

## ADAMS'S SCIENCE OF FINANCE.<sup>1</sup>

IN reviewing, a few years ago, in this QUARTERLY the first comprehensive work that had been published in England on the subject of public finance, the hope was expressed that there might soon appear in America a similarly comprehensive treatise, intended primarily for our own public and dealing more specifically with the problems that are, in a measure, peculiar to the United States. This hope has now been realized by the publication of Professor Adams's *Science of Finance*, which it is easy to predict will at once command attention as a lasting contribution to economic literature.

That such a book is timely it is scarcely necessary to say. The United States has so rapidly outgrown the swaddling clothes of its infant economic surroundings, it has stepped with such prodigious strides from its youthful social environment to the complex conditions of a full-grown industrial society, that we are suddenly confronted on all sides by the new problems of political, economic and social maturity which are at present engaging the public mind. America presents in some respects most curious contrasts. It is at once the youngest and the oldest of economic societies — at once the most youthful and the most mature of social experiments. It is the youngest, in the sense that there are still in our territory vast tracts untouched by plow or harrow, awaiting the coming of the first settler and needing only irrigation to convert the desert into a garden. It is young, because there are other huge sections of the country which are only one step removed from the primitive agricultural stage, in which the local life is still largely dominated by frontier conditions — conditions analogous to those which the old world faced centuries ago. In another sense, however, America is not young, but old. Nowhere on the face of the globe has capital been applied to productive purposes with such intensity and such energy. Nowhere has man's victorious contest with the powers of nature been waged with such intelligence and with such relentless vigor. Nowhere have the captains of industry

<sup>1</sup> The Science of Finance: an Investigation of Public Expenditures and Public Revenues. By Henry Carter Adams, Ph.D., LL.D., Professor of Political Economy and Finance at the University of Michigan. New York, Henry Holt & Co., 1898. — 8vo, viii, 573 pp.

prosecuted their quest for industrial supremacy with such alertness and with such ability. As a consequence, nowhere have the most advanced forms of a highly organized, fully differentiated and thoroughly complex industrial organism been evolved with such startling rapidity and with such complete success. This is the age of international commerce based on national forces, the age of the factory system, of corporations, of trusts, of combinations. In the development of these new institutions America is leading the world, and is showing other countries what stages they have still to traverse. While the old world is slowly outgrowing the domestic system of industry, America has in numberless cases leaped at once into the factory system; it can teach even England many a lesson. While the movement toward combination of capital has even in Europe made only timid beginnings, it is at this moment completely revolutionizing American industry. In this sense America is old — far older than most of its industrial rivals.

As a result of these opposing forces, we are face to face with two sets of problems. The one set has its origin in the newer and less developed sections of the country, and may be illustrated by the currency question. This question, for example, covers far more than is implied in the term itself. It involves, in large sections of the West and the South, not so much an increase of the money supply as a rearrangement of the forces of production and consumption and a readjustment of the relations of indebtedness to productive capacity. With every shifting of the frontier further westward we have had periodical readjustments of this character. At the very beginning of our national life, when the frontier was located in western Massachusetts, came the economic outbreak known as Shay's Rebellion. A generation later, precisely the same causes produced, on the new frontier, the troubles which culminated in the stay-laws of Kentucky. When the frontier reached the Middle West, almost half a century later, the same movement assumed the guise of the fiat-money craze. And finally, after the lapse of another generation, when similar economic forces worked out their result, not only in the frontier life of the Far West, but also amid the primitive economic conditions of large sections of the regenerated but as yet undeveloped South, we reached the silver movement of the last presidential campaign.

On the other hand, the second set of problems that agitate us at present is due to the new and complex industrial conditions of the more advanced sections of the country. These new conditions have given us, to mention only a few instances, the corporation problem,

the wages problem, the trust problem, the tax problem and the colonial problem. It is, then, as idle to inveigh against the policy of territorial expansion, on the ground that such a scheme was not contemplated by Washington and that it is bound to change the destinies of the nation, as it would be futile to object to the regulation of combinations because this also involves a new departure. In the one case, as in the other, economic conditions have arisen which were unknown to the Fathers, and which require for their solution a new analysis and a new method.

