A Practice-Relevant Approach for Revenues Recognition in the Public Sector Entities: A Practitioner’s Perspective

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1- Introduction

While private sector receives its revenues from exchange transactions, public sector entities receive a large portion of their revenues through non-exchange transactions, including sales, income, and property taxes; intergovernmental grants, entitlements, and other financial assistance; and private donations. In addition, governments provide financial assistance to other governmental and nongovernmental entities (GASB, 1998). Therefore, the government’s decision with respect to the timing of recognition of non-exchange transactions in the financial statements can have significant impact on the reported results and financial position and on the user’s ability to compare information across governments and over time (GASB, 1998). Despite the significance of non-exchange transactions, there is a lack of uniform guidance on when to report them. As a result, different public sector accounting standards setting bodies, such as IPSASB, GASB and ASB-UK, AASB-Australia and CICA-Canada, have used different criteria in making reporting decisions. This has resulted in making the situation more difficult for the practitioners to adopt different criteria into practice and for the users (internal and external) to understand the financial statements and to make their decisions. Furthermore, the public sector accounting literature did not cover enough the recognition of revenues resulting from non-exchange transactions and it did not even agree about the approaches that should be used in that recognition process. Therefore, there is a need for developing a Practice-relevant approach that can assist the practitioners in the recognition of revenues process in the public sector including both exchange and non-exchange transactions. Therefore, the main aim of this paper is to make an attempt to develop a practice-relevant approach for the recognition of revenues (including exchange and non-exchange transactions) in the public sector context. The contribution of this paper is twofold: First, our paper examines the accounting treatment of revenues recognition in the public sector from different international and national standard setting bodies' point of view; this has led to infer that there is a lack of uniform guidance for the revenues recognition in the public sector entities. Second, we will make an attempt to develop practice-relevant approach. The paper proceeds as follows. Section 2 discusses the theoretical background. Following that we review prior Literature with respect to different accounting treatment of revenues recognition in public sector from different standard setting bodies’ point of view. Section 4 describes our attempts to develop a Practice-Relevant Approach for revenues recognition in the public sector from the practitioner's perspective. Section 5 concludes.

2- Theoretical Background: Recognition/Realization Principle

As starting point, it may be useful to consider whether the recognition principle is a synonym of the realization principle or not. A considerable numbers of writers have been used the recognition principle as a synonym of the realization principle (see for example, Larson and Pyle, 1987, p.21 and Hendriksen, 1982, p.178). On the other hand, many writers and professional bodies are making difference between recognition principle and realization principle (see for example, FASB –SFAC 5- paragraph 83). According to FASB –SFAC 5- paragraph 83, revenue should be recognized in the financial statements when:

- it is earned; and
- it is realized or realizable.
Basically, revenue is earned when the earnings process is completed or virtually completed. It is realized when cash is received and it is realizable when claims to cash are received and can be converted into a known amount of cash. Then, a distinction can be made between the recognition and realization as follows:

- Recognition is the process of recording an item in the financial statements.
- Realization is the process of converting non-cash resources into cash.

Herein, we agree with the second point of view, which does not use the recognition principle as a synonym of the realization principle.

However, the timing of recognition and realization of revenues will differ under the two main accounting bases: cash-based accounting and accrual-based accounting. Under the traditional government accounting (cash-based system), the revenues are recognized and realized when cash is received. In addition, receipts and revenues are identical since no difference is made between the time when they are recognized and when they are collected. Generally, under this system, the cash inflows are recognized as receipts regardless of source or type. For instance, borrowings and custodial receipts are included as revenues although they may be identified separately from other sources of revenues. So the problem of recognition and realization does not exist under the traditional government accounting system as the timing of recognition and realization of revenue coincides (Ouda, 2006).

On the other hand, the transition to accrual accounting in the public sector entails making a distinction between the point at which the revenues are considered to be recognized and the point at which they are considered to be collected. The revenues are usually recognized at the time of the exchange transaction when goods are sold or services rendered. For instance, revenue is recognized at the time of invoicing. It is at the point in time that the amount of the accrued revenue can reliably be measured, for example, the amount of the debtor invoice for accrued income. On the other hand, because an accrual basis attempts to recognize events in the period in which they occur, it is possible that unrealized gains (e.g., increase in the value of assets, increases caused by growth of livestock or forests) are included among revenues. This will depend on whether or not, in a particular jurisdiction, realization is considered to be a criterion for the recognition of revenues (IFAC, 1996). Furthermore, in other jurisdictions such as the UK, the realization principle states that assets value increases should not normally be accounted for and reported on until such time as they have been realized in terms of either cash or near-cash resources. Conversely, asset value decreases should be recognized and accounted for as soon as they arise, irrespective of when realization of the asset concerned will take place (United Nations, 1984). Consequently, because earned income is not reported until realized and assets values are understated, the financial statements of the entity are misleading. For instance, when the current valuations of assets do not fall below their original costs, the balance sheet will value unrealized assets at their original cost minus any depreciation allocations in the case of fixed assets and not at their current valuation. Thus, the balance sheet does not reflect the entity current value but rather its original transaction value (United Nations, 1984).

