

Social Security

Fourth Edition

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Chapter 12

Railroad Retirement System

The Old-Age, Survivors, and Disability Insurance (OASDI) system, as indicated previously, covers virtually all nongovernment wage employment in the United States except for railroad employees, who are covered by the Railroad Retirement (RR) system.¹ As indicated later, this separate system is coordinated closely in many ways with OASDI, and its general structure is quite similar, although the retirement benefits are significantly higher and the retirement conditions are somewhat more liberal. It may be said that the RR system is a social insurance program, although it has certain characteristics of a large multiemployer, private pension plan. It is administered by the Railroad Retirement Board, with headquarters in Chicago and about 100 local offices throughout the country, in conjunction with certain other benefit programs for railroad employees (namely, unemployment insurance and cash sickness benefits).

This chapter first discusses the early developments in the pensions for railroad workers and how the RR system was initially developed. Then, the general nature of the program (including the Supplemental Annuity portion) is described in terms of coverage, eligibility, beneficiary categories, benefit amounts, and financing provisions.² Fi-

1. It may be noted that, although the federal government took over the operation of the railroads to a considerable extent—through the National Railroad Passenger Corporation (Amtrak) and the Consolidated Rail Corporation (Conrail), although the latter was privatized in 1987—their employees are considered not government employees but railroad workers.

2. For an excellent description of the RR system as it was following the 1974 legislation, see Norman Solomon, "Principal Features of the Railroad Retirement Act of 1974," *Transactions*, Society of Actuaries, 1975. The appendix to this paper outlines the provisions of RR. Only very minor legislative changes were made since then (other than as the Social Security Amendments of 1977, 1980, and 1983 also affected RR) until the

nally, the recommendations of the 1989–90 Commission on Railroad Retirement Reform are set forth. Appendix 12-1 is a detailed summary of the benefit and financing provisions of the RR system.

Appendix 12-2 presents operational data for the RR system, while Appendix 12-3 deals with its actuarial basis, and Appendix 12-4 goes into more detail as to its financing. The earlier editions of this book have detailed discussions of the development of the RR system over the years.

Early Pension Developments

Most of the large railroads established private pension plans for their employees before 1930, in most instances in the early part of the 1900s. This was the result, at least in part, of strong unions in this industry. Naturally, these plans differed from one railroad to another, but they generally possessed the following common characteristics:

1. The plans were noncontributory.
2. The plans were financed on a pay-as-you-go basis.
3. Benefits were not vested and were payable only if the employee was in active service at the time of reaching retirement age (relatively long service was usually required for eligibility).
4. Pensions were computed as a given percentage (usually 1 percent) of final average salary (usually over the last 10 years) per year of service.
5. Disability pensions were provided, but not survivor benefits.
6. The minimum retirement age was generally 65, but was as high as 70 in some plans.

In the early 1930s, due to the effects of the depression combined with a lack of advance funding, many railroads had difficulty in maintaining their pension payments. In fact, in a number of instances, reductions in pensions of 10 percent or more were instituted, which, of course, disturbed the covered individuals. Railroad workers were also dissatisfied with the existing pension setup because those who might be laid off (or go out on strike) feared that the break in service might result in a complete loss of the pensions they anticipated.

Before 1930, various railroad labor organizations, particularly those of the “operating employees,” were active in establishing their own

very significant amendments made by legislation in 1981 and 1983. A similar summary is contained in the various triennial valuations of the RR Account.

pension plans. In some instances, participation was on a voluntary basis, while in other cases the plans were financed on a compulsory assessment basis as mutual-benefit societies. These plans, on the whole, did not have successful financial operations. Some of them are still in existence, although they have ceased to be in the pension field and instead are providing insurance (death, disability, and endowment) on a "legal reserve" basis in the same general manner as life insurance companies are required to do.

Initial Government Action

As a result of these difficulties in the early 1930s, the railroad labor organizations made efforts to secure federal legislation that would establish an industrywide pension plan under government administration. In 1934 such a law was passed, but it was declared unconstitutional by the Supreme Court for a number of reasons beyond the general matter of whether a government-operated pension plan was constitutional. These reasons included certain features of the particular plan, such as giving prior-service credit for all persons who had ever worked for a railroad regardless of their current employment status, and provisions that meant virtually compulsory retirement at age 65.

Following the successful attempt of the railroad employers to have the 1934 Act declared unconstitutional, the railroad labor organizations attempted to get new legislation enacted that would meet or bypass the objections of the Supreme Court. It was hoped that this would be accomplished through completely separating the benefit and tax provisions by having two separate acts (as was done, to some extent, in the original Social Security Act, which was under consideration at the same time), by partially eliminating the compulsory retirement provisions (the 1937 Act completely eliminated such provisions), and by providing equal employer and employee contributions (instead of the employer contribution being two thirds of the total—possibly to recognize greater employer responsibility for prior-service liability—as under the 1934 Act).

At the same time that this legislation was in process, the Social Security Act was in the legislative mill. In fact, it was enacted some two weeks before the Railroad Retirement Act of 1935. Thus, for this brief period, railroad workers were covered under the initial old-age benefits program in the same way as all other commercial and industrial workers, but they were excluded thereafter.

Immediately, the constitutionality of the second Railroad Retire-

ment Act was challenged. In part, it too was declared unconstitutional by a lower court (namely, as to the tax provisions). In an effort to clarify the confused situation, President Roosevelt called a conference of railroad labor and management.

A compromise was worked out under which the railroads agreed not to challenge the constitutionality of the program, provided certain changes were made (as was done by amendments in 1937). An important concession made to railroad employers was that all pensioners under their existing private pension plans (numbering almost 50,000) would be taken over by the RR system, and the payments to them would be met from the general financing of the system. This was of great financial assistance to several of the largest railroads, which had sizable, steadily increasing pension rolls that they were financing on a current-cost basis. In turn, railroad labor agreed that the program would be on a 50–50 financing basis for all time to come (as contrasted with the 1934 legislation, under which the employers paid two thirds of the cost). This situation was changed in 1966, when a supplemental annuity program financed entirely by the employers was instituted and, even more significantly, in 1973, when the equal-matching basis for employer-employee taxes to the regular program was abandoned. Since 1937 there has been no challenge to the constitutionality of the RR system, and while it has been amended from time to time, its basic characteristic as a social insurance plan for a single nationwide industry has been retained.

Coverage Provisions

The coverage provisions of RR are relatively clear-cut, because it applies to all railroad employment in the country, including that with railroad labor organizations and the various consolidated railroad terminal stations.³ Coverage is restricted entirely to the United States, except for certain employment in Canada for a U.S. railroad.

Current Retirement and Disability Benefit Provisions

The original effective Railroad Retirement Act (as applicable in 1937) provided for a contributory old-age and disability pension plan. There

3. Coverage does not apply to local or interurban electric street railways unless they are part of a general railroad system. Likewise, coverage does not apply to certain railroad facilities operated by mining and manufacturing industries within the confines of their plants. There are certain borderline areas, such as the "captive" railroads of steel companies. However, because of the limited number of railroad employers, questions as to whether borderline employment is covered by RR or OASDI have been

were no survivor benefits other than a provision guaranteeing that total benefits paid would at least equal the employee contributions, plus an implied allowance for interest, and other than the availability of elective actuarially computed joint-and-survivor annuities. The latter required a reduction in the amount payable during the employee's lifetime to provide possible survivor benefits.

The discussion in this section relates to the current benefit provisions. The Railroad Retirement Act uses the term *annuity* to refer to monthly benefits payable, but here *benefit* is used.

Eligibility Conditions

The eligibility conditions (as to the amount of covered employment) for all types of monthly benefits and for the insurance lump-sum death payment require a minimum of 120 months of railroad service. Any wages in a month constitute a month of service. In addition, so-called current connection (defined hereafter) is required for occupational-disability benefits, for supplemental annuities, for monthly survivor benefits, and for the insurance lump-sum death benefit. Only for the residual lump-sum death benefit is there no requirement as to length of service or current connection.

A current connection exists if the individual has railroad service in at least 12 months in the 30-month period preceding the date when the particular event insured against occurred (i.e., date of retirement, disability, or death). As an alternative, it also exists if there were at least 12 months of service in some preceding 30-month period if the individual did not have any regular employment outside the railroad industry between the end of such period and the date when the event occurred. Also, for survivor benefits and for supplemental annuities, it occurs if the employee was terminated involuntarily and without fault after 25 years of service and with some railroad employment after September 1975.

If a person does not meet the eligibility conditions described above for monthly benefits, then the earnings record is transferred to OASDI for whatever benefit rights it will produce (along with any OASDI earnings credits otherwise acquired).

relatively easily worked out. A small, but growing, problem in the coverage area in recent years has been the tendency of some railroads to purchase services from other companies rather than to do such services themselves. For example, certain accounting and data-processing activities and car-repair services are amenable to such procedure. The effect is a reduced amount of social-insurance tax cost for the employer (because the OASDI rate is lower than the RR one).

Monthly Beneficiary Categories and Rates

Age retirement benefits are available on a full-rate basis at the Normal Retirement Age as it is defined under OASDI or, with 30 years of service, at age 62.⁴ Persons with 30 or more years of service (who, before legislation in 1983, could have obtained full-rate benefits at age 60, applicable to those first eligible before July 1984) can obtain reduced benefits at ages 60–61. The tier-2 (non-OASDI) portion of the regular annuity in such cases is not reduced, but the tier-1 (OASDI) portion is reduced by the same factor as OASDI would use for such person at age 62 (only by half thereof for those first eligible in July 1984–December 1985). Thus a “notch” is created as to the tier-1 portion as between those who retire at age 62 (and have no reduction) and those who retire just before age 62 (and currently, have a 20-percent reduction for life). Such reduced tier-1 annuity is frozen (i.e., no COLAs) until age 62, when it is recomputed to equal what OASDI would have paid the individual.

