Historical Development of Government Accounting

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Abstract

Government accounting aims at preventing waste in government services and establishing a balance between optimal expenditure and services by managing government assets and government sources in the most efficient way. This balance can be established only by obtaining complete and accurate information from government accounting system on time. Since the users have a low level of knowledge needs in government accounting system, it has been recorded for long years in a cash basis manner. However, as the government's area of operation expanded and the needs increased, it became obvious that cash basis system had lacking parts. So it started to focus on recording financial transactions and financial reporting. These lacking parts in the accounting system tried to be overcome through a new regulation by focusing on the areas where cash basis accounting system was insufficient; and a change was experienced with regard to applying the accrual basis in the areas of government accounting and financial reporting. This study aims to explain the historical development of government accounting by applications in countries and especially by detailed expressions for Turkey. As a result of the literature review and the examination of countries' government accounting practices, it has been determined that the government accounting practice has made the correct transition from cash basis to accrual basis.

Keywords: government accounting, cash basis government accounting, accrual government accounting, historical development of government accounting, applications of government accounting in country level

1. Introduction

As the economic boundaries between the countries started to be removed through globalization, the concept of an international competition emerged between them, and this concept forced the countries to experience an economic reconstruction. It also brought the necessity of the revision of the government's role and share in economic life as well as a reconstruction



in government finance management which is appropriate for the new conditions within the framework of these developments. Reconstruction of government accounting systems is of high importance among reform movements in government finance management systems. Because accounting system is very important to establish financial transparency in government management, both for helping government managers to make correct decisions under the liability of accountability and about how the government sources are used in this area. Changes in the concept and perception of government, changes in the quality of goods and services, changes in government economy and changes in government budget systems had important effects on the development and importance of government accounting.

Government accounting used to monitor revenues and expenses, which were available only in the budget and excluded the payables, receivables and assets of the government as there was a limited area of operation for the government previously. As the area of operation of the government was expanded, government accounting became an accounting system, which monitored revenues and expenses determined through budget as well as the payables, receivables and assets of the government. However, there is currently no government accounting system, which is applied across the world. Government accounting systems also experienced some changes depending on the changes of the era. The need for knowledge regarding financial decisions and financial policies of the governments was relatively much more limited in the past, which led to the creation of simple and budget-oriented accounting systems. On the contrary, modern concept of government accounting goes far beyond being budget oriented and considers the changes in assets and includes cash flows into the accounting system.

For long years, government accounting systems have been recorded in a cash basis manner which includes allocations given by the budgets, expenditures from these allocations, total revenue for financing the expenditures, and some other information that may be needed and which principally represents for the record of collection of revenues and payment of expenditures. However, this budget-oriented recording system became insufficient to fulfill the needs of government management over time, and so, some new experiences were started to be looked for in the area of government accounting. Thus, there has been some studies recently to develop an accrual recording system which is recognized by all financial transactions which have already emerged or will emerge in the future including tangible assets of the government. In the selection of accounting systems which will be published in government area, there is a movement on a platform with cash basis accounting at one of the edges and accrual accounting at the other edge. This platform also includes the principle of undertaking, modified cash basis, and modified accrual basis.

This section explains how government accounting should be defined, what kind of a content it has, which important aspects it has for the country's economy, as well as the emergence and changes it has within its historical process in order to put forward the importance of government accounting for government managements and economies. It also evaluates studies which are carried out in different countries in the areas of government accounting and their reflections in Turkey as well as the studies which are carried out in Turkey.

2. Government accounting

Given that accounting is the recording, classifying, and reporting of financial transactions in monetary terms, this definition becomes valid for private sector. If the matter is government accounting, there is a different definition because the aim of government accounting ranges from being an instrument of financial management and control to the planning of national economy. Government institutions and organizations within the scope of government accounting record their transactions as efficiently as possible and facilitate accountability. This section explains how government accounting should be defined, what kind of a content it has, which important aspects it has for the country's economy, as well as the emergence and changes it has within its historical process in order to put forward the importance of government accounting for government managements and economies.

2.1. Definition, scope, and aim of government accounting

Government accounting is a process which enables recording, making decision analysis, classification, summarization, notification, and interpretation of government financial knowledge as well as including and reflecting all transactions which include purchasing, transferring, and allocation of government property in general [1].

When government accounting is described within the framework of financial accounting, it can be defined as recording and classifying all the monetary activities, assets, and liabilities of the government, which can be financial partially or wholly and reporting them to the authorized entities and institutions. Historical development of both financial and government accounting is in parallel with the political and economic development levels of the countries, because there are some changes in the concept of government management as a result of differentiation in economic and political organization types of the countries.

As the political regimes started to change, there were some important developments observed in the concept of government as well. Developments in government accounting also improved in accordance with these developments arising in the concept of government because government accounting is not an aim but an instrument for government management. Government activities started to change in parallel with the developments in the world, and traditional concept of government experienced a change. Within this process, firstly the concept of government budget emerged, and then the concept of accounting developed in budget-oriented manner. So government accounting system became a derivative of government budget system [2]. In this regard, the concept of government accounting is described in a budgetary point of view as follows: an accounting technique, which audits whether government activities are fulfilled in accordance with the determination of legislative power within time periods determined by budget laws or not, suggests the expenditures of government services and throws light upon forward decisions for the management [3].

Government accounting plays a key role in government finance management. Importance of government accounting lies behind the fact that countries trying to restructure government managements start their reforms by making adjustments in their accounting systems and making their systems to have the competency of producing more accurate, timelier, and more reliable knowledge [2]. Government that is liable to provide government services has to monitor government expenditures efficiently and account for it as well. It is not only the government expenditures that the government accounts for, but also has to keep transferred assets and observe any changes in their values [4].

Scope of government accounting is the general administration. Financial and nonfinancial government corporations compose the government sector in addition to general administration. However, these corporations are outside the scope of government accounting because they aim at making profit through their economic activities by producing goods and services in accordance with the accounting and reporting principles of private law for the market. So government accounting should aim at creating a framework which is practical for making comparisons with common accounting and reporting standards as well as consolidating them in central administrations, local administrations, and social security institutions which are included in the scope of general administration [5].

Issues which are handled based on the definition of government accounting are of high importance for the institutions and organizations which are included in government accounting. If we do not address to accounting to include general government services, it has a very limited scope, and there will be no account unity in government sector. So we need to address to the concept of government accounting in a broad sense and define it as an accounting which uses government sources as much as possible and shows the records of all government institutions and organizations. Because goods, services, and sources of the government are produced and used by people who create this organization, so it is important to provide transparency and accountability for these people. Liability of accountability, which is defined as displaying how efficiently they (people who are allocated with sources and provided with authority in this process) use the sources and authorization, is also important for the society to provide confidence toward the government. It will be beneficial with regard to government finance management to provide account unity, information accuracy, and common financial reporting in the government sector through the concept of government accounting, which we handle in a way that we include all the government sectors, not just a part of it [6].

Government accounting fundamentally aims at carrying out an audit for the results of the activities of government institutions and other government-affiliated institutions within a calendar year to determine their conformity with budgeted revenues and expenses. In this regard, government accounting accurately determines revenue and expenses within a financial year and reports the activity results [7]. Government accounting, as an instrument of financial management, also aims at creating a basis for productivity analyses by suggesting the costs of government services. In other words, it determines whether government activities are rational or not [5].

In conclusion, government accounting, as an instrument of financial management and control, aims at monitoring yearly and year-end accruals of budgeted revenues and expenses within a financial year as well as assets and sources of the government and executive bodies in addition to reporting the budget application results and activity results of executive bodies for specific periods to the relevant authorities in a way that is appropriate for information

needs in order to provide information to the government sector which is necessary for planning and managing national economy [7]. In this regard, it is required to have budgetary accounts, assets, and capital accounts within the scope of government accounting, so that it can come up as an instrument which provides necessary data to the government in making efficient financial and economic decisions [8].

Government needs accounting more than private enterprises do because aim of the government is not to make profit just as in private enterprises, but to fulfill the needs of the society and provide wealth for them. So the government needs to spend the revenue which is gained from various sources in the most efficient way and to present some specific information about them [11].

Recording and monitoring the studies and activities of the governments regarding financial and economic policies, government accounting is the most important element of the principle of financial transparency and financial accountability in this regard. It checks whether or not government sources are managed efficiently and economically, and it provides the most important data in internal and external audits. Existence of government accounting is of high importance to provide government services efficiently in governments. Government accounting system contributes to information production, making them available for usage, determination of economic policies, and solution of budgetary applications [3].

2.2. Government accounting systems

Emergence and development of government accounting date back to the fifteenth century. Recording and development of government accounting started with cameral accounting system. Government accounting recorded through cameral accounting system was budget-oriented and handled the collection and expenditure of revenues and expenses of the budget [9].

There is currently no government accounting system that is applied across the world. Government accounting systems also experienced some changes depending on the changes of the era. The need for knowledge regarding financial decisions and financial policies of the governments was relatively much more limited in the past, which led to the creation of simple and budget-oriented accounting systems. On the contrary, modern concept of government accounting goes far beyond being budget-oriented and considers the changes in assets and includes cash flows into the accounting system [10].

