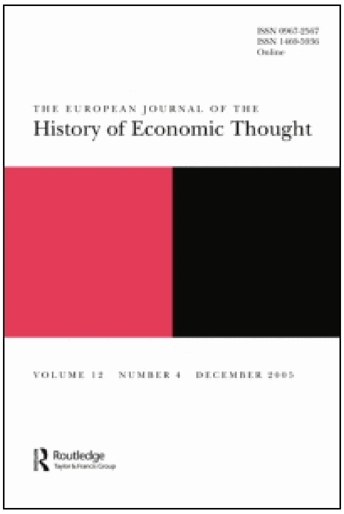

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Public expenditure in Italian public finance theory

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1. Introduction

From the publication of Smith's *The Wealth of Nations* (1776) up to the publication of Keynes's *The End of Laissez-Faire* (1926) and *The General Theory of Employment, Interest and Money* (1936) there was little change in how economists viewed the role of government in the economy. In this long period, much of the writing on the topic was negative and emphasized the dangers of increasing government expenditure.

Prior to the Great Depression of the 1930s, most discussions of government expenditure policy assumed full employment, and the scope of the economic functions of the government was restricted to maintaining the value of currency, preserving law and order, the provision of national defence and other basic services, such as limited investment in public works. The opinion shared by the majority was that the least government was the best.

The economic borders of the State shifted markedly after the 1930s. The long-run tendency was to raise public expenditure, increasing the magnitude of government outlays both absolutely and as a percentage of the gross domestic product. Throughout the industrialized world, the government had a more comprehensive role in allocating resources, increasing the redistribution of income and becoming a major factor to support a stable economy.

As a whole, the classical economists focused on the allocational functions of the State and argued in favour of a minimum State, because the appropriate functions of government have to be non-interventionist.

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Classical economists, exponents of *laissez-faire*, are in favour of a free market economy provided that it is a competitive economy.

In England, towards the end of the nineteenth century, with the transition from classical political economy to neo-classical economics, the theory and problems of the public sector became ever less important. The first edition of Marshall's *Principles of Economics* (1890) included no chapter on public finance, unlike the previous treatises by Smith, Ricardo and J.S. Mill. Marshall examined the effects of shifting and incidence of taxation, but did not consider the potential role of public expenditure in the economy. Even in Pigou's *A Study in Public Finance* (1928), with its focus on public expenditure, the analysis is limited to some general guidelines.[1]

Stigler (1965: 7–8) emphasized that, after a century of *laissez-faire*:

> the main school of economic individualism had not produced even a respectable modicum of evidence that the State was incompetent to deal with detailed economic problems of any all sorts. There was precious little evidence, indeed, that the State was unwise in its economic activities, unless one was prepared to accept as evidence selected corollaries of a general theory.

The continental Europe tradition in public finance was completely different already during the last few decades of the nineteenth century. The subject of public expenditure was first debated among public finance scholars from Austria, France, Germany, Sweden and Italy. As regards Italy, Pantaleoni, De Viti De Marco, Mazzola and others, using the new marginal theory of value, made important contributions to the theory of public finance,[2] in which the expenditure side of the budget cannot be neglected as in the Anglo-Saxon tradition. In Germany, as in Italy, towards the end of the nineteenth century, in the writings concerning public economy, a greater role was given to government than that suggested by the classical 'minimum State' model. Wagner (1883: 8), for example, resting on the idea of the necessary complementarity of public and private activities throughout the process of economic development, indicated a law of increasing expansion of the public sector.

Indeed, public expenditure has an influence on the whole economy: economic development is chiefly affected by increasing public expenditure; the incidence of taxation can be affected by public expenditure, tending to

1 Some reasons advanced are not very convincing. For example, Shirras (1936: 46) writes: 'A theory of the public expenditure in the nineteenth century was not very necessary, because the scope and the functions of Government were restricted'.

2 Some of the most influential essays are published in Musgrave and Peacock (1967).

offset its effects; and general public services are productive and designed to improve the other factors of production. Therefore, public expenditure analysis regards a broad spectrum that ranges from analysis of its growth to more theoretical formulations of its effects.[3]

In this paper an attempt is made to analyse these important aspects of public expenditure in the light of the Italian tradition in public finance. The paper is organized as follows: section 2 describes the factors that determine the growth of public expenditure; section 3 looks at the integration of the tax and expenditure sides in the theory of shifting and incidence of taxation; section 4 focuses on the economic role of the general productivity of public expenditure; and section 5 provides some concluding remarks.

2. The growth of public expenditure

Towards the end of the nineteenth century, Wagner's law of expanding State activity was formulated, originating mainly from the empirical observation of public expenditure in Germany.[4] Since then the law has attracted the attention of the literature, albeit subject to different interpretations and with various formulations used to test the hypothesis.[5]

In its most general form, Wagner's law states that there exists a positive correlation between the level of economic development and public expenditure because, in developed countries, the ratio between the amount of total expenditure and income grows both in absolute and relative terms. This is attributed by Wagner to three factors. Firstly,

3 There are many hypotheses that attempt to explain the secular increase in government spending: Tanzi and Schuknecht (2001: 171) document a rapid expansion in the size of government among today's industrialized countries during the past 125 years, caused largely by the implementation of the 'welfare State'. Theories to explain the increase in the share of resources allocated to the public sector have usually emphasized both demand factors (population and income growth, technological change, urbanization, etc.) and supply-side factors (especially the effects of bureaucratic power). In more recent discussions, the public choice approach has stressed that public expenditure growth must be explained by the utility-maximizing behaviour of the demanders and suppliers of public services. For surveys on the subject, see Amacher *et al.* (1975), and Peacock and Wiseman (1979). For a pioneering attempt to combine the theory and the empirical testing of hypotheses about the governmental and bureaucratic behaviour, see Borcherding (1977).