Unlike the private sector, governments obtain their inflows from different sources, and this in turn makes the recognition and realization problems in case of the adoption of accrual accounting more difficult since diversity of sources will require different recognition points. The main categories of inflows to governments are (IFAC, 1996):

(i) Revenues derived from exchanges in a manner similar to the private sector. These include revenues from sales of goods or services, dividends, interest and gains arising from the sale of assets;
Revenues derived from the use of sovereign powers; these include a variety of direct and indirect taxes, duties, fees and fines. These revenues are called non-exchange revenues. These are:

- Income tax;
- Fringe benefits tax;
- Sales tax;
- Value-added tax;
- Payroll tax;
- Property tax;
- Capital gains tax;
- Stamp, cheque and credit duties;
- Death /estate duties;
- License tax;
- Road-user charges and motor vehicle fees;
- Lives; and
- Fines.

Other non-exchange transfers such as grants or donations from other governments, from supranational authorities or from the private sector;

Financing inflows, notably borrowings; and

Custodial receipts. These include taxes collected as agent for another government, contributions towards pension and welfare funds, and other receipts collected as agent for another entity.

As aforementioned, governments raise revenues from both exchange transactions and non-exchange transactions. Due to the fact that exchange transactions are entirely different from the non-exchange transactions, the revenue recognition of both transactions requires different accounting treatment. Therefore, the recognition principle, similar to matching principle, needs to be reshaped to fit the context of public sector entities:

3- Literature review: Revenues recognition from different standard setting bodies perspectives

The main issue in accounting for revenue is determining when to recognize revenue in financial statements of governmental entities. IPSAS 9 determines two main criteria for the recognition of revenues. Revenue recognized when it is probable that 1- future economic benefits or service potential will flow to the entity, and 2- these benefits can be measured reliably. While these two criteria are applicable to both exchange and non-exchange transactions, the accounting for revenue arising from exchange transaction is entirely different from the revenue arising from non-exchange transactions in terms of approaches, models and timing of recognition.

3.1 Revenue Arising from Exchange Transactions (Bilateral/Reciprocal Transactions)

Exchange transaction means that each party receives and gives up essentially equal values. In order to suggest the accounting treatment of revenue resulting from the exchange transactions, the use of ASB-GRAP 9, IPSAS 9, IFRS 15 and AASB 15 can assist in determining when the
revenues arising from exchange transactions can be recognized. The focus here is on the revenue arising from exchange transactions and events as follows:

- The sale of goods;
- The rendering of services; and
- The use by other of entity assets yielding interest, royalties, dividends or similar distributions.

Goods include goods produced by the entity for sale such as publications or purchased for resale such as merchandise or land. According to IPSAS 9 and GRAP 9, rendering of services involves the performance by the entity of an agreed task over an agreed period of time. Rendering of services by governmental entities for which revenue is received in exchange can take one of the following examples: management of toll roads, management of water facilities and provision of housing. Also the use by others of entity assets gives rise for revenue in form of interest: charges for the use of cash or cash equivalent or amounts due to the entity. Royalties: charges for the use of long term assets of the entity, for example, patents and copyrights. Dividends or similar distributions –distributions of surpluses to holders of equity investments in proportion to their holdings of a particular class of capital (IPSAS, 9 and GRAP 9).

While the IFRS 15 focuses only on contracts with customers for goods and services supplied in the ordinary course of operations, IPSAS 9 and GRAP 9 base the revenue recognition on the type of transaction, for example, whether revenue relates to the provision of goods, services, interest, royalties or dividends. This is due to the fact that while they are sharing the two main criteria of revenue recognition, there are specific conditions related to each transaction and event that should be satisfied to consider whether the revenue arising from the exchange transaction can be recognized or not.

