<table>
<thead>
<tr>
<th>Possible action</th>
<th>(a) Obtain offsetting wage rate increase</th>
<th>(b) Reduce consumption expenditures</th>
<th>(c) Reduce saving and/or dis-save</th>
<th>(d) Obtain additional job, or overtime</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barriers to action's success</td>
<td>Employer can hire other workers—unemployment high</td>
<td>Consumption at physical or psychological minimum</td>
<td>Not previously saving</td>
<td>Jobs not available</td>
</tr>
<tr>
<td></td>
<td>Employer wins bargaining</td>
<td>Heavy fixed monetary commitment (i.e., installment payments, etc.)</td>
<td>Psychological need to save</td>
<td>Not willing to sacrifice leisure</td>
</tr>
<tr>
<td></td>
<td>Employer convinces workers cost increase impossible because profit margin small</td>
<td>Employer can substitute labor-saving equipment</td>
<td>Wages so large a portion of total costs employer vigorously resists increase</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Employer can substitute labor-saving equipment</td>
<td>Wages so large a portion of total costs employer vigorously resists increase</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Receiver if action successful</td>
<td>Employer</td>
<td>Supplier of consumer goods and services</td>
<td>Borrowers</td>
<td>Other workers</td>
</tr>
<tr>
<td>Receiver's action</td>
<td>See Chart 2</td>
<td>See Chart 3</td>
<td>See text</td>
<td>See text</td>
</tr>
</tbody>
</table>
quence of the tax, and spends the revenue raised by the tax for the benefit program only, though not necessarily in the same year as collected. It also is assumed that the taxpayer finds the tax large enough to justify efforts to shift it. It is further assumed that the imposition of the tax occurs when the taxpayer is in a position of optimum adjustment, i.e., that he has taken full advantage of all economic opportunities open to him.

Chart 2 shows the employee’s response to a tax on his wages or to a tax which has been shifted to him; Chart 3, the employer’s response to a tax on payroll or to a tax on wages which has been shifted to him; Chart 4, the response of consumer goods producers. All of these charts link together in an interrelationship.

One can think of the shifting process as a flow which will seek the avenue of least resistance and will continue to flow until it encounters a barrier sufficiently strong to stop it. Hence tracing incidence becomes a matter of finding the path likely to be easiest to follow and estimating the effectiveness of the barriers in order to judge when the tax can flow no further and will come to a rest.

A crucial problem immediately becomes apparent when one examines the charts: the strength of the barriers, and hence the probability that the tax can be shifted, will vary from industry to industry, and consequently economy-wide generalizations about incidence must be subject to considerable reservations. In many ways, however, an industry-by-industry examination of incidence holds special appeal. Although tedious, such an approach can identify those sectors of the economy in which the burden of the tax has a particularly repressive effect on growth.

**Employee’s Reaction**

Chart 2 shows four major avenues of action open to the worker (singly or in combination) who has been taxed on his wages: he can try to (a) obtain an offsetting wage rate increase, (b) reduce his consumption expenditures, (c) reduce his current savings and/or withdraw from savings to maintain his previous consumption levels, or (d) obtain additional work to maintain his after-tax income.

Each of these courses of action will encounter obstacles, as shown in the chart. For instance, in trying for a higher wage, the worker might discover that plenty of applicants are willing to work at the existing wage — i.e., the supply of labor at the prevailing wage is more than adequate for the employer’s requirements. The employee might engage in bargaining with his employer and, because of lack of skill on his part (or his representative’s) not achieve his objective. Wages might represent a large enough portion of total costs for the employer to oppose vigorously any push for an increase. The employer may be able to convince workers that an increase would force a decline in his production or even put him out of business, with consequent unemployment for them.

If, however, the employee surmounts all these barriers, the chart shows that the tax is then transferred to the employer, in the form of higher labor costs. (Chart 3 illustrates the employer’s attempts to pass on the tax.)

