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PUBLIC ACCOUNTING AND PUBLIC MANAGEMENT: LOOKING FOR LINKING DRIVERS BETWEEN THE TWO ACADEMIC DISCIPLINES

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Abstract: *The aims of the article follow from the observation that the topics of Public Accounting and Public Management are frequently discussed separately in the international scientific literature. From this initial observation derives the research question of the paper, which is aimed at identifying the possible connection themes between the two disciplines.*
In this perspective, a significant interest can be identified in the concept of full cost, an abstraction that usually pertains to the private profit-oriented sector, which finds in the standard cost the alter ego applied in the public sector. The analysis of standard costs in the public sector originates at the European level from the introduction of the Maastricht Treaty parameters in the 1990s and in particular from the new accounting discipline introduced by the Treaty. The new discipline has been the basis of many accounting reforms that have taken place in the European context which have generated, in some countries, the integration (or in some cases the replacement) of the traditional Cash Basis Accounting (used in the public sector) with the Accrual Basis Accounting (used in the private sector). In order to pursue the declared aim, the paper proposes the following articulation: the analysis of the different cost variations deriving from the different Public Accounting models; the cost analysis for management control purposes; the determination of the different cost configurations; the derivation of the standard cost and finally, the use of the standard cost as a driver in the reengineering processes implemented by the Public Management. The revision of the organizational models, an activity pertaining to Public Management, represents the solution of the critical issues indicated by the cost analysis - and in particular of the standard cost analysis - implemented by the management control derived from Public Accounting. In this perspective, the concept of standard cost (obtained through the full costing methodology) can be considered as a significant driver of conjunction between Public Accounting and Public Management.

Keywords: *Public Accounting, Public Management, New Public Management, Standard Cost, Full Cost.*

INTRODUCTION

The paper aims to bring out and methodologically consolidate the connection between Public Accounting and Public Management, in which the analysis of the costs derived from the first discipline, turns out to be useful for management control in order to optimize the process of reengineering of the public institution oriented to the principles of efficiency, effectiveness and cost-effectiveness.

The cost-effectiveness principle is describable as the ability of the company to manage itself according to the criteria of effectiveness and efficiency in the long term, where:

- The first principle – the effectiveness – implies, alternatively, the measurement and indication of the ability to achieve a predefined corporate objective (internal or managerial effectiveness), or the measurement and indication of the ability to satisfy the needs of its external stakeholders (external or social effectiveness).
- The second one – the efficiency – measures, instead, the ability to achieve a specific managerial objective by optimizing available resources.

The cost-effectiveness principle is, therefore, the cardinal condition that each entity (a public institution, or a non-profit organization, or a business enterprise) must satisfy in order to be in long term "(...) *an enduring economic institution which, for the satisfaction of needs human needs, composes and carries out in continuous coordination, the production or acquisition and consumption of wealth* (...)" [1].

The cost analysis applied to the European public sector follows the introduction of the Maastricht Treaty parameters in the 1990s and in particular from the new accounting discipline introduced by the European Treaty.

Since then, the European Commission has examined whether budgetary discipline is respected by euro countries, based on the following parameters:

- annual government deficit (given by the ratio of annual government deficit to gross domestic product) not exceeding 3 %, government debt (given by the ratio of gross government debt to gross domestic product) not exceeding 60 %.

The new accounting discipline has been the basis of many accounting reforms that have taken place in the European context, which have generated, in some countries, the integration (or in some cases the replacement) of the traditional Cash Basis Accounting (used in the public sector) with the Accrual Basis Accounting (used usually in the private sector).

The new international accounting standards applied in the public sector are the IPSAS (International Public sector Accounting Standard), issued internationally by the IPSASB emanation of the IFAC (International Federation of Accountants) and the EPSAS (European Public sector Accounting Standard) proposed at European level by EPSAS Expert/Working Groups, Eurostat, European Commission.