Sale of goods

Revenue from the sale of goods shall be recognized when all the following conditions have been satisfied (IPSAS 9 and GRAP 9):

(a) the entity has transferred to the buyer the significant risks and rewards of ownership of the goods;
(b) the entity retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods sold;
(c) the amount of revenue can be measured reliably;
(d) it is probable that the economic benefits associated with the transaction will flow to the entity; and
(e) the costs incurred or to be incurred in respect of the transaction can be measured reliably.

Rendering of services

While the recognition of revenue arising from the sale of goods depends on transferring the significant risks and rewards of ownership of goods to the customer, the revenues associated with the rendering of services shall be recognized by reference to the stage of completion of the transaction at the end of the reporting period. The outcome of a transaction can be estimated reliably when all the following conditions are satisfied (IPSAS 9 and GRAP 9):

(a) the amount of revenue can be measured reliably;
(b) it is probable that the economic benefits associated with the transaction will flow to the entity;
(c) the stage of completion of the transaction at the end of the reporting period can be measured reliably; and

(d) the costs incurred for the transaction and the costs to complete the transaction can be measured reliably.

**Interest, royalties and dividends**

For the interest, royalties and dividends: Revenue shall be recognized on the following (IPSAS 9 and GRAP 9):

(a) interest shall be recognized on a time proportion basis that takes into account the effective yield on the asset.

(b) royalties shall be recognized on an accrual basis in accordance with the substance of the relevant agreement; and

(c) dividends shall be recognized when the shareholder’s right to receive payment is established.

While the standards setting bodies use different approaches for the recognition of revenues arising from the exchange transactions and events in the public sector, these approaches are not entirely different from that approaches used in the private sector. For example, the risk and rewards approach used by IPSAS 9 and GRAP 9 is, to a great extent, consistent with Performance Obligations Approach used by IFRS 15. A performance obligation is a promise to transfer goods or services to another party. However, in identifying performance obligations associated with a contract under IFRS 15, the main focus is on identifying distinct goods and services. A good or service is distinct when the following criteria are met: (IFRS 15)

- The customer can benefit from the good or service on its own or together with other readily available resources; and
- The entity's promise to transfer the good or service to the customer is separately identifiable from other promises in the contract.

So once the distinct goods and services are identified, the performance obligations can also be identified. Accordingly, public sector entity recognizes revenue when the performance obligations are satisfied by transferring the promised goods or services to the customer. Similarly, under IPSAS 9 and GRAP 9, revenue is recognized for goods when risks and rewards of ownership are transferred or when services are provided. ASB-UK (2015) concluded that while the process followed by the two approaches is different, the effect on revenue recognition may be similar. In addition, Australian Accounting Standard Board has also issued ED 260-AASB 15 (2015) – Income of Not-for-Profit (NFP) Entities, which also encouraging the application of Performance Obligations approach to exchange transactions. The core principle under AASB 15 is that an entity recognizes revenue at an amount that reflects the consideration to which the entity expects to be entitled in exchange for transferring goods or services to a customer. AASB 15 (2015) also stated that for performance obligation to exist with respect to a NFP entity, the promise to transfer a good or service must be sufficiently specific to be able to determine when the obligation is satisfied. So application of performance obligation approach is more consistent with exchange transactions. However, some accounting standard bodies argue (such as AASB15) that Performance obligation approach can be applied to both exchange and non-exchange transactions by using both IFRS 15 and AASB 15. Some other such as ASB argue that while it is possible to extract certain principles from the approach in IFRS 15 and apply them to non-exchange transactions, it is difficult to apply the model “as is” to non-exchange transactions. This is because: (ASB, 2015):

(a) non-exchange transactions often arise from statutory rather than contractual arrangements, which makes the initial step in the IFRS 15 difficult to apply; and
(b) non-exchange transactions are not executory in nature in that they do not require performance by both parties to the transaction. Under IFRS 15, the event that gives rise to the initial recognition of a transaction is usually based on one party to the arrangement having performed in terms of the arrangement.

In contrast, the event that gives rise to the recognition of non-exchange transactions is often the occurrence of an event, e.g. a taxable event, or breach of a law. Because the recognition of transactions in IFRS 15 is driven by performance by parties and the satisfaction of performance obligations, the initial recognition of transactions and the recognition of revenue under IFRS 15 is unclear for many non-exchange transactions.

In addition, IPSASB (2015) agreed that a performance obligation approach cannot be applied to transactions that are not subject to performance obligations, and that these transactions would need to be dealt separately. Therefore, the non-exchange transactions should be treated differently from the exchange transactions.