4 For relevant passages, see Wagner (1883: 1-8). Wagner stated his ideas in many publications over a long period of time. A detailed account may be found in Timm (1961). See also Bird (1971).

5 See Gandhi (1971) and Michas (1975).

expansion of the administrative and protective functions of the State due to the substitution of public for private activity. To public expenditure on law and order and economic regulation, Wagner adds the increase in population density and urbanization, with the connected phenomenon of industrialization. Secondly, an expansion of cultural and welfare expenditure particularly on education and the redistribution of income, practically by assuming for these public services an income elasticity greater than unity. Thirdly, changes in technology and the required scale of capital for investment activity, with growing participation of the State in the sectors of production and regulation.

Another hypothesis concerning the behaviour of public expenditure that has attracted great attention over time is Peacock and Wiseman's 'displacement effect', formulated in connection with their empirical investigation of British government expenditures over the period 1890 to 1955.[6] In this study it is argued that emergencies (such as wars, revolutions, economic crises) shift public revenues and expenditures upward. The hypothesis is that public expenditures grow over time roughly stepwise, and when the 'displacement effect' is over a new threshold may be reached. The critics have had better consideration of the displacement effect hypothesis than Wagner's law, although the large majority of empirical studies do not validate either hypothesis.[7]

Italian scholars have made considerations concerning the growth of public expenditure that are similar to Wagner's law.[8] For example, Conigliani (1903: 318–20) links increases in national income with the growth of public expenditure: increases in national income produce increases in tax revenue and, in such a way, new public needs can be

6 Peacock and Wiseman (1961). On the questions that can be raised about the meaning of the 'displacement effect', see Bird (1972). Subsequent work by Peacock and Wiseman moves in the direction of models of group behaviour to explain the growth of public expenditure (Peacock and Wiseman 1979).

7 The econometric tests of Wagner's law have been found wanting both in the accuracy of the data and the statistical methods utilized (Diamond and Tait 1988: 17). In the same, empirical studies almost always fail to validate the 'displacement effect' (Diamond 1977). In the Italian case, from data for the period 1960 to 1981, Wagner's law and Peacock and Wiseman's 'displacement effect' have been confirmed (Giannone 1983). From another essay, which examines Italian public expenditure in the period 1951 to 1980, it resulted that public expenditure had an exponential growth, without any impact of government changes on the trend of expenditure (Fossati 1981). Examination of Italian public expenditure in the period 1960 to 1990 showed that the expansion was caused by various factors: income increases, demographic changes, redistributive targets, and achievement of great electoral success (Franco 1993: 209).

8 For a detailed analysis, see Mastromatteo (2003).

satisfied. For Ricca Salerno (1921: 47) there is a link between the distribution of wealth and the growth of public expenditure, which is connected to the increasing disparity of economic conditions among social classes: the progressive concentration of wealth increases the possibility of satisfying the less important collective needs felt by the wealthier classes. According to Borgatta (1935: 83–4), the growth of the average revenue automatically increases the tax revenue and hence the available means for financing public expenditure, without producing excessive reactions.

In Wagner's footsteps, but following a specific approach, major contributions were supplied by Graziani, Sitta and Nitti.

Graziani's approach to the growth of public expenditure (Graziani 1887), based on the principles of subjective-value theory, was a pioneering work in which it is recognized that the productivity in provision of government services must be taken into account, although the thesis is stated in rather general terms (Peacock and Wiseman 1979: 5).

Graziani's essay is divided into three sections. The first examines the nature of public expenditures; that is, the reasons why a share of national income is spent on achieving the aims of the State. Juridical and political principles, which are interlaced in financial relationships, cannot clarify the nature of public expenditures, which is based on natural laws deriving from the theory of value. Everyone evaluates public services, and the objective average of the subjective evaluations determines the expenditures of public institutions (Graziani 1887: 166). On the basis of these criteria, in the second section the author considers the trend of public expenditures drawing a comparison among the budgets of some nations in different times (Graziani 1887: 167–84).

At the beginning of the third section it is stressed that the causes of public expenditures must be cautiously studied, so as not to mistake apparent reasons for real ones, or immediate reasons for underlying ones (Graziani 1887: 185). In this connection, it is pointed out that scholars such as Wagner and Leroy Beaulieu, failing to heed such warnings and based on faulty conceptions of public expenditures, obtain incomplete, misleading results. Wagner considers some important principles, but does not expound a systematic theory of public expenditures. Leroy Beaulieu discusses the argument with a large number of data, putting together various causes, but leaves the fundamental concepts in the shade. To clarify the progressive growth of public expenditure scientifically, it is necessary, instead, to consider the principles of the nature of expenditures.

