quate access to all of its relevant legal records, including sources dealing with legislative history in its broadest sense. The task of assuring such access merits the attention and commitment of all who are functionaries of, or subject to, that system. Ms. Folsom's monograph recognizes that need and makes a valuable contribution to legal research and scholarship. It deserves the widest circulation and use.

THE PAYROLL TAX FOR SOCIAL SECURITY. By *John A. Brittain*,[1] Washington: Brookings Institution, 1972. Pp. 285. $8.95 (hardcover); $3.50 (paperback).

Introduction

John A. Brittain's analysis of the financing of Social Security has added a good deal of analytical material to the current debate on aid to the aged.[2] There is little doubt that this Brookings Institution study ranks as a major contribution to the literature on social security. As a work intended to have a policy impact, however, Brittain's book fares somewhat worse.

Several mathematical passages may deter many readers from reading beyond the first chapter. Skipping the mathematical portions altogether, however, will not limit one's understanding of Brittain's analysis. Since much of the highly technical material is either peripheral to the main line of argument or already available to most readers capable of deciphering the analysis,[3] greater use of technical appendices for such material would have helped Brittain attract a wider audience.

Before analyzing the content of Brittain's effort, it is useful to

1 Senior Fellow in the Brookings Institution Economic Studies Program. Hereinafter citations to the book will be by page number.

2 *See, e.g.*, W. COHEN & M. FRIEDMAN, SOCIAL SECURITY: UNIVERSAL OR SELECTIVE? (1972); Bok, *Emerging Issues in Social Legislation: Social Security*, 80 HARV. L. REV. 717 (1967); Hollander, *Reform in Social Security*, N.Y. Times, Jan. 3, 1973, at 37, col. 6.

3 Brittain, *The Incidence of Social Security Payroll Taxes*, 61 AM. ECON. REV. 110 (1971). For the ensuing debate on this article, see Feldstein, *The Incidence of the Social Security Payroll Tax: Comment*, 62 AM. ECON. REV. 735 (1972), and Brittain, *The Incidence of the Social Security Payroll Tax: Reply*, 62 AM. ECON. REV. 739 (1972).

have an over-view of the main features of the social security payroll tax. Payment of the payroll tax is involuntary,[4] and there are no exemptions on the basis of family size and the like.[5] The share contributed by the employees is matched by an employer tax contribution.[6] An individual's social security payments and those made by his employer on his behalf do not go into a personal fund to earn interest until his retirement. Instead, amounts equal to current contributions are appropriated out of money in the Treasury to fill the trust fund from which the benefits of those now receiving social security are paid.[7] An individual's earning level establishes his future eligibility for social security benefits and the size of his benefits. The actual benefit levels to be received are contingent upon congressional modification of social security provisions and the level of contributions of future workers.

I. Brittain's Theory of Payroll Tax Incidence

Brittain's discussion does not focus on the benefit aspects of social security, but rather upon the incidence of the initial payroll tax contributions. The main question he analyzes is whether the employer portion of the payroll tax is shifted to workers as a whole.[8] The employer's tax could be shifted forward thereby passing it on to consumers through higher prices. Alternatively, there could be a backward shifting of the tax in which case workers' wages would be reduced by the amount of the employer tax. Combinations of forward and backward shifting are also possible.

In analyzing the incidence question, Brittain criticizes the popular view that the employer tax is not shifted at all and that the only portion borne by labor is their payroll deduction.[9] While the popular view accords with what happens in terms of actual

4 Int. Rev. Code of 1954, §§ 3101-26. The related tax on self-employment income is likewise mandatory. Int. Rev. Code of 1954, §§ 1401-03.

5 *See* Int. Rev. Code of 1954, §§ 3101, 3111, 3121, 1401-02.

6 Int. Rev. Code of 1954, §§ 3101, 3111.

7 42 U.S.C.A. §§ 401, 1395*i* (1970). Employment taxes are paid into the Treasury as internal revenue collections. Int. Rev. Code of 1954, § 3501.

8 P. 21.

9 P. 24.

funds paid to the government, Brittain recognizes that this is a naive approach to the question. In particular, it ignores possible shifting of the tax that ultimately forces labor to bear a far greater share of the tax than their payroll deductions indicate.