3.2 Revenue from Non-Exchange Transactions (Unilateral/Non-Reciprocal Transactions)

Non-exchange transactions (including taxes and transfers), means that revenues are not directly derived from incurring costs and an entity will receive resources and provide no or nominal consideration directly in return (IPSAS, 23). In other words, non-exchange revenues are politically not economically driven (van Peursem, 2006). While the exchange transactions are to some extent similar to the transactions in the private sector, the non-exchange transactions are entirely different from the private sector in respect of the recognition and measurement criteria. For example, when are the tax revenues considered to be recognized and measured? The answer to this question under accrual accounting is not easy. Whilst it may be probable that a government is entitled to revenue at the time a taxpayer earns income subject to taxation, it may not be possible to measure the amount of the tax revenue until some later point – for example, at the end of the income year, when tax returns are filed or when tax is assessed (IFAC, 1996).

Furthermore, there may be a considerable time lag between the point at which the transaction which gives rise to the revenue takes place and the point at which the amount can reliably be estimated. For example, there may be a lag between the time sales tax is collected by vendor and the time it is accounted for by the government.

To overcome the problem associated with the recognition of non-exchange transactions, IPASAB issued IPSAS 23 - Revenue from Non-Exchange transactions (including taxes and transfers) to tackle this problem. IPSAS 23 tackles the requirements for the recognition, measurement and disclosure of revenue from non-exchange transactions. The IPSAS 23 develops an “Assets and Liabilities Approach” that requires entities to recognize revenue when an inflow of resources is recognized as an asset, to the extent that liability or contribution from owners is not also recognized. The IPSAS 23 has stated in paragraphs 44, 45, 46, 47 and 48 the following recognition and measurement criteria of revenue from non-exchange transactions:

a. An inflow of resources from a non-exchange transaction recognized as an asset shall be recognized as revenue, except to the extent that a liability is also recognized in respect of the same inflow.

b. As an entity satisfies a present obligation recognized as a liability in respect of an inflow of resources from a non-exchange transaction recognized as an asset, it shall reduce the carrying amount of the liability recognized and recognize an amount of revenue equal to that reduction.

And if an inflow of resources satisfies the definition of the contributions from owners, it is not recognized as a liability or revenue.
c. Revenue from non-exchange transactions shall be measured at the amount of the increase in net assets recognized by the entity as at the date of initial recognition of assets arising from the non-exchange transaction.

According to IPSAS 23, the assets-liability approach should be based on the control-based model. Control of an asset arises when the entity has the ability to exclude or regulate the access of others to the benefits of an asset and when the entity can use or otherwise benefit from the asset in pursuit of its objectives. However, exercising of a regulatory role by governments over some activities such as pension funds does not necessarily mean that such regulated items meet the definition of an asset or satisfy the criteria for recognition as an asset in government financial statements. Therefore, in many cases, the entity will need to establish enforceability of its control of resources before it can recognize an asset (IPSAS 23). This is due to the fact that if the entity does not have an enforceable claim to resources, it cannot exclude or regulate the transferor's access to those resources.

In addition to IPSAS 23, Australian Accounting Standard Board has released an Exposure Draft (ED) 260 in 2015. This draft has been partially driven by a range of concerns with current standards, AASB 1004 Contributions (AASB 1004), the issuance of AASB 15 Revenue from Contracts with Customers (AASB 15). Unlike IPSAS 23, the ED 260 does not only consider the control-based model for the recognition of the non-exchange transactions but it also considers the enforceable right to receive funds. Therefore, the ED 260 - Part B, has made distinguish between two non-exchange transfers:

- **Voluntary transfers:**
  - Donations, including identifiable donation components of contracts with customers;
  - Other transactions with donation elements such as where the fair value of asset acquired by the NFP entity significantly exceeds the consideration paid;
  - Grants in relation to which specific performance obligation have not been identified; and
  - Appropriations to government department and agencies.

- **Compulsory transfers:** such as taxes, rates and fines.

The revenue recognition is determined by an assessment of when control of funds passes to the NFP entity (Control-based Model) for voluntary transfers or when the entity has an enforceable right to receive funds (compulsory transfers). Therefore, voluntary transfers would usually be recognized on receipts of funds, and compulsory transfers would usually be recognized when the underlying "taxable event" occurs.