Alternative actions the employee might take would pass the tax on to
### Chart 3

**Employer’s Response to Tax on Payroll**

<table>
<thead>
<tr>
<th>Possible action</th>
<th>(a) Reduce workers’ wages in compensating amounts</th>
<th>(b) Increase price of product</th>
<th>(c) Substitute labor-saving capital equipment</th>
<th>(d) Substitute skilled workers</th>
<th>(e) Reduce non-labor costs</th>
<th>(f) Accept lower profit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barrier to action’s success</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strong union</td>
<td>Fear of loss of sales to competitors</td>
<td>Technical problems</td>
<td>Insufficient supply of skilled workers</td>
<td>Suppliers not amenable to pressure</td>
<td>Profit already at lowest acceptable point</td>
<td></td>
</tr>
<tr>
<td>Long-term wage contract in effect</td>
<td>Fear of anti-trust regulatory authorities</td>
<td>High absolute cost</td>
<td>Financing problems</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demand for labor high</td>
<td>Fear of general reduction in sales</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workers place little value on tax-associated benefits</td>
<td>Sufficient but small increases lead to awkward pricing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employer’s humanitarian scruples</td>
<td>Generally low level of prosperity in economy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Receiver if action successful</td>
<td>Workers</td>
<td>Consumers</td>
<td>Workers</td>
<td>Unskilled workers</td>
<td>Suppliers</td>
<td>Employer (owner)</td>
</tr>
<tr>
<td>Receiver’s action</td>
<td>See Chart I</td>
<td>See text</td>
<td>See Chart I</td>
<td>See Chart I</td>
<td>See text</td>
<td>(no action)</td>
</tr>
</tbody>
</table>
If the worker cuts his consumption expenditures, producers of those commodities or services he eliminates, or reduces, will suffer a loss of sales. If he reduces his savings, the amount of loanable funds will drop, tending to raise interest rates, to the detriment of borrowers (but to the advantage of others with capital to invest). If he (or a member of his family) attempts to obtain additional work, he will compete with other workers and perhaps lower their wage scale (by increasing the supply of labor). At one time he might have tried to change to a job in an industry not subject to the tax, but today's almost universal coverage of the OASDHI tax precludes the possibility.

Employer's Reaction

None of these burden-receivers, if acting rationally, will passively accept the tax. In seeking to minimize cost (in order to maximize profit), the employer not only will resist the tax being passed on, but should it be dumped in his lap he will try to find someone else to whom he, in turn, can shift it.

Chart 3 diagrams the possible reaction of the employer. It shows the action he might take in response to a social security payroll tax increase levied directly on him, as well as illustrating, with one modification, his response to the eventuality that the employee might shift his wage-tax.

Of the six types of action the employer might take, five apply regardless of whether he is reacting to a tax which has been imposed directly or shifted. The reduction of his workers' wages in compensating amounts, however, is obviously closed to him when the workers already have passed the tax on via a wage increase.

Wage reduction encounters a number of other obstacles. If the employer must deal with a strong union, if a long-term wage contract happens to be in effect at the time of the imposition of the tax, or if there are ample alternative employment opportunities open to his labor force, he will find it extremely difficult to negotiate a wage reduction or delay increases related to rising productivity. If his employees place relatively little value on the benefits associated with the tax, wage reduction will be more difficult than if they consider the added social insurance a form of fringe benefit.

Industry conditions will show a strong effect in determining the employer's most probable path of action. Labor relationships are markedly different from one industry to the next. To take an extreme example, compare automobile manufacturing with agriculture: ordinarily the employer in the former will encounter more resistance to wage reduction (or absence of increases) than in the latter.

If, in spite of all obstacles, the employer does lower wages in an amount which offsets the tax (or, with the same effect, does not raise wages as much as productivity increases would indicate appropriate), then the tax is passed on to the employee. The subsequent movement of the tax can be traced out by returning to Chart 2, barring only alternative action (a).

Several other courses of action may lie open to the employer. He may be able to (b) pass the tax on to consumers by increasing the price of his product, (c) reduce his tax by substituting labor-

3. It is assumed throughout this discussion that the actions considered will characterize enough workers for the effects to be felt.
saving equipment for some of his labor force, (d) reduce his total tax bill by hiring workers who are more skilled and, though requiring higher wages, presumably more productive than those he currently uses, (e) contrive ways to reduce his non-labor costs in compensating amounts, or (f) accept a lower profit. Each of these possibilities has vastly different effects, as shown in Chart 3.