Benefits are also available at ages 62 up to the NRA for those with less than 30 years of service, but on a reduced-rate basis using the same actuarial-reduction factors as under OASDI (e.g., an 80-percent benefit at age 62 for those attaining age 62 before 2000, with gradually reduced percentages for later attainments, until ultimately being 70 percent).⁵

Permanent and total disability benefits (i.e., for those unable to do any regular work) are available on a full-rate basis. Also, if the disability is an occupational one (i.e., for those unable to do the regular job), and if the individual has 20 years of service or is aged 60–64, full-rate benefits are payable. The same waiting period as that under OASDI is applicable (before the 1983 legislation, there was no waiting period). However, generally during this period cash sickness benefits under the Railroad Unemployment Insurance system will be available.

Both age and disability benefits are payable only if the individual ceases working for a railroad and relinquishes all rights to such job (except in the case of a disability beneficiary under age 65 who is not receiving a supplemental annuity and whose spouse is not entitled to spouse's benefits). Benefits are not payable for any month when the individual works for a railroad.

Full-rate spouse benefits are payable with respect to retirement

4. For purposes of computing “years of service” under RR, any residual months not making up 12-month years are considered fractional years.

5. For persons with any service before August 12, 1983, the reduction applicable to the portion of the regular annuity that is not the tier-1 (or OASDI) portion cannot exceed 20 percent. Also, the supplemental annuity for those with 30 or more years of service is payable at all times without reduction for being started before age 65.

beneficiaries (1) if the spouse is aged 60 or over and the worker retired at age 62 or over and had at least 30 years of service, (2) if the spouse is aged 65 or over, or (3) if the spouse is caring for a child as defined under OASDI and the worker is aged 62 or over and had at least 10 years of service. If the spouse cannot meet any of the foregoing conditions but is at least age 60 and under the NRA and the worker has at least 30 years of service and retired at age 60–61, or otherwise the spouse is aged 62 and under the NRA, reduced benefits are available.⁶

It will be observed that RR does not pay benefits to all the categories that OASDI does (e.g., child's benefits for retired and disabled beneficiaries). This difference, however, is recognized (and compensated for in some cases) by the Social Security minimum guarantee (discussed later).

Survivor benefits are, in general, paid to the same categories as under OASDI, although there are several small differences. For example, on the one hand, RR pays dependent parent's benefits at age 60, instead of age 62, and provides widow's and widower's benefits at ages 60–61 which are at the same rate as at age 62 (i.e., 82.9 percent of the primary benefit), instead of applying the reduction factor applicable between ages 62 and 65 down to age 60. Tier-2 benefits are also paid to surviving spouses with an eligible child in care until the child attains age 18 (as OASDI formerly did, but now has an age limit of 16).

On the other hand, RR does not pay any benefits to either (1) divorced spouses aged 62 or over of workers aged 62 or over who have not filed for benefits or (2) spouses or divorced spouses of workers under age 62 with less than 30 years of service or of workers under age 60 with 30 or more years of service who are receiving a disability benefit. Also, the \$255 lump-sum death benefit is not payable when monthly survivor benefits are payable for the month of death. Tier-2 benefits are not payable for certain minor categories—for example, remarried widows and widowers aged 60 or over. Unremarried divorced widows and widowers and remarried-after-60 divorced widows and widowers (in all cases, with a previous marriage duration of at least 10 years) receive only a tier-1 benefit.

Retirement and Disability Benefit Amounts

The method of benefit computation is simply to calculate the tier-2 annuity by obtaining the individual's average earnings in the highest

6. More liberal eligibility conditions apply if the worker met the 60/30 requirement before July 1984.

60 months of service.⁷ This amount is then multiplied by the product of 0.7 percent and the years of service. If a vested dual benefit⁸ is payable, then 25 percent thereof is deducted from the tier-2 amount otherwise payable.

The Social Security minimum-guarantee provision as it relates to RR benefits for the employee is that the total family benefit will not be less than the OASDI benefit based on the same wage record. This provision had little effect in the recent past and will have even less in the future; it is only through this provision that such child's benefits as would arise under OASDI are recognized.

Spouse Benefit Amounts

Spouse's annuities are, in general, 50 percent of the tier-1 component of the employee's annuity and 45 percent of the tier-2 component, but subject in most cases to reductions for being under the NRA at claim or, as to the OASDI component, for OASDI benefits on the spouse's own earnings record.⁹ Such reduction in spouse's annuities

7. When earnings are reported on an annual basis (after 1984), they are divided by the months of service in the year, and such average is assigned to each such month.

8. An employee who qualified for both RR and OASDI benefits before 1975 and met certain vesting requirements can receive an additional annuity amount called a "vested dual benefit." This amount partially offsets the reduction in tier 1 for OASDI entitlement. Generally, an employee is qualified for a vested dual benefit at age 62 if falling within one of the following categories:

1. Worked under RR in 1974, had at least 120 months of RR service by 1975, and was insured under OASDI as of December 1974.
2. Had at least 300 months of railroad service by 1975 and was insured under OASDI as of December 1974.
3. Had at least 120 months of RR service by 1975, had a current connection with the railroad industry as of that time (or when retired), and was insured under OASDI as of December 1974.
4. Had at least 120 months of RR service before 1974, no RR service in 1974, and was insured under OASDI as of the end of the year before 1974 in which last performed RR service.

A "vested dual benefit" (which is sometimes referred to as a "windfall dual benefit") consists of (a) the OASDI primary benefit which the individual would receive under the law in effect at the end of 1974 on the basis of RR wages before 1975, plus (b) such an OASDI benefit based on OASDI earnings before 1975 or the person's determining point for vesting purposes, if earlier, minus (c) such an OASDI benefit based on combined RR and OASDI earnings before 1975 or before such earlier determining point. As to the effect of cost-of-living changes on the amounts of the vested dual benefits, they are adjusted in exactly the same manner as OASDI benefits are increased after 1974 under the automatic-adjustment provisions (exclusive of what would happen under any ad hoc increases that Congress might legislate).

9. When the spouse receives unreduced benefits at age 60 or over, because the employee retired at age 62 or over with at least 30 years of service, the OASDI benefit payable on the spouse's earnings record is considered for offset purposes in connection with the OASDI component.

for early retirement does not apply when the worker retired before the NRA and received a full-rate annuity. As a special exception, the foregoing offset applicable to the OASDI component does not apply when the spouse's earnings record was under RR.

Frozen vested dual spouse's benefits are provided if the employee is vested under both OASDI and RR in the same manner as described previously, or if at the end of 1974 the employee had 10 years of service under RR and the spouse was then vested under OASDI, but only if receiving such benefits on August 13, 1981. The amount of this dual benefit is the smaller of (1) the OASDI benefit at age 65 based on the spouse's earnings record before 1975 or (2) the OASDI spouse's benefit at age 65 based on the employee's RR and OASDI earnings before 1975, but in any case not less than (3) 50 percent of the employee's frozen vested benefit, if any. When the employee's determining point for vesting is before 1974, such point is used, instead of 1974, for computing the spouse's OASDI benefit. The computations are made on the basis of the law in effect at the end of 1974.

The public-pension offset for spouse's benefits under OASDI also applies to RR spouse's benefits, but only to the tier-1 part thereof. Similarly, the "noncovered-employment pension" provision under OASDI also applies under RR.

The cost-of-living adjustments for spouse's annuities are made in the same general manner as is done for employee annuities.

Monthly Survivor Benefit Amounts

As to monthly survivor benefits, the tier-1 portion is 100 percent of the OASDI benefit, while the tier-2 portion is a percentage of the worker's tier-2 annuity (50 percent for widow[er], 35 percent for parents, and 15 percent for children—with a maximum family benefit of 80 percent and a minimum family benefit of 35 percent). For those eligible for such benefits, the RR wages are combined with any OASDI ones that the deceased worker had in computing the benefit amount. A guarantee is provided that the widow's or widower's benefit shall not be less than any spouse annuity received before widowhood. The public-pension offset for surviving spouse's benefits under OASDI also applies to RR survivor benefits, but only to the first tier.

Frozen vested dual widow's and widower's benefits are provided if the employee had 10 years of service before 1975, and if the spouse was fully insured under OASDI before 1975 on the basis of own earnings record, but only if receiving such benefits on August 13, 1981. The amount of this dual benefit is the sum of (1) the RR widow's benefit computed under the former regular RR benefit formula for

RR and OASDI earnings before 1975 and (2) the OASDI benefit based on the widow's OASDI earnings, minus (3) the total survivor benefits arising under tiers 1 and 2.

Other Survivor Benefits

The amount of the residual lump-sum death benefit, which in essence is a guarantee of the return of employee taxes plus some interest, is frozen at its size at the end of 1974. This action merely reflects the fact that, since October 1973, the employee taxes have been at the OASDI rates, rather than at the higher ones previously applicable. Accordingly, because no such refund guarantee is present under OASDI, it does not seem necessary for RR in the future.

The insurance lump-sum death benefit under the law as it was before the 1974 Act (namely, 10 times the so-called basic amount for survivor benefits then, available only for deaths where there is no beneficiary immediately eligible for monthly benefits) is continued for employees with a current connection who had at least 10 years of service before 1975, but its amount is frozen at the level at which it was at the end of 1974 (the maximum such payment is slightly less than \$1,200). All other employees have only the OASDI lump-sum death payment of \$255, but available only for deaths where no immediate monthly survivor benefit is payable (otherwise, subject to the same restrictions as under OASDI).

Current Financing Provisions

The RR system has, from the beginning, been intended to be financed on a completely self-supporting basis from the payroll taxes on employers and employees. In the 1974 amendments, however, a government payment was introduced to pay for the cost of the vested dual benefits. Then too, at times, an indirect government subsidy has been present in the form of a favorable basis for the investments of the RR Account. Appendix 12-4 gives a detailed account of the financing provisions of RR as they have developed in the past.

The RR taxes are deposited in the RR Account, and benefit payments and administrative expenses are disbursed from it. The payments under the financial interchange with OASDI and Hospital Insurance (HI) likewise are made to (or from) the account. The assets are invested in obligations of the federal government in much the same manner as is done for the OASDI Trust Funds, except that more favorable treatment in certain respects is given to the RR Account.