So both control-based model and enforceable right to received funds based on the occurrence of taxable event are consistent with Asset-Liability approach. For taxes —enforceable right to receive funds is based on occurrence of the underlying "taxable event". As example of the occurrence of taxable event, we can use the New Zealand and Australian experience as follows:
**New Zealand**: the recognition points of major non-reciprocal revenues are summarized below (in Table 1):

### Table 1: Tax Revenue, New Zealand

<table>
<thead>
<tr>
<th>Revenue Type</th>
<th>Revenue Recognition Point</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source deductions (PAYE)</td>
<td>When an individual earns income that is subject to PAYE</td>
</tr>
<tr>
<td>Residents withholding tax</td>
<td>When an individual is paid interest or dividends subject to deduction at source</td>
</tr>
<tr>
<td>Fringe benefits tax (FBT)</td>
<td>When benefits are provided that give rise to FBT</td>
</tr>
<tr>
<td>Provisional tax</td>
<td>Payment due date</td>
</tr>
<tr>
<td>Terminal tax</td>
<td>Assessment filed date</td>
</tr>
<tr>
<td>Goods and services tax</td>
<td>When the liability to the Crown is incurred</td>
</tr>
<tr>
<td>Excise duty</td>
<td>When goods are subject to duty</td>
</tr>
<tr>
<td>Road user charges and motor vehicle fees</td>
<td>When payment for the fee or charge is made</td>
</tr>
<tr>
<td>Stamp, cheque and credit card duties</td>
<td>When the liability to the Crown is incurred</td>
</tr>
<tr>
<td>Other indirect tax</td>
<td>When the debt to the Crown arises</td>
</tr>
</tbody>
</table>

**Australia**: The bases of recognition for major types of taxation revenue are summarized as follows (in Table 2): (IFAC, 2000).

### Table 2: Tax Revenue, Australia

<table>
<thead>
<tr>
<th>Major type of taxation revenue</th>
<th>Basis of revenue recognition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income tax from individual (PAYE, PPS, Provisional Tax)</td>
<td>recognized on earnings of taxpayers during the reporting period where such amounts can be reliably measured and are expected to be collected</td>
</tr>
<tr>
<td>Company Tax &amp; Superannuation Fund Tax</td>
<td>recognized on company income for the reporting period</td>
</tr>
<tr>
<td>Sales Tax &amp; Withholding Tax</td>
<td>recognized on defined sales and other relevant activities occurring during the reporting period</td>
</tr>
<tr>
<td>Fringe Benefits Tax</td>
<td>recognized on fringe benefits provided to employees during the reporting period</td>
</tr>
<tr>
<td>Excise Duty</td>
<td>recognized when goods are distributed for home consumption</td>
</tr>
<tr>
<td>Customs Duty</td>
<td>recognized when imported goods are distributed for home consumption</td>
</tr>
</tbody>
</table>

In addition to the aforementioned public sector accounting setting bodies, the USA- GASB (1998) issued a statement No.33 regarding the Accounting and Financial Reporting for Non-exchange Transactions. GASB 33 has focused on accounting treatment of non-exchange transactions. The main focus was on the timing of recognition of non-exchange transactions – that is, when should governmental entities recognize the non-exchange transactions in the financial statements? The statement No. 33 identifies four classes of non-exchange transactions based on shared characteristics that affect the timing of recognition as follows:

- **Derived tax revenues**: result from assessments imposed on exchange transactions (i.e., income taxes, sales taxes and other assessments on earnings or consumption).
• **Imposed non-exchange revenues**: result from assessments imposed on nongovernmental entities, including individuals, other than assessments on exchange transactions (i.e., property taxes; fines and penalties; and property forfeitures, such as seizures and escheats).

• **Government-mandated non-exchange transactions**: occur when a government at one level provides resources to a government at another level and requires the recipient to use the resources for a specific purpose (i.e., federal programs that state or local governments are mandated to perform).

• **Voluntary non-exchange transactions**: result from legislative or contractual agreements, other than exchanges, entered into willingly by two or more parties to the agreement (i.e., certain grants, certain entitlements and private donations).

The GASB 33 has determined the timing of recognition of the four classes of non-exchange transactions under both accrual accounting and modified accrual accounting. It is assumed the timing of recognition should be the same whether the accrual or modified accrual basis is used. However, the recognition of revenue under modified accrual basis should not only meet the recognition criteria but also the revenues should be available. Available means that the government has collected the revenues in the current period or expects to collect them soon enough after the end of the period to use them to pay liabilities of the current period (GASB 33, 1998). According to GASB 33 the timing of revenues recognition is outlined as follows:

- **Derived tax revenues**
  Revenues are recognized when the underlying exchange transaction occurs. If the resources received before the underlying exchange has occurred should be reported as deferred revenues (Liabilities).