The current Public Management issues represent a consequent derivation from the theory of New Public Management (acronym NPM), born in the mid-1980s in the United States and the United Kingdom: this approach constitutes the appropriate proposal to the common growing demand for a better quality of public services and a related containment of public spending. The international literature on the theory of New Public Management identifies the following articles as main references: [2], [3], [4] and [5].

THE PUBLIC ACCOUNTING DILEMMA: CASH BASIS ACCOUNTING (CBA) OR ACCRUAL BASIS ACCOUNTING (ABA)?

Public Accounting has traditionally had two alternative methods of reference: Cash Basis Accounting (acronym CBA) and Accrual Basis Accounting (acronym ABA).

Historians of accounting identify the CBA origins in ancient Greece, in Egypt and in ancient Rome, where it emerged the figure of the "rational", replaced with that of "accountants" in the modern times.

This accounting model was born with the affirmation of the currency minted for the first time by Croesus, king of Lydia (city located at present-day in Turkey) in the sixth century BC. CBA recognizes revenue and expenses only when money enters or exits the company's accounts. CBA methodology is the simple-entry bookkeeping: it accounts each administrative fact only once and generates the Cash Flow Statement.

About ABA's origin – question somewhat discussed in historical reconstructions – it is attributed to the mathematician Luca Pacioli (1445-1517), who in 1494 defined for the first time, in systematic terms, the double entry method in the book "Summa di arithmetica, geometrica, proportione et proportionalita", in the chapter entitled "Tractatus de computis et scripturis".

The publication of this book earned him the title of "father of accounting". ABA accounts the revenues from the time of issue of the active invoice (document not necessarily cashed) and accounts the expenses from the time of receipt of the passive invoice (document not necessarily paid).

The ABA methodology is the double entry bookkeeping: it accounts each administrative at least twice and generates the Annual Report, a document consisting of three sections: Cash Flow Statement, the Balance Sheet and the Income Statement.

The prerequisite for the implementation of the CBA is the availability of an up-to-date initial balance sheet reconciled with the public institution's inventory: this initial accounting situation must be included in an initial balance sheet.

The full cost (in the private sector) or the standard cost (in the public sector) represent particular types of cost and the cost – as a generic concept – represents an economic sacrifice sustained for the purchase of the primary production factors (or inputs) necessary for the production of goods and/or services (or output).

The ABA methodology identifies two types of cost:

- accrual cost
- long-term cost (or asset).

Accrual cost represents an economic sacrifice sustained for the purchase of short-cycle production factors (e.g. capital, labour, raw materials, etc.) and this economic entity is included in the Income Statement.
Long-term cost (or asset) constitutes economic sacrifice sustained for the purchase of long-cycle production factors (e.g. the costs incurred for the purchase the purchase of machinery, plants, technological equipment, etc.) and this multi-year economic entity it is included in the Balance Sheet.
The allocation of the portion of the multi-year cost pertaining to the economic period of the single financial year takes place through the amortization process in the Income Statement.
ABA methodology has the advantage that it directly obtains the costs, while from the CBA methodology the costs are obtained indirectly through an extra-accounting processing.
In fact, the possibility of obtaining costs from both methodologies has made the debate on which methodology to adopt useless and obsolete

THE PROCESS OF DETERMINING THE STANDARD COST IN THE PUBLIC SECTOR

The determination of costs it is functional to obtain the different cost configurations attributable to the individual service unit produced in a Cost Centre: this result is obtained by attributing the overall cost configurations (see Figure 1) to the individual Cost Centres.