There are two fundamental points of view in the historical development process of government accounting systems as traditional and modern views. cameral accounting system and Schneider accounting system were shaped within the framework of traditional view, while Constante accounting system and logismography accounting system were shaped within the framework of modern view.

2.2.1. Traditional government accounting system

Traditional government accounting system suggests that government accounting fundamentally aims at monitoring, recording, and controlling government revenues and expenses within the framework of budgetary provisions and procedures. It is possible to regard this system as "budget accounting" where tangible assets and intangible assets of the government as well as receivables and payables of the government are not monitored and recorded within the framework of accounting. Traditional view suggests that receivables, payables, and assets of the government should be excluded from the scope of government accounting because of the reasons below [12]:

- There is no power of disposition on the assets of the government (purchasing, renting, etc.).
 There can be no disposition on such government properties as ancient arts, palaces, and museums just as on private properties. Assets cannot be recorded as they are not an instrument of change for the government.
- Assets of the government belong to the community, not the government. So government
 is liable to prevent these assets by considering the interest of the community. Therefore,
 patrimuan (government's assets and enterprise revenues) accounting cannot be recorded
 through the assumption that government has no assets; items in the assets cannot be indicated in the balance sheet.
- Development of an accounting system regarding government properties brings out the idea of expanding government's assets. Traditional system suggests that government's function is to manage the existing assets in the best way, not to increase patrimuan.
- It is not possible to monitor cash account and asset account of the government technically. So there are many problems while presenting the facts about the balance sheet of the government.
- Patrimuan accounting requires making up a balance sheet. Assets and receivables in the
 balance sheet of the government and payables in the liabilities are not the same securities,
 so they cannot be compared. It is not possible to determine the liquidity of some values in
 the assets.
- Since there are many problems while presenting the facts about the balance sheet of the government, it is not possible to monitor the values. Accordingly, amortizing and managing the assets remain as utopic ideas.

Traditional government accounting systems are classified as cameral accounting system and Schneider accounting system.

2.2.1.1. Cameral accounting system

Being one of the leading accounting systems, cameral accounting system was designed as an internal audit assistant composed of cash tangible assets and derivatives, which have no systematic sustainability in financial management of the royalties (assets and treasury administration). Being called as simple cameral accounting between 1500 and 1750, this concept included classifying the revenues and expenses, monitoring personnel changes, and indicating the status of active assets. In other words, the cash basis which included recognition of budget values was applied. Today's accounting was founded between 1750 and 1810 with regard to government accounting. In 1763, Johann Mathias Puechberg, Australian Emperor's advisor, put forward the principles of cameral system in his book *Introduction to Development of Cameral Accounting*

Applied by the Kingdom. Defined also by Hung, the German Cameralist, this system started to keep the records of daily logs and larger books which were divided into subsections after 1786. Some arrangements also took place to include revenues and expenses between the accounts. So accrual basis gained much more importance in accounting. After 1810, revenue reports were prepared in conformity with commercial accounting model with the help of result-oriented transactions in accounting. After 1910, executors created cameral accounts, which will be indicated in inventory for expense items with the existence of government enterprises [13].

Cameral accounting system is divided into two as old cameral accounting system and new cameral accounting system with regard to historical development of accounting systems. Old cameral accounting system can only monitor the cash. It is not possible to monitor changes in the assets of the government and status of its receivables and payables. In this system, accounts are divided into two as revenue accounts and expense accounts. In cameral accounting system, there are two books as cash book and detailed book of revenues and expenses. Cash book is recorded by the cashier based on the documents of revenues and expenses. Detailed book of revenues and expenses is also recorded by the cashier based on revenue collections and expense payments in accordance with the phases and provisions in the budget [14].

New cameral accounting system is an updated version of old cameral accounting system created in order to remove some lacking parts of the old cameral accounting system in that the old version could not audit itself or the cash records, and it could not indicate the accrual balances of revenues and expenses [15]. In the new cameral accounting system, cash book and detailed book of revenues and expenses are kept by different people, which is something that facilitates audit of the accounts, and it can indicate the account balance of revenues and expenses. The only thing that makes the system insufficient is that it does not show the changes in assets of the government just as in cameral system [7].

2.2.1.2. Schneider accounting system

Both old and new cameral accounting systems only include cash and budget transactions in government accounting while excluding clearing transactions as well as off-budget receivables and payables accounts. Schneider accounting system is a more developed cameral system applied in order to remove these lacking parts [9].

In Schneider accounting system, accounting records are recorded in accordance with bilateral recording method: payables are recorded in the relevant column in the section of expenses, and receivables are recorded in the relevant column in the section of revenues. The most important benefit of this system is that it includes cash transactions as well as clearing and off-budget receivables and payables accounts. Furthermore, it enables balance sheet adjustments by making loss and profit accounts [7].

2.2.2. Modern government accounting system

Modern government accounting system suggests that government accounting should include and recognize the payables, receivables, and assets of the government as well as its revenues and expenses on the contrary to traditional view, because it is inevitable for a government to have assets, payables, and receivables because of the expansion of its area of operation. So it is incorrect to regard government accounting just as a budget accounting. It also means giving insufficient answers to the needs of government management. Views of modern government accounting system that are contrary to the budget accounting-oriented approach of traditional view are justified as follows [12]:

- Government's assets belong to the community. However, it does not remove the liability of
 the government. All kinds of changes in the government's assets should be recorded with
 regard to the principle of accountability of the government.
- There have been substantial increase in the government's assets with the increase in government functions today. Increase in the government's assets is a result of modern government concept. So assets should definitely be reflected in the accounting for an incredible presentation of the balance sheet of the government.
- It is not a rational approach to conclude that the view suggesting that existing assets should be recorded will definitely lead to an increase in the assets.
- Technically, budget accounts and patrimuan accounts should be addressed in different groups. It is not impossible to solve this problem by making an adjustment while considering this distinction in the account plan.
- Firstly, it is necessary to consider government budget and commercial budget separately.
 Even though it is not necessarily possible to evaluate some items in government budget sufficiently, it is not an obstacle for including these items into the balance sheet. For example, there are some problems while recording such items as museums, historical assets, and palaces. In this case, recording should be started after determining a method which will reflect the reality explicitly.
- It is absolutely correct that there will be major problems in the application of patrimuan
 accounting in large-scaled countries. However, existence of these difficulties is not an obstacle for the execution of the application. Large-scaled countries will lead to increase in the
 number of activities and even some changes in patrimuan. So it is an inevitable obligation
 to use patrimuan accounting.

Modern government accounting systems are classified as Constante accounting system and Logismography accounting system.

2.2.2.1. Constante accounting system

This system includes both budget accounts and asset accounts. System was founded in accordance with the principle of recording revenues and expenses in the budget in accrual phase. All transactions are recorded in accordance with bilateral recording method. Cash book and detailed book of revenues and expenses are recorded in the system. Cash book is used for monitoring the cash movements as usual, while detailed book of revenues and expenses is used for recording revenues and expenses in the relevant accounts in accrual phase. This system includes budget accounts and asset accounts. Since tangible asset accounts are also used in this system, there can be decreases and increases in the tangible assets of the government [7].

While the system enables determination of changes (increases and decreases) in the government's assets, it can also calculate loss and profit at the end of the financial year. Loss and profit balances of all the accounts are recorded in the capital account at the end of the year. Net balance of this account represents for the net assets of the government [11].

2.2.2.2. Logismography accounting system

Logismography accounting system also includes budget accounts and asset accounts just in Constante accounting system. In this system, there is a perception that there is one owner and one manager of the government's assets; so two accounts are kept as the owner (government) account and officer (civil servants) account. Logismography system can deliver budget accounts and asset accounts any time. It is also important and outstanding in that it brings new concepts to government accounting. It is one of the most important systems as it considers the cost of government transactions [16].

Owner (government) account shows all the goods and assets as well as any changes on them including the government's assets. Owner account is an account group, which shows the government's assets through its records, tables, and books [11]. On the other hand, officer account was created in order to notify the status of the assets of civil servants who keep and manage these assets on behalf of the government in accordance with specific laws, decrees, and regulations. So accounts of these officers are collected under the account of government officers [15].

2.3. Recording methods in government accounting

When political power had only a few duties in national economy in the past, there was not much need for information for economic administration. But today, political powers in some developed countries shoulder important roles in order to facilitate socioeconomic development of their communities for a direct management of economy. So it is of high priority and high importance for an efficient government finance management to adapt to new conditions in obtaining the necessary information. It is obliged to create a method which can respond to changes arising out of lack of information on account of relationships among the nations [17].

It is impossible to compare or consolidate financial reports which are produced in different accounting and reporting methods. For example, it would not be possible to consolidate EU financial statements if EU member countries applied different accounting systems. So international organizations launched studies in order to create the same accounting standards across the world. During these studies, there has been a shift from cash basis government accounting to accrual basis government accounting in government accounting systems [18].