- **Imposed non-exchange revenues**
  Revenues are recognized in the period when use of the resources is required or first permitted by time requirements (for example, for property taxes, the period for which they are levied; and for the other than property taxes revenues recognized in the period when an enforceable legal claim has arisen), or at the same time as the assets if the government has not established time requirements. Resources received or recognized as receivable before the time requirements are met should be reported as deferred revenues.

- **Government-mandated non-exchange transactions and voluntary non-exchange transactions**
  Revenues are recognized when all applicable eligibility requirements are met. According to GASB 33-The eligibility requirements comprise one or more of the following:
  a. **Required characteristics of recipients.** The recipient (and secondary recipients, if applicable) has the characteristics specified by the provider. (For example, under a certain federal program, recipients are required to be states and secondary recipients are required to be school districts.)
  b. **Time requirements.** Time requirements specified by enabling legislation or the provider have been met. (The period when the resources are required to be used [sold, disbursed, or consumed] or when use is first permitted has begun, or the resources are being maintained intact, as specified by the provider.)
  c. **Reimbursements.** The provider offers resources on a reimbursement (-expenditure-driven) basis and the recipient has incurred allowable costs under the applicable program.
  d. **Contingencies** (applies only to voluntary non-exchange transactions). The provider’s offer of resources is contingent upon a specified action of the recipient and that action has occurred. (For example, the recipient is required to raise a specific amount of resources from third parties or to dedicate its own resources for a specified purpose and has complied with those requirements.)
After reviewing the accounting literature of accounting treatment regarding the revenues recognition in the public sector from different international and national standard setting bodies' point of view, it is obviously that these bodies do not only agree about the accounting treatment of revenues but also on the classification of non-exchange transactions. For example, in Australia, the non-exchange transactions are classified as voluntary transfers and compulsory transfers while in USA, they are classified into four classes as stated above. It can be concluded that there is a lack of a unified guidance of accounting on revenues arising from both exchange and non-exchange transactions.

4- A Practice-Relevant Approach for revenues recognition: A Practitioner’s perspective

4.1 Revenue from Exchange Transactions: Public Sector Performance Obligation Approach

In fact, assets, liabilities, revenues and expenses arising from transactions and events must be recognized in the financial statements when they have an economic impact on the government, regardless of when the associated cash flows occur. As earlier stated, governments obtain their revenues from both exchange transactions and non-exchange transactions. The accounting treatment of revenues arising from exchange transactions in the public sector is to a reasonable extent similar to that of the private sector. The accounting treatment of revenue in both sectors agreed about the two main revenue recognition criteria which are: a- revenue is recognized when it is probable that future economic benefits will flow to the entity; and b- these benefits can be measured reliably. In addition, there is consensus in both sectors that these recognition criteria should be applied separately to each transaction (see, IAS 18, IFRS 15, IPSAS 9, AASB 15 and GRAP 9). The revenues arising from exchange transactions and events include: -The sale of goods; the rendering of services; and the use by other of entity assets yielding interest, royalties, dividends or similar distributions. While the two recognition criteria are applied to all revenues arising from the exchange transactions and events, there are specific conditions associated with each transaction that should be satisfied to consider the revenue is recognized. For the sale of goods, the recognition of revenue should be based on risks and rewards model. This means that the entity has transferred to the buyer the significant risks and rewards of ownership of the goods. For rendering the services, the recognition of revenue should be based on the stage of completion of the transaction at the end of the reporting period. The recognition of revenue by reference to the stage of completion of a transaction is often referred to as the percentage of completion method. Under this method, revenue is recognized in the accounting periods in which the services are rendered. The recognition of revenue on this basis provides useful information on the extent of service activity and performance during a period. For the interest, royalties and dividends: Revenue shall be recognized on the following bases:

(a) interest shall be recognized on a time proportion basis that takes into account the effective yield on the asset.
(b) royalties shall be recognized on an accrual basis in accordance with the substance of the relevant agreement; and
(c) dividends shall be recognized when the shareholder’s right to receive payment is established.