The possibility of increasing the price of the product varies from industry to industry, depending in part on the degree of concentration existing. In an industry characterized by approximately pure competition, presumably price-setting is out of the hands of the seller; in many industries, however, the seller enjoys more leeway to raise price directly or to achieve much the same result by altering quality and service. Up to a point, price rises may be more readily accomplished in higher concentration industries, simply because there are fewer firms which must make the adjustment more or less simultaneously. On the other hand, when concentration becomes high enough to attract the more or less constant, suspicious attention of government anti-trust agencies, price changes can raise delicate problems, such that the industry might hesitate to increase prices even when such a move would be a valid business decision.

Another industry-related consideration arises in connection with the danger that a price increase would merely reduce total sales by more than costs so that profits would decline. Whether such a profit-reducing drop in sales will result depends in part on the elasticity of demand for the particular product—that is to say, on how much the price changes will affect the quantity people will buy—and in part on cost conditions. For certain goods—cigarettes, table salt—price appears to be scarcely a consideration at all in determining the quantities to be purchased. On the other hand, for many people price takes a quite important part in decisions as to how much to buy of certain items—phonograph records, clothing, housing, small appliances, to name only a few. Thus the employer must judge the elasticity of demand for his product and the consequent effect on sales before he risks a price increase. In some industries a price adjustment to the tax can be successful and in others, disastrous.

Another deterrent to price increases stems from the inevitable fear that one's competitors will not go along with the change, but will continue to offer the product at the existing price and thus capture additional portions of the market. Once again, industry conditions vary. Grape growers perhaps can feel reasonably sure that other grape growers will be forced to the same price position, but manufacturers of small appliances might justifiably feel more apprehensive about the action of their competitors.

Another pricing problem which particularly affects service industries re-

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4. "Concentration" is often held to be an approximate indicator of the competitiveness in an industry, although of course many other factors are involved. Concentration is commonly measured in terms of the portion of the market (measured as value of shipments or value-added) attributable to the largest 4, 8, and/or 20 firms. The percentage of value of shipments originating in the 4 largest firms can be quite high (soap, electric light bulbs, sewing machines, for example, showed concentration of 90 percent or more in the latest—1958—survey) or quite low (costume jewelry, games and toys, less than 15 percent in 1958). Many problems arise in measuring concentration, the most troublesome of which lies in the setting of boundaries for an industry. Clearly, the more narrowly an industry is defined—i.e., wooden office furniture, an actual Department of Commerce industry classification—the higher apparent concentration will result.

5. And therefore if he cannot pass on the tax in the form of higher prices he will be unable to remain in business.
lates to the difficulty of making small price adjustments. For instance, a television repairman would find it clumsy to increase his service charge from, say, $10 to $10.17, or a barber, to raise the price of a haircut from $2 to some awkward figure like $2.03.

Some barriers to price increases, however, apply to all industries with about equally decisive force. A generally low level of economic activity, for instance, would give pause to any impulse to raise prices, regardless of industry.

As indicated in a previous section, the employer might reduce his OASDHI tax bill by substituting labor-saving capital equipment for workers on whom he would be required to pay tax. Various reasons why he might not do so were listed earlier. If, however, he were successful, the burden of the tax would rest on the workers displaced by the machinery, either in the form of unemployment (or shorter hours) or wage rates lower than would have prevailed otherwise (unless a tight and inflexible labor market prevails).

A payroll tax such as the social security tax tends to induce employers, to the extent that it is practical, to substitute highly skilled, more productive workers. For example, if three unskilled workers at an annual wage of, say, $5,000, are required to perform tasks which could be handled by two skilled workers at an annual wage of $7,500, then a tax inducement to use the skilled workers would arise. The total wage bill in both cases amounts to $15,000, but OASDHI tax is payable on the entire amount for the three employees and only on $13,200 for the two employees. At 1966 rates, the tax saving comes to a little more than $75—not a large sum if only a few employees are involved, but one that could be meaningful for a firm with a large work force. Such substitutions would make it increasingly difficult for unskilled individuals to find employment. But in some industries a supply of labor with relevant skill might not exist, or make any difference.