The RR tax rate for employees was the same as that under OASDI-

HI (see Table 2.5) from October 1973 through September 1981. The employer rate then was the sum of (1) the employee rate and (2) 9½ percent of payroll. When the collective bargaining between labor and management which resulted in this financing basis occurred in connection with the 1974 Act, the employers agreed to finance completely the cost for the benefits under tier 2 and the excess cost of the benefits under tier 1 over the financial-interchange payments from the Social Security system.¹⁰ The tax rate of 9½ percent was supposed to accomplish this result, but actual experience has proved to be otherwise.

As a result, the 1981 amendments increased the employer tier-2 tax (applicable also to the additional costs of tier 1 over what the financial interchange with OASDI provides) by 2¼ percentage points, to 11¾ percent, and reintroduced an employee tax, at 2 percent, effective in October 1981. Continuing financing problems resulted in the Railroad Retirement Solvency Act of 1983, which reduced benefits (primarily the early-retirement benefits for those with 30 years of service and the vested dual benefits) and further increased the tier-2 tax rates. Such rates then became as shown:

<i>Calendar Year</i>	<i>Employer</i>	<i>Employee</i>
1982-83	11¾%	2 %
1984	12¾	2¾
1985	13¾	3½
1986 and after	14¾	4¼

10. The Senate committee report (Senate Report No. 93-1163, September 23, 1974, p. 14) stated that the negotiator for the railroads made a commitment to the effect that "all future benefit liberalizations in the Railroad Retirement Act, other than those occurring to the Social Security Act, will be financed 100 percent by the railroad industry" and that he testified that "the railroad industry is perfectly prepared to fund the Railroad Retirement System in every respect in which it bears a reasonable resemblance to any other private industry pension plan, and what that means is that if somehow these [cost] figures go askew and we run into difficulty in the future because we have not put enough money in with relation to the benefits that are being provided, we will fund that." These statements seem to mean to the author that the railroad employers will pay the entire cost for tier 2 (and the excess cost for tier 1 over the Social Security financial-interchange payments) as long as the plan is not liberalized. The problem as to the specific meaning arises in connection with the cost-of-living adjustment provisions, which were only temporary (through 1980). Some might argue that the "benefits that are provided" does not mean an extension of such adjustments on a long-range or permanent basis and that such adjustments are not such as to have RR "bear a reasonable resemblance to any other private industry pension plan." The author does not agree with that argument, because cost-of-living adjustments are not "real" liberalizations, but rather merely keeping the plan up to date with changing economic conditions.

Continued decline in railroad employment resulted in further concern about the financial status of the RR system, both in the short range and over the long run. Legislation in 1987 increased the tier-2 tax rates to 16.1 percent for employers and 4.9 percent for employees, effective in 1988.

The maximum taxable earnings base for the employee tax and for the matching employer tax is the same as that under OASDI-HI, except that until 1985 it was expressed on a monthly basis. However, for the employer and employee tier-2 tax, the maximum taxable earnings base is that which would have been applicable for OASDI-HI under the automatic-adjustment provisions if the ad hoc increases for 1979–81 legislated by the Social Security Amendments of 1977 had not been enacted. Such base for 1992 is \$41,400 (see Table 2-13 for earlier years).

Another source of financing for the tier-2 benefits (and also for the tier-1 benefits which are not equivalent to OASDI benefits) is the return to the RR system of the federal income taxes which are payable on them; such benefits are taxed on the same basis that contributory private pensions are taxed (and not on the limited basis that OASDI benefits are taxed). This procedure is similar to what is done for the income taxes levied on OASDI benefits and on the tier-1 benefits which are equivalent to OASDI benefits, the proceeds of which indirectly are of financial advantage to the RR system (through the financial interchange).

Payments from the General Fund of the Treasury are to be made to pay for the cost of the vested dual benefits. Such payments were to be made annually and were to cover such costs for all future years. Equal annual amounts during 1976–2000 were provided for under the 1974 law, but subject to such adjustment as future experience may indicate. The initial estimate of the amount of such payments was \$285 million per year; this, however, was to be reduced by the extra interest to be earned from the favorable interest basis for the investments permitted by the 1974 amendments, estimated at \$35 million per year. Payments of \$250 million were made in fiscal years 1976, 1977, and 1978, and \$313 million in fiscal years 1979 and 1980 (the latter being the President's budget request). It may be noted, however, that the 13th Actuarial Valuation of RR (published in August 1976) estimated the necessary annual payment at \$350 million (based on \$360 million gross, minus \$10 million as an offset for excess interest earnings). The 14th Actuarial Valuation (published in December 1979) estimated the necessary net annual payment at an amount ranging from \$479 to \$529 million (after allowing for the \$10 million offset).

The 1981 amendments recognized these shortfalls in the financing

of the vested dual benefits, which shortfalls were a significant part of the financing crisis of the RR Account then. Besides cutting back on these benefits, it was provided that general-revenues appropriations would finance all such benefits after September 1981, except that, after September 1988, income taxes levied on such benefits would first be used for this purpose. These appropriations are put into a newly created Dual Benefits Payments Account. The vested dual benefits actually paid in a fiscal year cannot exceed the total available in this account (whose balance, if any, cannot be carried over from one year to the next).

The 1983 amendments provided that the RR Account should be reimbursed for the shortfalls in the financing of the vested dual benefits in 1975 through September 1981. This was done in an indirect manner by providing for loans equal to such shortfalls (plus allowance for interest), which loans would have to be repaid only if Congress did not make appropriations to meet them (as hopefully would be done). Loans each equal to one third of the total shortfall were to be available at the beginning of 1984, 1985, and 1986 (again with appropriate allowance for accumulating interest on the remaining shortfall). Such appropriations were made.

Originally, the financial interchange with OASDI was completely on a deferred or lag basis, with appropriate interest adjustment. Over the long range, this was not disadvantageous to the RR Account, but it was disadvantageous from a cash-flow standpoint. The 1981 amendments provided that the RR Account could obtain interest-bearing loans from the General Fund of the Treasury when needed to meet benefit payments. Such loans cannot exceed the expected financial-interchange transfer and are to be repaid when the RR Account receives such transfer. The 1983 amendments changed this provision somewhat by requiring that the loans be made, but on a month-by-month basis as the financial-interchange amounts develop (assuming that, as has been the case for many years, the flow is from OASDI to RR).

Another element that has caused cash-flow problems for the RR Account was the provision allowing the Railroad Unemployment Insurance (RUI) Account to borrow money from it, repayable with proper interest. In order to repay this debt (including further interest accumulations), an additional repayment tax on the first \$7,000 of annual earnings was to be paid by the employer beginning July 1986 and ending September 1990. The tax rate was 2.0 percent for 1986 and increased by 0.3 percent each year, until being 3.2 percent for 1990. The proceeds go into the RR Account.

Legislation in 1985 revised the loan-repayment tax rates, so that

they became 4.3 percent in 1986, 4.7 percent in 1987, 6.0 percent in 1988, 2.9 percent in 1989, and 3.2 percent in the first 9 months of 1990. At the same time, if further borrowing from the RR Account occurs, an automatic increase in the tax rate of 3.5 percent is instituted.

Then, legislation in 1988 changed the loan-repayment basis. The taxable base (in annual terms) became \$8,520 for 1989, with indexing thereafter by two thirds of the percentage increase in nationwide wages, and the tax rate became a level 4.0 percent, payable until the loan is repaid. The surcharge tax rate of 3.5 percent continues to be applicable if new borrowing occurs.

Loans from the RR Account to the RUI Account were first made in 1960. By 1973, they were virtually all paid off, but after 1980, sizable borrowing once again occurred. The maximum size of the loan was \$866 million, in 1986. Thereafter, due to the legislative actions, the balance decreased and was down to \$279 million at the end of April 1992. It is estimated that the debt will be extinguished in 1994.

Supplemental Annuity System

In 1966 a system of supplemental annuities was enacted on top of the regular RR benefits. This program applied only to persons retiring at age 65 or over whose regular benefits were awarded after June 1966 and who have at least 25 years of service and a current connection. It provided benefits for only the retired worker, in the flat monthly amount of \$45 for 25 years of service, increasing by \$5 per year of service to a maximum of \$70. Such amount is however, reduced by the amount of any private pension financed by the railroad employer. This procedure was established so that employers who had established private pension plans in the past would not be disadvantaged compared with those who had not done so. Initially, the system was to be only "temporary," but in 1970 it was made permanent. Legislation in 1981 eliminated this program for persons who enter the RR system after September 1981 (which will have no cost effect before 2006).

Under the original legislation, the Supplemental Annuity program was financed entirely by the employer—an indirect breaking of the 1937 labor-management agreement for there always to be 50–50 financing of government retirement-benefit programs for railroad workers. However, this approach was not at all unreasonable in view of the fact that private pension plans in the mass industries, particularly collectively bargained ones, are almost always entirely paid for by the employer. The financing was not based on a percentage payroll

tax, but rather on a tax of 2 cents per hour per employee. Employers with private pension plans could deduct from the amount of tax due any pension payments up to the amount of the supplemental annuity that they made to pensioners eligible for supplemental annuities. This financing was estimated to be sufficient to meet the cost for at least the first four years of the "temporary" five-year period for which the plan was to be effective. However, more retirements than expected, and less employment, had an adverse effect, and by the end of 1969 the special fund established for this program (the RR Supplemental Account) became exhausted.

This resulted in legislation in 1970 that made the program permanent and provided for financing on a pay-as-you-go basis, with the Railroad Retirement Board to promulgate the cents-per-hour tax rate on a quarterly basis. Such rate was 6 cents during April–June 1970. Thereafter it increased steadily to 8½ cents in 1975 and 12 to 12½ cents from January 1976 through December 1980. The rate increased thereafter and was 20 cents in 1984–85, 22½ cents in 1986, 24 cents in 1987, 26 cents in 1988 through June 1991, 28½ cents during July 1991 through March 1992, and 31 cents for April–December 1992.¹¹

The 1970 legislation also restricted the benefit eligibility conditions by requiring retirement within a certain time after age 65, or else the supplemental annuity would be permanently forfeited. This was done on a graded basis so that those attaining age 65 in 1974 and thereafter must retire from railroad employment by the end of the month following the month in which they attain age 65. In this sense, a full circle has been completed, since the original 1934 Act (declared unconstitutional) also had a compulsory retirement feature, which was dropped in the 1935 Act. However, a further reversal occurred, and now such forfeiture does not apply to those who attained age 65 after August 1981.