It is obvious that approaches and models that have been used as a basis for the recognition of revenue arising from the exchange transactions and events, (such as risks and rewards model, percentage of completion method, etc.), are to a great extent consistent with the performance obligation approach applied to the private sector based on IFRS 15. The question is: can the performance obligation approach be also applied to the public sector? In fact, IPSASB, during its meeting held in Johannesburg, South Africa, IAESB Meeting –April 13-15, 2015, has considered the extent to which the performance obligation approach can be applied to revenue and expense transactions. The IPSASB noted that the performance obligation approach in IFRS
15, *Revenue from Contracts with Customers*, only relates to contracts for good and services with customers. Accordingly, it does not cover the accounting treatment of other exchange transactions such as the use by other of entity assets yielding interest, royalties, dividends or similar distributions. Therefore, the IPSASB suggested that the performance obligation approach should be broadened to include the other exchange transactions with performance obligations. Such transactions include those that meet the criteria in IFRS 15 and transactions out of the scope of IFRS 15 that contain performance obligations. In addition, the IPSASB sees that developing the performance obligation approach to be applied to the public sector needs to include non-contractual binding arrangements in the public sector, noting that specific legislative requirements can give rise to performance obligations. Furthermore, it needs to take a broad view of the enforceability of binding arrangements, which is not just through legal means (IPSASB, 2015).

However, the core of the recognition of revenues under performance obligation approach based on IFRS 15 is that revenue is recognized when the performance obligation is settled. The settlement of a performance obligation at a point in time is considered in relation to the transfer of control over the asset that is created in fulfillment of the performance obligation. This means that the point at which control over the asset is transferred coincides with the point in time that a performance obligation can be considered to have been fulfilled. This establishes the control-based revenue recognition model employed by IFRS 15. However, Most of standard setting bodies in the public sector such as ASB-UK and IPSASB (GRAP 9 and IPSAS 9) prefer the use of risks and rewards model where the revenue from the sale of goods is only recognized when the risks and rewards related to an asset are transferred to the customer. Accordingly, the transfer of risk and rewards is considered in IFRS 15 to be a subset in evaluating the transfer of control over an asset. As such, it is considered that the control-based model of IFRS 15 might result in a later point of revenue recognition in the public sector entities (ASB, 2015), which can create confusion into practice from the practitioner's standpoint. Therefore, the development of the public sector performance obligation approach should be based on risks and rewards model.

Taking into account that Public Sector Performance Obligation Approach only appropriate when agreed performance obligations are “identifiable and specific”, therefore, the development of the Public Sector Performance Obligation Approach for the exchange transactions should be based on:

1- Identify which goods or services are distinct and hence should be accounted for as a separate performance obligation, this can be facilitated by focusing on:
   a- Transactions with performance obligations stipulated in both IFRS 15 and AASB 15; and
   b- Transaction with performance obligations but not included in IFRS 15 and AASB 15.

2- When considering the large volume of customers of public sector entities, it is envisaged that the use of control-based model would be onerous to the point of becoming impractical; therefore the satisfaction of the performance obligation should be based on the transferring of significant risks and rewards of a promised goods or services to a customer.

3- Enforceability should be considered as a key aspect of Public Sector Performance Obligation Approach legal and equivalent binding arrangements.

Performing the aforementioned amendments will result in improving reporting of revenue from exchange transactions within the public sector. However, given the current level of maturity of accounting practice in the public sector it is considered that the public performance obligation approach should be simplified to remove the complexities provided in IFRS 15.
4.2 Revenue from Non-Exchange Transactions: Assets-Liabilities Approach

While the performance obligation approach can be modified to be applied to the revenue arising from exchange transactions, it seems impractical to be used to recognize revenue arising from non-exchange transactions. This is due to the following facts:

- Revenues recognition within the scope of the performance obligation approach- IFRS 15 are based mostly on contractual agreements, whereas the revenues recognition of non-exchange transactions often arise from statutory rather than contractual arrangements.

- Non-exchange transactions are not executory in nature in that they do not require performance by both parties to the transaction. This is obvious from the scope of GRAP 23 and IPSAS 23, as it is argued that arrangements within the scope of GRAP 23 may entitle one party to recognize an asset before either party to the arrangement has performed.

- The performance obligation approach described in IFRS 15 requires the identification of a customer whereas the nature of transactions in the public sector often precludes the identification of a specific customer. The goods and services rendered by public sector entities are determined by their legislative mandate to a wide range of people/entities. These goods and services are also often provided collectively rather than individually (ASB, 2015).

Furthermore, non-exchange transactions entail the public sector entity to receive resources, either for free of charge or provide nominal consideration that is considerably lower than prevailing market prices. The transaction or arrangement that governs the transfer of the resources, irrespective of whether it is statutory or contractual, gives one party to the transaction or arrangement a right to receive the resources (ASB, 2015).

