Comparison of the Features of UI, DI, and WC

Characteristic	UI	DI	WC
Qualifying Event	Job loss, job search	Disability	On-the-job injury
Duration	26-65 weeks	Indefinite	Indefinite (if verified)
Difficulty of verification	Job loss: easy Search: impossible	Somewhat difficult	Very difficult
Average after tax replacement rate	47%	60%	89%
Variation across states	Benefits and other rules	Only disability determination	Benefits and other rules

Unemployment Benefit Schedule for Michigan



APPLICATION: The Duration of Social Insurance Benefits around the World



CHAPTER 14 📕 UNEMPLOYMENT INSURANCE, DISABILITY INSURANCE, AND WORKERS 'COMPENSATION

EVIDENCE: Moral Hazard Effects of Unemployment Insurance



Card, Chetty, Weber (2007)

Effect of Benefit Extension on Unemployment Durations



Card, Chetty, Weber (2007)

Effect of Extended Benefits on Subsequent Wages



Card, Chetty, Weber (2007)

Effect of Extended Benefits on Subsequent Job Duration



CHAPTER 14
UNEMPLOYMENT INSURANCE, DISABILITY INSURANCE, AND WORKERS 'COMPENSATION

Partial Experience Rating in Vermont



Beneficiaries in Current-Payment Status

Chart 2. All Social Security disabled beneficiaries in current-payment status, December 1970–2017

The number of disabled beneficiaries has risen from 1,812,786 in 1970 to 10,059,166 in 2017, driven predominately by an increase in the number of disabled workers. The number of disabled adult children has grown slightly, and the number of disabled widow(er)s has remained fairly level. In December 2017, there were 8,695,475 disabled workers; 1,105,405 disabled adult children; and 258,286 disabled widow(er)s receiving disability benefits.



Source: SSA DI annual report

Chart 10. Disabled-worker awards, by selected diagnostic group, 2010

In 2010, 1,026,988 disabled workers were awarded benefits. Among those awardees, the most common impairment was diseases of the musculoskeletal system and connective tissue (32.5 percent), followed by mental disorders (21.4 percent), circulatory problems (10.2 percent), neoplasms (9.0 percent), and diseases of the nervous system and sense organs (8.2 percent). The remaining 18.7 percent of awardees had other impairments.



TABLE 1—REASSESSMENTS OF INITIAL SOCIAL SECURITY DETERMINATIONS

A. Bureau of Disability Insurance Review One Year After Initial Determination (Percentages):

Initial determination				
Allowance	Denial			
78.8	21.1			
	Initial detern Allowance 78.8 22.5			

Note: The sample sizes are 250 initial allowances and 248 initial denials.

Source: Smith and Lilienfeld (1971 p. 195).



Source: Parsons 1984 Table A1

	1972			1978			
	Rejected Population Applicants Beneficiaries			Population	Rejected Applicants	ected cants Beneficiaries	
Labor Supply							
Percent Employed	77.7	32.6	3.2	69.3	28.7	2.3	
Percent Worked 71/77	91.9	45.0	7.5	86.7	40.4	5.5	
Percent Full Year							
$(\geq 50 \text{ Weeks})^a$	76.8	47.4	31.4	83.5	41.2	22.2	
Percent Full Time							
$(\geq 35 \text{ Hours})^a$	95.4	75.9	25.0	92.4	79.6	38.3	
Earnings Among Positive Earners							
Median Annual Earnings,							
71/77 ^b	\$9000	\$4000	\$700	\$14000	\$5300	\$1000	

TABLE 2—EMPLOYMENT, EARNINGS, AND OTHER CHARACTERISTICS OF REJECTED DISABILITY INSURANCE APPLICANTS



FIG. 1.—Flat-rate portion in Quebec and the rest of Canada

Source: Gruber 2000

TABLE 1

	CPP		QI	DIFERENCE	
	Before (1)	After (2)	Before (3)	After (4)	Difference (5)
Benefits	5,134	7,776	6,878	7,852	1,668 (17)
Replacement rate	.245	.328	.336	.331	.088
Not em- ployed last week	.200	.217	.256	.246	.027 (.013)
Married? Anv kids <	.856	.856	.817	.841	024
17? Less than 9 years of	.367	.351	.354	.336	.002
education	.303	.274	.454	.421	.004