Starting point of modern government accounting is the cash basis-oriented accounting system. Accrual basis accounting system which is the fundamental of modern government accounting system records all kinds of financial transactions regarding all the assets and liabilities, including tangible assets, regardless of collection and payment. For long years, government accounting systems have been recorded in a cash basis manner which includes allocations given by the budgets, expenditures from these allocations, total revenue for financing the

expenditures, and some other information that may be needed and which principally represents for the record of collection of revenues and payment of expenditures. However, this budget-oriented recording system became insufficient to fulfill the needs of government management over time, and so, some new experiences were started to be looked for in the area of government accounting. Thus, there has been some studies recently to develop an accrual recording system which is recognized by all financial transactions which have already emerged or will emerge in the future including tangible assets of the government [19]. While recording methods in government accounting accept cash basis at one side and accrual basis at another side, there are other bases as well which are close to both sides. In other words, various regulations were developed within the specified boundaries in order to see the best accounting and reporting status of an asset [20].

2.3.1. Cash basis government accounting

Cash basis government accounting records are transactions arising out of cash purchases. In other words, financial transactions and cases are recognized upon purchasing or payment of cash. Cash basis accounting is not interested in when services and benefits which are derived from transactions have emerged. Financial reports lose budget revenues and expenses, cash inputs and outputs, and opening and closing cash assets in such an accounting system [21].

Cash basis government accounting does not record or report tangible assets, accrued revenues and expenses, expenditures on the assets which must be activated, and government payables as well as other liabilities, commitments, guarantees and changes in price, and quantity of the government's assets [7]. Cash basis accounting system is easy to understand and manage as it includes simple transactions. Since its scope is limited to cash flows, it does not serve for transparency and accountability purposes. So it is required for cash basis government accounting to include or be supported by commitments and liabilities arising out of budget applications at least. Moreover, cash basis government accounting can be strengthened through accrual budget accounting and recognition of some assets and liabilities such as security assets and deposit securities advances and financial assets [22]. Cash basis accounting system is easy to understand and manage as it includes simple transactions. Since its scope is limited to cash flows, it does not serve for transparency and accountability purposes [23]. Furthermore, it provides very little information which is beneficial for finance management as it is mainly focused on payments. It is not a single basis for performance evaluation in terms of prudence and efficiency or achievement of the targets, either [24]. It is possible to suggest the lacking parts of cash basis government accounting system [25].

Not making up a balance sheet: In this system, there is no balance sheet made up because there is no data regarding the payables, moveable and immoveable assets, liabilities, and equities of the government to make up a balance sheet. The fact that cash basis system does not record them and does not create data leads to some negative results. So users cannot obtain sufficient data regarding the financial information of government administrators, and they cannot make assessments.

Not revealing economic results: In this system, budget revenues, expenditures, budgetary and off-budget collections, and payment transactions are reported only based on cash flow.

Activity reports cannot be produced to indicate the results of activities of the institutions. So economic results of that institution cannot be indicated.

Not having economic and financial performance indicators: In this system, economic movements cannot be estimated. So there are some difficulties in evaluating the financial and economic performance of the institution because of lack of information in comparison of revenues and expenses of that period. Consequently, performance indicators cannot be determined.

Not producing information on service costs: Service cost information, pricing policy and control, and performance evaluation are beneficial and necessary instruments for decision-making process and government contract policies. However, since there is no necessary information which can be obtained regarding expenses and service cost in cash basis accounting system, it is not possible to get necessary information regarding decision-making process because revenues and expenses are recognized when the collections are made, not at their accrual time. Moreover, not recording the moveable assets and not calculating the amortizations are other reasons which make determination of service cost impossible.

Not fulfilling the liability of accountability and financial transparency: Liability of accountability, as a requirement of democracy, is the responsibility and necessity of making inquiries and calling somebody to account regarding fulfillment of the duties and use of government sources by people who are elected by the government and people who are appointed by these elected people. Financial transparency is the explicitness in which government accounts and economic targets can be observed by the government. Since government accounting is a method which records the use of all moveable and immoveable assets of the government as well as its sources and produced financial reports accordingly, it is the main element of accountability. However, this accounting system cannot produce necessary data for the fulfillment of liability of accountability and cannot produce the relevant reports. This system cannot sufficiently help financial transparency because it does not produce detailed and accurate financial data on the issues which are required to be within the knowledge of government.

Opinions of supporters and non-supporters of cash basis government accounting system can be summarized as follows [14]:

Cash basis government accounting system is the simplest method which is used for monitoring government accounts. Supporters of this system suggest that it easily determines the impacts of financial transactions on economy. They also suggest that actual payments by the government increase monetary revenues and revive economy, while payments to the government decrease cash position and society's demand for goods and services. Moreover, since the treasury works as a banker, this system enables evaluation of cash position which is required to be known. The most important function of cash basis accounting system is fund control and determination of liabilities. System also carries out the functions of feasibility and determination of economic impact through expenditure limitations in the short term.

On the other hand, non-supporters of cash basis system accept that cash basis system may have strong impacts on economy, but these impacts cannot be measured unless demands or liabilities are paid to the government. They believe that cash basis system is open to abuses, for example, postponing the payment of debts of current fiscal year to the upcoming year and going into unmatured debts such as advance payments and budget securities until the end of the year. Capacity of cash basis accounting system to help the managers to make decisions regarding administration and financing is limited only to the cash points while government's assets and charges are excluded.

Cash basis recording method, as it is explained above, includes information about the payments within the current fiscal year. However, since these payments do not reflect the actual value of real activity and used government sources, they are not accepted as expenses in reality. Moreover, since accounting records are recognized when the payments are made, not when services and goods are received, this method does not give any information regarding demands arising at the end of the year against a government administration.

2.3.2. Cash customized government accounting

In cash customized government accounting, financial transactions are recorded when the actual payment and collection are made regardless of their accrual periods just like in cash basis government accounting system [21].

The most important characteristic which differentiates cash customized accounting from cash basis accounting is that accounts are not closed by the last evening of the fiscal year; they are open for a specific period of time, generally one month, for the records of transactions of the previous fiscal year. Transactions of the previous period, especially invoices of the budget year, are accepted, and their accounting records are held within this additional period. In this method, transactions are recorded in the accounting records of that fiscal year, and they are reported in the relevant period [24].

2.3.3. Accrual customized government accounting

In accrual customized government accounting, transactions are recorded when an economic value is created, changed, exchanged, transferred, or eliminated regardless of time of cash flows. The most important characteristic which differentiates accrual customized government accounting from accrual basis is the scope of accounting transactions. In this basis, transactions regarding such tangible assets as land, estate, building, vehicles, inventories, forests, and monuments are not included in accounting system, and they are not reported. Therefore, it is easier to understand, apply, and manage compared to accrual basis accounting system because such transactions of determination of tangible assets, amortization, and reevaluation are excluded from accounting. Compared to cash basis, it does not produce deficient information, it records economic transactions as soon as they emerge regardless of cash flows, it is not budget oriented, it records and reports accrued receivables and payables, it creates a basis for activities and performance check, and it records and reports commitments and guarantees which may lead to liabilities in the future [7].

General characteristics of accrual customized government accounting and its distinctions from commitment basis, cash basis, and cash customized government accounting methods are as follows [24]:

- It does not have the weaknesses of cash basis in the production of information.
- It records commitments and liabilities, so it is one step further than commitment basis.
- It does not have the weaknesses of altered cash basis as inherited from cash basis in the production of information. Since liabilities are recorded when they are recognized, there is no need for set-off period in order to enable the principle of periodicity in this basis.
- It is more convenient for conformity with budget allocations and for liability audit.

It is also in conformity with cost accounting elements which are required by activity and performance audit.

2.3.4. Accrual basis government accounting

Accrual basis accounting fundamentally aims at comparing expenses and revenues accrued within a specific period of time and controlling the existing sources and liabilities to be fulfilled by the end of the period.

Accrual accounting was principally developed in order to make external financial reporting by high profit-oriented private enterprises. Government enterprises also experienced some changes as a result of distinctions of accrual basis. However, the idea that it could be applied in noncommercial sectors of the government had recently been very effective. While it was of high priority to increase profit performance in commercial enterprises, accrual accounting applications would be an instrument of decision-making for the managers in nonprofit governmental organizations and increase the management performance [26]. Liability of accountability, improvement of management, and providing savings would be enabled by increasing the management performance. Especially after 1990, it is seen that governments made progress in the issue of accrual accounting and started financial reporting, management systems, government financial reporting, and budgeting processes in accrual basis [27].

During accrual, transactions are recorded when they are recognized regardless of time of cash flows. Revenue account indicates revenue transactions which accrued throughout the fiscal year regardless of their being collected in cash and which are required to be recorded as revenues in accordance with the principles of accounting which are universally accepted, while expense account indicates sum of expenses which accrued throughout the fiscal year regardless of their being collected in cash. Given that, accrued revenues and expenses are included in the accounts and reports of their fiscal year. Such an approach records and reports these economic transactions in their fiscal year. So periodic financial reports exactly reflect the financial transactions regarding the relevant activity periods [28].