In setting up his alternative to popular misconceptions, Brittain uses a variant of the competitive economic model to determine the incidence of the tax.[10] In essence, this model assumes that nobody possesses market power to influence wages or prices. Suppose that prices of goods are fixed and a social security tax is imposed on employers. If they continue to pay the same wages to labor as before and also bear the cost of the social security tax, their wage bill will rise, increasing costs. But under the competitive model the firm's profits were zero before the tax. Thus, the increased wage bill will create a net loss, driving the firm out of business. Only if the wages are reduced by the amount of the tax can firms avoid a loss. If wages are reduced by more than the amount of the tax, all of the workers will leave to work elsewhere. Thus, the wage decline equals the value of the employer tax under the competitive model.

Similarly, if wages are fixed and prices vary, the firm cannot continue charging its former price after the employer tax, since its previously zero level of profits would drop to a net loss equal to the value of its social security taxes. It must raise its prices sufficiently to cover the cost of the tax and return to its zero level of profits. It cannot charge a price greater than that amount, since its competitors would undersell it.

Under Brittain's variant of this model, the entire value of the employer portion of the tax is shifted to "labor," either through higher prices or lower wages.[11] Brittain uses the term "labor" to refer to all income earners, including management and the self-employed. He assumes that the payroll tax affects only two broadly inclusive economic groups: firms in terms of their profits, or labor in terms of wages and prices. In fact, some income earners who do not participate in the social security program do not

10 Pp. 32-49. The following discussion is intended to provide a simplified summary of the competitive model and is by no means intended to be theoretically rigorous.

11 P. 36.

fit within Brittain's term "labor." Yet these income earners bear some of the cost of social security taxes which are shifted into higher prices. Nevertheless, since the percentage of people who do not expect to benefit from social security is small,[12] Brittain's concept of "labor" is not unreasonable.

However, Brittain's conclusion that labor bears the entire burden of the payroll tax, including the employer's tax, is overstated, since it hinges upon a simplified view of how wages and prices are set. A variety of market imperfections interfere with the attainment of the competitive result. Most important is that both labor and firms possess considerable control over wages. Recognition of the role of bargaining power and collective bargaining in our society leads to different economic consequences than those cited by Brittain.[13] The imposition of the social security tax upon employers should enhance the value of the bargaining package received by employees, since the value of the employer tax is imposed by the government and does not require that employees sacrifice negotiating demands to receive these benefits. Therefore, in the bargaining context the employer tax for social security confers a net advantage upon the workers.[14]

The ability and willingness of a firm to pass on the tax in terms of higher prices also depends on a variety of complex factors. The degree of concentration in the industry, the nature of consumer demand, and the role of the government in controlling prices all affect the tax's impact on prices. Any of these factors may force a firm to absorb the tax in lower profits, a real economic possibility that Brittain dismisses by using the competitive model which assumes there are no profits. In spite of these qualifications to Brittain's argument, his basic conclusion that employers do not bear the burden of all of their social security taxes is sound.

Unfortunately, little can be done to solve the basic problem posed by Brittain's theory of the payroll tax incidence. Legislative modifications cannot transform the sharing of the employer-

12 *See* J. Pechman, H. Aaron, & M. Taussig, Social Security: Perspectives for Reform 263 (1968).

13 The classic treatise of the role of power relations in determining wages is that of J. Dunlop, Industrial Relations Systems (1958).

14 Dunlop discusses the effect of social security in altering compensation rules for workers. *Id.* at 121-23.

employee tax burden back to the equal shares dictated by Congress. A major statistical problem exists in determining the proportions in which various enterprises shift the taxes forward through higher prices or backward through lower wages. Without such information, any altering of the tax will result in continued inequitable burdens. Labor in firms in which taxes are shifted backward through lower wages are hit both ways. Their own wages decline due to their firm's backward shifting, while the shifting of the employer's tax through prices by other firms reduces the purchasing power of labor's earnings. Labor in industries in which the taxes are passed on through higher prices only suffer the effect of the price rises without the wage decline. Inability to determine each firm's relative amounts of the two kinds of shifting prevents the employer tax percentages from being adjusted to accommodate such differences. Yet another major technical problem exists. Suppose that an enterprise shifts 90 percent of its employer tax to labor. Labor's effective total tax share is thus 95 percent. Even if the employee's tax were abolished and the employer's tax were doubled, labor still would bear 90 percent of all social security taxes. In short, legislating an equalization of effective employer and employee taxes is not an economically viable policy alternative.