In no department of social and political life have these warring forces engendered more confusion than in the domain of public finance. In former times the fiscal problem was comparatively simple. The collective wants of individuals were small in comparison with their private wants; public expenditure was insignificant; and the needs of government revenue were easily satisfied. With the growth of industrial democracy, however, all this has been suddenly changed. A scale of public expenditure which would have appeared absurdly lavish to former generations now seems barely adequate to modern necessities. The resulting prodigious increase in public revenues has called into being problems of the utmost nicety, not because the growth of these revenues is necessarily more rapid than that of the private wealth on which they are based, but because the constituent elements of this private wealth have in themselves become so complex and have so intertwined themselves with the integrated forms of modern industrial life. What is peculiarly confusing in the American situation is the fact that, on the one hand, we have sections where the economic conditions, and therefore the fiscal conditions, are still, as compared with the great mass of modern communities, of the primitive type; while, on the other hand, in numerous parts of these sections themselves there have been grafted upon the still dominant and persistent primitive stock the shoots of the newer industrial type; or, to put it in other words, although the basis of such communities is still primarily agricultural, the newer methods of transportation, as well as the more modern media of exchange and distribution, have superimposed upon the simplicity of the old and still persistent the complexity of the new and ever extending. The consequence is that the fiscal conditions of this country to-day are supremely heterogeneous and that, because of this contest of the old with the new, we are all still groping almost in the dark, dissatisfied in the more progressive communities with the survivals of old conditions, and trying to discern in the dim light of the future

the fiscal expression of the newer conditions which are soon to become universal.

The appearance of Professor Adams's work bears eloquent testimony to this change of view. We have for a long time had American treatises on political economy, although these treatises have been, until comparatively recent times, for the most part simply copies of their English predecessors rather than adaptations to our own peculiar conditions. In the science of finance, however, there have been no American treatises, just as there have been until recently no English ones, chiefly because the fiscal problems have been so simple as not to warrant any separate or extended discussion. An insignificant addendum to the ordinary work on political economy has sufficed for the consideration of the few questions that have presented themselves. For the reasons mentioned above, however, the fiscal problems have now come to the very forefront of modern controversy; and it is time for the science of finance to take its place side by side with economics in the narrower sense; for while economics proper is primarily social in its character, laying emphasis on the industrial relations of man to man, the science of finance, as a part of the broader political economy, is primarily political, laying the emphasis on the fiscal relations of the individual to the government. The appearance of a comprehensive treatise on finance accordingly marks a turning-point in the history of American political and economic literature; and when such a treatise attempts, as none of its English or continental predecessors have done, to call attention to the close connection between changing social and changing fiscal conditions, it is doubly deserving of attention.

A word should first be said regarding the formal arrangement of the volume before us. After an introductory chapter on the character of the science and the nature of public wants, the subject of public expenditure is taken up in Part I. The first book of this part deals with the theory of public expenditure; while a second book, to our surprise, treats of the budget. Why the budget should be dealt with under the general heading of expenditure is not apparent. It is true that much of the time spent in budgetary discussion in modern legislatures is devoted to expenditure; but there is also a revenue side to such discussion. Another departure from customary methods of arrangement is found in a subdivision of the book on the budget, in which Professor Adams discusses the subject of financial organization and administration. It may be urged that either this subject

should be treated separately or the general heading of the book should be "Budgets and Financial Organization."