When there is an entitlement of using the sources, which are expected to provide benefit to the organization in the future, accrual basis government accounting system regards them as an asset and records them. Similarly, liabilities of the organization against third parties which are expected to be fulfilled in the future (firm, conditional, guarantee, etc.) are recorded as payables and liabilities. So if there is a positive difference between assets and payables, they are recorded and reported as the equities of the organization (net value) [29].

Important factors in the emergence of accrual accounting are to increase accountability, determine financial status of government sector better, and develop reporting studies as well as financing current expenditures by the taxpayers and making contributions to the assets to provide intergenerational equality. Being considered within the liability of accountability, accrual accounting provides large benefits to the governments with regard to showing actual costs of the use of sources [30].

When comparing with the other government accounting recording methods, accrual basis government accounting has some distinctions as follows [25]:

- Making up a balance sheet: Balance sheets which are prepared in accrual basis system and which include assets, payables, liabilities, and equities put forward the financial status and performance of the relevant government organization clearly, explicitly, and accurately instead of charts which are far beyond giving information prepared in cash basis government accounting. With the help of this characteristic, accrual basis government accounting system helps decision-making mechanisms of government management and external users. This system includes all payables and liabilities of the general government sector or the relevant government organization. In other words, it includes all economic results of the services and activities of the relevant government organization. It also helps us to evaluate the capacity of covering payables and liabilities of the government sector in the future through information on financial status obtained from balance sheet.
- Preparing an activity sheet: On the contrary to cash basis government accounting, accrual basis system can put forward and report the results of activities and services of the general government sector or the relevant government organization. Therefore, it gives us the opportunity of determining the costs of services or activities of the government and the relevant government organization. So it becomes possible to make a performance evaluation.
- Determining performance indicators: It is of high importance to record accrued revenues and expenses with regard to financial decision-making process and performance evaluation. In accrual basis government accounting, indicators and criteria can be determined for measuring economic and financial performance by using the produced reports.

There are some changes and adaptations experienced in the implementation of accrual basis government accounting system to overcome its difficulties. Approaches and modifications which were developed because of the obligation of this implementation in some countries using accrual basis government accounting system are as follows [31]:

- Approach which supports that assets and liabilities are recorded in accrual basis while revenues are recorded in cash basis because of difficulty in calculating the amount of collection.
- Approach which supports that all the liabilities are recorded in accrual basis except for some payable items (social security payments funded by budget revenues).
- · Approach which supports that all the assets are recorded in accrual basis except for some asset items (infrastructure, defense and cultural assets, etc., which are recognized as an expense when they are acquired or constructed)

Approach which supports that all tangible asset items are recorded when they are acquired
manufactured or constructed

Financial reports which are produced in accordance with accrual basis accounting system include revenues, expenses (including amortization expenses), assets (financial assets, physical assets, capital assets), liabilities, and other economic flows. Accrual basis accounting records and reports all the program costs including amortization expenses. So it creates a strong basis which measures whether or not government sources are used efficiently and economically or in other words whether or not government managers are good managers with good performances [22].

2.4. International developments

Developments in government accounting were principally brought in as a result of the need for creating financial statistics and reports for the governments by international financial institutions such as United Nations, OECD, IMF, World Bank, and regional economic and political units such as European Union. Since it is impossible to compare and consolidate financial reports that are produced in various accounting reporting systems, it has become necessary to make adjustments which will enable comparison and consolidation in the field of financial statistics and reporting [7].

International organizations and institutions, economically developed countries, and especially European Union carry out important studies in the field of government accounting in international level. Thus, System of National Accounts (SNA93), Government Finance Statistics Manual (GFSM2001), European System of Accounts (ESA95), and International Public Sector Accounting Standards Board (IPSAS) are the fundamental outputs of these studies and projects carried out in this area.

2.4.1. System of National Accounts (SNA93)

SNA93 was founded in order to establish standards and rules regarding measurement of national economy such as classification of national economies in corporates, sector and subsector level, flows, rules of stocks and accounting, production account, income distribution, capital account, financial accounts, balance sheet, economic activities with the foreign world, changes in prices and values, population and labor force inputs, and functional classification which are prepared by the European Union, International Monetary Fund (IMF), Organization for Economic Co-operation and Development (OECD), International Bank for Reconstruction and Development (IBRD), and United Nations (UN) jointly. This system includes principles, which should be taken into consideration while creating systems of accounting and reporting with regard to issues specified above [28].

SNA93 aims at handling scopes and definitions which have recently emerged regarding economy and removing the difference between definitions and scopes of these concepts which are observed in the reports and governmentations of various institutions and organizations [32]. SNA93 is composed of a set of meaningful, consistent, and integrated set of macroeconomic

accounts, balance sheets, and statements based on a set of concepts, definitions, classifications, and accounting rules, which are internationally accepted [33]. In this regard, this system aims at recording an economy in full [34].

There were important developments in macroeconomic concepts across the world especially after World War II. Many economists were satisfied with a few economic variables in the past, while they need more detailed economic data in statistical analyses today. Collection of this data is only possible by collecting more detailed statistical data. So current System of National Accounts is a complicated system which is composed of many economic variables which are associated with each other beyond calculating gross domestic product today. There is too much detailed information in the accounts in System of National Accounts (SNA93) depending on the rules of economy and perception of their operation manner. Moreover, these accounts provide more comprehensive and detailed records about economic relationships between complicated economic activities and various economic elements within an economy [32].

2.4.2. Government Finance Statistics Manual (GFSM2001)

Government Finance Statistics Manual (GFSM2001) is a regulation which is prepared by IMF with the participation of the experts from such countries as Australia, Canada, America, and the USA which made progress in the field of accrual basis accounting and reporting as well as International Bank for Reconstruction and Development (IBRD), United Nations, Organization for Economic Co-operation and Development (OECD), and European Commission and which aims at preparing government financial reports such as balance sheets and activity reports as well as classifying and reporting stocks, liabilities, revenues, and expenses in the same manner in every country in accordance with the accrual basis. It includes points which should be taken into consideration while creating accounting and reporting systems especially such as the classification of assets, revenues, and expenses with regard to its scope and rules. GFSM2001 fundamentally aims at creating a comprehensive concept and an accounting framework which enable analysis and evaluation of financial policies, as well as the performance of general administration, in specific terms, and government sector, in broad sense [35].

Basic definitions, concepts, and classifications in GFSM2001—regardless of the conditions in the country where they are applied—are based on economic ideas and principles, which are universally validated. So GFSM2001 can be applied on all the economies regardless of corporate or legal structure of the country where it is applied, complexity of its statistical system, its accounting system, or expansion of its government administration. Unfortunately, some sections of GFSM2001 will not represent for the same meanings and results for the countries, which have important differences in terms of administrative and economic structure.

GFSM2001, as SNA93 is described, was designed and published for general administration and government sector. These sectors are defined based on corporate units, which can acquire assets, go into liabilities, and deal with economic activities on their own. An important difference of GFSM2001 from SNA93 is that it is focused on financial transactions of Government System of Financial Statistics such as taxes, expenditures, and payables, while it also includes production and consumption of goods and services of System of National Accounts [35].

2.4.3. European System of Accounts (ESA95)

European System of Accounts (ESA95) is a study prepared by EUROSTAT, a sub-institution of the European Union, carrying out studies in the field of statistics aiming at creating statistics, which can be compared and consolidated in the member states and candidate states of the Union at the same level. ESA95 is a substitute for European Integrated System of Economic Accounts published in 1970. ESA95 was prepared and published in complete conformity with SNA93 which is a worldwide guidance regarding national accounting systems. However, ESA95 is heavily focused on the provisions of European Union as well as information and data, which are required in integration. Just like SNA93, ESA95 also enables uniformity in concepts and classifications of such various economic and social statistics as employment statistics, production statistics, and foreign trade statistics. So ESA95 is a core reference for the European Union and member states regarding economic and social statistics. Framework of ESA95 is composed of two basic sets of table [36]:

- · Sector accounts
- Framework of input-output and industrial accounts

Accounts are classified under three categories:

- Current accounts include acquisition, distribution, redistribution, and the use of revenues
 for final consumption. These accounts also enable saving calculation, which is a necessary
 transaction for saving (capital) accounts.
- Saving (capital) accounts analyze changes in the assets and liabilities of different units and enable recording of changes among net values (differences between assets and liabilities).
- Balance sheets indicate assets and liabilities of different units as well as net values as from the beginning and end of the fiscal year.

2.4.4. International Public Sector Accounting Standards Board (IFAC-PS Standards)

The International Federation of Accountants is the most executive and comprehensive organization of the accounting profession in the world. It carries out global studies and provides services in the field of accounting through various subdepartments, councils, committees, and independent advisory boards. As it is specified in the decree of the organization as well, it fundamentally aims at providing service for government interests, strengthening the profession of accounting across the world, and making contributions to the development of international powerful economies [37].

A subdepartment of IFAC, International Public Sector Accounting Standards Board, carries out studies in order to create worldwide standards for government accounting and reporting. These studies are recognized by international financial institutions, regional economic and political unions, and developed countries. There are 21 accounting standards that are published by IFAC so far, and the new ones are under work for the time being [19].