II. The Incidence Data

In testing his hypothesis, Brittain employs statistical tests utilizing foreign data as well as tests relying on U.S. figures.[15] His main objective is to determine whether it is plausible to assume that none of the employer tax is borne by labor. As might be expected, the results lead to rejection of this view. Brittain thus accepts the polar hypothesis — that all of the employer tax is shifted to labor.[16]

What Brittain does not tell the reader is that there is a wide range of alternative hypotheses consistent with his results. For example, the view that half or three-fourths of the employer tax is shifted to labor is also consistent with the data. The importance

15 Pp. 60-81. The foreign tests involve cross-sectional regressions, while tests on U.S. data are time series regressions.

16 P. 73.

of Brittain's contribution is in providing evidence dispelling any illusion that the employer really bears all of his tax. In short, some significant shifting of the tax to labor occurs. Unfortunately, the results cannot distinguish whether the burden is shifted via wages or prices.

We should also keep in mind the weakness of the evidence Brittain presents. While the international data imply relatively strong support for significant shifting of the employer tax, the omission of a number of relevant factors from the analysis tends to bias his results.[17] Brittain's neglect of differences in cultures and in the economic structure of various countries leads us to conclude that the degree of shifting found by Brittain in the international results may well be overstated.

While Brittain's study of the United States experience was not hindered by such complicated differences, his results were somewhat "erratic."[18] Unfortunately, Brittain's failure to include the figures he calculated prevents others from analyzing the type of statistical problems he encountered and the meaningfulness of his results.

III. Brittain's Policy Conclusions

On the basis of the preceding results, Brittain argues for increased funding of social security through the income tax to lessen the burden of the payroll tax on those less able to bear the burden of taxation.[19] In justifying the need for this policy reform, Brittain presents a wealth of data indicating that the social security tax is a greater burden on low and middle income groups than is the income tax.[20] For example, a family of four with one

17 The procedure used by Brittain involves regressing manufacturing wages on value added in production per unit of labor and on differing values of social security taxes (including the shifting of employer taxes). His equations "explain" 92 to 96 percent of the wage variation. P. 69. The omission of variables capturing international cultural factors, societal mores, power relations, and the like indicate that Brittain's favorable results may be attributable to specification error. In particular, the high estimates of the shift coefficients are probably due to the omitted variable bias created by the neglect of the aforementioned influences. For an excellent treatment of problems created by omitted variables, see H. Theil, Principles of Econometrics 549-52 (1971).

18 P. 77.

19 Pp. 117, 149, 256.

20 Pp. 82-114.

earner pays a higher social security tax than income tax for all wage and salary levels below $15,000.[21] This calculation assumes that both the employer's and employee's social security taxes are borne by labor. Even under a less restrictive assumption of 50 to 75 percent of the employer tax being shifted, Brittain's conclusion is not invalidated.

It should be noted, however, that Brittain's policy recommendation is based on the ethical assumption that taxation should be based on one's ability to pay.[22] Brittain should have examined other policy choices that stem from the equally or more compelling assumption that individuals ought to pay for the benefits they receive. Those using this alternative assumption recognize the necessity of making adjustments for society's altruism; but unlike Brittain, they maintain that benefits should be considered in determining the optimal tax structure.

