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Chapter Title: Introduction to "The Taxation of Income from Capital: A Comparative Study of the United States, the United Kingdom, Sweden, and Germany"

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1 Introduction

A continuous increase in living standards is, in the long run, dependent upon a high level of investment. As the period of sustained economic growth enjoyed in the 1950s and 1960s has come to an end, governments in many countries have shown an increasing interest in policies designed to stimulate investment and productivity. One of the major weapons in the government's armory is the tax system. The impediments to savings and investment resulting from the tax system have been the focus of growing concern, especially in the periods of rapid inflation experienced in recent years.

It is not surprising, therefore, that a great deal of attention has been paid to analyzing the effects of the tax system on savings and investment. The failure of most of the developed economies to sustain high growth rates has led to an increased awareness of the lessons we may learn from each other. Is it true, for example, that countries with the highest rates of productivity growth have the lowest tax rates on capital income? The aim of the research described in this book is to compare the effective tax rates levied on capital income in the nonfinancial corporate sector in four major economies: the United States, the United Kingdom, Sweden, and West Germany. The study has entailed a collaborative effort by investigators working in each of the four countries to ensure as exact a comparison as possible. This is reflected in the fact that the project has produced a book rather than a series of papers by individual authors. As far as possible we have tried to ensure uniformity in our treatment and comparability of our estimates.

The existing literature on international comparisons of tax systems lacks a sharp focus, primarily because the statistics are produced for a multitude of purposes and are not designed to answer a clearly defined question. In this study we are attempting to answer the question, What is

the distribution of tax rates levied on marginal investment projects in the corporate sector? In each country the tax system imposes a wedge between the rate of return on an investment project and the rate of return that can be paid to the investors who financed the project.

When we look at the present value of expected taxes relative to the expected income from a marginal investment under consideration, we measure what might be called a "marginal effective tax rate." We compare this rate with an "average effective tax rate," defined as the ratio of observed taxes to income from existing investments. Our results indicate that the two are very different. The average rate reflects cash flows and tax burdens, but the marginal rate is more appropriate for looking at incentives to save and invest. Also, many studies that measure either of these effective tax rates have looked only at corporate taxes on marginal or existing investments (see discussion and references cited in Fullerton 1983). Although we limit our study to investment in the corporate sector, we do not limit ourselves to corporate taxes. We measure a marginal effective total tax rate, in the sense that we include corporate taxes, personal taxes, and wealth taxes associated with the income from each marginal investment.

In addition, we shall see that within each country the estimated marginal tax rate varies enormously among industries, among assets, among different sources of finance, and among different categories of original investors. A further important question we investigate is the sensitivity of the effective tax rate to changes in the rate of inflation. No particular relationship is necessary here, and indeed we find that the effect of inflation varies enormously from country to country.

Questions like these are both interesting and important for an analysis of the effects of taxation on investment, but they have a wider policy relevance as well. In three of the four countries involved in this project there have been major reports in recent years on the structure of the tax system. In the United States *Blueprints for Basic Tax Reform* was published in 1977. This official Treasury report examined the structure of the United States tax system and considered a number of major reforms. Simultaneously, under the sponsorship of the Institute for Fiscal Studies, the Meade Committee produced its report in the United Kingdom (Meade Committee 1978). This drew attention to the haphazard taxation of savings and investment in the United Kingdom and recommended that the tax system be reformed so that taxation would be based on expenditure rather than income. A similar conclusion was reached in a Royal Commission Report in Sweden in 1976 (Lodin 1976). Although these reports were produced quite independently, there is one striking fact about them. The phenomenon that all the reports identified as of fundamental importance for tax reform was the potential distortion of sav-

ings and investment decisions caused by the *unsystematic* tax treatment of income from capital.

To analyze this phenomenon requires a comprehensive treatment of both corporate and personal taxation. We attempt to provide this and to give empirical estimates of the size of the tax wedge between the return on investment and the return on savings. A study of this kind requires both a theoretical framework and a substantial amount of empirical work to ensure comparability of our estimates. Chapter 2 describes the theoretical framework we have used, and the individual country chapters (chaps. 3–6) provide the empirical basis for our estimates.

The economic performances of the four countries in our study have been rather different, and they provide a contrast in terms of both tax systems and institutional background. These four countries were chosen to provide a balance of economic and political structure and to represent countries with very different growth experiences. The study was limited to four countries to ensure feasibility of the project, although we hope that the methodology described in this book will be applied to other countries.

The approach we adopt is designed to complement existing comparisons of international tax systems. These are of two types. First, there are studies of the levels of revenue raised in different countries by different types of taxes. The best example of this type of study is the regular publication *Revenue Statistics of Member Countries* published by the Organization for Economic Cooperation and Development (OECD). This publication is designed to provide an accounting framework within which the total tax structures of member countries may be compared. It is not designed to answer any particular question, and the classification of taxes by category is inevitably a little arbitrary. For our purpose the problem is that the statistics are not collected with a view to providing information on the incentives offered by the tax system. Nevertheless, the figures published by the OECD do provide a useful starting point for an analysis of taxes, and they are used in the introductory section of each country chapter. The focus of our study, however, is the empirical estimation of the incentives to save and invest afforded by the different tax systems, and for this we need a theoretical framework.