International Public Sector Accounting Standards (IPSAS) no. 1 standard which is prepared by PS of IFAC fundamentally aims at explaining the principles of financial statements prepared

by government institutions and organizations as well as types of these financial statements. Aims of government financial statements are classified in two categories in the relevant standard [37]:

- Providing information regarding sources, assets, and changes in them as well as results of government works.
- Providing necessary data in order to analyze cash flows which can emerge in the future.

These activities are not so different from each other. Especially GFSM2001, SNA93, and ESA95 have similar applications with regard to the scope of government statistics and division of accounts. The first point to be considered is the issue of scope of government accounting. National economy is classified in sector level in the international studies, which are carried out in order to determine the scope, so government accounting system is based on social security institutions as well as local and central administrations [22].

3. Government accounting applications in Turkey and in the world

Many countries shifted from cash basis accounting system to accrual basis accounting system as a government accounting method in order to give a response to the pressures regarding efficiency and effectiveness of government sector. However, some other countries rejected this change because they supported that harmful and beneficial aspects of this system varied depending on the special cases of the countries [39]. In this regard, we firstly examined countries which had important developments in shifting to accrual basis accounting system as it threw light upon the developments in the world and which made the first applications of this system. After explaining government accounting applications in the world, we detailed government accounting applications in Turkey.

3.1. Government accounting applications in the world

It is remarkable that countries shifted from cash basis to accrual basis in the applications of government accounting in the world. Even though some countries did not approve this shift, they still advocate its benefits. In this section, we will brief the exemplary applications in some countries and explain the implementation of government accounting systems by the countries.

3.1.1. New Zealand

Developments regarding government accounting which started in the 1980s were not still completed at the beginning of the 1990s. Countries which started to work on this issue were mainly in designing or conceptual phases in 1993 [20]. However, government departments in New Zealand shifted to accrual basis in the issues of budgeting and accounting in 1991, and New Zealand became the first country to produce government accounts in accrual basis in 1992. A government reporting was carried out in 1993 to include approximately 3000 institutions ranging from the largest government enterprise to the smallest primary school (including

all assets of the government). New adjustments were brought in the operation of budget system through Liability Insurance Act of 1994. Through these adjustments, combined plans were made which included the ministries in strategical areas (education, health, social aid, social security, environmental protection, and economic development) after 1995 [40].

When the government shifted to accrual basis accounting, it had the competence of preparing balance sheets which can be consolidated and had the opportunity of calculating the actual value of its assets for the first time. Prestige of financial policy in New Zealand increased provided that accounting and budgeting would be made in accordance with all the widely accepted principles of accounting. A private institution acting independently from the government was authorized to control the prosecution and application of these accounting standards so that the government lost its opportunity to make explanations on behalf of itself. New Zealand broke taboos by granting the financial reporting authority of the government to an independent institution through this application [38].

After shifting to the new financial management system, it was possible to see integrated financial reports of the government in New Zealand. New series of widely accepted standards of accounting which are based on the government's financial statements were produced within the scope of a basic project which included the following seven factors [41]:

- Creating accounting policies.
- Collecting information from departments, government institutions, and state economic enterprises.
- Combining (consolidating) the information.
- Validating the information.
- Interpretation and analysis.
- Governmentation and presentation of financial information.
- Communication and marketing.

Studies for improving government finance management were carried out in three directions as creating government accounts, preparing accrual reports, and reporting which includes other independent institutions and enterprises of the government. Accounts and contents were determined through these adjustments. These accounts are "enterprise account" which indicates revenues and expenses of the government, "financial status account" which indicates assets and liabilities of the government, "cash flow account" which indicates cash flows arising out of the activities of enterprises and other institutions, as well as "borrowing and commitment account" and "receivable account". In fact, it was required to be in conformity with generally accepted accounting practice (GAAP) in New Zealand for the accounts which were applied in the central and local administration. Basic element of GAAP is accrual basis in accounting [20].

Adoption of widely accepted accounting standards facilitated the establishment of accounting policies in New Zealand. Approaches which are used by private sector in many areas could easily be applied. Since accounting policies of the government suggested a methodology for

preparing financial statements and affected all the government institutions, development of accounting policies was highly emphasized. These accounting policies were also analyzed by the accounting specialists in detail [41].

3.1.2. Australia

Developments in the field of government accounting were maintained within the scope of government management reforms in Australia, just like in New Zealand [20]. Governments made progress in accrual accounting especially after 1995, and they brought a vision to accrual accounting in the issues of financial reporting, management systems, government reporting, and budgeting. However, government managers were warned against the issue of accrual basis accounting starting from the mid-1980s indeed. In the 1980s, Australian Accounting Research Foundation, Australian Accounting Standards Board, and Public Sector Accounting Standards Board developed the idea of general-purpose financial accounts both for private and government sectors [27]. Large-scaled financial and administrative reforms in Australia include two basic themes [42]:

- Focusing on management control system by developing information obtained from accounting system and defining and determining roles and responsibilities.
- Providing economic balance by bringing the concept of competition in the government sector.

In general, financial reforms include financial reporting, accrual basis accounting, complete cost, reconciliation between supplier and buyer, and management of the assets, while administrative reforms include structural reforms, operational reforms, revision of information systems, and other reforms regarding responsibilities. However, administrative reforms are not limited to the foregoings [32]. These reforms were put into practice through two law proposals: "Improvement Plan for Financial Management" and "Program management and Budgeting". In addition to these laws, "Financial Management and Responsibility Law" was enacted in 1997. Government institutions started to apply accrual basis budget and accounting as a result of these reforms. Accrual basis accounting system was applied, and accrual basis financial statements were created in Australia for 1999–2000 budget year for the first time [42]. A "working group" was also created in order to develop accrual accounting and bring it in the government sector. Enterprise accounts, asset and liability accounts, cash flow accounts, and bond accounts were included in the account plan which covers the whole central administration [20].

3.1.3. Canada

The Government of Canada has applied cash basis in budgeting and recognition of financial transactions until the 1980s. It also used "creative accounting" (overvaluation) methods in reporting and measuring some financial information just like some governments. So that cash basis accounting was used as an instrument of showing false financial reality. However, evaluating financial assets as differently from the reality did not satisfy the need for information which would help correct estimations for the future. So the Government of Canada

was highly indebted through its financial statements and budgets obtained through cash basis accounting, could not see the real financial status, and could not take the necessary precautions. The Government of Canada gave up using cash basis accounting application and decided to shift to accrual basis accounting application in order to remove this negativeness. The Government of Canada made important changes in financial reporting applications and shifted from cash basis to accrual basis and financial statements consolidated from separate accounting reports from the beginning to the end of the 1980s. These changes were partly encouraged by Public Sector Accounting and Auditing Board (PSAAB) of Canadian Institution of Chartered Accountants as well [43].

3.1.4. England

There are reform studies regarding the functions, operations, and structure of central administrations in England. The most important reform in this scope is that some authorities and duties of central administration units which provide government services have been transferred to autonomous institutions and agencies [44]. "Resource Accounting and Budgeting (RAB)" is applied in budget and accounting system in England. RAB is a term used for the application of accrual basis in government budgeting and accounting system. It includes the use of "Resource Accounting" knowledge for the control and planning of "Resource Budgeting" government expenditures. Although benefits of accrual basis accounting for the countries could not be understood by many countries in the 1990s, it was understood in England that accrual basis was efficient in both budget and accounting. Accrual basis accounting system was used primarily for government health services at the beginning of the 1990s [45]. England pays much attention to record budgeting and accounting in accrual basis. RAB transforms political priorities of the government into department strategies and budgets, so that the parliament can be reported about productivity and efficiency of the services. It fundamentally aims at enriching the services which are provided by the government. RAB was first founded in 1982 in England through "financial management principles" based on "Financial Management Legislation (FML)". Then, "Green Paper" and "White Paper" published in England included important developments about RAB. There was also an important progress regarding the announcement of RAB after July 11, 2000 [46]:

- "Spending Review" was prepared in order to plan government expenditures on July 18, 2000.
- On July 19–20, 2000, two parliamentary election committees (Government Accounting Committee and Cooperation Committee) authorized the Parliament to make the Treasury apply accrual basis accounting for 2001–2002 fiscal year.
- On July 28, 2000, "Government Resources and Accounts Act (GRAA) 2000" abolished the laws which had been applied since 1866 and provided legal assistance to the parliament both for applying RAB and consolidating all the accounts of the government.

There are financial statements in England, which is similar to the ones produced by government institutions and private sector institutions. However, budgeting process is still regarded as one of the fundamental aspects of financial control.