Yet Brittain contends that the tax and benefit aspects of social security should be considered separately.[23] He argues that the two parts are divisible since expected benefits generally exceed an individual's tax contributions[24] and since social security is not directly analogous to private insurance.[25] But both of these arguments are irrelevant. Even though expected benefits exceed contributions, social security remains a coherent system since it is financially self-contained. The taxes paid by those now working and their employers pay current social security benefits. While declining population, decreased per capita wages, or substantial increases in the elderly population may jeopardize the self-financing mechanism, historically payroll taxes have funded benefits. Though the contributors and beneficiaries at any point in time are generally different groups, a link between taxes and benefits exists. Moreover, the level of benefits received depends on the

21 P. 91.

22 P. 3.

23 P. 115.

24 Pp. 151-79. It is not clear from Brittain's discussion that he has incorporated the lower life expectancies of the poor into his analysis. If he has not, then the desirability of social security benefits for lower income groups would be lower than the figures indicate since many lower income contributors do not live long enough to reap many social security benefits.

25 P. 9. The case cited by Brittain is Flemming v. Nestor, 363 U.S. 603, 610 (1960).

level of past earnings,[26] which generally affect one's tax contributions.[27]

Because Brittain focuses only on social security taxes, his rationale for alleviating the social security burden on the poor by general revenue financing centers on the equity issue of who pays.[28] In fact, much more is at stake. Replacement of the payroll tax could create psychological, economic, and political problems for the elderly. First, general revenue financing would risk upsetting the sense of dignity that beneficiaries now possess.[29] Use of income taxes to fund other income maintenance efforts has stigmatized the beneficiaries, both through the presence of a means test and the fact that benefits are in no way earned by the recipients.[30] Similar stigmatization could affect our entire elderly population if we abandon the current financing mechanism for social security. Second, replacement of a payroll tax with general funding might subject social security benefit levels to frequent and uncertain congressional decisions. Any subsequent instability in funding levels and/or consumer doubts about funding might result in significant economic harm by forcing the elderly to divert their funds to cover possible needs. Instability in funding might also make the elderly more anxious about whether they will receive enough social security to cover their needs. Finally, the political feasibility and desirability of subsidizing the poor through general revenue financing is questionable. If such assistance were provided, the resulting benefit levels might be lowered and might thus reduce the net benefits of social security for the poor. In view of current political emphasis on the work ethic and on reducing welfare rolls, a shift to general revenue financing might lower social security's subsidy to the poor.

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26 42 U.S.C.A. §§ 413-15 (1972).

27 INT. REV. CODE OF 1954, § 3101 (1970). *Cf.* INT. REV. CODE OF 1954, § 1401.

28 P. 256.

29 As noted by Senator George, Chairman of the Senate Finance Committee when the Social Security Amendments of 1956 were passed: "Social security is not a handout; it is not charity; it is not relief. It is an earned right based upon the contributions and earnings of the individual. As an earned right, the individual is eligible to receive his benefit in dignity and self-respect." 102 CONG. REC. 15110 (1956).

30 J. BROWN, AN AMERICAN PHILOSOPHY OF SOCIAL SECURITY: EVOLUTION AND ISSUES 87 (1972).

In determining an ideal long-run solution to the social security tax burden, we should not follow Brittain's policy recommendation. Introduction of cash transfers to the poor, such as a negative income tax with substantial work incentives and benefits for the working poor, would be preferable to Brittain's proposal. The working poor would be aided without disturbing the beneficial aspects of social security.

IV. Conclusion

The fundamental drawback with Brittain's book is that he fails to consider the social security program's net effects. Instead, he maintains that the impact of the payroll tax can be considered wholly apart from the incidence of benefits. The limitations of Brittain's policy recommendation stem from his isolation of the payroll tax from other aspects of the social security program. While the case for social security reform is strong, it does not require the type of solutions urged by Brittain. It is likely that reducing the risks of being poor in old age ranks as a more fundamental problem than the structure of payroll taxes. Even if one wishes to focus on easing the payroll tax burden, solutions other than those proposed by Brittain are more effective in alleviating the inequities and can also avoid stigmatizing social security benefits.

On balance, however, Brittain raises important issues with an unusual degree of rigor. The main implications of Brittain's effort do not involve his policy recommendations. Even though appropriate modification of his results is necessary, Brittain makes a notable contribution in proving that much of the employer portion of the payroll tax is shifted to labor. Although a policy may be designed to provide for a clearcut allocation of benefits and costs, Brittain's conclusion should remind legislators and students of public policy that actual economic implications need not follow the pattern intended by legislation, even if the legislative provisions are followed.

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