Table 1

Maximum Indemnity Benefits (2003)									
	Ту								
State	Arm	Hand	Index finger	Leg	Foot	Temporary Injury (10 weeks)			
California	\$108,445	\$64,056	\$4,440	\$118,795	\$49,256	\$6,020			
Hawaii	180,960	141,520	26,800	167,040	118,900	5,800			
Illinois	301,323	190,838	40,176	276,213	155,684	10,044			
Indiana	86,500	62,500	10,400	74,500	50,500	5,880			
Michigan	175,657	140,395	24,814	140,395	105,786	6,530			
Missouri	78,908	59,521	15,305	70,405	52,719	6,493			
New Jersey	154,440	92,365	8,500	147,420	78,200	6,380			
New York	124,800	97,600	18,400	115,200	82,000	4,000			



Figure 1. Distribution of Weekday Injuries.

Source: Card and McCall 1996

		Kentucky		Michigan			
Variable	Before	After	Percentage	Before	After	Percentage	
	increase	increase	change	increase	increase	change	
	(1)	(2)	(3)	(4)	(5)	(6)	
Maximum benefit (\$)	131.00	217.00	65.65	181.00	307.00	69.61	
Replacement rate,	32.70	51.02	56.02	30.01	44.15	47.14	
high earnings (percent)	(0.25)	(0.37)	(1.65)	(0.35)	(0.48)	(2.33)	
Replacement rate,	66.42	66.66	0.36	66.64	66.35	-0.45	
low earnings (percent)	(0.20)	(0.22)	(0.44)	(0.24)	(0.30)	(0.58)	

	High earnings		Low earnings		Differences		Difference in differences	
Variable	Before increase (1)	After increase (2)	Before increase (3)	After increase (4)	[(2)-(1)] (5)	[(4)-(3)] (6)	[(5)-(6)] (7)	
Mean duration (weeks)								
Kentucky	11.16 (0.83)	12.89 (0.83)	6.25 (0.30)	7.01 (0.41)	1.72 (1.17)	0.76 (0.51)	0.96 (1.28)	
Michigan	14.76 (2.25)	19.42 (2.67)	10.94 (1.09)	13.64 (1.56)	4.66 (3.49)	2.70 (1.90)	1.96 (3.97)	
Median duration (weeks)	(
Kentucky	4.00 (0.14)	5.00 (0.20)	3.00 (0.11)	3.00 (0.12)	1.00 (0.25)	0.00 (0.16)	1.00 (0.29)	
Michigan	5.00 (0.45)	7.00 (0.67)	4.00 (0.22)	4.00 (0.28)	2.00 (0.81)	0.00 (0.35)	2.00 (0.89)	
Median medical cost (dollars)	(01.07)	(0000)	(,		_			
Kentucky	393.51 (19.29)	411.49 (22.72)	238.96 (8.48)	254.40 (9.11)	17.98 (29.80)	15.44) (12.44)	2.55 (32.30)	
Michigan	689.73 (77.30)	765.00 (134.53)	390.63 (32.80)	435.00 (33.09)	75.27 (155.16)	44.38) (46.59)	30.89 (162.00)	

TABLE 4—KENTUCKY AND MICHIGAN: DURATION AND MEDICAL COSTS OF TEMPORARY TOTAL DISABILITIES DURING THE YEARS BEFORE AND AFTER BENEFIT INCREASES

Source: Meyer, Viscusi, Durbin 1995



FIGURE 4. SSDI RECEIPT AND LABOR SUPPLY BY INITIAL ALLOWANCE RATE

Notes: Ninety-five percent confidence intervals shown with dashed lines. Employment measured in the second year after the initial decision. Bandwidth is 0.116 for DI and 0.130 for labor force participation.