3.1.5. The United States of America

Developments in government accounting in the USA started with the government sector reforms. The Federal Government prepared a large program for the development of management as from 1981. It was specifically emphasized to facilitate government management and decrease the costs, increase the efficiency of service programs in government sector, and develop financial system to the extent that it can be compared to private sector. In 1990, Federal Accounting Standards Board was founded in order to strengthen the relationship between reporting and accounting upon the agreement of budget office, treasury, and general accounting office. This board has a mission to make advices in accounting standards [20]. This board would be making contributions to development and the use of accrual basis accounting in the next years. As a result of the studies, Administrative Financial Accounting applications made it possible to analyze and report the way of using and controlling the sources as well as collection and measurement of the information which is produced [30]. In 1993, US Senate enacted "Government Performance and Results Act" (GPRA). This act aims at establishing a system of strategic planning and performance measurement within the Federal Government and emphasizes preventing waste and enabling efficiency in the use of government sources in order to fulfill the common needs and demands of the citizens sufficiently. Within this scope, it includes strategic plan, performance plans, and performance reports which are the documents that will be used for getting objective information regarding determination and achievement of performance measurement, aims, and targets; meanwhile procedures and principles regarding the elements which are needed to be available in these documents as well as qualifications and preparation of the documents are also indicated [47].

3.1.6. European Union member states

EU member states, except for Germany and Denmark, prepare their financial reports in accrual basis. Moreover, many member states do not prepare their consolidated financial statements for the whole of government. There are different applications in studies of the countries to shift to accrual basis. Firstly, Holland and Sweden prepared their financial statements in accrual basis and then reflected these statements in their budgets. On the other hand, France and Spain apply accrual basis only in their financial statements while adjusting their budgets in cash basis. Prepared by government management committee, 2002 OECD Study put forward that only three member states prepared their government financial statements based on accrual accounting. Statements prepared in corporation level suggest that there are three member states more in this group. So only 6 member states among 15 member states use accrual basis though in different levels [48]. Spain has been using cash basis accounting system and unilateral record method with regard to government accounting since 1977. It enacted "General Budget Act" for government sector and laid the foundations of new accounting information system. Then, it started "Government Chart of Accounts Plan" (PGCP) for the assets of the government. First studies regarding the government chart of accounts were published in 1983 and remained in force until January 1, 1995 when the new PGCP was put into effect. Then, "System of Information for Accounting and Budget" (SICOP) was published in 1986 in order to put these reforms enacted in the 1980s into force efficiently. This system includes the following: chart of accounts for the general government, detailed accounting lists, and financial statement models regarding the rules of determination and valuation of prices. After all this progress, Spain published Government Accounting Principles of "General Internal Audit and Accounting Offices" (IGAE) in 1991 and accepted the new government chart of accounts in 1994. So Spain shifted to accrual basis accounting with regard to government accounting and adjusted the principles of accounting for the government institutions in a way that they would not be different from the principles of accounting for private sector [49]. The most outstanding characteristic of Sweden government model is that decisions made by the government are jointly made by all the ministers. While daily activities are carried out by a large number of independent units and authorities in different scales, structures, and types, the cabinet determines and makes the policies. Upon the approval of government budget by the parliament, all the allocations are submitted to the use of the government, while the government transfers its responsibilities and funds to its bodies. All accounting applications are carried out in the level of independent units (in this sense, ministries are regarded as independent units). In 1979, "Regulation on Government Accounting" was published by putting forward the accounting principles of independent units. However, some exceptions from accrual basis accounting which are specified in the regulation were applied for a majority of the independent units, while old methods and standards were allowed to be used. Regulation was changed in 1991, and all the exceptions were abolished in 1994 when one-third of independent units changed their accounting methods every year. The parliament also decided to apply these accounting regulation adjustments and accounting principles for the whole government sector. These principles were also standardized in local and regional institutions, but there was no obligation imposed. So that it became possible for Sweden to execute annual accounts in the basis of operational balance sheet, certificate of revenues-expenses, and universal accounting principles which include application balance sheet for sources and funds [50].

Shifting to accrual basis accounting system was regarded as a fundamental step for the managers to derive benefit from total flexibility in input selections. So it was required to see the costs of each input in order to have a more efficient management. Accrual basis accounting system increases the quality of cost information. Also budget and all allocation accounts are also cash basis. Moreover, Sweden brought the obligation of publishing annual reports for the government institutions in 1993. These annual reports include not only financial reports but also performance reports [51]. Studies on accrual basis in Holland started in 1997 when the Ministry of Finance submitted a study titled "From Expenditures to Costs" to the parliament. The government aims at getting the best cost and benefit by using accrual accounting and budgeting in all government services. Having been used in private sector until 1997, accrual accounting also became important in budget classification with the help of these studies after the discussions of full accrual or half accrual [52].

3.2. Applications in Turkey

This section firstly explains the historical development of government accounting applications regarding the application process of government accounting in Turkey. Then, it will address to the reform of government accounting applications in Turkey.

3.2.1. Historical development process in Turkey

Government accounting applications in Turkey date back to pubic accounting system in Ottoman Period. In the fifteenth century, Ottoman Empire firstly made financial legal regulations and then aimed at developing accounting regulations within this legal framework. So a strong government accounting order and organization emerged in the mid-fifteenth century when financial management was structured within the government organization. Government accounting was regarded as a place to hide the secrets for Ottoman Empire. It also emphasizes the importance of government accounting. In the mid-seventeenth century, when there were no budget applications in the west; the idea of government budgets was brought in Ottoman Empire. Budget expenditures were higher than budget revenues at that period. This deficit became chronic as the wars were longer and more expensive. When Europe became richer and stronger in the seventeenth and eighteenth centuries, Ottoman Empire fell behind in economic and military terms. Being a part of the reforms, Imperial Edict of Reorganization in Ottoman Empire was announced in 1839. This edict brought reforms in the field of law, and then the most important reforms were made in the field of finance. Works of writing the legislation of expenses which started toward the end of Period of Reorganization continued until Constitutionalist Period and ended in this period. Subsistence, salary, and retirement laws were put into force in this period by completing the legislation of expenses and starting to keep the records of government officers working in provinces and at the headquarters. These legislations of expenses created the basis of current legislations of expenses in Turkey. After 1876 Constitution was put in legal basis again and Second Constitutionalist Period was announced, the First Parliament and Assembly of Notables accepted the budget of that year in 1909. This budget is of high importance to create the basis of the budgets in the other years in Republic Period. After the announcement of Second Constitutionalist Period in 1910, the first "General Accounting Law" and "By-Law on Restrictions on Accounts to be kept in Subdivisions of Treasury" was put into practice. This main law was practiced until 1910 abolished in 1927 through the Law No. 1050 upon the enactment of General Accounting Law [53].

The first difference in government accounting applications in Turkey is composed of government accounting and budget system in Ottoman Period, while the second difference is composed of government accounting which is applied by the regulations in the field of government accounting throughout Regovernmentan Period. There are important differences in terms of state organization and legality of regulations between Ottoman and Regovernmentan Periods. From this point of view, it is more appropriate to analyze the development process of current government accounting applications in Turkey within the scope of Regovernmentan Period.

After the announcement of Regovernment, there has been important progress in development of government accounting and commercial accounting in our country. While there were progresses in commercial accounting depending on the share of the statist economic policies and so the government in the production of goods and services, there were also important studies in the field of government accounting. As a result of these studies and efforts, General Accounting Law No. 1050 which is regarded as excellent was enacted on May 26, 1927, in early Regovernmentan Period. This law includes authorities and duties of accrual departments,

government officers, and accountants of the ministries as well as government budget and other relevant issues [54]. Law No. 1050 had been the legal basis of government accounting system in our country for 76 years until 2003 when Government Finance Management and Control Law No. 5018 was enacted. However, as a natural result of changes in government management concept and government organization structure, Law No. 1050 became insufficient, so the Law No. 5018 was put into force in 2003 as the main law which regulated government financial management. Law No. 1050 fundamentally aimed at basing on the existing administrative structure and establishing financial structure on it. Financial system which is composed of this fundamental structure is as follows [55]:

- Legislation and judicial institutions affiliated with sole government legal entity as well as
 ministries and organizations are affiliated to a ministry, while their allocations are included
 in general budget of general administrations (departments) as a separate division.
- Defined in state organization, independent administrations having separate legal entities which are not included in sole government legal entity (service place administration) are included in government budget in the name of value-added administrations. Value-added administrations have their own budgets on account of their separate legal entities. So government budget includes general budget which represents the budget of administrations within the scope of central administration and added budget which represents the budget of the administrations within the scope of service place administration. On the other hand, budget of local administrations named as special budget is excluded from government budget [56].

General Accounting Law which regulates the decisions to determine the officers who are responsible from spending the government expenses, collecting the government revenues, and regulating the final accounts was enacted in 1927. Then, By-Law on Procedures of Treasury Account was put into force in 1928. This bylaw facilitated accounting transactions; abolished Principal Register, which was previously recorded; and put Classification Journal into use. After that, remittances, allocations, and general revenue accounts of current treasury account were also abolished, and money accounts from treasury and branches, collection accounts on behalf of other treasuries, and dispatch account from treasury branches were brought. Moreover, this bylaw abolished the accounts regarding the accrual of budget expenses and revenues, decreased the number of accounts, left the control of the accounts through bilateral recording method, and adopted the control with subsidiary ledgers. In other words, a new system was created by combining the cameral accounting system and the bilateral recording system with the said instruction [56].