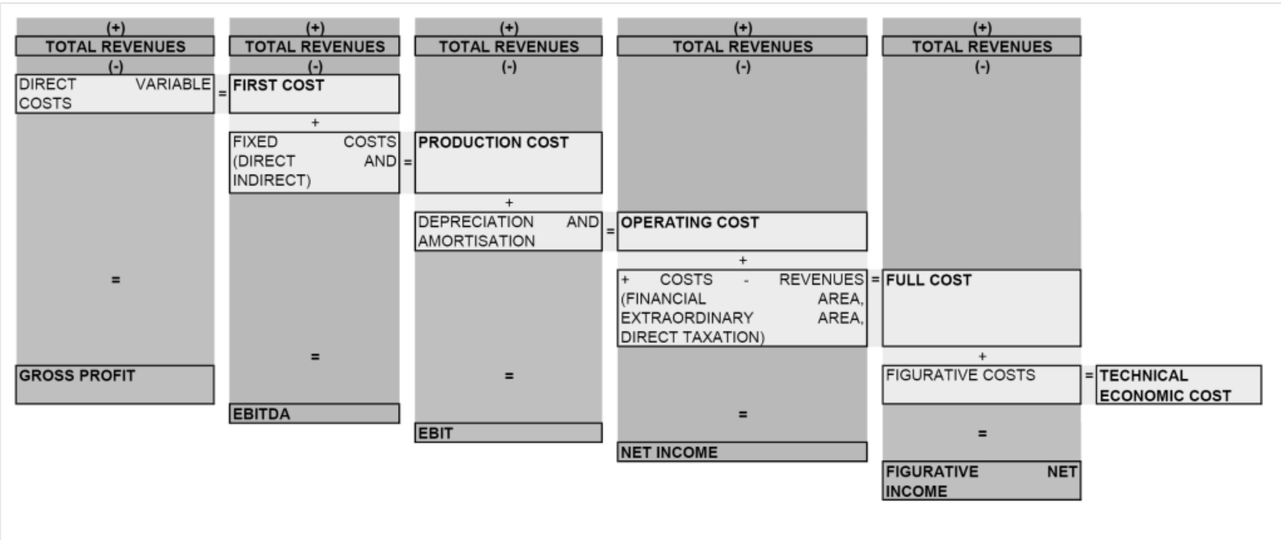

Figure 1: Business economic configurations of costs and margins. Source: own elaboration of the authors

In the public sector, the Cost Centres correspond to the service-producing areas for which the standard cost is calculated, while the Administrative Responsibility Centre is the management-level organisational unit to which financial, human and instrumental resources are allocated to produce the services.
The holder of the Centre of Responsibility is responsible for the management and the results deriving from the use of all the resources assigned to him/her: one Centre of Administrative Responsibility may correspond to one or more Cost Centres, depending on the activities carried out.
Supporting the process of determining the full cost (in the private sector), or the standard cost (in the public sector), the subsequent reclassification of the costs obtained follows two criteria.
The first criterion concerns the possibility of identifying the variability (or stability) of the costs obtained in relation to the volumes of service provided (in this case, costs are divided into fixed and variable). The second criterion regards the possibility to allocate directly (or indirectly) the costs obtained to a Cost Centre (in this case, costs are reclassified into direct and indirect).
To better understand these two criteria, consider for example a public institution set up to provide two different services: organizing public competitions to select personnel and providing training courses for employees of other administrations. In this case, the public institution is an Administrative Responsibility Centre with two Cost Centres, competitions and training.
At this point, it might be interesting to calculate the standard cost of the single competition, or of an hour of training.
In the latter case - the calculation of the standard cost of a training hour - the combination of the two criteria set out above provides the three real situations that are operationally relevant:

- variable-direct costs (e.g. the hourly cost of trainer teachers),

- fixed-direct costs (e.g. the cost of training design activities),
- and fixed-indirect costs (e.g. the cost of personnel in the Centre of Administrative Responsibility).

In the latter case, the allocation of the cost of personnel in the Centre of Administrative Responsibility to the Cost Centre is done by a driver (e.g. given by the ratio of hours devoted to training to total hours worked by personnel).

The standard cost is derived from the income statement and it is given by the ratio between the full cost attributable to the single Cost Center and the volume of services provided and related to the same Cost Center.

In the public sector, the standard cost is the production cost of a public service, obtained assuming normal operating conditions: it is used - in Public Management - to evaluate, in comparative terms (in time and/or space), the efficiency of a process, understanding the latter as the measurement of the ability to achieve a certain corporate objective, optimizing the resources available.

