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EXECUTIVE COMPENSATION IN LARGE INDUSTRIAL CORPORATIONS

WILBUR G. LEWELLEN

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This report is one of a series of studies on tax structure and economic growth aided by grants from the Rockefeller Brothers Fund and the Life Insurance Association of America. These organizations, however, are not responsible for any of the statements made or views expressed.

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PREFACE

This volume had its origins in a master's thesis completed by the author at the Massachusetts Institute of Technology in 1961. That study and a subsequent article prepared jointly with Daniel M. Holland [1] dealt in particular with a comparison between the value to corporate executives of their stock options and their annual salary plus bonus payments. The investigation reported on here, which also served as the basis for the author's doctoral dissertation at M.I.T., extends the conceptual framework developed for options to the remaining components of the compensation package. In that respect, it represents the latest in a series of analyses of the structure, evolution, and impact of executive rewards which have appeared in the literature of business and economics over the last thirty years or so. The classic works of Baker and of Washington and Rothschild are the landmarks in the field, but more recent studies by Hall, Roberts, Smyth, Patton, and Burgess [2] have contributed significantly to our knowledge and understanding of the process of managerial remuneration. The Burgess book, which appeared while the present investigation was in progress, is perhaps its closest intellectual antecedent with respect to concepts and objectives, in that both are concerned with measuring what may be termed the "current income equivalent" of noncurrent rewards. While there are rather substantial differences in the

[1] Daniel M. Holland and Wilbur G. Lewellen, "Probing the Record of Stock Options," *Harvard Business Review*, March-April 1962.

[2] John C. Baker, *Executive Salaries and Bonus Plans*, New York, 1938; George T. Washington and V. Henry Rothschild, *Corporate Executives' Compensation*, New York, 1942 (title changed to *Compensating the Corporate Executive* for the second and third editions, 1951 and 1962); Challis A. Hall, *Effects of Taxation on Executive Compensation and Retirement Plans*, Cambridge, 1951; David R. Roberts, *Executive Compensation*, Glencoe, Ill., 1959; Richard C. Smyth, *Financial Incentives for Management*, New York, 1960; Arch Patton, *Men, Money, and Motivation*, New York, 1961; and Leonard R. Burgess, *Top Executive Pay Package*, New York, 1963.

valuation methodology employed in the two studies, many of the findings reported here are, where comparable, consistent with those of Burgess.

Because this study has been several years in preparation and has required a considerable amount of data collecting and processing at various stages, more than the usual number of individuals became involved in its execution. The contributions of the staff of the National Bureau were invaluable. Norman Ture, who has directed the Bureau's project on Tax Policies for Economic Growth, supplied encouragement when encouragement was needed, paved the way for additional research support and, most importantly, enforced the kind of discipline in concept and presentation which—although I did not always appreciate it at the time—was essential to the preparation of a cohesive document. The Bureau's staff reading committee, composed of Gerhard Bry, Ralph Nelson, and Thomas Juster, provided the perspective and critical judgment which, I trust, kept my more blatant preconceptions from finding their way into the finished version. Joan Tron's editing skills smoothed out most of the remaining rough spots. I am most grateful also to Theodore Yntema of the Board of Directors of the National Bureau for incisive comments on the manuscript. The reading committee of the National Bureau's Board of Directors, Thomas D. Flynn, Charles G. Mortimer, and Gus Tyler, made many helpful comments, which I gratefully acknowledge. Throughout, Geoffrey Moore kept the whole effort moving toward fruition.

The study owes much to the advice and counsel of Douglass V. Brown and Paul Cootner of the Alfred P. Sloan School of Management at the Massachusetts Institute of Technology, who gave generously of their time on numerous occasions during the past few years. My research assistants—Jack Brown, Peter Grant, William Mihaltse, Abraham Setnick, Peter Thurston, and William Ryan of the Sloan School, and Franz Giguere, Charles Holt, Juie-Min Cheng, and Stanley Lipstadt of the Herman C. Krannert Graduate School of Industrial Administration at Purdue University—aided significantly in the collection of the data and in programming the computations.

Winthrop T. Lewis of the John Hancock Mutual Life Insurance Company in Boston provided important help in the crucial early stages of the investigation in connection with the conceptual framework and the relevant actuarial mathematics. Albert E. Whiton of The Travelers

Insurance Company and Hugh Dolby of the Connecticut General Life Insurance Company, both in Hartford, supplied needed historical information on individual annuity premium rates. John E. Steele. Placement Director at the Harvard University Graduate School of Business Administration. did the same for the starting salaries of MBA graduates. In all four cases, these men took time out of busy schedules to respond cheerfully to my requests for assistance.

In addition to the support provided by the Rockefeller Brothers Fund and the Life Insurance Association of America to the National Bureau's project of which this study is a part, I wish to acknowledge the assistance given by the Standard Oil Company of Indiana and the Ford Foundation. The former, through the Standard Oil Foundation. granted the author a fellowship which financed the final year of his doctoral studies, during which time the research represented herein was begun. The Ford Foundation's grant to the Sloan School of Management for research in business finance was drawn on over a period of several years to provide funds for computer time and for salaries of research assistants. The computations themselves were performed at the Computer Centers of M.I.T. and Purdue University and at the computer facility of the Sloan School of Management.