"General Regulations of Government Accounting and Regulation on Government Accounting Procedures" have been put into effect since January 1, 1948. The operation of accounts has been explained with General Regulations of Government Accounting, and accounting documentation to be used has been included with Regulation on Government Accounting Procedures. These regulations, which went into effect in 1948, became part of regulations and joints in 1953, 1974, 1975, 1977, 1981, 1986, 1987, and 1989; the number of accounts has been multiplied; accrual and commitment accounts have been added; and the number of off-balance sheet accounts that are available has been increased. Despite the existence of important documents

in this regulation such as period end and goods accounting transactions, the abovementioned additives have come to an extreme mixed state with the issuance of regulations, and the new generation of officials is having difficulty with the spelling language. Both regulations were then merged and entered into force as of January 1, 1990 under the title "Government Accounting Regulation" [56].

According to the application of Law No. 1050 in Turkey, an accounting system other than the accounting logic was established structurally aiming to record and report the results of the budget implementation in the units which are included in the general and annexed budgets. Later, when General Regulations of Government Accounting entered into force, entities that are not included in cash-based and noncash-generating debts, affiliates, loans, assets such as extra-budgetary capital, and record of income accruals have also begun to be included in the accounting system in addition to the cash-based accounting system which records budget results. As it is known, all accounts based on cash are closed on December 31. However, after the regulation accounts were not closed on this date and kept open for one month so that past year's accounts can be completed. As it is seen, past practice is neither a totally cash basis nor an accrual accounting system. The application is seen as a system between the adapted cash basis and the accrual basis.

When Government Accounting Regulation is examined, it is seen that the accounting system applied in the general and annexed budgetary administrations accounted for transactions such as deposits and cash capital formations, which are not based on cash basis and income accruals in addition to cash-based budget applications. In addition, accounts are not closed on December 31, the end of the fiscal year, and are kept open for 1 month to complete the budget process for the previous year. When assessed with these characteristics, the government accounting applied for units with general and annexed budgets can be expressed as a system between the adapted cash basis and the accrual basis [24].

3.2.2. Reforming government accounting practices in Turkey

The reform studies in the field of government accounting in Turkey were initiated in 1995 under the name of "Government Financial Management Project" with loan support of the World Bank and maintained in 1999 with the "Regulation on the Accounting of Companies with Circulating Capital". Within the scope of the project, on March 2, 1999, it was planned to be transferred to automation in all the accounts, and the pilot accountancy for Say2000i "Web-Based Accountancy Automation Project" was selected and the first application started. The Say2000i project is a bill management automation system aiming at transparent, fast, and secure service on a virtual network that links all the accounts to each other centrally and across the country. The Say2000i system was started to be implemented in all the accountancies as of December 31, 2001 [57].

Following this, in 2003, "General Regulations of Government Accounting" entered into force, and the accounting plan created according to this regulation also resulted in the change of accounting method. As an accounting method, accrual accounting method has been adopted instead of the government accounting method, which is somewhere between the adjusted cash basis and the accrual basis [11].

Pilot applications were made following the General Regulations on Government Accounting, and all information could be obtained from central computers by providing transparency in government accounts. The pilot works of accrual-based government accounting were initiated in 47 accounting departments carrying out the transactions of 6 pilot institutions selected in 2002 (under Secretariat of Treasury, General Directorate of Highways, Ege University, Hacettepe University, Ministry of Energy and Natural Resources, and Coast Guard command). The transactions carried out in these accounts were recorded according to the cash-based accounting system from one side and according to the accrual accounting system. These records were made in a systematic and accurate basis with around 6000 detail codes classified according to their qualifications. The developments in the accounts and registration methods in the government accounting continued with the abolition of the "General Accounting Law" Law No. 1050 in December 2003, and the "Government Financial Management and Control Law" No. 5018 was put into effect [58].

The criticisms of this system applied in Turkey before 2003 are as follows [24]:

- Since the government accounting system focuses only on the budget, only the budgetary
 operations are accounted, and government activities that are out of the budget are not
 monitored.
- The current accounting system is based on cash basis. In the accounting system based on
 the cash basis, information about the assets and responsibilities of the state cannot be recorded in full and on time. This situation causes much information that is important for
 financial reporting not to be recorded and lost.
- Government accounting system is limited by scope. Government Accounting Regulation
 includes annexed budget administrations, without prejudice to the provisions of general
 budget departments and special legislation. However, there are also institutions in the government sector that hold and use financial resources in their hands such as municipalities,
 private administrations, funds, and social security institutions.
- There is no accounting unit in the government. Since the existing accounting system includes general budget administrations and annexed budget institutions, institutions outside of them have created their own special accounting systems. Because of this multi-structure, it is not possible to consolidate accounts across all the government sectors.
- Accounts do not have a systematic code, and there are no time separator accounts in the current accounting system. Accounts are classified according to their qualifications. The qualifications of the accounts and the meanings they bear are only understood by the experts in this field. For this reason, financial reports and information that all users can understand and interpret from the existing accounting system cannot be produced, and government accounting remains a specialty.
- Continuity is one of the basic accounting principles. In the current accounting system, activity and budget practices remain in their respective years, while assets such as government assets, liabilities, and receivables are not transferred to the new fiscal year. The results of government action and budget implementation cannot be carried to forwarding years.

This removes the continuity of current government accounting and the comparability of these accounting-generated reports.

- The government accounting system is not as detailed as its competence. The current accounting system is not suitable for generating detailed information both because of the coding system and because it is not fully automated. Since the accounts are not divided into subaccounts, different and detailed information within an account cannot be decomposed and displayed and reported by the accounting system.
- The government accounting system is not suitable for reporting and generating results in
 this situation. Due to the problems mentioned above, the current system recognizes the
 transactions of general and annexed budgets and is only able to produce information in the
 form of rules that can be prepared by non-accounting transactions related to budget implementation results; it is unable to issue financial reports covering the government sector.
- The treasury general account and final account law, which the state is liable for accountability of the budget implementation results, does not have a similar financial reporting feature, and since they are communicated together with the new fiscal year budget in plan budget committee and the general assembly, they are voted and accepted in about 15 min and thus completely loses its effectiveness.
- Many accounts used in the account plan have lost the sense of accounting; different transactions by nature have been recorded on the same account. Reasons for this situation, especially occurred in payable accounts, are that some of government debts are monitored out of budget and a cash basis accounting cannot respond to the accounting needs of emerging borrowing instruments.
- In this accounting system, the government's assets are not recognized and cannot be reported.
- Most semi-fiscal transactions are carried out outside the accounting system, the ones that
 the system registers are lost in bag accounts which are emerged as the result of not using
 the accounts in accordance with their qualifications; as a result semi-fiscal transactions cannot be reported.
- Since this accounting system, in which the financial transactions of the government are recorded and therefore the financial reports are generated, does not register enlisted commitments, cannot separate noncash flows from cash-generating flows, cannot show pending
 expenses, it is not eligible for making allocations and cash projections.
- Accounting of budget implementation and reporting it at both local and central levels is
 usually carried out manually. This affects the accuracy and speed of information in a negative way.
- The manager should be able to access the information as soon as possible in order to make the right decisions. Information provided with day delay is not sufficient for good and effective management.

"General Regulations of Government Accounting" which is one of the products of "Government Financial Management Project" and regulates accounting and reporting standards and

framework account plan for units included in the scope of general management has been published in the Official Gazette on November 19, 2003 with the decision of the Council of Ministers dated October 16, 2003 and No. 2003/6334. However, it has been stated that this regulation will be postponed until the enforcement date of regulations to be made in accordance with the Law No. 5018 dated December 10, 2003. "Accounting Regulation of Units Included in General Budget and Added Budget Administrations" which was included in the units within the central government in 2004 and is on accrual basis has entered into force on February 20, 2004. This regulation terminated the "Government Accounting Regulation" which entered into force in 1990 [59].

Government Financial Management and Control Law No. 5018 was issued in 2004 in order to harmonize Turkish government financial management system with contemporary financial management principles and practices such as efficient, economical, and the effective use of government resources; transparency; accountability; accrual-based government accounting; analytical budget system; and internal control. This law, which is fulfilled with the General Accounting Law No. 1050, was adopted in the Turkish Grand National Assembly on December 10, 2003 and was started to be implemented on January 1, 2006 with all its provisions. Following the governmentation of some provisions of Law No. 5018 in 2003, "General Management Accounting Regulation" which was entered into force by being published on the Official Gazette dated June 8, 2005 with the decision of the Council of Ministers dated May 3, 2005 and No. 2005/8844 abolished General Regulations on Government Accounting dated 2003 from the date of enforcement. The purpose of this regulation has been expanded according to "General Regulation on Government Accounting". Accountability, which is an indispensable element of financial transparency, has been added to the text of the regulation. Furthermore, "General Budget Accounting Regulation" was issued in 2005 and put into force as of 2006. With the governmentation of the said regulations, General Regulations on Government Accounting issued in 2003 and "Accounting Regulation of Units Included in General Budget and Added Budget Administrations" issued in 2004 have been abolished. Finally, General Budget Accounting Regulation has been abolished with "Central Administration Accounting Regulation" which is prepared for administrations within the scope of central government in line with the amendments made in the Law No. 5018 with Law No. 5436 and has been effective as of January 1, 2007. In the first article of the Law No. 5018, which is formed within the scope of the government accounting reform implementations in Turkey, the aim of the law is expressed as follows: the mission that the law is undertaken is emphasized by telling "The purpose of this Law is to regulate the structure and functioning of government financial management, preparation and implementation of government budgets, the accounting, reporting and financial control of all financial transactions to ensure accountability and financial transparency to obtain and use government resources effectively, economically and efficiently in line with the policies and targets contained in the development plans and programs" [60].