The 1974 Act changed the Supplemental Annuity program in several respects. These annuities are now available at age 60 for employees with at least 30 years of service, although they are not compelled to retire until age 65 to be eligible. The benefit amounts appear to have been changed from the \$45–70 range previously applicable to a \$23–43 range. In fact, however, the same net result still prevails, as a result of eliminating certain reductions which had previously been made in the regular RR annuities. It is significant that automatic ad-

11. Projection I of the Eighteenth Actuarial Valuation (which the author believes is the most likely one) indicates that the rate will peak at 31 cents and then slowly decrease. Under other projections, the rate will rise for some years (to as high as 54 cents by 2014), but will eventually decline and disappear as the closed group vanishes.

justments for changes in the CPI are not applicable to these supplemental annuities, so that to a certain extent they are tending to “wither away” as economic conditions change.

In connection with the financing of the Supplemental Annuity program, the benefit liberalization in the 1974 amendments, of course, means a higher cents-per-hour tax rate. Also, the receipts from this tax will be divided between the RR Supplemental Account and the RR Account to reflect that, in actuality, part of the supplemental annuity is merely being paid with the regular RR benefit. It appears likely that in the long run, as the “retirement wave” of age cohorts under RR rolls along, the tax rate will drop, eventually vanishing when the plan is phased out some 60 years from now.

An interesting feature of the supplemental annuities is that, unlike OASDI and regular RR benefits, they have always been fully subject to federal income tax. Thus, the revised, lower basis for new retirants after 1974, which resulted in a shift of part of the supplemental annuity to the regular RR annuity, was favorable to them from the basis of net income after taxes. Following legislation in 1983, the tier-1 benefits are taxable in the same manner as OASDI benefits (see Chapter 2), while the tier-2 benefits are taxable in the same manner as private pensions (to the extent that the benefits exceed employee taxes paid). The revenues from the tax on tier-1 benefits go to the OASDI Trust Funds (through the financial interchange). Those from the vested dual benefits go to the RR Account before October 1988 and to the Dual Benefits Payment Account thereafter. Those from the tier-2 benefits go to the RR Account.

Commission on Railroad Retirement Reform

The Commission on Railroad Retirement Reform was created by legislation enacted in late 1987, and it functioned in 1989–90. Its final report was issued on September 14, 1990 (and is now available through the Library of the Railroad Retirement Board).

The major findings and recommendations of the Commission were as follows (not all recommendations were unanimous):

1. RR is financially sound in the intermediate-term.
2. It is quite probable that RR is financially sound over the long-range future (the next 75 years).
3. Tier 2 has elements of both a social insurance program and a private-pension tier for railroad employees. The system is ac-

tuarily sound as the term is applied to a social insurance program.

4. The future of the national economy appears to be favorable over the next decade for the freight railroad sector.
5. Employment projection D of the 17th Actuarial Valuation is the most reasonable and predictive of the five projections, and even appears to be on the low side.
6. A partial-pegged-payroll tax should be substituted for the current employment-based employer tax. If this alternative tax basis is adopted, the statute should clearly indicate that these tax payments are to be recorded as period expenses when paid.
7. If the partial-pegged-payroll tax is not adopted, and if contracting-out increases as a problem by causing reduced employment, serious consideration should be given to imposing an excise tax on contracting-out.
8. The current temporary transfers of income-tax revenue on tier-2 and unrecompensed tier-1 benefits should be continued on a permanent basis.
9. Alternative retirement systems for newly hired railroad employees only should be developed, with transition rules to encourage satisfactory individual company and/or multiemployer pension plans for such employees.
10. The early-retirement provisions should be phased out to provide eventual retirement-age requirements which are the same as those under OASDI.
11. The "notch" in the early-normal-retirement-age reduction factor should be changed in an actuarially correct manner.
12. The occupational-disability annuity provisions should be amended to provide that, effective for disabilities occurring after 1993, the duration for benefit receipt is limited to 24 months.
13. In conjunction with the phase-out of the early-retirement provisions and modification of the occupational-disability annuity eligibility, the provisions for tier-1 benefits should be conformed to the benefits provided under OASDI for those who become entitled or eligible in the future.
14. The Railroad Retirement Tax Act (RRTA) should be changed so as to restore the previous cross-reference to the Federal Insurance Contributions Act for determining tier-1 tax rates (subsequently legislated).
15. A further increase in the current tier-2 tax rates is not needed if the present benefit structure remains unchanged. The current procedure of regular financial reporting by the Railroad

Retirement Board, with recommendations for adjustments to the tax rates if necessary, is an efficient and adequate mechanism for any future corrective action.

16. The tier-2 taxable compensation base should not be increased.
17. The Railroad Retirement Tax Act should be amended to allow individual employers to assume the employee tier-2 tax, and such employer payments should not be considered as compensation for RRTA or income-tax purposes.
18. The financial relationship of the RR Account and the General Fund through the Dual Benefits Payments Account is appropriate.
19. No change in the financial interchange relationship between the RR Account and the OASDI system should be made.
20. The RR Account and the Social Security Equivalent Benefit Account should be combined and should no longer be separate accounting entities.
21. As to the investment management of the RR Account: (1) The statutory formula for determining the monthly rate of interest to be earned on par value special issues should be changed from one based on notes of at least 3 years to maturity, to all "marketable interest-bearing obligations" of at least 4 years to maturity; (2) The current statutory investment authority should be continued; and (3) If the partial-pegged-payroll tax alternative is not adopted, and the balance in the RR Account increases to a more than adequate level (e.g., 3 or 4 years of anticipated outgo), Congress should consider granting the Board more flexible investment authority, so as to include private-sector investments.
22. Tier 1 benefits should be extended to the divorced-spouse categories of beneficiaries, which are now excluded from receiving such benefits.
23. The simultaneous filing of employee and spouse annuities to which an individual is entitled should be required.
24. All future benefit changes for OASDI should apply to tier-1 benefits.
25. Coverage should apply to all interurban passenger railroads which receive any federal funding for their operations or construction, regardless of whether they operate between states.

The author (who was the Chairman of the Commission) strongly disagreed with items 9, 10, and 12.

Appendix 12-1

Outline of the Benefit and Financing Provisions of the Railroad Retirement System as Amended through December 31, 1990

(Prepared by Maynard I. Kagen, Chief Actuary,
Railroad Retirement Board)

EMPLOYEE BENEFITS

1. Normal age annuity

10-year service requirement for retirement at (a) age 65 if born before 1938, or (b) social security retirement age (see definition at end of outline) if born after 1937.
2. Prenormal age annuity
 - A. Eligible upon later of (1) attainment of age 60 and (2) completion of 30 years of service (60/30 eligibility).
 1. If became eligible before 7-1-84, unreduced benefit for retirement at age 60. Employee deemed age 65.
 2. If became eligible after 6-30-84, unreduced benefit for retirement at age 62.
 3. If became eligible after 12-31-85 and employee retires before age 62, tier-1 benefit on annuity beginning date is equal to what social security would have paid an individual retiring at age 62 after applying any age reduction, except that the number of benefit computation years depends on the employee's actual year of birth. Tier-1 benefit is frozen until attainment of age 62, when it is recomputed to equal what social security would have paid the individual had he retired at that time. Tier-2 benefit is not reduced for age. If became eligible between 7-1-84 and 12-31-85, the same procedure applies, except that the age reduction in tier-1 benefit is only one half the amount applicable after 12-31-85.
 - B. Other prenormal retirements

For employees born before 1938 and retiring at ages 62–64 with 10 but less than 30 years of service, the benefit is reduced by $\frac{1}{180}$ for each month the employee is under age 65 on his annuity beginning date. If born after 1937, the benefit is reduced by $\frac{1}{180}$ for each of the first 36 months and by $\frac{1}{240}$ for each additional month the employee is under social security retirement age. (Reduction for age in excess of 36 months

applies only to tier 1 benefit if employee had any service before 8-12-83.)

3. Total and permanent disability annuity
10-year service requirement. Benefit may not begin earlier than the first day of the sixth month following date disability begins.
4. Occupational disability annuity
Requirement of 20 years of service or attainment of age 60 with 10 years of service; current connection (see definition at end of outline) required. Benefit may not begin earlier than the first day of the sixth month following date disability begins.
5. Supplemental annuity
Requirement of attainment of age 60 with 30 years of service if retired on or about 7-1-74, or age 65 with 25 years of service. Must have service before 10-1-81. Current connection required.
6. Vested dual benefit
 - A. Requirement of fully insured (see definition at end of outline) status under Social Security Act effective 12-31-74 and either (i) 25 years of railroad service before 1975 or (ii) 10 years of railroad service before 1975, with some railroad work in 1974 or a current connection on 12-31-74 or at the time the annuity begins,
or if the above conditions were not met,
 - B. Requirement of fully insured status under Social Security Act as of last year of railroad work before 1975 and 10 years of railroad service before 1975.
7. Work restrictions
Suspension of annuity for any month annuitant is employed by a railroad. For disabilities, loss of one month's annuity for each \$400 in excess of \$4,800 earned in a year. In addition, the tier-1 portion of the annuity based on railroad earnings (see definition at end of outline) after 1974 and all social security earnings (see definition at end of outline) is subject to social security work restrictions. If annuitant is employed by last nonrailroad employer preceding retirement, the tier-2 portion and the supplemental annuity are also affected, being reduced one dollar for each two dollars of railroad earnings, subject to a maximum reduction of 50 percent. All vested dual benefits are subject to social security work restrictions.
8. Creditable service (continuity not required)
All service after December 31, 1936. Service before 1937 may be used if annuitant had employment relation on August 29, 1935 or 6 months of service after August 29, 1935 and before

1946. No limit on service except 30-year maximum if pre-1937 service used. Additional service months may be deemed where employee does not work in every month of year, but railroad earnings exceed monthly prorations of annual maximum earnings creditable.