Reduction of prices paid for non-labor inputs would probably be possible, at most, for relatively few items. Some suppliers do have specialized, relatively unadaptable, products and productive processes and so cannot turn to other outlets. In such cases the buyers might be able to force suppliers to reduce prices. Another possibility would be to modify the quality of the product so that the cost of raw materials, components, or labor would be reduced.

The adjustment of accepting a lower profit or larger loss provides another example of industry and individual firm variation in reaction to the tax. In a highly competitive industry, by definition the employer makes just enough profit to keep him in business, and any reduction in profit relative to equity capital would drive him from the scene or force a reduction in scale. But some firms, operating in less competitive conditions, probably enjoy more leeway in profits, and even after a tax-related profit reduction would still find it worthwhile to continue to operate on the same scale as before.

**Response of Other Elements**

Some of the maneuvers of employer and employee to pass along the tax can touch diverse elements in the economy. Thorough analysis of these more scattered effects requires expertise in every

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6. Federal income tax provisions may provide some compensating offset.
field of economics — probably an impossible achievement. Nonetheless, an attempt must be made to predict at least the general shape of the effects when suppliers of consumer goods and services, capital goods manufacturers, consumers, and others experience the effects of the tax.

In the case of reduced demand for consumer goods or services (resulting from the tax on employee’s wages — see Chart 2), the suppliers probably have three main alternatives. Chart 4 shows they can (a) reduce their output to the level at which a new equilibrium will be established between what workers and other consumers are willing to spend — probably at a somewhat higher price than before, and more than likely at a reduced profit overall. Since output will be cut, employment in these industries also will fall.

Producers of consumer goods also might (b) try to decrease prices so as to maintain sales at about the same level as before. In order to do this, of course, they would need either to lower their costs in some way or accept a reduced profit — both difficult courses. Reduction in quality or typical package of goods offers one cost-cutting possibility, but probably one of limited efficacy.

A third alternative lies in (c) increasing advertising, modifying the product, or otherwise inducing the public to maintain its previous level of consumption. Since such a course would increase costs, it would have to result in total sales at a level somewhat higher than prevailed before the tax-shifting, in order to prove worthwhile.

Lower profits (or larger losses) and reduced industry employment (or lower wages), in proportions depending in part on the bargaining strength of owners vis-a-vis labor, seem the most probable overall effect on the consumer goods industries.

When the consumer goods industries happen also to be subject to the tax which is being shifted — as is generally the case under the OASDHI tax — the analysis becomes further complicated. The primary difference is that on this second “flow” through the industry, the channels previously used probably will be closed and cannot be used again. Either secondary channels will be
found or the tax cannot be further shifted.

When the flow of the tax burden moves to workers in untaxed industries, there lies open to them all the array of actions possible for the originally taxed worker plus one additional avenue, the erection of various obstacles, such as union regulations, to bar the entry of new workers into their industry.

When capital goods industries are affected by the tax, not only as taxpayers but also as beneficiaries of increased demand for labor-saving equipment, expansion of the industry may result, with accompanying increased prices, probably larger employment and for a time a higher rate of profit. To the extent that labor released from the taxed industry is flexible and mobile, increased employment in capital goods industries can take up some of the slack in employment in other sectors.

Conclusion

Charts 2-4 suggest a large range of possible adjustments to imposition of the tax, and it is not surprising that contradictory opinions have been offered as to the final result. Generally speaking, economists and other students of the tax have predicted one of the following results, or combinations, without much detailing of the process by which the results emerge or careful separation of employer and employee taxes:

1. The burden of the tax rests on the consumer (whom some writers roughly equate with the employee) in the form of the higher prices he must pay after the tax has been imposed.

2. The burden of the tax rests on the employee, in the form of lower wages or unemployment associated with increased use of labor-saving machinery.

3. The burden of the tax rests on the employer in the form of reduced profits or larger losses, resulting primarily from increased labor costs.