The second type of international comparison usually consists of descriptions of the tax code in different countries as it affects particular assets or types of income. For example, there are studies of the differences in the tax treatment of dividends, of capital transfers, and of capital gains. Some of these studies have been the basis for policy recommendations. For example, the European Economic Community (EEC) has been trying to harmonize its treatment of corporate taxation with respect to dividends. The drawback to this approach is that to evaluate the

economic effects of the tax system we need to take into account a very long list of provisions in the tax code. One of the problems with the EEC's attempts to harmonize corporate taxation has been that to date it has focused far more on the taxation of dividends than on the definition of the corporate tax base. Since the provisions for depreciation and allowances for inflation vary widely among member countries, such an approach is at best partial and at worst highly misleading. To examine the effects of the tax system on investment, we need to take account of a large number of details in the tax code, including the rate of corporation tax, the nature and scope of depreciation allowances, the extent to which these are indexed for inflation, investment tax credits or other cash grants for investment, regional grants and subsidies, the system of corporation tax (the classical versus the imputation system, for example), the personal tax treatment of dividends and interest income, capital gains taxation, wealth taxation, and the tax treatment of particular types of investors such as pension funds and insurance companies. An exhaustive description of the tax treatment of these different items in each country would be just as incomprehensible as the tax codes themselves, so in this study we have tried to set out a simple conceptual framework within which we may analyze the effective marginal tax rate on capital income. Not only does this framework enable us to bring together the different aspects of the tax code, it also allows us to compute the quantitative significance of the tax system as a whole.

The size of the marginal tax rate levied on investment depends upon the way the project is financed and the identity of the supplier of finance. We have attempted to compute distributions of marginal tax rates using as weights the proportions of net capital stock financed by particular owners and from particular sources. We have also examined the allocation of investment among industries and among different types of asset. This required an empirical study into the ownership of different types of securities and the financing of industry. In themselves these data requirements proved time consuming and are described in detail in individual country chapters. One of the by-products of our study is a good deal of detailed information about the financing and ownership of industry in each country and of the institutional background against which our results may be seen. As part of our study, we used very large data sets to compute a distribution of marginal tax rates on individual investors in each country, and we carried out the most systematic study to date of shareownership in West Germany.

We would stress, therefore, that the output of this research project should not be seen solely in terms of the tax rates we present in chapter 7. The individual country chapters contain a good deal of detail about the financing and ownership of the corporate sector and of tax systems so as

to allow the reader to place our results in context. To make this detail more accessible, we have organized each country chapter in an identical fashion, as follows:

1. Introduction
2. The Tax System
 - 2.1 The Personal Income Tax
 - 2.2 The Corporate Tax System
 - 2.3 Tax Allowances for Depreciation and Inventories
 - 2.4 Estimates of Economic Depreciation
 - 2.5 Investment Grants and Incentives
 - 2.6 Local Taxes
 - 2.7 Wealth Taxes
 - 2.8 Household Tax Rates
 - 2.9 Tax-Exempt Institutions
 - 2.10 Insurance Companies
3. The Structure of the Capital Stock and Its Ownership
 - 3.1 Data Limitations
 - 3.2 Capital Stock Weights
 - 3.3 Sources of Financial Capital
 - 3.4 The Ownership of Equity
 - 3.5 The Ownership of Debt
4. Estimates of Effective Marginal Tax Rates
 - 4.1 Principal Results
 - 4.2 Recent Changes in Tax Legislation
 - 4.3 Comparison with 1960 and 1970
 - 4.4 Comparison with Average Tax Rates

This arrangement should enable readers who wish to compare the tax treatment of, for example, insurance companies in each country to do this by referring to section 2.10 in each country chapter. A glossary of notation is provided at the beginning of the book.

The work of the project fell into three parts. First, there was the development of the conceptual framework. Second, there was the collection of data on a comparable basis for the computation of effective marginal tax rates. Finally these rates were estimated using a common computer program. The bulk of the time was taken up in producing estimates of the parameters used in our calculations and in ensuring comparability of our estimates.

The plan of the book is as follows. The conceptual framework is described in chapter 2, and the data for the individual countries are discussed in chapters 3–6. Our main results concerning effective marginal tax rates may be found in chapter 7, and the main lessons of our study are summarized in chapter 8. Readers who wish to focus on the principal

results are advised to start with chapters 1, 2, 7, and 8 and then return to the individual country chapters for a fuller explanation.

The discussion in chapter 7 compares the marginal effective tax rates in the four countries for 1980. In section 4 of each country chapter the results for 1980 are summarized, and their sensitivity to alternative assumptions is examined. For each country we also examine the effect of recent changes in tax legislation and provide two sets of comparisons. The first is with estimated marginal effective tax rates for 1960 and 1970, to give some idea of how tax rates have evolved over time. The second comparison is with an estimate of the average effective tax rate on income from corporate capital in 1980. This comparison shows the difference between marginal and average tax rates.

Our aim is to provide sufficient detail on both the methodology underlying our study and the data used so that other investigators may, first, replicate the calculations for the same sample of four countries and, second, extend the analysis to other countries. In time we hope to persuade governments or other bodies to adopt our methods so as to produce regular estimates of the incentive effects of taxation. The study should also be a useful compendium of information not only about the tax system in each country but also about the structure of the corporate sector.

It is more than two hundred years since Edmund Burke wrote that "to tax and to please, no more than to love and to be wise, is not given to men." Our results will not make it easier for governments to please their electorate, but we hope they will make voters and governments alike a little wiser about the true impact of tax legislation.