9. Creditable and taxable railroad earnings

<i>Maximum Monthly Earnings</i>	<i>Applicable Time Period</i>
\$ 300	before July 1, 1954
\$ 350	July 1, 1954–May 31, 1959
\$ 400	June 1, 1959–October 31, 1963
\$ 450	November 1, 1963–December 31, 1965
\$ 550	1966–67
\$ 650	1968–71
\$ 750	1972
\$ 900	1973
\$1,100	1974
\$1,175	1975
\$1,275	1976
\$1,375	1977
\$1,475	1978
\$1,575*	1979
\$1,700*	1980
\$1,850*	1981
\$2,025*	1982
\$2,225*	1983
\$2,350*	1984

*From 1966 through 1978 the amount was one twelfth of the annual social security maximum. The 1977 social security amendments introduced a difference between the maximum earnings creditable for tier-1 and tier-2 benefits starting in 1979. The amounts shown for 1979–84 are the tier-2 maximums. The tier-1 maximums are \$1,908.33, \$2,158.33, \$2,475, \$2,700, \$2,975 and \$3,150 respectively.

Starting in 1985, earnings are credited on an annual rather than a monthly basis. The annual maximums are

<i>Year</i>	<i>Tier 1</i>	<i>Tier 2</i>
1985	\$39,600	\$29,700
1986	\$42,000	\$31,500
1987	\$43,800	\$32,700
1988	\$45,000	\$33,600
1989	\$48,000	\$35,700
1990	\$51,300	\$38,100
1991	\$53,400	\$39,600

10. Creditable military service and earnings

Military service is creditable in war and national emergency periods, and between June 15, 1948 and December 15, 1950, if preceded by railroad service in the year of entry into military service or the preceding year. Earnings: \$160 before 1968; \$260 after 1967 but before 1975. For each calendar year after 1974, earnings are the same as that credited under social security.

11. Basic monthly annuity formula for all types of retirement cases

Tier 1—social security component: Social security benefit based on combined railroad and social security earnings, less social security benefit actually payable (based on social security earnings only). See item 2 for computation of tier-1 benefit for employees with 60/30 eligibility.

Tier 2—railroad industry component: 0.7% of the average monthly compensation (AMC) multiplied by the number of years of service. This amount is then reduced by 25% of the employee's vested dual benefit as computed before any adjustment (see item 12). The AMC is the average of an individual's highest 60 months of railroad earnings up to the tier-2 maximum. For each month of service in a year for which the Railroad Retirement Board's records do not show earnings on a monthly basis, the total earnings for the year divided by the months of service in that year will be considered the monthly earnings for each month of service in the year.

12. Vested dual benefit computation

A. For employees satisfying requirements in item 6A, benefit is social security benefit based on railroad earnings through 1974, plus social security benefit based on social security earnings through 1974, less social security benefit based on combined railroad and social security earnings through 1974.

B. For employees satisfying requirements of item 6B, benefit is the same as in A., except for the exclusion of all earnings after last pre-1975 year employee had railroad employment.

In both cases, benefit might be proportionally reduced so that the total amount paid out in vested dual benefits in any fiscal year does not exceed the total amount appropriated for that year (see item 42).

13. Supplemental annuity computation

For employees retired before 1975, the monthly benefit is a minimum of \$45 increased by \$5 for each year of service over 25, with a maximum benefit of \$70. These employees have a reduction in their regular railroad retirement annuity because of the supplemental annuity. For employees whose supplemental

annuity begins after 1974, the monthly benefit is a minimum of \$23 increased by \$4 for each year of service over 25, with a maximum benefit of \$43. These employees have no reduction in their regular railroad retirement annuity. Supplemental annuity will be reduced if employee receives a private pension from railroad employer based on employer contributions.

14. Cost-of-living increases (annually, effective with January 1 payments)

Tier 1: Same as social security increases.

Tier 2: 32.5% of social security increases.

Vested dual benefits: Frozen at the 1974 level, except that social security cost-of-living increases effective between 12-31-74 and the earlier of January 1, 1982 and the annuity beginning date are included in the benefit computation.

Supplemental annuity: None.

15. Tax rebate lump sum

Employee who has at least 10 years of railroad service and is not eligible for the vested dual benefit will receive a lump sum at retirement computed by summing for each year from 1951 through 1974 the product of the social security tax rate for the year times the excess of the employee's combined railroad and social security earnings for the year over (approximately) the maximum creditable for the year under the 1937 Act. Survivors of employee may receive refund if employee dies before receiving it.

16. Separation/severance lump sum

Lump sum, equal to tier-2 payroll taxes deducted from separation or severance payments, will be paid at retirement to employees with 10 or more years of service if separation or severance payments did not yield additional service month credits.

SPOUSE BENEFITS

17. Eligibility

A. Unreduced annuity:

1. Spouse retiring at age 60 (or any age with a child in care), if employee attained 60/30 eligibility before 7-1-84 and retired at age 60 or later, or if employee attained 60/30 eligibility after 6-30-84 and retired at age 62 or later.
2. Spouse retiring (a) at age 65 if born before 1938, (b) social security normal retirement age if born after 1937, or (c) at any age with a child in care, if employee retired after 12-31-74 and is age 62 or over, employee retired before 1-1-75 and is age 65 or over, or employee attained 60/30

eligibility after 6-30-84 and retired from disability after 6-30-84.

B. Reduced annuity:

1. Spouse retiring at age 60 if employee attained 60/30 eligibility after 6-30-84 and retired after 6-30-84 before attaining age 62. If employee and spouse have not both attained age 62, spouse tier 1 is one-half the tier 1 the employee received before attaining age 62. If employee and spouse have both attained age 62, spouse tier 1 is equal to a social security spouse benefit after applying an age reduction based on the spouse's age at the time both employee and spouse became age 62; in this case, if employee attained 60/30 eligibility between 7-1-84 and 12-31-85, spouse age reduction is one-half the amount otherwise applicable.
2. Spouse retiring at age 60, if employee attained 60/30 eligibility after 6-30-84 and retired from disability after 6-30-84. If spouse was born before 1938, age reduction in tier 1 is $\frac{1}{144}$ for each month spouse is under 65. If spouse was born after 1937, age reduction in tier 1 is $\frac{1}{144}$ for each of first 36 months and $\frac{1}{240}$ for each additional month spouse is under social security retirement age; spouses retiring at 60-61 are deemed 62.
3. Spouse retiring at age 62, if employee has less than 30 years of service, is retired, and has attained age 62. If spouse was born before 1938, age reduction is $\frac{1}{144}$ for each month spouse is under 65. If spouse was born after 1937, age reduction is $\frac{1}{144}$ for each of the first 36 months spouse is under social security retirement age and $\frac{1}{240}$ for each month in excess of 36 that spouse is under retirement age. (Reduction for age in excess of 36 months applies only to tier 1 if employee had any service before 8-12-83.)

18. Work restrictions

Same as employee; in addition, spouse is not paid for any month employee annuity is not payable by virtue of work restrictions.

19. Annuity formula

Tier 1—social security component: One half of social security benefit based on employee's combined railroad and social security earnings. See item 17 for computation of spouse tier 1 in cases where employee is receiving a reduced 60/30 benefit. If spouse is entitled to a social security benefit, tier 1 is reduced by the amount of the benefit, but not below zero. If spouse is entitled to employee annuity or a public service pension, certain additional restrictions apply.

Tier 2—railroad industry component: 45% of employee's tier-2 benefit. Spouse receives additional benefit if spouse is also an employee.

20. Vested dual benefit

A spouse receiving a vested dual benefit on August 13, 1981, will continue to receive a benefit (adjusted as described in item 12). No vested dual benefits will be awarded after that date.

21. Divorced wife

Entitled to a tier-1 benefit only. Employee must be age 62 and retired. Divorced wife must be age 65 (or 62 for reduced benefit), unmarried, and have been married for at least 10 years to employee.

22. Cost-of-living increases

Each tier is subject to same percentage increase as corresponding tier of employee benefit.

MAXIMUM AND MINIMUM ANNUITIES

23. Maximum annuity (employee and spouse)

100% of "final AMC" up to an amount equal to 50% of tier-1 earnings in the year in which the annuity begins, plus 80% of that part of the final AMC that exceeds 50% of tier-1 earnings. The final AMC is the average monthly combined railroad and social security earnings received by the employee during the two highest calendar years of earnings in the 10 years ending with retirement. Earnings used in computing the final AMC are subject to the tier 2 earnings maximum.

If the combined employee and spouse annuities (excluding the vested dual benefit) exceed the above amount, the spouse's tier-2 benefit is reduced first, then the employee's supplemental annuity, and finally the employee's tier-2 benefit. The tier-1 benefits are not reduced. The maximum may not reduce total family benefits (excluding the vested dual benefit) below \$1,200 per month.

24. Minimum annuity

The overall minimum guaranty for employees and spouse is 100% of the amount, or the additional amount, the family would receive under the Social Security Act if the employee's railroad earnings after 1936 were credited as social security earnings.

SURVIVOR AND DEATH BENEFITS

25. Residual lump sum death benefit

Payable when it appears no further benefits will derive from deceased employee except possibly to a widow, widower or par-

ent at a future date. In this case, survivor must waive the right to all future benefits. The amount payable is the sum of 4% of taxable railroad earnings from 1-1-37 to 12-31-46, 7% from 1-1-47 to 12-31-58, 7½% from 1-1-59 to 12-31-61, 8% from 1-1-62 to 12-31-65, and from 1-1-66 to 12-31-74, ½% above the employee tier-2 contribution rate. Railroad earnings after 1974 are not taken into account. The amount actually paid is reduced by the amount of benefits paid deriving from the deceased employee.

26. Employee requirement for survivor benefits

All benefits except residual lump sum require deceased employee to have 10 years of railroad service and a current connection. If employee does not meet above conditions, his earnings record is transferred to social security, which pays any survivor benefits.