The scope of the law is shown in the second article of the Government Financial Management and Control Law No. 5018: "This Law includes the financial management and control of government administrations that are within the scope of general management which constitutes of government administrations within the scope of central government, social security institutions, and local administrations". The use and control of resources provided by the European Union funds to government administrations from within and outside the country is also subject

to the provisions of this Law, provided that the provisions of international agreements are reserved. The domain of financial management and control is set forth by telling that "regulatory and supervisory agencies are subject to articles 3, 7, 8, 12, 15, 17, 18, 19, 25, 42, 43, 44, 47, 48, 49, 50, 51, 52, 53, 54, 68, 76, and 78 of this Law" [60]. The accounting system prescribed by Government Financial Management Control Law No. 5018 includes the following matters [61]:

- Taking the overall management sector and all of economic transactions into full coverage.
- Enabling officers and officials to account and be controlled.
- To be detailed enough to be able to produce data suited to the needs of administrators and staff.
- Allowing the preparation of final accounts and financial reports.
- Accrual accounting of all financial transactions and at the same time recording the budgetary transactions in cash basis.
- Determination of accounting and reporting standards by a board—preparation of financial reports and financial statistics in line with international standards.
- Governmentation of financial reports and financial statistics by the Ministry of Finance for specified periods.

Government financial management system in Turkey is fundamentally changing with Law 5018; especially the boundaries of government financial management have been specified; common terminology has been prepared; financial reporting, financial statistics, and government accounting have been rearranged; new arrangements have been introduced in parallel with international developments in the scope, implementation, and realization of the central governed budget. By this law, provisions relating to government accounting and government financial statistics have been arranged between 49 and 54 articles of the fourth part of the law entitled "Government Accounts and Financial Statistics" [57].

In Article 49 of the Law, the government accounting system is defined as to ensure that making decisions, controlling, and giving accountability steps are effective and to be established and implemented in such a way that it will be based on a quick calculation of the final account and financial reports. In the second paragraph of Article 49, the features of the government accounting transactions are introduced, and the reasons for the recording of accounts related to accounting transactions are explained. In the said article, it is said that "Records are kept to provide information to the government by the authorities in the control and management in government accounting accounts by taking into account the commitments and trusts in a predetermined system for the assets of government institutions with financial transactions that have any financial consequences and which cause the equity to decrease or increase" [61].

The time and conditions under which accounting transactions are to be recorded are set out in Article 50 of Law No. 5018. In accordance with this article, accounting transaction is "When any economic asset emerges, is converted to a different style, sold or completely left out, it is taken into account. It is essential that all financial transactions are included in accounting and all accounting entries are made based on absolute documents" [61]. Regarding budget expenditures

and revenues, it is stated in Article 51 of Law No. 5018 "Government expenditure and income must be shown in the accounts of the accrued year, budget expenditures and revenues must be collected in the accounting records of the year in which the collection is made". In this article government revenue costs and related accounting records are tracked in the accounts of the fiscal year accrued according to the accrual-based registration system. However, recording of budget transactions continues to be recorded on a cash basis as it was in the past [61].

According to the regulations regarding financial statistics made by Article 54 of the Law No. 5018, the provision "Financial statistics for a year are examined by the Court of Accounts for regulation, reality, governmentation, reliability, suitability for predetermined measures and then the conclusion of the review is sent to the Ministry of Finance, to the Turkish Grand National Assembly. The Ministry of Finance takes necessary measures regarding the evaluation of the report" is available [61].

Consequently, while the government accounting system applied in Turkey until 2004 was based on cash basis, Law No. 5018 was published in 2003 within the framework of the studies initiated in 2001, and with the regulation introduced in 2004, the accrual-based government accounting system was introduced.

Within the scope of secondary legislation regulations of the Government Financial Management and Control Law No. 5018, "General Management Accounting Regulation" and "General Budget Accounting Regulation" were issued in 2005 and put into force as of 2006. With the governmentation of the said regulations, General Regulations of Government Accounting issued in 2003 and Accounting Regulation of Units Included in General Budget and Added Budget Administrations issued in 2004 were abolished. Finally, together with "Central Management Accounting Regulation" issued in 2006 and put into force as of 2007, General Budget Accounting Regulation has been abolished.

4. Conclusion

Government accounting assumes the most important role in taking forward rational and sound decisions as a means of providing budgetary control. It is therefore a fundamental task of government accounting to keep records of financial policy transactions and to report them in a manner that is understandable to everyone, by providing the control of the state and other government institutions' compliance with the budgeted revenue and expenditure outcomes of a fiscal year.

Studies that started at the beginning of the 1980s in the world with the purpose of providing efficiency in government financial management, performing accountability to society, making financial reports, and making information transparent resulted in the change of the structure and functioning of government accounting. In general, government financial management, in private, especially developments and changes in government accounting continue. In government financial management, international organizations contribute to government accounting, national accounting, and budgeting. It has been important in the development of accounting that IMF, OECD, the World Bank, and the European Commission

have contributed in national accounting subject, but in fact the United Nations has pioneered this issue, IMF has pioneered in budgeting, and International Accountants Federation has leaded on the accounting discipline. Especially the work of the International Accountants Federation and the government sector committee within that continues to meet the new demands expected from accounting. International developments in government financial management and accounting caused countries to review their financial management and accounting systems. Developments that were started in this direction in New Zealand and Australia continued in the USA, Canada, Sweden, the Netherlands, England, Germany, Switzerland, Korea, and Turkey although the starting years were different. New Zealand, the country where first developments in government financial management were experienced, started working in 1989 and has become to record state accounts with accrual-based accounting in 1992. We believe that New Zealand thinks of these things as things that should be in their own internal structure rather than thinking internationally. In other words, we think that the importance of the effective use of government resources and the integration of accountability are socially integrated and work is started in this direction. New Zealand practices led to other countries. The studies carried out by other countries were also carried out for the same purpose in order to gain a certain discipline in government financial management and to realize government accountability.

Cash-based government accounting based on the Accounting Government Law number 1050, which has been implemented for many years in the government sector after the Regovernmentan period in Turkey, was kept totally based on the budget. Only the results of the budget implementation could be seen; it could not ensure that the results of the original work of the government were visible. While the transactions related to the budget were being recorded, the transactions out of that could not be recorded. A simple accounting system was used to record only the cash inflows and outflows from financial transactions regardless of when the benefits from financial transactions come into play. Since the changes that have taken place in the commodities owned by the state have not been recorded in the accounting records, the account of these goods could not be kept, and therefore the borrowing capacity of the state is kept hidden; the actual size of the state could not be determined. For this reason, government-owned assets and accrued income and expenses, commencing commitments, payables, and receivables could not be recorded and reported. It was not possible to obtain financial reports and healthy information from this system. In addition, global and scientific developments emerged in the world have increased the social requirements. State that determines revenue and expenditure according to budget realizations had to pay unnecessary interest by borrowing extemporaneously.

Due to all these reasons, the Law on Accounting Government Law No. 1050 was insufficient against the changing conditions. For this reason, government financial management reform initiatives have been initiated starting from 1995. The first step in the reform of government accounting was taken at the beginning of 2002 with pilot applications made to test accrualbased government accounting by creating a working group within the General Directorate of Accounts. The results of testing the account plan prepared as a result of pilot applications have been successful. It has been seen that it is possible to produce financial reports in accordance with international classification, data can be collected on the basis of institutions, and reports can be produced as classified institutional. It has been understood that budget applications can be reported daily through the Say2000i system. Successful results as a result of pilot applications have shown that accrual-based accounting and reporting system could be implemented.

"General Regulations of Government Accounting" has been prepared after these studies for the transition to accrual-based state accounting in 2003. Then, in 2004, the "Accounting Regulation of Units Included in General Budget and Added Budget Administrations" was put into effect. The regulation, which was in force for 2 years, underwent some amendments under the Government Administration and Control Law No. 5018. "General Management Accounting Regulation" which aims to cover the entire government sector pursuant to this law was published in the Official Gazette on June 8, 2005 and entered into force as of January 1, 2006.

A number of problems were encountered during the transition to accrual-based accounting system that enabled more effective fiscal management and drastic changes in the government accounting system, and it is inevitable that problems will be experienced in the following period. However, with the arrangements made, government accounting has come to be able to fulfill the functions expected from accounting. This used system will be more effective over time by eliminating the deficiencies in implementation and by increasing the knowledge of the staff with better adaptation to the system and will fully fulfill the benefits expected from it.

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