Graziani (1887: 215–16) draws the conclusion that individual evaluation of public expenditures derive from subjective conditions, such as the intellectual, moral and economic conditions for each person, and from objective conditions, such as the price of public services, the structure of population and the state of technique. The increase in public expenditure derives from changes in the citizen's state of needs, which, in turn, presupposes changes in subjective and objective conditions. The dynamics of these subjective and objective conditions (improvements in culture, increases in wealth, population growth, technological changes, increase in the prices of subsistence goods) has an impact on needs, and hence raises the price of public services that, in turn, are immediate causes of the progressive growth of public expenditure.

For Sitta (1893) too, Wagner, Leroy Beaulieu and others mistake one thing for another; that is, concrete ways in which the phenomenon of public expenditure growth occurs for its real causes, linking it to intensive and extensive increases in the State's functions, militarism and public debt. According to Sitta, to determine the real causes of public expenditure growth, analysis should be based on the fundamental principles behind the actions of individuals in society. In modern times, the State, besides guaranteeing law and order, has the mission to improve public life, developing education and welfare. It is logical that the growing extension of State functions should entail a proportional increase in public expenditure (Sitta 1893: 17).

Sitta (1893: 22), following Mazzola's footsteps, argues that public needs are a reflection of private needs. Therefore, any increase in the quantity and intensity of private needs means more public goods, with a corresponding increase in public expenditures, which are the monetary costs of public goods and services. The more the conditions of life improve, the more needs specialize. As a result, public expenditure has to increase, since it is necessary to obtain more complete satisfaction of private needs (Sitta 1893: 24). In practice, it can be said that the more rapid the growth of national wealth, the more likely is the growth of public expenditure (Sitta 1893: 26). However, from this conclusion, Sitta (1893: 29–33) also draws the practical warning that the extraordinary growth of public expenditure in some countries does not appear consistent with the taxable capacity. A tax hike, when exorbitant in relation to national wealth, is a drag on people's willingness to push forward the economic effort and has an adverse impact on economic growth.

In the final section of the essay, Sitta (1893: 35–7) stresses that, although convinced that the development of civilization multiplies private and public needs, and hence more public goods are necessary as complementary to the more perfect satisfaction of private needs, it is nevertheless important to warn people off the approach of Wagner and other scholars, who point out the indefinite progression of public institution activity.[9]

The best known pages of Nitti's textbook examine public expenditure (Nitti 1922: 84–116). Nitti quotes, amongst others, Wagner's contribution, but does not go into details of his statement. The analysis starts from the consideration that, in the modern society, the growth of public expenditure is connected to the need of general order (Nitti 1922: 85). Despotic and oligarchic governments have shown the same propensity of democratic governments (Nitti 1922: 96–7). It is beyond doubt that public expenditure growth is widespread, but to establish whether State action and the satisfaction of collective needs means a greater proportion of resources compared with the past, in order to avoid mistakes, comparison with past budgets must be made taking into account: the quantity of personal and in-kind services; the amount of revenue from estate property; the amount of private wealth; and the changes in the value of money (Nitti 1922: 105–11).

According to Nitti, it is very difficult to establish comparisons with past societies, but the increases in public expenditures were widespread, especially from the mid-nineteenth century onwards. These increases mainly came from: the growth of military expenditure; great public works brought about by the use of steam traction and electricity, as well as the construction of roads and railways; the growth of public debt required to finance new expenditure; the development of social legislation and public assistance; and the greater participation of the working class in public life that entailed the provision of services not hitherto considered of general utility (Nitti 1922: 113–15). Public revenues and expenditures are interconnected. National income and the distribution of wealth determine the amount of revenues, their composition and split. The expenditures, instead, are mainly determined by the political and social peculiarity of each country (Nitti 1922: 167).

Another important aspect examined by many Italian scholars regards the social determinants of public expenditure growth. According to Griziotti, Lolini, Sensini and others, the reasons for and the limits of public

9 Peacock thinks that there is a link among the approaches by Wagner, Graziani and Sitta. He says: 'The late nineteenth century view, represented by Adolph Wagner and the Italian writers Graziani and Sitta, accorded well with the doctrine of comparative advantage. With the growth of the industrial economy a complementary demand was set up, alongside industrial and manufacturing expansion, for transport and communication services, energy and waste disposal. It was commonly claimed at the time that central and local governments had a comparative advantage in providing such services' (Peacock 1992: 31–2).

expenditures (and public revenues) originate from the fact that they are conditions for satisfying needs selected by collective institutions to impose a policy of general welfare according to the social and economic principles predominant in society (Tivaroni 1934: 405–6).

Among the Italian scholars who dealt with public expenditure growth between the end of the nineteenth century and the beginning of the twentieth century, the most significant theoretical contributions were made by Pantaleoni, Mazzola and Puviani.