27. Aged widow's and widower's eligibility

A widow or widower must be age 60 and unremarried. Those age 60–61 are deemed age 62 in computing the benefit. For those born before 1940, the benefit reduction is 19/40% for each month of age under 65 when benefits begin. For those born after 1939, the age reduction depends on the age at retirement and the social security retirement age. In this case, the monthly reduction factor is that percentage which would cause retirement at age 60 to result in a 28.5 percent reduction.

28. Disabled widow's and widower's eligibility

A widow or widower must be age 50, unremarried, and totally and permanently disabled if disability occurs within 7 years of employee's death or within 7 years after widowed mother's or father's status terminated. Age reduction is 28.5%. Benefit may not begin earlier than the first day of the sixth month following the date disability begins.

29. Widowed mother's and father's eligibility

Unremarried former spouse of a deceased employee who is not entitled to a larger amount as aged or disabled former spouse and who at the time of filing an application has in his or her care a minor or disabled child of the deceased employee.

30. Divorced widow's, remarried widow's, and divorced mother's eligibility

The following are eligible for a tier-1 benefit only.

A. Divorced widow—must have been married to employee at least 10 years, have attained 65 (60 for reduced benefit), and be unmarried.

B. Remarried widow—must have remarried after age 60, or the

remarriage must have ended. Widow must have attained age 60 or be between 50 and 59 and disabled.

C. Divorced mother—divorced widow who is unmarried and has in her care a child of employee under age 16 or disabled. Benefits for divorced widows and remarried widows are reduced for the full number of months under age 65.

31. Child's eligibility

A child of a deceased employee must be under 18 or under 19 and a full-time elementary or secondary school student. Dependent, unmarried children who were disabled before age 22 are also eligible, regardless of age.

32. Parent's eligibility

A parent of a deceased employee who has attained age 60 and received at least one half of his or her support from the employee will be eligible for an annuity. A parent of an employee who died leaving a widow, widower, or child who is or might become eligible in the future will be eligible for a tier-1 benefit only. In certain instances, a remarried parent of a deceased employee will be eligible for a tier-1 benefit.

33. Work restrictions

Annuity not payable for any month in which survivor engages in railroad employment. Entire benefit subject to social security work restrictions.

34. Annuity computation for all eligible survivors

Tier 1: Amount payable to survivor under Social Security Act, based on the deceased employee's combined railroad and social security earnings after 12-31-36, less the amount of any social security benefit received. Additional restrictions exist for a widow who also receives an annuity as a railroad employee or who receives a public service pension.

Tier 2:

Widow or widower—50% of employee tier-2 benefit

Parent—35% of employee tier-2 benefit

Children—15% of employee tier-2 benefit for each child

The total family tier-2 benefit has a minimum of 35% and a maximum of 80% of the employee's tier-2 benefit.

For aged widow or widower, the total benefit exclusive of any vested dual benefit may not be less than amount received as spouse in month before employee's death.

All percentages are before deductions for work or entitlement to social security benefit or railroad retirement employee annuity.

35. Vested dual benefit for widow or widower

A widow or widower receiving a vested dual benefit on August 13, 1981 will continue to receive a benefit (adjusted as described in item 12). No vested dual benefits will be awarded after that date.

36. Insurance lump sum

Payable if employee leaves no survivor eligible for monthly benefits in the month of death.

A. If employee had 10 years of service before 1-1-75, the benefit is 10 times the basic amount. The basic amount is 52.4% of the first \$75 of average monthly remuneration (AMR), plus 12.8% of the remainder, increased by 1% for each year before 1975 with earnings of \$200 or more. The AMR is combined railroad and social security earnings before 1975 divided by the number of months after 1936 or age 22 and up to retirement or death.

B. If employee had less than 10 years of service as of 12-31-74, the amount will be the amount social security would have paid (in 1991, \$255).

37. Cost-of-living increases for survivors

Each tier is subject to same percentage increase as corresponding tier of employee benefit.

FINANCING, INVESTMENTS, AND TAXATION OF BENEFITS

38. Employee and employer payroll taxes

Employees and employers contribute at the prevailing social security rate of pay up to the tier-1 earnings limit. In addition, employers contribute 16.1 percent and employees contribute 4.9 percent of pay up to the tier-2 earnings limit. Contributions to 401(k) deferred compensation plans and the value of employer-paid premiums for group term life insurance coverage in excess of \$50,000 are included in railroad earnings for payroll tax purposes.

39. Supplemental annuity tax

Taxes for the supplemental account are collected on the basis of the \$45-\$70 benefit scale previously in effect. The tax rate is determined quarterly by the Railroad Retirement Board on a cents-per-work-hour basis and is paid by employers. The excess resulting from the \$23-\$43 actual benefit scale is transferred to the regular railroad retirement account.

40. Financial interchange

Railroad retirement system pays to social security system the taxes social security would have collected and receives the additional amount of benefits and administrative expenses social se-

curity would have paid if railroad employment had been covered under social security. The net difference (including interest) is transferred in the June after the fiscal year for which the transfer is made.

The Railroad Retirement Board estimates the amount and direction of the financial interchange transfer that would be made for each month if transfers were on a current monthly basis. If this estimate favors the railroad retirement system, Treasury advances the amount with interest to the railroad retirement account, as a loan from the general fund, by the middle of the succeeding month. Within 10 days after receipt of the annual financial interchange for a fiscal year, the RRB must repay the amount, with interest, advanced during the fiscal year.

41. Investments

Railroad retirement system funds are permitted to be invested in special obligations, U.S. interest-bearing securities, and interest-bearing securities guaranteed by the U.S. or which are lawful investments for trust funds managed by the Treasury. The securities purchased in a month must have fixed maturity dates and interest yields at rates at least as high as the average market yield of all Treasury notes with maturities of over 3 years, but not less than 3%. The Railroad Retirement Board has the authority to make mandatory requests upon the Secretary of the Treasury as to purchase of these obligations. The Railroad Retirement Board determines when and which securities are to be redeemed for the purpose of paying benefits or for reinvestment.

42. Financing of vested dual benefits

General revenue appropriations finance all vested dual benefit payments since September 1981. Beginning October 1, 1981, each annual appropriation is placed in the Dual Benefits Payments Account. Total benefits paid in any fiscal year (starting with 1982) may not exceed the total available in the account. The account may borrow at the end of a fiscal year the amount that the Railroad Retirement Board estimates will be necessary to pay vested dual benefits for the first month of the next fiscal year.

43. Railroad unemployment repayment tax

The purpose of this additional tax paid by employers is to repay to the railroad retirement account the outstanding loan to the railroad unemployment insurance account. Effective January 1, 1989, the tax rate was fixed at 4 percent of the first \$710 (indexed) of each employee's monthly earnings. The monthly earnings limit changed to \$745 for 1990 and \$765 for 1991. The Treasury transfers from the general fund to the railroad retire-

ment account the revenue produced by this tax. The tax will continue at the 4 percent rate until the loan is fully repaid with interest.

44. Taxability of benefits

The portion of tier-1 benefits equivalent to social security benefits is taxed under the same rules as are social security benefits. Tier-1 benefits in excess of social security equivalent benefits, tier-2 benefits, vested dual benefits, and supplemental annuities are taxed under the rules by which private pensions are taxed.

Revenues from taxes on social security equivalent benefits are transferred to the social security system through the financial interchange. The revenue derived from taxing pre-October 1992 excess tier-1 benefits and tier-2 benefits will be transferred to the railroad retirement account. [Author's note: As a result of legislation in 1992, these transfers are permanent and not only for pre-October 1992 benefits.] The revenue derived from taxing pre-October 1988 vested dual benefits was also transferred to the railroad retirement account; revenue from taxing vested dual benefits paid after September 1988 is being transferred to the Dual Benefits Payments Account.

MISCELLANEOUS PROVISIONS

45. Benefit preservation

Each year the Railroad Retirement Board must report to the President and Congress the results of a five-year projection of anticipated revenues to and payments from the railroad retirement account. If the results show that the funds in the account will be insufficient to pay full benefits at any time during the five-year period, the report must indicate (1) the first fiscal year in which benefits would have to be reduced because of insufficient funds in the absence of any changes, and (2) the amount of adjustments necessary to preserve financial solvency. Within 180 days after publication of this report, representatives of railroad labor and management are obligated to submit proposals designed to preserve the fund's solvency. The Railroad Retirement Board will publish regulations necessary to provide a constant level of benefits at the maximum level possible and to insure that no individual receives less than what he would have had all his earnings been covered under social security. The Railroad Retirement Board's regulations will take effect beginning with the first year in which benefit reductions will be necessary and continue until legislative action supersedes them.

46. Automatic benefit eligibility adjustments

Liberalizations in social security eligibility requirements will automatically be reflected in railroad retirement eligibility requirements, but reductions in social security requirements for categories not entitled to railroad retirement annuities under the 1937 act will not confer railroad retirement eligibility. If the Social Security Act is amended to provide benefits to a class not previously entitled under social security, the new class will also be provided railroad retirement benefits. The amount will be the social security benefit based on the employee's combined railroad and social security earnings.

47. Transfer of credits

Transfer of railroad retirement credits is made to social security if an employee had less than 10 years of railroad service or, in the case of a survivor, if the employee lacked a current connection.

DEFINITIONS

The meanings of terms used in the outline are defined below:

Railroad earnings—earnings derived from covered railroad employment, up to the maximums specified in item 9.

Social security earnings—earnings derived from employment covered under the Social Security Act (excludes railroad earnings), up to the maximums allowed.

Current connection—generally defined as having at least 12 months of railroad service in the 30 months preceding death or retirement. For purposes of the supplemental annuity or survivors' benefits, an employee who was terminated involuntarily and without fault after 25 years of service is deemed to have a current connection if he worked in the railroad industry on or after October 1, 1975.

Fully insured—insured for retirement at age 62 under social security; does not necessarily imply an insured status for disability benefits or for survivor benefits for death before age 62.