Special mention should also be made of the debts owed John S. Day, Associate Dean of the Krannert School at Purdue, and Mrs. Jean Stanton of M.I.T. Dean Day's moral and financial support—and patience—during the last two years materially aided completion of the study. So did his friendly but firm admonitions to "Get on with it." Jean Stanton's role was the delicate one of typing the final manuscript. Her forbearance under that always difficult circumstance was as welcome as her skill and speed in performing the work.

There is, however, no way to measure or even reasonably suggest the magnitude of the contributions of the two persons most responsible for there being a document to present at all: my wife, Jean, and Daniel M. Holland of the Sloan School of Management, who shepherded me through my doctoral studies at M.I.T. It is in no sense an exaggeration to say that the end product is as much a result of their energies as of my own.

W. G. L.

FOREWORD

This study is one of a series undertaken by the National Bureau of Economic Research to add to our understanding of the influence of federal tax policies on economic growth. This broad endeavor, directed by Norman B. Ture, falls into two parts: one concerned with the effects of the corporate income tax on business decisions, and the other with the effects of the personal income tax on individual effort.

The present volume belongs to the second group and is concerned with questions such as the following: What happens to the net returns from effort when a heavy personal income tax is imposed as it was in the United States twenty-five years ago? What changes take place in the level of compensation, in the structure of compensation among various occupations, and in the form in which it is arranged? What effect do these changes have on the supply of effort, i.e., the number of people available for productive work, the pace at which they labor, and the tasks they choose to do?

Answers to these questions are the links in a chain that runs from taxation at one end to economic growth at the other via an effect on personal effort. Lewellen's analysis comprises the basis for the answers that make up the first several links in that chain. Two other studies—one that analyzes tax return data to determine the income and tax characteristics of high-salaried persons, and the other that draws on a series of interviews, are designed to get at the remaining links.

That these are important questions is not open to dispute. That we should not expect a general answer, applicable to all kinds and conditions of effort, should also be clear. For the Bureau's project we have sought the answer to these questions in the specific context of a particular category of "workers"—business executives.

The decision to focus the study in this manner reflects the judgment that very little in the way of interesting, important, and valid findings on the effect of taxation on effort is possible for "workers in general."

Numerous factors enter into the decision to work, and this decision is made in the context of a particular market for labor and specific conditions of work that importantly interact with other determinants of the decision. Having surveyed the relevant economic theory and previous empirical work, we concluded that the questions we posed could be meaningfully answered only in the complex reality of a well-defined category of personal effort.

For the choice of business executives as the initial[1] group of "workers" on which to concentrate, there were a number of compelling reasons. Executives have an importance in the economy that far transcends their numbers, their return from effort, or their personal resources. The decisions they make significantly affect the employment and allocation of a major portion of the community's resources. They are, therefore, an efficient group for our purposes; with a small sample we can learn something about a sizeable fraction of the economy. Moreover, top executives as a group receive among the highest labor incomes, and they should, other things equal, be among those workers most noticeably affected by a high and progressive personal income tax. Indeed, their compensation arrangements give clear evidence of tax-induced transformations. Finally, for the highest-paid executives, at least, more information on compensation is publicly available than for any other class of workers. From published sources—primarily the proxy statements sent to stockholders—a record can be developed of the amount of their compensation and its distribution among the various forms of current, deferred, or contingent arrangements that it can assume. This is the focus of Lewellen's study.

Income taxation could affect how hard executives work most directly by lowering their net return from effort. Very little is known, but much has been conjectured, about the effect of income taxation at the level and degree of progressivity we have experienced over the last twenty-five years on the economic rewards of business executives. Some have contended that there is no question that the effect must be a deterioration in their earnings and a decline in their economic standing.[2] As Dan T.

[1] Initial because, although this is the only group the resources available for the present project permitted us to study, we felt that procedures developed in this effort could be used at a later date by other investigators.

[2] Dan Throop Smith, "Taxation and Executives." *National Tax Association: Proceedings of the Forty-Fourth Annual Conference*, 1951.