In Pantaleoni's approach to public expenditure there is a clear interdependency between economic and political factors. This aspect is confirmed by what seems to him to be the major or at least the most permanent cause of the increase of State functions: the general absorption of direct costs in overhead costs. Pantaleoni (1909: 42) uses the term 'direct' to describe the costs that are paid on the basis of individual consumption, while he uses the term 'overhead' for costs that are financed by means of taxation. He stresses that, if the public budget has increased, this occurs because a service, once provided individually by each citizen (e.g. defending one's house from burglars), 'now considerably expanded, is met by a fixed expense, i.e. with the outlay of an amount independent of each individual citizen's consumption of the service' (Pantaleoni 1909: 42). But the substitution of the private enterprise by a single public one is:

> the substitution of the outlays which each citizen had to meet in a measure varying with the use made of the service, by an outlay which is no longer a function of consumption, even if it varies among different citizens. (Pantaleoni 1909: 42)

Therefore, 'such substitution is a transformation, for each individual, of direct costs in overhead costs. Public expenditure is to be considered as an overhead cost by each firm according to the measure in which it pays taxes' (Pantaleoni 1909: 42). These taxes are part of the expenditures for production and must be paid by means of the firm's productivity increased by public services. The richer a country is (i.e. the more its firms are booming and large), the more overhead costs prevail over direct costs, and, for the same reason, the larger are public expenditures and public revenues. Briefly, the richer a country, the more advantageous is a large budget (Pantaleoni 1909: 43). The main cause of public expenditure growth, therefore, is the replacement of the private sector with the public sector.

Like Pantaleoni, Mazzola asserts that public expenditure must reflect individual preferences. A characteristic of his approach is that public goods are complementary to private goods, and both concern individuals. The basic role of private goods is to be useful to individuals as they are necessary to obtain utility from private goods that satisfy private needs (Mazzola 1890a: 66–73). Every individual need contains 'some proportion of need for complementary public goods, upon which individual satisfaction is conditional' (Mazzola 1890b: 40). 'Hence the satisfaction of new needs also entails consumption of public goods' (Mazzola 1890b: 41). Therefore, an increase in production of private goods implies the growth of public expenditure.

Another approach to the theory of public expenditure expansion stems from Puviani (1903), who certainly made the most important contribution to the theory of fiscal illusion. He accepts the application of analytical instruments of marginal analysis to the problems of public economy, but argues that fiscal illusions on both tax and expenditure sides of the budget distort the taxpayer's perception of the equilibrium between sacrifice and utility.

Puviani defines fiscal illusion as a misperception by individuals of the total amount of tax burden and of the benefits returned by public expenditure. Misperceptions about the means (taxes and public expenditures) the State uses to achieve its aims can consist either of overestimation or underestimation by citizens of the sacrifice of tax burden and the benefits of public expenditure with respect to their objective value. He argues that most fiscal illusions work by obscuring the real cost of public goods and services and overestimating their utility (optimistic illusions). In his opinion, the opposite case (pessimistic illusions) is uncommon.

Puviani's analysis mainly concerns optimistic illusions on the revenue side. However, although he does not examine optimistic illusions on the spending side closely (Puviani 1903: 18–22), situations in which citizens might systematically overestimate the benefits of public expenditure are relevant, because they lead to an increase of the public sector. Examples of fiscal illusions on the expenditure side discussed by Puviani that involve a propensity to expansion of public expenditure are as follows: ignorance of certain expenditures; ignorance of the real use of expenditures; ignorance of the quantity of expenditures; ignorance of the duration of expenditures; ignorance of the moment when expenditures are made; ignorance of the aim of expenditures; ignorance of the immediate and consequent effects of expenditures; and ignorance of the reasons for expenditures. Fasiani (1941a: 75–171), who thoroughly discussed and summarized Puviani's contribution in his treatise, reduced fiscal illusions on the expenditure side to the following three categories: hiding of expenditures known to everybody; hiding of expenditures by means of accounting and administrative adjustments; and hiding of expenditures by other ways and means (Fasiani 1941a: 75–109).

Puviani's hypothesis that, in bygone times, the sovereign, and in our time, the legislature, can deceive about the real costs of supplying different levels of public expenditure seems reasonable enough to explain why governments can grow larger than their citizens prefer, especially in cases in which public expenditures are financed by deficit financing or by means of an increase in public debt.

Summing up, Italian scholars have analysed in great depth the growth of public expenditure. There is difficulty gathering together in a comprehensive framework the economic, political and institutional elements involved in a literature that is rich in significant contributions. But it is worth making clear some main features. The main Italian economists who examined the growth of public expenditure were influenced by marginal analysis, which regards the decisions of the amount of public expenditure and its allocation among the different sectors as a function of taxpayer preferences, in line with the approach followed in the private economic sector. Hence, alongside private goods – which satisfy private needs – public goods and services are considered – which satisfy public needs.

3. Simultaneous analysis of tax levy and public expenditure

The theory of shifting and incidence of taxation has long failed to consider changes in demand for goods a result of expenditure of tax revenue, neglecting that with tax revenue a demand for private goods is made to turn them into public goods and services. This theoretical approach reflects a view of financial activity as public consumption, essentially unproductive, restricting theoretical research to the tax levy; that is, the subtraction of economic resources to private uses, without considering the benefits deriving from public expenditure.