Social security benefit—when used in describing the computation of the vested dual benefit, the term "social security benefit" means a primary insurance amount computed by using the social security formula in effect in 1974 and the specified earnings; it does not imply an actual benefit.

Social security retirement age—the age at which an individual may receive an unreduced benefit at retirement under the Social Security Act, as follows:

<i>Year of Attainment of Early Retirement Age (62 for employees and spouses, 60 for widows and widowers)</i>	<i>Retirement Age (age for unreduced benefit)</i>
1999 or earlier	65 years, 0 months
2000	65 years, 2 months
2001	65 years, 4 months
2002	65 years, 6 months
2003	65 years, 8 months
2004	65 years, 10 months
2005–2016	66 years, 0 months
2017	66 years, 2 months
2018	66 years, 4 months
2019	66 years, 6 months
2020	66 years, 8 months
2021	66 years, 10 months
2022 or later	67 years, 0 months

Appendix 12-2

Operational Data for the Railroad Retirement System

The average monthly number of workers with any covered employment under the RR system during the course of the year 1990 was about 300,000. Such employment in the railroad industry rose from about 1.2 million in the late 1930s to a peak of 1.7 million during World War II. It then declined slowly to about 1.4 million during the early 1950s and then steadily to only about 540,000 in 1974–80. Thereafter, employment dropped off to only 400,000 in 1983 (the major cause of the financing crisis then). A considerable number of railroad workers also have employment covered by OASDI.

The total wages in the railroad industry were about \$12.0 billion in 1988, of which \$11.5 billion, or 96 percent, was taxable within the tier-1 monthly earnings base (but only about 85 percent was taxable within the tier-2 base). The annual taxable payroll increased from about \$2.2 billion in the late 1930s to a maximum of about \$5.0 billion in 1948–57 (fluctuating in this period generally between \$4.9 and \$5.1 billion), despite the fact that the general earnings level was steadily rising. Following 1957, the taxable payroll declined by almost 20 percent, to \$4.0 billion in 1962–63, but the subsequent increases in the earnings base had the effect of increasing it thereafter, until it was about \$5.0 billion in 1968–71. The taxable payroll increased slowly thereafter, primarily due to the increases in the maximum tax-

able earnings base. Rises in wage rates in the past years have been largely offset by the declining employment and, in many early years, by the effect of the earnings base remaining unchanged.

Benefit payments under RR increased from about \$100 million per year in the early years of operation to about \$7.2 billion in 1990 (plus \$110 million in supplemental annuities). Administrative expenses in recent years have represented somewhat less than 1 percent of benefit outgo. The payroll taxes amounted to under \$200 million per year in the early years of operation and grew steadily to around \$600 million per year in 1951–63 (the declining total payroll during this decade was, on the whole, offset by rising tax rates and higher earnings bases), and then gradually to about \$1.0 billion in 1969–72 (due largely to increased tax rates, including those for HI, which are transferred entirely to the HI Trust Fund, and to higher earnings bases) and steadily thereafter, to about \$3.7 billion in 1990, which was subdivided as shown in the following table (in billions).

<i>Type</i>	<i>Employer</i>	<i>Employee</i>	<i>Total</i>
Tier-1	\$0.8	\$0.8	\$1.6
Tier-2	1.5	0.5	2.0
Supplemental	0.1	—	0.1
Total	2.4	1.3	3.7

The balance in the RR Account increased from \$3.8 billion at the end of 1963 to \$4.6 billion at the end of 1972 and declined steadily thereafter, to a low of about \$500 million in 1983; thereafter, the balance rose and was about \$8.8 billion at the end of 1990 (not including about \$0.9 billion in the Social Security Equivalent Benefit [SSEB] Account).

Over the years, the current financing of RR (on an income-outgo basis) has been greatly aided by the financial interchange with OASDI. The cumulative effect of the financial interchange through 1990 was net income to RR of \$40.4 billion (including interest). Because the RR Account, plus the SSEB Account then was only \$9.7 billion, it can readily be seen that without this source of income RR would have been bankrupt (on a cash basis) some years ago. It is estimated that the financial interchange will produce a flow of funds to RR from OASDI for many years.

The number of worker annuitants (both age and disability) increased from about 150,000 in the late 1930s to 420,000 at the end of 1963 (including only about 400 of the original closed group of

pensioners taken over from the railroad private pension plans). The worker annuity roll peaked at about 465,000 in mid-1976 and then decreased to 395,000 at the end of 1990, including 34,000 disabled annuitants under age 65. There were also on the benefit roll 218,000 spouses and 284,000 survivor beneficiaries (268,000 widows and widowers, 16,000 children, and 2,000 widowed mothers). The total number of monthly beneficiaries was 1,091,000, or about 3.6 times as high as the number of covered workers during a typical month of 1990. Significant proportions of the beneficiaries were also receiving OASDI benefits. The total number of beneficiaries is slowly decreasing—by about 100,000 during 1990.

The average monthly benefits payable at the end of 1990 were as follows: age annuitants and disability annuitants aged 65 or over, \$924; disability annuitants under age 65, \$1,122; widowers and widows aged 60 or over or disabled, \$562; widowed mothers and fathers, \$587; and children, \$511.

In 1990 the Supplemental Annuity system paid \$110 million in benefits, averaging \$46 to 194,000 annuitants.

The maximum monthly benefits available under RR (including the supplemental annuity), as compared with OASDI, for an individual who attains age 65 (or who dies at age 65) in March 1991 and who began work in 1949, are shown in the following table.

	<i>RR</i>	<i>OASDI</i>
Retirement Benefits		
Worker only	\$1,920	\$1,022
Worker and spouse aged 65	2,816	1,533
Survivor Benefits		
Widow aged 65	\$1,464	\$1,037
Maximum family benefit	2,500	1,816

Appendix 12-3

Actuarial Basis of the Railroad Retirement System

The original Railroad Retirement Act required that actuarial valuations should be made at intervals of not less than three years. The valuations are currently carried out according to standard pension-fund procedures (except for being for a 75-year period, just as is done for OASDI, although formerly on an open-end basis that considered new entrants into the indefinite future). The results are presented in the form of a balance sheet. Subsidiary year-by-year projections are

also presented. Thus, indication is given as to the sufficiency or insufficiency of the tax schedule in the law and as to the amount of any differential. Some years ago, only a single estimate was prepared, rather than a range showing possible low-cost and high-cost estimates, and no year-by-year projections were given.

The Eighteenth Actuarial Valuation was made as of the end of 1989. This valuation was made on four alternative bases as to the level of future railroad employment. Also, the valuation was made on an open-end basis over a 75-year valuation period.

One of the most crucial factors with regard to the cost of RR is what employment, and thus the taxable payroll, will be in the future years. As indicated previously, there had been a very substantial decrease in railroad employment in the past. In this respect, the financial-interchange provisions with OASDI have a very strong cushioning effect, but nonetheless the use of a considerably lower payroll assumption results in significantly higher costs expressed as percentages of taxable payroll. The Eighteenth Actuarial Valuation assumed that there would be a change in average employment from the 1990 level of 296,000 as shown in the following table (along with the resulting long-range actuarial balances as a percentage of taxable payroll and years of exhaustion of the fund balance).

<i>Valuation</i>	<i>Employment Level in 2010</i>	<i>Ultimate Employment Level</i>	<i>Fund Exhausted in</i>	<i>Actuarial Balance</i>
I	194,000	179,000 (2015 and after)	Not in period	+ 3.67%
II	188,000	94,000 (2064 and after)	Not in period	+ 2.08
III	161,000	68,000 (2064 and after)	2024*	+ .03
IV	112,000	62,000 (2037 and after)	2012	- 3.89

*But becomes solvent again in 2043 (on the assumption that it could obtain repayable loans in 2024-42).

As can readily be seen, the financial soundness of the RR system over the long run is very dependent upon how much employment declines, and on how rapidly this occurs. All of the valuations assume a decline of at least 40 percent in employment, and the most pessimistic one assumes a decline of 79 percent. In any event, however, no cash-flow problems are shown in any of the valuations for the next 20 years.

Two "mini-valuations" are also required by the legislation to be prepared annually. The "Section 22 Report" is a 5-year projection of revenues and disbursements, while the "Section 502 Report" examines the actuarial status of the RR system over the next 25 years. The 1991 Section 22 Report concluded that the RR Account had sufficient

funds to finance benefit payments through 1996, even under pessimistic employment assumptions. The 1990 Section 502 Report found that “barring a sudden, unanticipated, large decrease in railroad employment, the railroad retirement system will experience no cash flow problems during the next 20 years” and that “the long-term stability of the system, however, is still questionable.”

Appendix 12-4

Development of Financing Provisions of the Railroad Retirement System

The financing provisions of RR can be considered in four parts: the maximum taxable wage base, the employer and employee tax rates, the investment procedures for the RR Account, and the government subsidy.¹² In addition, the financial-interchange provisions with OASDI (as described in Chapter 4) provide significant financing for RR.

Maximum Taxable Wage Base

The maximum taxable wage base under RR was on a monthly basis until 1985—unlike OASDI, which has always used an annual basis. The RR base was \$300 initially and was increased successively to \$350 beginning for July 1954, to \$400 beginning for June 1959, and to \$450 beginning for November 1963. The apparent intent was to have the RR base, on an annualized basis, always be slightly higher than the OASDI one (although, in fact, it was the same during January 1951 through June 1954, during 1955–58, and during June 1959 through October 1963, and was actually lower during January–May 1959).

As a result of the amendments to the Social Security Act in 1965 that established the HI program under Medicare, an amendment to the RR Act in 1965 provided that, beginning for 1966, the RR base would always be one twelfth of the OASDI-HI base. If this situation did not prevail, the HI taxes would be collected separately by the Internal Revenue Service, rather than combined with the RR taxes and collected by the RR Board. Those concerned with the operation of RR did not want the separation of the tax collections, and so they

12. For a detailed account of the financing problems of RR over the years, and the solutions thereof, see Robert J. Myers, “Financing Problems of Social Insurance Schemes Covering Small Industrial Categories—A Case History,” *Transactions*, 20th International Congress of Actuaries, October 1976.

readily agreed to the amendment providing for this parity of the earnings bases.