Source: DIODS data for 2005 and 2006

Figure 2: Income and Spending If Stay Unemployed

Income (Labor + UI) If Stay Unemployed







Notes: This figure plots income and spending for the sample that stays unemployed. In months $t = \{-5, -4, -3, -2, -1, 0\}$, this includes everyone who receives UI at date 0 and meets the sampling criteria described in Section 2.1. In month t = 1, this includes only households who continue to receive UI and excludes households who receive their last UI check in month 0. In month t = 2, this excludes households who receive their last UI check in month 1, and so on. Employment status after UI exhaustion is measured using paycheck deposits. The vertical line marks UI benefit exhaustion. Income is positive after UI benefit exhaustion because of labor income of other household members. Vertical lines denote 95 percent confidence intervals for change from the prior month. See Section 3.1.1 for details.

Figure 3: Heterogeneity in Income and Spending If Stay Unemployed



Notes: This figure shows heterogeneity in income and spending by the ratio of UI benefits to estimated household annual income and the ratio of estimated total liquid assets (a measure described in Section 2.2) to consumption prior to the onset of unemployment. The sample is households that receive UI and stay unemployed, as described in the note to Figure 2.

Figure 3. Annual Percent Mortality Rates around the Bend Points A: Lower bend point





FIGURE 4. AVERAGE MONTHLY EARNINGS AFTER DI ALLOWANCE

Notes: The figure shows mean monthly earnings in the first four years after going on DI, in \$50 bins, as a function of distance of AIME from the bend point, where AIME is measured when applying for DI. The figure shows that mean earnings slope upward more steeply above the upper bend point than below it, with fitted lines that lie close to the data.



FIGURE 5. AVERAGE ANNUAL FRACTION EMPLOYED AFTER DI ALLOWANCE

Notes: The figure shows the mean fraction of years when a beneficiary has positive annual earnings, over the four years after going on DI (i.e., the mean yearly employment rate over these four years), in \$50 bins, as a function of distance from the bend point. The figure shows that the probability of positive earnings appears to slope upward more steeply above the upper bend point than below it.

I. Initial density of AIME



FIGURE 3. SMOOTHNESS OF DENSITY AND PREDETERMINED COVARIATES AROUND THE UPPER BEND POINT (continued)

Notes: The figure shows the density of initial AIME in \$50 bins as a function of distance of initial AIME to the upper bend point. The number of observations appears smooth through this bend point, with no sharp change in slope or level. The upper bend point is where the marginal replacement rate in converting AIME to PIA changes from 32 percent to 15 percent. The sample includes DI beneficiaries within \$1,500 of the upper bend point (see the text for other sample restrictions). The fraction of the sample in each bin is calculated by dividing the number of beneficiaries in each bin by the total number of beneficiaries in the sample. The best-fit line is a ninth-order polynomial that parallels the regression presented in Table 2 that minimizes the corrected Akaike Information Criterion (AICc).

Source: The data are from SSA administrative records.

AUGUST 2017



FIGURE 1. PRIMARY INSURANCE AMOUNT AS A FUNCTION OF AVERAGE INDEXED MONTHLY EARNINGS

Notes: The figure shows the primary insurance amount (PIA) as a function of average indexed monthly earnings (AIME) in 2013. The percentages are marginal replacement rates. *Source:* SSA (2013)



Share of state's unemployed workers receiving unemployment benefits, March 2020



- Unemployment Rate



Shaded areas indicate U.S. recessions.

Source: U.S. Bureau of Labor Statistics

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Figure 2: Effect of Expanded Benefits on Job-Finding: Interrupted Timeseries Design

(a) Interrupted Timeseries Estimate

Exit rate to new job from unemployment benefits



CARD, LEE, PEI, AND WEBER



FIGURE 2.—Daily UI benefits.



FIGURE 3.—Unemployment duration.

REFERENCE-DEPENDENT JOB SEARCH



(A) Benefit Path Change, Main Sample



(B) Empirical survival rates

FIGURE III

Empirical Hazard and Survival Rates under the Old and the New Benefit Schedule