In the classical approach, which dates back to Ricardo, the expenditure of tax revenue is generally not considered in the incidence of taxation.[10] In the first systematic Italian work on the theory of shifting and incidence of taxation, Pantaleoni (1882: 13), summarizing the classical view, mentions only incidentally the use made by tax institutions of tax revenue. He then examines the topic in an essay in which he points out that an increase in public revenues may not entail a burden for citizens if a larger amount of revenues than before is used to create more utility than if it was left to private availability (Pantaleoni 1887). In this essay he argues that tax burden effects do not entail a general increase in production costs, like a

10 For a review of some references by classical authors to the use of tax revenue, see Holden (1940: 774–8).

ransom extorted by a bandit, because the State gives back public services in exchange for taxes. According to Pantaleoni, the hypothesis that taxation might reduce the general production costs is not ruled out, but this is not the common case. Public services are generally an expenditure that citizens have to make, albeit disapprovingly. Now, if this is case, it is clear that taxation is really like ransom extorted by a bandit in the part that exceeds the limit citizens would have paid for the desired services of their own accord (Pantaleoni 1887: 48, 68 and 74–6).

The first explicit organic statement of the theory that the use made of public revenue should be considered in the incidence of taxation can be found in one of Einaudi's essays, which levels criticism, in the discussion of tax capitalization, at the theory that a tax always implies an increase in production cost, and especially in interest (Einaudi 1912). There are three possibilities: the public use of tax revenue may allow the same utility that would have been attained if the resources had been kept available for private use; the public use of tax revenue may allow greater utility; or it may allow smaller utility. Despite holding the third of the possible cases to be the most likely (due to the incapacity of governors to administer the fundamental and productive functions of the State), Einaudi does not exclude the probability of the second possibility coming true (Einaudi 1912: 478–81).

Einaudi revisited the topic more than once. In 1919, in an essay on the theory of tax capitalization (Einaudi 1919)[11] – referring both to the cases examined in the previous essay of 1912 and to Pantaleoni's approach (which, as we have seen, considers tax a ransom extorted by a bandit) – he compares the hypothesis of a 'ransom tax' with the hypothesis (introduced by himself) of a 'hail tax' and the hypothesis of an 'economic tax'.

According to Einaudi (1919: 183–4), taxation is not like hail, because, being due to the will of man, it has different effects (even worse or even better) than a completely unforeseen event of nature, which, without costs and rewards for man, carries off the fruits of the earth. In effect, we are either in the situation of a 'ransom tax', which implies a more continuous destruction of wealth than the case of a 'hail tax', or in the situation of an 'economic tax' that is an index of a situation in which, against the tax burden, there are benefits for society arising from public services financed by tax revenues (Einaudi 1919: 185–9).

Einaudi summarizes in his *Principî di scienza della finanza* the concept that the effects of taxation can be studied not only as a pure burden, but also in terms of the use that can be made of tax revenue. With regard to the different hypotheses of a 'ransom tax', 'hail tax' and 'economic tax', he

11 See also Einaudi (1967: 192–201).

draws the conclusion that the modern propensity is towards the 'economic tax', which produces an increase in income, savings and productive activity, a reduction in interest rate, and an increase in capital (Einaudi 1952: 263).

Like Einaudi, De Viti De Marco (1936) criticizes the traditional approach to the theory of incidence, considers mainly the effects of the whole tax system[12] rather than the effects of a single tax, but follows different general lines. For the De Viti De Marco, the traditional approach rests on two errors. The first is the practice of considering the problems of public finance as if they were completely independent of the phenomena of private economics, supposing that tax represents a loss of wealth for the taxpayer and for society. The other error consists in treating tax only from the standpoint of the producer, who translates it into an increase in costs or a decrease in profits, whence it is supposed that the immediate effect of taxes is the increase in prices (De Viti De Marco 1936: 148–9). The combination of these two erroneous propositions leads to the 'axiomatic truth that the tax, in itself, and in its entirety, and independently of any counteroffer of public services, always means an increase in the cost of production of private goods' (De Viti De Marco 1936: 150). Now if we admit in general that public goods are instrumental in producing and using private goods, it arises that – De Viti De Marco points out – 'the previous cost of production may have been increased, left as it was, or diminished by an increase in taxes. In pure theory it must be said to have decreased' (De Viti De Marco 1936: 151).

De Viti De Marco rejects the hypothesis that the State uses the tax to acquire the same goods that the consumer usually demands:

> because such a hypothesis would be in conflict with the very reason for the State's intervention, – that is, the reason for the production of public goods and for tax. It is a matter of indifference whether the State spends the tax wisely or unwisely; it is, however, necessary and sufficient that it should spend it in a manner different from that in which the consumers would have spent it. (De Viti De Marco 1936: 153–4)

Taxation necessarily changes the previous demand curves for private goods: set against reduced demand curves for private goods due to taxation, there is the expenditure of tax revenue and hence increased demand for private goods on the part of the State to supply public goods. The immediate and necessary effect is the change in the previous demand curves for private goods on the part of the taxpayers and the State that modifies the previous equilibrium.