4. The burden of the tax rests on rentiers, as the major nonwage-earning segment of the economy.

The mechanisms of the first three results have been covered in the preceding pages. The fourth result, however, is contingent on an assumption not previously considered. Advocates of the rentier theory hold that there is no burden if the taxpayer receives a compensating benefit. Hence employees, whether they shift the tax or not, bear no burden. If employers shift their taxes in the form of higher prices, consumers bear the burden. But consumers who are also beneficiaries (either present or potential) receive benefits which compensate for the shifted tax. Only those outside the system, primarily rentiers, receive no compensating benefits and therefore can be considered to bear the tax.

It is difficult to verify or disprove any of the preceding points empirically. Potential reactions of employee and em-

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7. Movement to an untaxed industry is virtually an impossible alternative under the present Social Security Act, but is discussed here for completeness, because it presented a possibility until coverage changes in the 1950's and also because it remains a possibility under the present payroll taxes for unemployment insurance.

ployer make all four credible, particularly in individual industries. That is to say, in some industries prices would rise as a result of the tax; in others, wages would be reduced; in yet others, profits would fall. In some industries combinations would occur. Using the charts, the reader will find he can readily trace the probable path of incidence for an industry if he is familiar with such elements as its technology, concentration, financing patterns, union strength, etc. The difficulty lies in summing up the probable results in all the separate industries found in this nation so as to obtain the probable result for the entire economy. For the time being, perhaps the most that can be said is that incidence will vary from industry to industry.

An approximate picture of the overall burden could be obtained if sufficient time and resources were available for the necessary field work. Charts 2-4 could be recast as Markovian chains, and suitable probability values obtained from discussions with individuals familiar with the 50 or so major industries. One then could compute the likelihood of the burden shifting to the potential receivers. Although at this time all that can be done is to outline the various possible outcomes, perhaps later researchers will build on the foundations which have been laid.
V.
Problems of Equity

Everyone would agree that taxes, representing use of the coercive power of government, should treat similar taxpayers identically, and make adjustments for relevant differences. But agreement is not so easy to find when one comes down to the specific identification of “relevant” differences. Hair color, racial origin, weight — obviously such dimensions have no bearing on taxation. But subtle questions arise in connection with size of family, age, amount of income, type of earnings, level and type of expenditures. Even among those who would agree that differences in these factors require differences in tax treatment, there still remains the perplexing question of how much and what kind of allowance should be made to achieve a reasonable degree of fairness. Another question revolves around the issue of whether fairness in sharing the costs of government results from appropriate balancing of rewards and penalties, or whether humanitarian considerations—which might demand relatively more from some taxpayers than others—are more important.

Subjective judgments must play a large part in such decisions. The hope is to develop a tax system which appears to be fair—which taxes people unequally but equitably on the basis of relevant differences. Since “fair” is culturally determined and subject to constant change, there exist at least as many concepts of fairness as there are subcultures in this country, with detailed agreement probably impossible even within the subgroups. Nonetheless, certain broad elements probably are common to almost all groups, and it is these concepts which the search for equity tries to satisfy.

Several aspects of the social security tax raise questions of equity. These involve such issues as regressivity and tax payment-benefit relationships. This section will point out some of the inequalities of treatment; whether they are inequities or reasonable differences on relevant bases is left for the reader to judge.¹

Burden of the OASDHI Tax by Income Class

The social security tax obligation, as mentioned earlier, relates to a peculiar type of base. Up to a specified maximum of earnings, an identical rate applies to all individual taxpayers, and above that maximum, the marginal rate drops to zero. Consequently, the effective rate on employees—the percentage of total earnings which goes

¹. Equity considerations are involved in the differential impact of the employer portion of the tax, discussed in Section IV, and therefore not repeated here. An implicit assumption in the equity discussion in this section, which will be concerned with the employee portion of the tax, is that the burden of the tax rests where it is imposed. To the extent that the employer portion of the tax is shifted to the employer, the conclusions which ensue do not apply. If the employer passes on either the shifted tax or his own tax in the form of higher prices, presumably low earners and the unemployed will be among those most disadvantaged. If the employer passes on his own tax to the employee in the form of reduced wages, the effects discussed in this section will be reinforced.
for the OASDHI tax—comes to the same figure for all taxpayers whose earnings lie below the taxable maximum. For all taxpayers with income in excess of the taxable maximum, however, the average or effective rate falls as income increases. This tax therefore can be described as proportional up to the point where earnings equal the maximum base, and regressive (i.e., characterized by lower rates on higher incomes) thereafter.