Part II of the work deals with public revenue, taking up in three successive books public domain and public industries, taxation and public credit. This arrangement is followed in pursuance of the division of all revenue into three classes: "direct," "derivative" and "anticipatory." While this distinction is clear enough, it must be said that the inclusion of credit under the head of revenue is, to say the least, unusual; and that the choice of the terms "direct" and "derivative," to mark the difference between income from the domain and income from taxation, is not entirely beyond criticism. "Direct" revenue is defined as that which accrues to the state from public ownership or management, or which falls to it by virtue of its sovereign character; and "derivative" revenue is that which forms in first instance a part of the income of the citizen, but which is paid to the state in satisfaction of some revenue law. It is further stated that "direct" revenue constitutes a positive addition to the social income, while "derivative" revenue is a transfer of a part of the earnings of the citizen to the state. In regard to the first point, however, it is to be noticed that all revenue from taxation falls to the state in virtue of its sovereign character; and that, on the other hand, much of the so-called "direct" revenue is originally a part of the income of the citizen and is paid in virtue of some revenue law. Post-office charges, for instance, are included by the author under "direct" revenue; yet the receipts originally form part of the income of the citizens, and are paid in virtue of a very definite revenue law—if by revenue law we mean a law which prescribes the raising of revenue. Again, referring to the second distinction, it must be noted that "direct" revenue, no less than "derivative" revenue, implies a transfer of the earnings of the citizen to the state. For, even if the government rents out its land, or runs its industries for profit, the prices are paid by the citizens, and the revenue involves a transfer of the earnings of the citizens to the state. While, therefore, the intent of the classification is obvious, it cannot be said that the nomenclature is a very happy one.

One other feature of the general arrangement may be mentioned. Within the separate books themselves there is nothing particularly worthy of note until we come to that on taxation. Here the arrangement is at once novel and interesting. Beginning with general considerations, successive chapters are devoted to the principles of apportionment; to the classification and characterization of taxes;

to the manner in which taxes work ; to the administrative consideration of taxes ; and to suggestions for a revenue system. It may, perhaps, be urged that this necessarily gives a somewhat disjointed account, as there is no place where any particular tax can be judged as a unit from every point of view. But no arrangement can satisfy conflicting claims ; and it is undeniable that the one adopted in this treatise does succeed in putting a fresh aspect on some familiar topics.

Coming to the subject-matter of the work, attention must first be directed to the chief merit in the whole presentation — the masterly power of analysis disclosed by the author. The emphasis is everywhere laid, not upon facts and figures, but upon the principles involved ; and to those who approach the subject for the first time, as well as to those already familiar with the general nature of the problems, the serried phalanx of argument upon argument, of closely reasoned analysis upon analysis, must be both a surprise and a delight. Not that all is new—for here, as in every other department of human thought, one can build only upon the basis of the known ; but the whole work is so permeated with the doctrines of continuity, and of the essential dependence of fiscal upon economic conditions, that almost every single discussion is put in a new light. The insistence upon principles has indeed, as the French say, the defects of its virtues. With a few exceptions, we miss not only historical examples, but also any detailed statement of actual fiscal methods in America and any comparison with the institutions of other countries. The exceptions are to be found chiefly in Part I, devoted to expenditure, where the necessarily brief discussion of theory is pieced out with a separate chapter on “some facts.” In the second part, however, dealing with public revenue, the student will, for instance, search in vain for any description of actual taxes, whether in the United States or abroad. Professor Adams evidently takes for granted that the reader is familiar with all such details, and he prefers to dwell on the more important matters of principle. It may be queried, however, whether he has not gone a little too far in this respect, and whether the book would not be still more valuable to the general reader, if it contained the essential facts as well as the interpretations to be put upon the facts.

In considering the work in detail, the reviewer is obliged, not only to call attention to the remarkable brilliancy and general solidity of the results, but also to attempt the less grateful task of noting the shortcomings that are inseparably connected with any such comprehensive effort.

In the discussion of public expenditures, the author brings out clearly their dependence upon the stage of industrial development. He lays down the principle that a profitable investment for a state is one which results in raising industry to a higher level of efficiency. From this point of view, increased expenditure is not necessarily an evil. Attention is also directed to the connection between public expenditures, on the one hand, and political conditions, as well as social organization, on the other. Perhaps the only point lacking in this analysis is a discussion of the influence of modern democracy upon expenditures, and of the gradual ascendancy of the preventive over the repressive principle in modern legislation. A suggestive section compares the English with the German view of expenditures, with the conclusion that the English writers did not need any definite theory, because their conception of the state implied a fixed limit to governmental functions, while the more extreme German economists erred in setting up too strong a presumption in favor of the state. Professor Adams's position lies midway between the extremes of *laissez faire* and socialism.