12 This approach is basically used by Musgrave (1959: 211–17).

> This implies variations upward and downward in the previously prevailing system of prices; and therefore in all cases there will be phenomena of shifting, whether the tax affects all citizens equally or only a part of them, or whether the producers operate under conditions of monopoly or of free competition. The producers of goods the demand for and price of which have increased, shift the tax; others feel its incidence. (De Viti De Marco 1936: 154)

Among the Italian scholars who examined De Viti De Marco's approach suggesting the simultaneous consideration of the effects of tax levies and public expenditure, it seems important to consider the contribution by Fasiani (1940, 1943) and Da Empoli (1941).

The legitimacy of the approach in which the use made of public revenue should not be considered in the incidence of taxation is examined by Fasiani (1940: 6–9) in a review article concerning the contents of a book by Black (1939). Fasiani argues that it is possible, in some particular cases, to limit the analysis to the hypothesis of a 'hail tax'. Fasiani (1943: 261–2) also points out that De Viti De Marco received the praise for making current use in Italy of the approach suggesting the simultaneous consideration of the effects of tax levies and public expenditure. The use started to spread after the publication of the first printed edition of De Viti De Marco's textbook in 1923. In Fasiani's opinion, there are various precedents of this theoretical approach, but De Viti De Marco's merit is that he presented his theory as part of a systematic study of the whole fiscal phenomenon.

Da Empoli (1941: 93) justifies his consideration of De Viti De Marco's approach because, in his opinion, it is undoubtedly the most impressive (Da Empoli 1941: 93). De Viti De Marco's approach is criticized by Da Empoli in the first place because, in order to contrast his approach with the conventional one, De Viti De Marco referred to Seligman's treatment of a special tax. Da Empoli (1941: 94) points out that, as De Viti De Marco limited his analysis to a general tax, the contrast between his theory and the conventional one would have been better defined and specified if he had made reference to the treatment by the conventional theory of the incidence of a general tax. Later on, Da Empoli criticizes De Viti De Marco's demonstration of the faulty premise on which the current theory is based – that is, independently of the performance of public services, a tax always entails an increase in the production cost of private goods. Da Empoli (1941: 97), although appreciating De Viti De Marco's reminder that omitting to consider the effects of expenditure as non-existent gives always approximate results, points out that De Viti De Marco moves from the extreme tendency to consider the effects of expenditure as non-existent to the other extreme; that is, to considering too simplistically the fusion of the effects of the tax levy with the analysis of the effects of public expenditure. Da Empoli (1941: 102) also affirms that De Viti De Marco's opinion, according to which in pure theory a diminution of production cost must always be admitted, lacks a rational conception of taxation. Da Empoli (1941: 131) concludes his objections to De Viti De Marco's approach by pointing out that, although he thinks it is necessary to separate the two stages of the inquiry on tax effects – that is, tax levy and the public expenditure stages – he does not deem any treatment appropriate in which analysis does not take account of both stages.

Another systematic exposition of the logical necessity of taking account of public expenditure in studying the effects of taxation comes from Scotto (1947, 1951), who points out that it is obvious that financial activity does not exhaust itself in the tax levy. Nevertheless, the view espoused by many scholars regarding the necessity of simultaneous and combined examination of the effects of tax levy and expenditure of tax revenue for every single tax is questionable and subject to numerous logical restrictions. This is because, while there is only one concept of tax levy, the concept of expenditure of the revenue from a given tax is impossible to establish (Scotto 1947: 211). Scotto's conclusion is that the hypothesis of a 'hail tax', although wide of the mark, is a useful hypothesis in cases in which there is the will to avoid useless complications. In other cases, simultaneous and joint examination of tax levy and public expenditure is not to be overlooked.

De Viti De Marco's contribution to the analysis of the incidence of taxation, besides being generally considered in a positive way by Italian scholars, has earned appreciations from other scholars too. Benham (1934: 364) states: 'The magnitude of De Viti De Marco's achievement is best perceived against the background of the treatment given to the science of public finance in England, and indeed in most countries'. Black (1939: 39) writes: 'De Viti De Marco introduced one of the two most significant improvements into the theory of incidence'.[13] Morgenstern (1972: 18) stresses: 'De Viti's analysis of the incidence of taxation anticipated many later developments'. A positive evaluation is given by Groves (1958: 110), who says that 'some economists, such as de Marco, are exceptional in this respect, considering the effect of a tax on demand as a part of the incidence theory'. There have nevertheless been

13 See also Black (1939: 142–4 and 189).

cases of no consideration[14] or undervaluation[15] of De Viti De Marco's contribution.

4. General productivity of public expenditure

The State is an institution that uses its monopoly of coercive power over society to drain off community resources by taxation, and that, by raising revenue, finances the provision of public services and the production of public policies. Therefore, the State is not only a drain on community resources, but is also a factor of production entitled, through taxation, to a share of the output available.

The theory that sees the State as a factor of production was advanced by the Italian economists Pantaleoni, De Viti De Marco and Einaudi.[16] The first economist to clearly put forth the notion of the State as a factor of

14 De Viti De Marco's contribution is ignored in Kendrick (1937). This article and the previous article (Kendrick 1930) are, however, interesting, because they apply the theory to two cases, respectively, to a petrol tax and a tax on milk. In the first case, the tax revenue is used for the improvement of roads that, in turn, increases the demand for petrol. In the other case, tax revenue is used for advertising so as to increase milk consumption. These examples give concrete meaning to a theory that superficial observers might consider sound only at the level of a pure abstract concept.

