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SUMMARY HISTORY OF COST ESTIMATES FOR DISABILITY BENEFITS

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This Actuarial Note presents a brief historical summary of the actuarial cost estimates for the monthly-disability-benefits portion of the Old-Age, Survivors, and Disability Insurance system. It will trace through not only the changes in the cost estimates resulting from the amended benefit provisions, but also those resulting from changed cost assumptions.

When the disability-benefits program (DI) was enacted in 1956, the estimated level-cost according to the intermediate-cost estimate was .42% of taxable payroll. Following usual practice, a range of cost estimates was prepared to recognize the inherent variability of such long-range estimates -- especially for disability benefits. The low-cost estimate was .27% of taxable payroll, while the high-cost estimate was .57%.

In 1958, before the enactment of the 1958 Amendments, revised estimates were presented. These showed the estimated level-cost of the program to be decreased to .35% of taxable payroll. The reasons for this estimated decline in cost were: (a) account was taken of the significant effect of the "offset for other disability benefits" provision (which had previously not been considered) and (b) the estimates of the size of the insured population that would be at risk of becoming disabled were considered more thoroughly and were revised downward (giving greater recognition to the relatively strict eligibility conditions -- fully insured, currently insured, and having 20 quarters of coverage in the last 40 quarters preceding disability).

The 1958 Amendments considerably liberalized the DI program by eliminating the aforementioned offset provision; by eliminating the requirement of currently insured status; by adding dependents benefits; and by increasing the general benefit level by about 7%. At the same time, the 1958 Amendments contained a cost-reduction element by raising the maximum earnings base. It will be kept in mind that the 1958 Amendments did not change the age-50 requirement for disability benefits. The estimated level-cost of the disability-benefits program, following the enactment of the 1958 Amendments, was .49% of taxable payroll.

In 1960, before the enactment of the 1960 Amendments, new cost estimates were made for the DI program. Not only did these reflect the higher earnings levels of recent years, but also the actual operating experience as to the rate of persons becoming disabled and going on the benefit roll. Also, some more reliable information was available as to the number of persons possessing insured status sufficient for them to be eligible for disability benefits if they became disabled. Since the rate of becoming disabled that was actually experienced was about the same for men as had been assumed, and considerably lower for women, a reduction in cost was indicated. The effect of the higher general earnings level also moved the cost in the same direction, and this too was so in regard to the estimates of the insured population, which were lower than previously assumed. As a result, the new cost estimates, prepared in 1960, for the system as it was following the 1958 Amendments showed a level-cost of .35% of taxable payroll.

The 1960 Amendments liberalized the program primarily by eliminating the age-50 requirement. As a result, the estimated level-cost of the disability benefits was increased to .56% of taxable payroll. Congress recognized that this resulted in the disability-benefits program having an actuarial lack of balance of .06% of taxable payroll (when measured against the level employer-employee contribution rate of ½%), but the belief was expressed that -- considering the variability of cost estimates for disability benefits -- this small actuarial deficit was not significant. Further, it was believed that, on the basis of future experience, such adjustments as might be necessary could be made.

The 1961 Amendments slightly liberalized the program by raising the minimum primary benefit from $33 to $40 per month and by liberalizing the fully-insured-status requirement in the next few decades of operation. The actuarial cost estimates for the disability benefits were not revised because it was believed that these changes would not produce significant cost increases (and, moreover, there were offsetting factors, such as the higher general earnings level being experienced and the more favorable interest basis on trust-fund investments).

At the end of 1962, new cost estimates were made on the basis of a complete re-examination of all cost factors involved. The major element resulting in higher estimated costs for the disability benefits was that the number of persons continuing on the benefit roll was significantly higher than had been anticipated -- or in other words, disability termination rates due to death and recovery were lower than assumed in the actuarial cost estimates. The result of the new cost estimates was to show a level-cost of .64% of taxable payroll.

Finally, there is presented an estimate of what the experience under the disability-benefits program would have been in the past and of what it will be in the short-range future (based on the cost estimates in the 23rd Trustees Report), if the past liberalizations as to providing dependents benefits and as to eliminating the age-50 requirement had not occurred, but rather the monthly benefits continued to be restricted to disabled workers aged 50–64. It is, however, assumed that certain other of the liberalizing amendments did occur, such as the elimination of the anti-duplication provision with other disability benefits, the general 7% increase in benefits in the 1958 Amendments, the $40 minimum benefit in the 1961 Amendments, and the various changes in the insured-status provisions.