In Chapter III an attempt is made to classify expenditures in accordance with governmental functions. The classification adopted is that of "protective," "commercial" and "developmental" functions, including under the latter head expenditures for education, recreation, public investigation, maintenance of equitable conditions for the prosecution of private business and development of the physical basis of the state. It may be conceded that the particular classification adopted is not of so much importance as the method pursued in dealing with the principles themselves; but classification may emphasize or obscure principles, and the scheme employed by Professor Adams may, perhaps, be subject to criticism. Why, for instance, should the outlay for reformatories be called "protective" and that for schools "developmental"? Why should expenses for rendering justice be termed "protective" and those for maintaining "equitable conditions" for private business "developmental"? Why, in fact, are not all expenditures "developmental"? If it be claimed that protective expenditures look at the bad in human nature, and developmental expenses at the good, how can expenditures for the factory acts, for railway commissions and the like, be put by Professor Adams under the head of "developmental"? We may, indeed, desire to educate the good impulses of the factory owners and the railway managers; but precisely the same result is sought to be attained by a well-digested poor-law system, or a well-

arranged penal system, or a good judicial system, all of which are classed under the head of "protective" functions. And why the building of a railway is the exercise of a "commercial" function, while the building of a canal or dock is the exercise of a "developmental" function is still more difficult to comprehend. In fact, while the whole of this chapter on public expenditure is remarkably suggestive, it confuses things that ought to be kept separate, and it separates things that ought to be united. Moreover, almost the only question of principle that emerges from the discussion is the tendency of given expenditures to grow larger or smaller. Even here it may be queried whether the author gives due weight to facts like the tendency of expenses for justice to increase — not, as he says, to diminish. The explanation of this tendency is not that people grow worse as they become civilized, but that the complexity of modern industry is continually augmenting the chances of collision of interests and thus creating new classes of crime. In this detail Professor Adams has forgotten the general doctrine which he elsewhere so eloquently inculcates.

In the book devoted to the budget the author keeps closer to the beaten track. Attention may, however, be directed to two interesting novelties. The one is the series of suggestions looking to a reform of the American budgetary system. Professor Adams believes that this can best be accomplished, first, by the abolition of the committee on appropriations and the assignment of its duties to the committee on ways and means, together with the abandonment on the part of all other committees of their right to introduce appropriation bills; second, by the abolition of the right of individual initiative of money bills, as well as of the right of indiscriminate amendment; third, by a closer connection between the secretary of the treasury and this new budgetary committee. The reasons advanced for these changes, all of which are within the realm of legislative competence, seem to be in many respects sound. The other important discussion, to which only a bare allusion can be made, is the treatment of the theory of accruals as a basis of public accounting. Here not only is the plane of this discussion, as elsewhere in the book, an elevated one, showing on the part of the author a comprehensive grasp of the principles at issue, but, in addition, we have the satisfactory feeling of being in touch with the actual practice and the details of real life.

Part II deals with public revenue. A section treats of the subject of classification, in the course of which it is to be noted that Professor Adams recognizes the existence of fees and special assess-



ments, and declares that they deserve an analysis separate from the general discussion of taxation. But after this frank confession — in which he takes issue with the English writers — it is a distinct disappointment to find no further discussion of these topics. The omission will be deplored, not only by those interested in the correlation between legal ideas and economic conditions, but also by those who believe that underlying our American practice there are some not unimportant questions of principle. The treatment of the public domain and of public industry, on the other hand, is characterized by much fresh and keen analysis. Occasionally, however, Professor Adams gets into difficulties — as, for instance, when he asserts that the phrase “quasi-private price” is inapplicable to governmental industry. His argument is that private prices, as “commonly” competitive, always seek the maximum profit, while public prices are adjusted to the idea of social utility. Nevertheless, not only does he speak, a little later, of the fiscal monopolies of government which seek to secure only profit, but he also calls attention to the private monopoly charges, adjusted to the standard of what the traffic will bear. Between the extreme of competitive private prices and social public prices there is a broad field to which neither term is applicable. This whole analysis is susceptible of improvement. Again, while the discussion of the principle of charge to be adopted by public industries is excellent, it may be questioned whether it is complete, and whether the treatment of the post-office, of the telegraph and of the telephone, for instance, might not be considerably amplified with profit. Finally, when it is stated that the industries fit for government ownership are primarily those which are subject to the law of increasing returns, Professor Adams forgets that this law can no longer be confined to industries dealing with transportation, but that the field of monopoly, so far as it is due to the existence of this law, is constantly growing in modern society. A more careful analysis would have shown a far greater complexity in the relation of the law of increasing returns to that of diminishing returns in actual industry.