15 Buehler (1938: 676) quotes, without giving any importance, the 'First Principles of Public Finance' of De Viti De Marco, 'where some of the relationships between the effects of public expenditures and incidence of taxes are briefly noted'. But Buehler (1938: 675) ascribes to Kendrick the priority of having examined the topic minutely. Another scholar, Holden (1940: 774–5) seems even to uphold that De Viti De Marco had been inspired by Kendrick. Indeed he writes: 'Antonio de Viti de Marco used a ''road-construction'' example very similar to Kendrick's to demonstrate the effects of public expenditure on incidence'. A short account of De Viti De Marco's contribution is made by Lindholm (1950: 282): 'Recently there has developed the belief that the analysis [of tax effects] should be broadened to include the effects of the expenditure of funds collected'. Rolph (1956: 8), instead, expresses himself in a completely negative way: 'I have difficulty in discovering a coherent theory in de Marco's exposition. Henry Simons has indicated a similar difficulty'. Nor does Buchanan completely appreciate De Viti De Marco's contribution. He argues that 'De Viti perhaps went too far. [...] he failed to recognize the tremendous difficulties involved in any complete integration of the tax and expenditure sides, and his specific analyses are often oversimplified. De Viti failed to recognize the usefulness of the ''imposta-grandine'' assumption in analyses aimed only at partial-equilibrium results' (Buchanan 1960: 40).

16 More extensive discussion of the literature on the subject may be found in Fausto (2004).

production was Pantaleoni (1906: 474),[17] who argued that public finance and private market economy are strongly linked. In Pantaleoni's view, the State is a factor of production like land, labour and capital. The cost involved in the participation of the State in production has to be paid for by part of the output in proportion to the marginal productivity of the factor of production employed. Therefore, the State as a factor of production obtains part of the output and this part is given by taxation. In spite of the coercive nature of the provision of public services by the State to taxpayers, the general criterion holds that the marginal utility of public services is equal to the marginal cost of taxation. Pantaleoni also points out that the criterion regarding the State as a factor of production allows the limit of public expenditure to be established by comparing the marginal utilities of public expenditure and private expenditure.

The theory of the State as a factor of production is examined further by De Viti De Marco, who argues that the State, through the production of public services, is a factor necessary for any other productive activity and, like any other factor of production, is entitled to remuneration.

De Viti De Marco (1936: 111–13) says: 'the tax is a share of the income of citizens which the State appropriates in order to procure for itself the means necessary for the production of general public services'. He then adds:

> If we consider the State as a collective use-economy, the transformation of private goods into public goods is an exchange of whose economic advantage the State itself is the judge [...] there can be no doubt that, if it is recognized that an exchange-relationship exists between the consumer and the State producing the special public service, an exchange-relationship also exists between the State as the producer of general public services and the community of tax-payers. [...] To sum up: the tax is the price which each citizen pays the State to cover his share of the cost of the general public services which he will consume. (De Viti De Marco 1936: 112–13)

De Viti De Marco (1936: 115) also stresses that 'almost all general public services take on the character of goods which are instrumental in the production and necessary for the consumption of goods produced by private persons'. For De Viti De Marco (1936: 223):

> Another principle deriving from the theory is that each part of income produced, no matter how small, contains its proportionate share of the cost that the State has incurred in providing its productive services; and since the tax corresponds to this cost in the same way that wages correspond to the labour provided by labourers, it

17 Cosciani (1936: 51) points out that Pantaleoni's approach also appears in other editions of Pantaleoni's lectures.

follows that each part of income, no matter how small, *comes into existence bearing the corresponding tax-debt.*

De Viti De Marco's theory of the State as a factor of production was much criticized by Fasiani (1941b: 299–301) for the following reasons: it is the old thesis of productivity or reproductivity power of tax; the majority of public services cannot be considered a factor of production, unless one seeks to give the concept of factor of production such a broad meaning as to make it useless; public services are the premise of every economic activity, but they are not factors of production; the concept of the State as a factor of production has the indeterminateness and elusiveness of the Marshallian concept of external economies and, besides, it should be considered that we cannot know the marginal productivity of the State as a factor of production; in the concept of the State as a factor of production there is only the vague idea that what is useful to us all increases general welfare, and neither the State can be considered a real factor of production, nor may taxation be considered – as rent, interest and profit – the remuneration of a factor of production; and it is impossible to use the concept of the State as a factor of production to identify a criterion of distribution of tax burden.

Einaudi (1942) commented broadly on Fasiani's criticism of De Viti De Marco's approach to the theory of the State as a factor of production, arguing in favour of the theory, which he had already defended in the past (Einaudi 1919: 189–91; 1930: 306–7). For Einaudi (1942: 301–26) there is a logical relationship between taxation and public services; that is, taxation is a share of the total social output given by the State in exchange for public services. Public services have a direct impact on the creation of wealth, and the difficulty in measuring the contribution of the State as a factor of production on the total output of a given industry and of the economy as a whole does not appear to be a reason to exclude the State from among the factors of production. In Einaudi's opinion, the State is a factor of production *sui generis*, which works as a potential entity (soldier, magistrate, educator, defender of public interest) and is rewarded in a different way from the other factors of production. According to Einaudi, from the theory of the State as a factor of production, no rule can be inferred regarding the distribution of tax burden to finance the cost of public services.