Chart 5 shows the effective rates provided in each of several major changes in rates and/or bases since 1937. Initially, all earnings up to $3,000 were taxed at 1 percent; then the effective rate on total earnings dropped off slowly, to .75 percent at $4,000, .6 percent at $5,000, and so on, to .15 percent at $20,000. By 1966, the differences become much more pronounced. In fact, Chart 5 shows a general pattern: the higher the effective rate, the larger the absolute drop from the rate on the lowest level of earnings compared with the highest. For instance, the effective rate on $1,000 in 1966 will be 4.2 percent, while the effective rate on $20,000 will be 1.38 percent—a difference of 2.82 percentage points. In 1937, the percentage point difference between the tax rates on these two levels of income was only .85. From another point of view, however, the system has become less regressive. The 1937 tax rate on $1,000 was 6.7 times the rate on $20,000; by 1966, the rate on the former was only 3.0 times the latter.

Chart 5, however, merely shows the effective rate for a given individual on earnings taxable under OASDHI provisions. It may be more realistic to consider the effective rate on adjusted gross income—reportable income under Federal income tax provisions—2 for family units. Chart 6 shows such rates for 1961 for single individuals and for families in which both husband and wife are present.

The rates in Chart 6 differ from Chart 5 for several reasons. For one thing, in many cases adjusted gross income includes items (capital gains, dividends, rental income, etc.) not subject to OASDI tax—making the effective rate lower. On the other hand, when there is more than one wage earner in a family, the nature of the base can lead to higher rates on a given income total, when that total exceeds the maximum base. A further complication stems from the fact that most of the taxpayers paid the employee rate (3 percent in 1961) but some paid the self-employed rate (4.5 percent in 1961).

Chart 6 shows the tax as progressive to a point and regressive thereafter for both single individuals and families with both husband and wife present. In the case of single persons, the tax as a percent of AGI ranges from 15 percent for the lowest category to 4.0 percent for the $5,000-$6,000 AGI class, declining thereafter to 0.3 percent for the upper AGI class of $15,000 or more. For husband-wife families, the rate begins at 2.8 percent, steadies at about that point for the next two classes, reaches a peak of 3.1 percent for the group between $5,000 and $7,500 AGI, then tapers off to 1.8 percent.

The chart does not show rates for all families or for families headed by a single person, (i.e., head of household Federal tax status). For the latter, the rate increases from 1.8 percent for the lowest category to 3.6 percent for the $6,000-$7,500 group, and then decreases to 2.1 percent for the highest AGI class. The tax as a percent of AGI for all fam-

2. See page 29 for example.
Chart 5
Effective Rate of OASDI Tax on Employee, by Earnings Level,
Selected Years, 1937-1987

Effective Rate

1987

1966

1961

1955

1951

1937-1949

Earnings (thousands of dollars)

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

a. OASI only prior to 1956, OASDI only prior to 1966.
Source: Table 2.
Chart 6

Effective Rate of OASDI Tax, by AGI and Family Status

1961

Effective Rate

4.0

3.0

2.0

1.0

0

under 2
2-3
3-4
4-5
5-6
6-7.5
7.5-10
10-15
15 or more

Adjusted Gross Income Class (thousands of dollars)

ilies — single persons, plus households headed by single persons and by husbands and wives — begins at 2.3 percent for the category of $2,000 or less, moving to a high of 3.1 percent for the $5,000-$7,500 group, and then decreasing to 1.7 percent for adjusted gross income in excess of $15,000.

For all single persons regardless of income class, the tax as a percent of AGI was 2.9 percent; for all families headed by a single person, 2.8 percent; for all husband-wife families, 2.7 percent; for all families, 2.8 percent.

**Tax Payments and Benefits**

Defenders of the social security tax have held that the statutory regressivity of the tax is mitigated because the taxes are closely related to benefits.