We pass over the final book on public credit, where the author substantially sums up the well-known conclusions of his earlier work on *Public Debts*, in order to come to what constitutes at once the most solid and the most valuable part of the treatise — the book on taxation. This occupies 332 out of the 564 pages of the work. It is here especially that we see the excellent qualities of the author and the break with the old English ways of regarding the subject, as

well as the recognition of the changes necessitated by the newer structure of industrial society. The discussions of the essential nature of taxation, of the difference between the legal and the economic point of view, of the duty to pay taxes and of the principle of tax exemption, are at once striking and admirable. Not less noteworthy are the abandonment of the benefit theory of taxation, with all that that implies, and the acceptance of the progressive principle. The analyses which lead up to the relinquishment, not alone of the doctrine of proportion, but also of the theory of the general property tax, are as brilliant as they are profound. In one respect, however, Professor Adams seems to be laboring under a delusion. In his treatment of the general property tax he several times repeats the assertion that the secret of its success in the Middle Ages lay in the fact that the tax was not assessed on individuals but on the organizations within the town, and that there was thus a collective responsibility. Professor Adams is here confusing the town as a taxing unit with the organization within the town. It is true that in England, for instance, the town as such paid its *firma burgi*; but this was in no wise different from the situation in modern times, where the county or city pays a lump sum toward state expenses as its share of the property tax, or where, as in France, certain cities compound for the *octroi* duties. In the mediæval town, as in the modern American locality, this aggregate was distributed directly among the individual citizens according to their property. There is no warrant for the assertion that there was collective responsibility of any kind of a degree lower than the local community itself. Yet upon this mistaken assumption Professor Adams subsequently builds up a part of his scheme of reform. The only exception to the above statement was an arrangement in a part of Spain, an acquaintance with the failure of which would have preserved the author from this curious slip.

The classification of taxes followed by Professor Adams is instructive. He divides them into taxes on income, on property as the source of income, and on business as a means of securing an income. This is in some respects convenient; but it is no less open to objections than are the other classifications which he discards. Where, for instance, shall we put a tax assessed on the net profits of land? To the extent that it is imposed on land, it is a tax on property; to the extent that it hits the income of the landowner, it is an income tax; to the extent that it reaches the business of the farmer, it is a business tax — unless indeed we arbitrarily confine the term business

to non-agricultural enterprises. Again, where shall we put a poll tax? Moreover, in the chapter on incidence, Professor Adams recognizes another classification, that between direct and indirect taxes; but he makes no attempt to correlate these two distinct criteria of classification.

The chapter on the shifting and results of taxation is clear and seemingly convincing. But it may be queried whether the author has not here secured clearness and simplicity at the expense of accuracy. The conclusion that a business tax is "indirect" for all competitive occupations and "partly direct, partly indirect" for monopolies is not warranted. It implies that every tax upon a competitive industry is completely shifted to the consumer, while this is far from being the case. Moreover, the author's classification of goods into those produced at uniform cost, those produced at expanding cost, and those produced under conditions of monopoly, is not convincing. He forgets that a distinction must be drawn between production at constant cost and production of various parts of the supply at different costs. A competitive industry may obey the law of constant returns (that is, it may be possible to produce more of the article at a proportionally greater outlay), and yet, under dynamic conditions of actual industry, the various parts of the supply are always produced at different costs, some producers being more efficient than others—else there would be no profits. The production of all parts of the supply at the same cost, in fact, always implies a monopoly, because monopoly profits alone are not dependent upon any marginal producer. The development of this idea would take us too far afield; but it may be stated that Professor Adams's treatment of shifting is not entirely adequate. It must be noted also that here again only a few broad principles are laid down, and that, except as regards the tax on land, no attempt is made to apply the principles to the separate taxes. Another point, moreover, in which Professor Adams's exposition fails to command assent is his unqualified opposition to protective taxes. Here again he proves untrue to the general principle of historic relativity with which the rest of the work is permeated.