Smith explains: "Based on 1952 individual income tax rates and the 1951 consumer price index, it would take an income of over $75,000 to yield the same net real income as a 1929 income of $25,000 before taxes. It would now require about $200,000 to give the same net real income as that provided by a 1929 gross income of $50,000 and about $1,000,000 to provide the equivalent of $100,000. No statistical study is needed to show that increases of corporate salaries and bonuses, substantial though they have been, have fallen far short of what would have been necessary to permit executives to maintain earlier standards of consumption and savings.[3] Quite the opposite kind of result, however, has been suggested as likely by Musgrave and Richman, who state that high marginal rates of tax "at the executive level . . . are bypassed to a considerable degree by various payment arrangements. Also, it may well be that high rates are shifted in considerable degree, i.e., compensated for by higher executive salaries."[4]

These conjectures cover the spectrum of possible outcomes. Other students, of course, have expressed opinions or judgments that fall within this range. Most discussions of executive compensation, however, have failed to take systematic account of all forms of compensation. In particular, with the notable exception of the recent pioneering effort by Leonard R. Burgess,[5] they have not attempted to incorporate in the total "compensation package" the deferred and/or contingent arrangements that have grown so important in recent years. Indeed, a major reason for the abundance of conjecture and paucity of fact on how top executive compensation has fared over the period of high income taxation lies in the major transformation of the pay structure away from currently taxable salaries and bonuses to pension benefits, profit-sharing arrangements, deferred compensation contracts, stock options, stock purchase arrangements, etc., which, because of deferral or capital gains treatment, are subject to lower tax rates. The proliferation of such arrangements suggests that they have meant substantial rewards for their recipients.

[3] *Ibid.*, p. 234.

[4] Richard A. Musgrave and Peggy Brewer Richman, "Allocation Aspects, Domestic and International" in *The Role of Direct and Indirect Taxes in the Federal Revenue System*, A Conference Report of the National Bureau of Economic Research and the Brookings Institution, Princeton University Press, 1964, p. 84.

[5] *Top Executive Pay Package*, New York. 1963. See also comments in the author's Preface to this volume.

Lewellen's work provides a soundly conceived and well-supported basis for judging how much.

By developing a methodology for measuring the value of all the major nonsalary forms of compensation received by executives, Lewellen has been able to: (a) trace the history of total compensation between 1940 and 1963 for a large sample of top executives; (b) assess the relative importance of the various components of their compensation packages; and (c) undertake a comparison of executive compensation with that of other groups in the labor force. It is fitting, of course, that he, himself, tell us what he did, what he found, and what it signifies. But I would like very briefly here to indicate how his findings, by providing the basic background, constitute the first several links of the "chain of explanation" that our studies in this area are seeking to forge.

He finds that the salary and currently taxable bonus of top executives has increased somewhat in money terms, so that, by the end of the period, it averaged one-third higher after taxes than in 1940. When adjusted for changes in purchasing power, however, after-tax salaries turn out to be only about half as large in recent years as they were just before the sharp wartime increase in personal income tax rates. On this evidence of salaries, then, top executives have "failed to keep up."

But to increase salary, after all, is a hard and unimaginative way of providing additional compensation in the face of a progressive income tax. Other arrangements, subject to lower tax rates, were made use of to a significant degree. Deferred compensation and stock options combined, for example, were worth more than salary over the years 1955–63. In all, after-tax compensation (in money terms) more than doubled over the period. In terms of purchasing power, however, top executives appear to have been just about as well off in recent years as in 1940. Whether or not this can be adduced as evidence of tax shifting requires that we know much more about the determinants of executive compensation and related factors than we now do. This constancy of total after-tax compensation does indicate at least that top corporate executives have managed to live with the tax.

They have not, on the other hand, fared as well as certain other segments of the labor force—doctors, lawyers, dentists, general production workers, and new business school graduates. For all these groups, real after-tax income from effort grew significantly. Consequently, over time the after-tax compensation of top executives has declined relative to that of other "workers," and the effect of taxation on the effort of executives would seem not to be an idle question despite the sharp increase in deferred and contingent forms of compensation. Moreover, Lewellen's findings suggest that an important area to investigate is the effect of this transformation in compensation on the motivation and decisions of executives.

There is also a hint of a purposeful response to taxation in the design of compensation packages. Over the period studied by Lewellen, the differentials in after-tax compensation among the five most highly compensated officers in each company have remained remarkably stable. Constancy in the face of a growing reliance on forms of reward other than salary—and the different proportions of each nonsalary item in total compensation at each compensation rank—suggests a policy designed to maintain differentials.

Stock options, which inevitably involve the executive in ownership, have grown tremendously in importance since 1940, as have stock-based bonuses and deferred compensation and profit-sharing plans. In addition, the top officers frequently hold amounts of company stock that are large relative to their total portfolios.[6] All this implies that top business executives should not be viewed simply as employees, professional managers, or civil servants. Their motivation could very well be closer to that attributed to classical entrepreneurs, i.e., owner-managers, than most current discussions would indicate. Many students point to the small fraction of stock outstanding owned by top management and conclude that there is a real danger that they will have goals and interests at variance with those of stockholders. But at least as likely is the possibility that the self-interest of top management *coincides* with that of stockholders because of the important fraction of his personal wealth represented by the top executive's ownership stake in his company.

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[6] I interviewed, among others, eighteen top executives whose holdings of company stocks could be found in proxy statements. They averaged $1,140,000, with a range from $49,000 to just under $5 million. Moreover, I have the impression from these and other interviews that substantial holdings of the employing company's stock are quite common if for no other reason than the fact that executives, as all other investors, like to invest with knowledge, and of course they know more about their own company than any other.