The estimates necessary for the concept considered here are relatively easy to make because the data on actual benefit disbursements are subdivided between primary benefits and supplementary benefits (so that the latter can be dropped out), and further, age data on the beneficiaries are readily available. Certain approximations and arbitrary estimates are necessary in connection with such other items as the Railroad Retirement financial interchange, the administrative expenses, the military-service-credits reimbursements from the General Treasury, and the interest earnings of the DI Trust Fund. It is believed, however, that these can be reasonably well approximated, especially considering that they are relatively small items as contrasted with the data on benefit payments and contribution income and so will not have a significant effect on the overall results.

Table 1 compares the estimated disability benefit payments if the original provisions had not been changed, as against the data for the actual operating experience under the program as it has been amended and as it is projected for the future under the present provisions. In calendar year 1962, the actual experience under the prevailing law resulted in benefit payments that were more than $400 million higher than under the original provisions, or an increase of about 60%. Relating the benefit cost to taxable payroll, the original provisions would have produced a cost of .33% for 1962, as against the actual experience of .52%. In the next 5 years of operation, the absolute amount of benefit payments is estimated to increase under both the actual experience and the original provisions, but the cost relative to payroll is estimated to level off (which may be too optimistic a picture). At the same time, during the next 5 years, the relationship between the experience under the present law and that which would have occurred under the original provisions would be only slightly changed, with the differential increasing from the 1962 figure of 61% to about 67% by 1967.

Table 2 shows the progress of the DI Trust Fund under the original provisions. As would be anticipated from the previous discussion, income from contributions significantly exceeds outgo for benefit payments and, together with the substantial interest earnings, results in a rapidly growing trust fund. At the end of 1962, the trust fund would have amounted to $3.4 billion if the original provisions had not been changed, as against the actual figure of $2.4 billion. In the next 5 years, the trust fund would have grown to $5.8 billion if the original provisions had not been changed, whereas the estimate for present law is a decline to $1.6 billion.

Table 1

COMPARISON OF DISABILITY BENEFIT PAYMENTS IF ORIGINAL PROVISIONS HAD NOT BEEN CHANGED, WITH ACTUAL EXPERIENCE

Calendar Year	Benefit Payments (in millions)		Benefits as Percent of Payroll		Increase in Cost Due to Amendments
	Original Provisions	Provisions As Amended	Original Provisions	Provisions As Amended	
			Actual Experience		
1957	$57	$57	.03%	.03%	–
1958	246	249	.14	.14	1%
1959	390	457	.20	.23	17
1960	479	568	.24	.28	19
1961	581	887	.29	.44	53
1962	685	1105	.33	.52	61
			Estimated Experience		
1963	$739	$1206	.34%	.55%	63%
1964	765	1257	.34	.56	64
1965	780	1291	.34	.55	66
1966	794	1321	.33	.55	66
1967	810	1350	.33	.55	67

Table 2

PROGRESS OF DI TRUST FUND IF ORIGINAL PROVISIONS HAD NOT BEEN CHANGED
(in millions)

Calendar Year	Contributions a/	Benefit Payments	Administrative Expenses	Railroad Interchange b/	Interest on Fund	Fund at End of Year
			Actual Experience			
1957	$702	$57	$3	–	$7	$649
1958	966	246	12	–	25	1382
1959	891	390	46	-$21	42	1900
1960	1010	479	31	-5	57	2462
1961	1038	581	35	-5	77	2966
1962	1046	685	40	-5	95	3387
			Estimated Experience			
1963	$1091	$739	$45	-$5	$110	$3809
1964	1129	765	50	-5	127	4255
1965	1167	780	55	-5	143	4735
1966	1202	794	60	-5	162	5250
1967	1230	810	65	-5	182	5792

a/ Including military-service-credits reimbursements from General Treasury.
b/ A positive figure indicates a payment to the Railroad Retirement Account and vice versa.