Fasiani (1942: 494–8) replied to Einaudi that he did not think the reproductivity of taxation could be restricted to the very simple concept of the necessary link between government expenditure and revenue. Actually, De Viti De Marco and Einaudi make use of the concept of factor of production in different ways. De Viti De Marco considers the concept similar to the fundamental factors of production (land, labour and capital) that, combining in different ways, produce different goods. Einaudi, instead, considers the concept as all the circumstances that affect production (Fasiani 1942: 499–511).

Some of the reasons why the theory of the State as a factor of production is due to Italian scholars are clarified by Buchanan (1960: 38–9):

> For the Italian, fiscal theory is concerned with the activity of the state, and not primarily with that of the individual as he is affected by the fisc. [...] The Italian model includes the state, and the more important feature has been the tying-together of the two sides of the state fiscal account, taxation and expenditure, and the general recognition of the limited usefulness of any one-sided analysis.

Buchanan (1960: 41–2) then stresses:

> Many of the more specific contributions which Italian fiscal theory contains are derivative from the general methodological approach. One of these is the recognition of the general productivity of public expenditure, a contribution which has been developed by those who adopt the 'economic' conception of fiscal activity, notably by De Viti De Marco and Einaudi. [...] Public services are instrumental to the production of final goods and are on an equal basis with labor and capital. Therefore, it becomes conceptually possible to impute to such services an appropriate distributive share.

Buchanan's interpretation of the Italian tradition in public finance is right: its main features are that public services are productive factors and that the economic role of the State needs great attention. The study of public finance regards the systematic analysis of both sides of public budget. In the Anglo-Saxon tradition, instead, from Smith and his followers up to Pigou, the economic role of the State must be minimized. The economic activity of the State is unproductive, public expenditure has no repercussions on citizens' welfare, and therefore the State ought to limit its activity to reducing public services to a minimum, whose existence is dictated by necessity. It is only with the contributions of Samuelson and Musgrave in the new public expenditure theory of the 1950s that stress was laid on a new favourable view of the beneficial function of the public sector.

5. Conclusions

This study first considered various contributions of Italian scholars to the theory of public expenditure growth. Following in Wagner's footsteps yet adopting a different approach, Graziani, Sitta, Nitti and others stress the links between the growth of public expenditure and the increase in the social and economic role of the State. Indeed, society and markets are not natural phenomena, since they depend on government for their existence and running.

These contributions, however, by no means capture the main determinants of the growth of public expenditure highlighted by the Italian scholars. As we noted, Pantaleoni focused on the dynamic aspects of the phenomenon: the richer a country is, the more public expenditure grows through the replacement of the private sector with the public sector. In Mazzola's approach, public goods are complementary to private goods, and an increase in the production of private goods implies the growth of public expenditure. The wider political and sociological aspects of the problem are considered in Puviani's analysis of optimistic fiscal illusions on the spending side, in which citizens systematically overestimate the benefits of public expenditure leading to an increase in the public sector. This kind of fiscal illusion presumes that the legislature can deceive taxpayers about the true size of government, and government can therefore grow beyond the level of efficiency. Yet like the others reviewed herein, Puviani's analysis fails to provide in itself an exhaustive explanation for the growth of public expenditure.

The approach of the two leading Italian economists, Einaudi and De Viti De Marco, is certainly relevant to the simultaneous analysis of tax levy and tax expenditure as regards the theory of shifting and incidence of taxation. They argue that attention must be paid to the changes in demand for private goods as a result of the expenditure of tax revenue. In their opinion, this is a realistic vision of financial activity. In the view of other authors, however, the methodological criterion for accepting, in a first approximation, the hypothesis of a 'hail tax' does not entail the elimination from the study of the shifting and incidence of taxation of all considerations regarding the expenditure of tax revenue.

Another remarkable aspect of the Italian tradition in public finance is that the State is a factor of production that, by means of public expenditure, produces public services for the community and establishes a framework of rules for protecting citizens' rights. Public finance activity, therefore, is a production activity that enters the production of private goods and increases the marginal productivity of private factors.

In conclusion, Italian economists have examined the problem of public finance in a general context, taking into consideration both taxes and public expenditure at the same time, giving to public expenditure a role as a potential implementation of efficiency. Italian theorists have always been far removed from the classical approach, which denies the productivity of public expenditure and public services. Their model includes the State as a factor of production. These statements, which were paramount already a century ago, remain of importance today in a much more dynamic world.

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Abstract

This paper examines public expenditure in the Italian public finance literature between the end of the nineteenth century and the early decades of the twentieth century. Three aspects are considered: the factors that determine the growth of public expenditure; integration of the tax and expenditure sides in the theory of shifting and incidence of taxation; and the general productivity of public expenditure. The main conclusion of the paper is that Italian economists have examined the problem of public finance in a general context, taking into consideration both taxes and public expenditure at the same time.

Keywords

History of public finance, public expenditure

JEL classification: B10, H50