While ordinarily the uses made of the proceeds of any particular tax need not be taken into account in the analysis of the tax (on the grounds that expenditure decisions should be developed separately from the tax), the argument mentioned in the preceding paragraph raises some interest in the relationship between tax payments and benefits.

### Table 12

**Employee Tax Payments as Percent of Benefits under OASI, Selected Categories of Beneficiaries**

| Category of beneficiary | Total employee tax payments plus 3% interest 1937-1955(|) | Total benefits, discounted at 3% 1966-1975 | Total tax payments as % of 10 years of benefit(|) |
|-------------------------|----------------------------------------------------------|--------------------------------------------|-----------------------------------------------|
| 1. Single individual, 65 | $2,877                                                                 | $13,479                                   | 21.3                                          |
| 2. Married man, wife never employed, both 65 | 2,877 | 20,224 | 14.2 |
| 3. Married couple, both employed, both 65 | 5,754 | 26,958 | 21.3 |
| 4. Married man (65), wife (62, never employed), child (15) | 2,877 | 22,461 | 12.8 |
| 5. Married man (65), wife (62, never employed), 2 children (15 & 16) | 2,877 | 23,100 | 12.5 |
| 6. Married man (65), wife (35, never employed), 2 children (3 & 5) | 2,877 | 30,868 | 9.3 |
| 7. Married man, wife receives less than half-support, has non-covered earnings, both 65 | 2,877 | 20,224 | 14.2 |
| 8. Married woman, husband receives less than half-support, has non-covered earnings, both 65 | 2,877 | 13,479 | 21.3 |
| 9. Farm worker, b wife never employed, both 65 | 2,030 | 20,224 | 10.0 |
| 10. Military serviceman, c wife never employed, both 65 | 1,566 | 20,224 | 7.7 |
| 11. Self-employed individual (non-farm)b | 3,045(d) | 13,479 | 22.6(d) |
| 12. Self-employed farmer, e wife never employed, both 65 | 2,525(d) | 20,224 | 12.5(d) |
| 13. Dentist, c wife never employed, both 65 | 2,349(d) | 20,224 | 11.6(d) |

a. To take account of employer portion of tax, multiply by two.
b. Not covered until 1951.
c. Not covered until 1956.
d. No separate employer tax. Figure given includes entire payment on behalf of individual.
e. Not covered until 1955.

Source: Computations based on data from Social Security Administration.
Table 12 gives total tax payments as a percentage of benefits over a 10-year period for an assortment of hypothetical beneficiaries who qualified for retirement in 1966. For purposes of comparison, the assumption is made that each of these beneficiaries has been in the labor force continuously since 1937, always earning a salary at least as large as the maximum taxable base under the social security laws—that is to say, each one would have paid the maximum tax for as long as his type of work was covered by the system. The first column of the table shows the total amount of tax which the individual would have paid on this basis from 1937 to 1965, plus 3 percent interest compounded annually. The amount ranges from $1,566 for the military serviceman to $5,754 for a working couple covered by social security since the outset of the program.

The second column, giving total benefits (discounted at 3 percent) which would be paid if the beneficiary retired in 1966 and continued to receive payments until 1975, shows a similar range. The lowest total benefits ($13,479) go to the single individual and the highest ($30,868) to the elderly married man with a young wife and two small children.

Total employee tax payments as a percent of benefits show plainly how differently these types of taxpayers fare. The single individual, the married man and his working wife, and the married woman whose husband receives less than half of his support from her, come out relatively worst, with 21.3 percent (total taxes as a percent of total benefits). The married man whose wife never worked does quite well, with his taxes coming to only 14.2 percent of benefits, but even better if he has young children when he retires—12.5 percent in the imaginary case of a beneficiary with teen-age children, 9.3 percent for the man with very young children.

The intermediate rate which applies to the self-employed makes interpretation of their tax-benefit percentage difficult, since essentially they make payments in the role of employer as well as employee. If their total payments are considered, then their percentage is not out of line with the other categories. If, however, only half their payments are taken as comparable with payments by employees (which did not include the matching payments by their employers), then the self-employed individual's percentage becomes 11.3, the married farmer's percentage 6.3, and the married dentist's, 5.8. With children, the percentages would fall even lower.