Parity between the OASDI-HI base and the RR base (annualized) was maintained after 1966 until 1979. Then, two bases were made applicable to RR: (1) the OASDI-HI one as to the employee taxes and the matching employer taxes which are used to finance the HI benefits and the OASDI benefits portion of the RR tier-1 benefits and (2) the OASDI-HI base that would have been present if the three ad hoc increases legislated in the 1977 Social Security Amendments had not been enacted, and only the automatic adjustments to the base had been made, as to the remainder of the employer and employee taxes which are utilized to finance the second tier of the RR benefit structure and the unrecompensed (by OASDI) portion of the tier-1 benefits. In 1979, the former base was \$1,908.33 per month and the latter was \$1,575. As to the tier-2 bases for other years, see Table 2.13.

Tax Rates

The schedule of employer and employee taxes that was effective when RR began tax collections was 5½ percent in 1937–39 for the combined employer-employee rate. This rate was scheduled to increase to 6 percent for 1940–42, 6½ percent for 1943–45, 7 percent for 1946–48, and 7½ percent for 1949 and after. In accordance with the original agreement between labor and management, the tax rate was, for all time to come, to be split equally between employer and employee.

The 1946 amendments made several significant benefit changes. The tax schedule was increased to meet the additional cost of the benefit liberalizations and to meet the estimated deficiency for the previous provisions. The new schedule provided a rate of 11½ percent for the combined employer-employee rate until 1949, then 12 percent for 1949–51, and 12½ percent for 1952 and afterward.

Despite the extensive benefit liberalizations in the 1951 Act, no changes were made in the financing provisions of the system other than those resulting indirectly from the financial-interchange provisions, which were estimated by the RR Board to provide some gain to its system.

The financing provisions were not changed following the 1946 amendments until the 1959 amendments (other than for raising the earnings base and introducing financial-interchange provisions with OASDI), despite several significant benefit liberalizations. Of course, during that time the tax rate increased according to the schedule in the law. In 1959, the combined employer-employee tax rate was in-

creased from $12\frac{1}{2}$ percent to the following schedule: $13\frac{1}{2}$ percent for June 1959 through 1961, $14\frac{1}{2}$ percent for 1962–64, and for years after 1964 to $14\frac{1}{2}$ percent plus the excess of the then-current OASDI rate over $5\frac{1}{2}$ percent, which was the OASDI rate scheduled for 1960–64 under the Social Security Amendments of 1956 (although, as it turned out, the actual rate for that period was different). To put it another way, the RR tax rates for years after 1964 would, under the 1959 legislation, be the OASDI rates plus 9 percent—that is, $14\frac{1}{4}$ percent, plus the OASDI rate, minus $5\frac{1}{2}$ percent.

Legislation in 1965–66 provided that the HI tax for the Medicare program would be included in the RR tax and that the basic RR tax rate would be increased from $14\frac{1}{2}$ percent to 15 percent in 1965. As a result, the combined employer-employee tax rate under RR after 1968 was $9\frac{1}{2}$ percent plus the then-prevailing OASDI-HI rates.

The historic 50–50 split of the total tax rate between employers and employees was significantly altered in the 1973 legislation. Beginning in October 1973, railroad workers paid only the same rate as employees under OASDI and HI, and railroad employers paid the balance of the scheduled RR total rate. This follows the usual pattern in private pension plans in mass-production industries, where the workers pay only the OASDI and HI taxes, and the employer pays the entire cost of the private plan, plus the employer OASDI and HI taxes.

At first glance, it might be thought that this change in the proportion of the RR tax paid by the employees was a great financial gain for them. Such change was the result of collective bargaining, and Congress enacted the necessary legislation merely because both parties involved were in agreement. But, in fact, another element must be considered.

The 4-percent increase in the cash wages in the railroad industry which was bargained for at the same time was less than might have been expected from the general trend of earnings and prices—by about the amount of the additional RR tax ($4\frac{1}{4}$ percent) that the employers agreed to pay. At the same time, this offered the railroad unions an ingenious way to “get around” the 4-percent maximum specified under the federal wage guidelines prevailing then. Accordingly, the employer cost then was about the same as it would have been if a “normal” wage increase had been given, and the employee take-home pay was also about the same, although some savings in income tax resulted. This raises once again the long-standing question of who really pays the cost of pension plans, whether nominally contributory or noncontributory.

Under the OASDI and HI tax schedule in the 1973 Social Security

Amendments, the combined employer-employee RR tax rates were scheduled at 21.2 percent for 1973–77, 21.6 percent for 1978–80, 22.1 percent for 1981–85, 22.4 percent for 1986–2010, and 24.4 percent for 2011 and afterward. As mentioned, the 1973 Amendments provided that railroad employees would, in the future, pay the same tax rates as employees under OASDI. Thus, the railroad employers would pay amounts matching the employee taxes, *plus* a tax rate of 9½ percent.

A financing change made by the 1974 Amendments was in connection with the taxes paid by employees in years when they work under both RR and OASDI. After 1974, the maximum tax liability for employees is based on the maximum taxable wage base, with refunds being available on the income tax return when the combined RR-OASDI earnings exceed such base. Employees with past service who are not vested for dual benefits are also eligible for similar refunds for years before 1975, payable at the same time that a claim is awarded on their earnings record. Vested employees are not so eligible because their separate RR and OASDI earnings produce separate benefits.

The unfavorable experience of the RR system in the late 1970s led to the increase in the tier-2 tax rates, including the reinstatement of employee ones, in the 1981 Amendments (as described in more detail in the main text of this chapter). And then continuing unfavorable experience led to further increases in both the employer and employee tier-2 tax rates in 1987 legislation (again, as described earlier).

Investment Procedures

Originally, the assets of the RR Account were required to be invested in obligations of the federal government, with special issues to be available at 3-percent interest if this rate was not achievable in the open market. Considering the low level of interest rates in the 1930s and 1940s, this was indirectly a government subsidy to RR. Later, like OASDI, the interest-rate basis was changed to the average coupon rate on all obligations other than short-term ones.

The 1963 amendments had the primary purpose of improving the financial position of the system. This was accomplished by having a more favorable basis for the special-issue investments of the RR Account. Under the new basis, the rate for such new investments is the average market yield rate, at the time of issue, on all interest-bearing obligations of the U.S. government with at least three years to maturity, rounded to the nearest ¼ percent and with a minimum of 3 percent. This is substantially the same procedure as is followed for the

OASDI Trust Funds, except that a 3-percent minimum is given to the RR Account. Furthermore, all special-issue investments of the account on the enactment date were converted to the new interest basis, which at that time produced a rate of 4 percent.

In 1970, a further change favorable to RR was made—basing the interest rate for special issues on the average rate for notes of the U.S. government with at least three years to maturity. This produced a higher result, because of the elimination of long-term bonds from consideration (which then had a lower yield than short-term notes).

An important change in the financing provisions made in the 1974 Amendments was that, in the future, the investments of the RR Account would be under the authority of the RR Board, rather than the Secretary of the Treasury. Accordingly, investments in special issues can be redeemed whenever the board decides, and this will quite likely over the long run be done when current market yields are higher than the coupon rates on special issues obtained in the past. But, if the opposite situation occurs, the special issues obviously would continue to be held. President Ford, in his veto of this legislation (which was later overridden), pointed out that such an investment procedure was unfair and improper because it was a “heads I win, tails you lose” arrangement. The RR Board also has flexibility about investing in other than special issues if a greater rate of return can be obtained in this way, although in these instances there would not be the advantage of redeeming at par if interest rates rise, as can be done for special issues.

Government Payments to Railroad Retirement

The 1974 Amendments made substantial changes in the RR financing provisions. A government payment was introduced to pay for the cost of the vested dual benefits that had arisen as a result of persons being covered under both RR and OASDI in years before 1975. Such dual benefits were eliminated by the 1974 Act with respect to service in the future.

The joint labor-management committee that had, in 1973, been assigned the task of solving the financial difficulties of RR had recommended that such cost be borne by OASDI. Congress, however, believed that this would not be proper and that, instead, it should be borne by the General Fund of the Treasury. The rationale for this action, rather than having the cost met by the railroad employers and employees, was that Congress was to be blamed for liberalizing OASDI benefits and providing corresponding increases under RR and for repealing the restrictions on dual benefits that had originally

been contained in RR. Of course, in actual practice such changes in RR were often made because of the pressures therefor of the railroad labor organizations, often over management's objections.

Other Financing Aspects

The 1973 joint labor-management negotiating committee made a recommendation to lessen somewhat the cash-flow difficulties of RR by putting the financial interchange with OASDI-HI on an accrual basis, rather than a deferred-payment basis, with approximately a 15-month lag.¹³ This procedure would, of course, have absolutely no long-range actuarial effect. It would, however, bolster the RR Account by about \$1½ billion for all future years and have exactly the opposite effect for the OASDI and HI trust funds.

Congress, upon the urging of the Nixon administration, did not adopt this accrual approach for the financial interchange, although its validity was not denied. The reasons given for such action were the current financial difficulties of OASDI and the fact that its trust-fund balances were estimated to be relatively level in the near future, and this change would produce a significant decline. However, the law was changed in 1981 so that the RR Account can borrow (with appropriate interest) from the General Fund amounts up to the amount of the outstanding accrued financial-interchange payment due. In 1983 monthly advances to the RR Account from the General Fund were provided, so that, in essence, the accrual procedure is operative insofar as the Account is concerned (although the OASDI Trust Funds continue to pay on a lag basis, with appropriate interest).

13. Under then-current practice, the FI payments for both OASDI and HI for a 12-month period ending September 30 were made in the following June. The length of time from the middle of such 12-month period to the following June is about 15 months. Before the fiscal year of the federal government was changed in 1977, so as to end on September 30 instead of June 30, the lag was 18 months for OASDI, but only 9 months for HI (because the HI payment had been made in the September following the end of the fiscal year, whereas the OASDI payment was always made in the following June, almost a year later). Insofar as OASDI and HI are concerned, this practice continues currently.