The necessary prerequisite in order to achieve the implementation of a proposal for a management control model, oriented towards the company's economic profile, is the availability of both non-monetary quantitative data (e.g. the number of activities performed by personnel), and the correlated economic-patrimonial values attributable to all activities performed (e.g. total full cost). The ratio between the latter and the former determines the standard cost of a single unit of activity.

The process to determine the standard cost therefore identifies the following steps:

- to derive the costs from the adopted accounting system (Accrual Basis Accounting, or Cash Basis Accounting);
- to determine the different cost configurations;
- to derive the standard costs related to a service provided (or to an internal process);
- and finally, to use of the standard cost as a driver in the reengineering processes implemented by the Public Management.

The Conjunction Model between Public Accounting and Public Management illustrated in these pages is summarized in the following table (see Figure 2.).

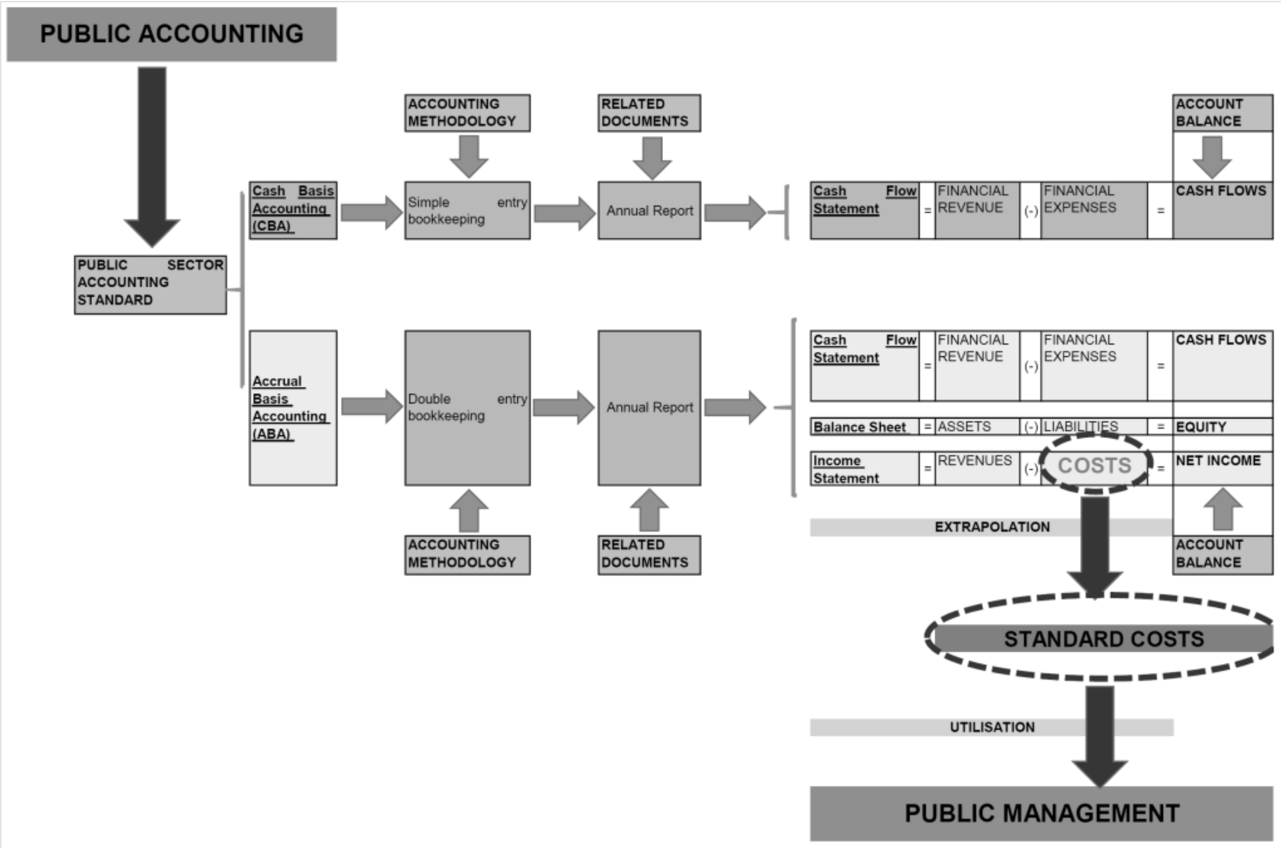

Figure 2: The Conjunction Model between Public Accounting and Public Management. Source: own elaboration of the authors

In Italy, cost analysis for the purpose of management control applied to public institutions is based on the Constitution of the Italian Republic, in the following terms: "(...) *Public offices are organised according to legal provisions, in such a way as to ensure good performance and impartiality of the administration*. (...)" (Source: Article 97, paragraph 2 of the Italian Constitution).

The management control' topics recall the broader theme of the "system of controls" applied to public institutions, which have a dual doctrinal derivation: that proper to administrative law and that pertaining to business economics.
The combination of the two disciplines - administrative law and business economics - has generated two types of control activities, the "external controls" and the "internal controls":

- the "external controls" are carried out by subjects external to the public institution (e.g., the Ministries Inspection Services, the studies of the economic sectors carried out by the Tax Agencies, which obtain the standard costs of the taxpayers, etc.);
- the "internal controls" are those carried out by subjects internal to the public institution provided – in same cases – by the specific laws (e.g. , the Evaluation Independent Boards, the Auditors and, obviously, the Public Management).

The determination of the full cost (in the private sector), or the standard cost (in the public sector) related to the single service unit, represent the final step of the process.
In the conclusions, the current reasons for the choice of the standard cost as a connecting element between Public Accounting and Public Management are resumed.