Beneficiaries covered relatively late in the program's history show especially advantageous percentages: 10.0 for the married farm worker and 7.7 for the married serviceman. These percentages would become even lower, of course, in the event these beneficiaries had dependent children.

An interesting feminine discrimination shows up in the comparative treatment of a beneficiary with a spouse who receives less than half support from the beneficiary, and has never had earnings covered by social security. If the beneficiary is a man, the tax-benefit percentage is 14.2, but if the beneficiary is

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3. It is assumed, for purposes of this computation, that benefits will not increase, although the assumption probably is not realistic. Since the purpose of the table is mainly to compare tax-benefit ratios for various categories of taxpayers, the 10-year period was chosen arbitrarily. Actuarial life expectancy will differ from one category to the next, depending on sex, marital status, etc. See Table 13.
Table 13
Value of Total Employee Tax Payments and Benefits, and Tax Payments As Percent of Benefits
Selected Retirement Years, 1962-2010

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Value of tax payments at 3.5% interest</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single male</td>
<td>$1,981</td>
<td>$2,270</td>
<td>$4,567</td>
<td>$16,830</td>
<td>$32,496</td>
</tr>
<tr>
<td>Married male</td>
<td>$14,995</td>
<td>$15,483</td>
<td>$16,797</td>
<td>$18,452</td>
<td>$19,704</td>
</tr>
<tr>
<td>Single female</td>
<td>$25,225</td>
<td>$26,050</td>
<td>$28,270</td>
<td>$31,021</td>
<td>$33,183</td>
</tr>
<tr>
<td><strong>Value of benefits at 3.5% interest</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single male</td>
<td>$14,995</td>
<td>$15,483</td>
<td>$16,797</td>
<td>$18,452</td>
<td>$19,704</td>
</tr>
<tr>
<td>Married male</td>
<td>$25,225</td>
<td>$26,050</td>
<td>$28,270</td>
<td>$31,021</td>
<td>$33,183</td>
</tr>
<tr>
<td>Single female</td>
<td>$17,437</td>
<td>$18,227</td>
<td>$18,639</td>
<td>$20,899</td>
<td>$22,495</td>
</tr>
<tr>
<td><strong>Value of tax payments as % of value of benefits</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single male</td>
<td>13.2%</td>
<td>17.6%</td>
<td>27.2%</td>
<td>91.3%</td>
<td>164.9%</td>
</tr>
<tr>
<td>Married male</td>
<td>7.9%</td>
<td>10.4%</td>
<td>16.2%</td>
<td>54.3%</td>
<td>97.9%</td>
</tr>
<tr>
<td>Female</td>
<td>11.4%</td>
<td>14.9%</td>
<td>24.5%</td>
<td>80.5%</td>
<td>144.5%</td>
</tr>
</tbody>
</table>

b. Assumes worker is employed (as employee) at maximum covered earnings in all years after 1937, or after attaining age 20, if later. Excludes portion of tax earmarked for health insurance. Tax payments are the same for single male, married male, and single female.
c. Assumes worker is alive at age 65 and retires at that time (attaining age 65 at the beginning of the year). Married worker and his wife are the same age.


a woman, the percentage is half again larger, 21.3 percent.4

One must not overlook the fact, however, that even the most “unfavorable” ratio in Table 12 still represents a quite impressive return on payments. In part this is true because none of the hypothetical beneficiaries of Table 12 began paying taxes before the age of 37. Even a person who began saving amounts equivalent to the maximum tax at age 21 in 1937 would accumulate only $13,053 by the time he becomes 65 in 1981 (presuming present rates and base remain as scheduled).

**Intergeneration Transfers**

It should be noted, however, that advantageous ratios resulting from coming into the social security system relatively late represent a windfall which will not recur in the future. Moreover, at the higher rates scheduled by the 1965 act, the tax-benefit percentage takes on different dimensions.

4. Married women who work only a few years provide an intermediate case, since they pay taxes, but not long enough to qualify for insured status independently. In such cases the total tax payments will exceed the figure given in Table 12 for a married man. Because the benefits will remain the same, however, the tax-benefit percentage will be higher.