Perhaps the most interesting chapters in the book—certainly the chapters to which the ordinary reader will first turn—are those on "the administrative consideration of taxes" and on the reform of the American revenue system. Professor Adams is opposed to a single tax of any kind, as well as to a direct income tax. As to the property tax, he advances the now familiar view that it should

be confined to real estate and that it should be levied only by the local divisions. In the case of the corporation tax, he points out that net receipts constitute the proper basis of assessment, and that the taxation of interstate commerce falls naturally to the federal government. This would leave intra-state business, as well as inheritances, to be taxed by the states, while excises and import duties would fall to the nation. The municipal revenues, he thinks, should be supplemented by a tax on municipal monopolies, as well as by one on professional incomes, to be assessed on guilds that are to be created for the purpose.

While some of these suggestions are in harmony with the present tendencies, — with the exception of the rather fanciful scheme for guilds, which, as we have seen, rests upon a misinterpretation of mediæval conditions, — the chief criticism to be urged is that the whole plan is based on the avowed principle that the “government must address itself to the industrial property, the industrial process or the industrial organization, rather than to the individual.” From the point of view of administrative efficiency or of increased revenue this principle is exceedingly important; but it is hard to see how it can be made to square with the principle of the citizen’s ability to pay, which the author accepts as the fundamental canon of taxation. If the property, the process or the organization can be regarded as the indirect source of income, well and good. But under Professor Adams’s scheme, no such correlation is worked out. Corporation taxes, according to him, are to be confined to businesses essentially public in character; and even here it is not shown how the bondholders can be made to pay taxes. Ordinary business taxes are to be limited to a very few occupations, assessed by the federal government; and here again, according to his theory, the taxes will be shifted to the consumer. Thus the owners of some of the chief sources of modern wealth would virtually escape taxation; and the criticism which Professor Adams urges against schedule D of the English income tax may be turned against himself. It is hopeless to expect the American farmer to consent to an abolition of the general property tax, even in those states where the conditions are ripe for a change; just as it is hopeless to expect the American laborer to rest content under an increase of the taxes he pays in the shape of federal excises, unless we show both the one and the other that our proposed scheme of reform is calculated, either directly or indirectly, to reach with rough but substantial accuracy the real earnings of those classes who are to-day fast getting into their hands the increment of

social wealth. The earlier chapters of Professor Adams's book deal with problems of justice; the later chapters with questions of administrative expediency; and the conclusions reached from the first point of view do not always harmonize with those reached from the second.

In reviewing a work of this character it seems somewhat petty to call attention to slips or to blemishes of style; yet it is to be hoped that, in a future edition, some details will be changed. On page 346 and elsewhere, the term "degressive" is used when "regressive" is evidently meant. On page 338, we find the clumsy German phrase "tax-object." On page 355, incidence is several times misspelled "incidents"; and on page 484, "imports" is printed for "imposts." In at least a dozen passages (preface, pp. 152, 197, 338, 381, 453, 499, *etc.*) "except" is used as a conjunction in the place of "unless." Finally, it may be queried whether the text would not be improved by the omission, not only of the seeming slur on President Walker, when it is stated (p. 343) that he, "as all American students know, was very careful to distinguish between a theoretic and a practical conclusion," but also of the uncomplimentary allusion to our cousins across the sea, when it is said (p. 748) that "it must be remembered by one who desires to understand the English constitution that a healthy Englishman is by nature impolite."

I have not hesitated to call attention to the few points in which the treatise seems to invite criticism; but all these criticisms pale into insignificance when compared with the praise that must be accorded to the solid merits of the book. It is perhaps no exaggeration to say that Professor Adams is at the head of those American scholars who have grasped the essential spirit of modern industrial life; and it is likewise no exaggeration to claim for this volume the distinction of being one of the most original, the most suggestive and the most brilliant productions that have made their appearance in recent decades. At all events, it is safe to assert that, in America at least, the publication of this treatise marks an epoch in the discussion of fiscal problems. We may congratulate ourselves that we have in this country so masterly a representative of the newer and saner views as is the author of this remarkable work.

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