CONCLUSION

Maastricht Treaty parameters are now at the centre of a political debate for their possible revision in a future perspective.
This revision is necessary because the European Commission and all Nations (not only European) in the present moment have relevant budget problems resulting from the expenses of the pandemic crisis (before) and (now) caused by the Ukraine-Russia conflict: this scenario leads to a consequent reduction in the resources available to each individual public institution (but not only in Europe).
From these premises it follows that the public sector needs to implement the management control and the Public Management represents an appropriate monitoring system that identifies – by the standard cost methodology – the objectives to be pursued, the relative resources allocated and the subsequent evaluation of the results obtained.
This approach also makes it possible to constantly compare forecast data with actual data and thus to direct management, intervening with appropriate corrective actions in the event that significant deviations have been identified.
The monitoring action involves a continuous improvement process articulated in the stages of the PDCA cycle (an acronym for Plan, Do, Check, Act), also known as Deming Cycle [6] and [7]. The PDCA cycle has the following meaning:

- Plan - establish the objectives and processes necessary to deliver results in accordance with user requirements and organisational policies,
- Do - implement the processes,
- Check - monitor and measure processes and service against policies, objectives and product requirements and report the results
- and Act - take action to continuously improve process performance.

The transition from the Check to the Act phase is based on a question-answer relationship that can be traced back to the "5W1H" model (acronym for: Who? What? Where? When? Why? In addition, How?), also known as the "Kipling model" [8].
In order to remove the causes at the origin of these deviations – detected by the indicators produced by management control and aimed at measuring effectiveness, efficiency and cost-effectiveness – one should therefore proceed with the mapping of the underlying business processes in a Business Process Reengineering (BPR)-oriented logic. In the public context, we could rename Institutional Process Reengineering (IPR) or Institutional Process Analysis (IPA) [9], [10], [11] and [12].
As stated above, it is possible to state that the methodological path exposed in the paper has identified:

- the connection between the two disciplines Public Accounting and Public Management;
- the significance of the standard cost concept in this connection between the two disciplines.

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