Consequently, recognition principle should be reconfigured to enable the public sector entities to recognize the revenues resulting from the non-exchange transactions. The performance obligation approach based on the transferring the risks and rewards of goods or services to the customer is unlikely to be valid to be applied to the non-exchange transactions. There should be a new approach that can recognize the revenues that are politically and not economically driven. In other words, revenues derived from the use of the sovereign powers. Therefore, standard setting bodies (such as: IPSASB, ASB and GASB) agreed on the application of assets-liabilities approach to the public sector entities for the recognition of revenues arising from the non-exchange transactions. This assets-liabilities approach with respect to recognition of revenues works as follows: (GRAP 23 and IPSAS 23)

1. Determine if the entity can recognize an asset from a non-exchange transaction.
2. Identify the stipulations attached to the transaction or arrangement and determine if they give rise to conditions or restrictions.
3. Recognize revenue to the extent that an asset is recognized, and any present obligation is satisfied (i.e. to the extent that conditions are met).
4. Measure revenue at the amount of the increase in net assets recognized by the entity.

In addition, IPSAS 23.44 and GRAP 23.43 mention that “An inflow of resources from a non-exchange transaction recognized as an asset shall be recognized as revenue, except to the extent that a liability is also recognized in respect of the same inflow”.

This means that under the assets-liabilities approach, described in IPSAS 23 and GRAP 23, the starting point of the revenue recognition is the determining whether an arrangement gives a right to receive resources that would meet the definition of an asset. Once the right to receive resources is confirmed, the public sector entity is required to determine whether it controls such a resource and otherwise meets the definition of an asset. This is confirmed by IPSAS 23.32 and
GRAP 23.27 as they stated that “An entity will recognize an asset arising from a non-exchange transaction when it gains control of resources that meet the definition of an asset and satisfy the recognition criteria.”

Gaining control of an asset means that the public sector entity has the ability to exclude or regulate the access of others to the benefits of an asset (IPSAS 23.32 and GRAP 23.27). It is evident that GRAP 23 and IPSAS 23 employ a control-based model for the recognition of assets arising from non-exchange transactions. Once an entity confirms the existence of a right to an asset, and confirms that it has the ability to control such an asset, it will recognize an asset in accordance with IPSAS 23 and GRAP 23 and either a liability or revenue as the counter entry (ASB, 2015).

However, based on the experiences of some countries (such as Australia and United states) the control-based model solely is not enough to cover the recognition of all revenues resulting from the non-exchange transactions. For example, Australia distinguishes between two non-exchange transfers: a- Voluntary transactions including items such as donations, grants and appropriations, herein the recognition of revenues arising from these transactions should be based on the use of control-based model. b- Compulsory transfers: such as taxes, rates and fines, herein the revenues would be recognized when the public sector entity has an enforceable legal claim to receive funds and the underlying taxable event occurs. In addition to Australian experience, the USA experience distinguishes among four classes of the non-exchange transactions: Derived tax revenues, imposed non-exchange revenues, government-mandated non-exchange transactions, and voluntary non-exchange transactions. As it obvious from the literature (discussed in section 3) that the four classes of non-exchange transactions are using different approaches as follows: some classes recognize the revenue based on the occurrence of taxable event and arising of an enforceable legal claim, as the case of derived tax revenues. Some other such as imposed non-exchange revenues, the recognition of revenues are divided into two cases: in case of the property tax, revenue is recognized in the period in which the property taxes are levied. While the other than property taxes, such as fines and penalties etc., the revenue is recognized in the period when an enforceable legal claim has arisen. This means that the recognition of property taxes is based on the control-based model whereas the other than property taxes are based on the arising of enforceable legal claim and the occurrence of the underlying taxable event. So it could be derived that in addition to control-based model, the enforceable legal claim and occurrence taxable event are also an essential element for the recognition of the revenue resulting from the non-exchange transactions.

As it is clear from the aforementioned discussion that accrual accounting recognition principle needs to be reshaped to fit the context of public sector entities. Moreover, the reconfiguration of recognition principle should take into consideration the specific characteristics of public sector entities compared to the private sector entities. As the recognition of revenues resulting from exchange transactions is to a great extent different from that of the non-exchange transactions. Furthermore, even within the non-exchange transactions context, the recognition of revenues will be based on different approaches and models. Therefore, the development of Practice-Relevant Approach for revenue recognition in the public sector should take all these issues into account (see the following page).

5- Conclusion

Even though some pioneer writers in public sector accounting such as Lauglin (2011) argues that some of the [private sector] underlying concepts and standards need reshaping to allow them to fit the context of PBEs (Public Benefits entities), the last three decades have witnessed that the standard setters, academics and practitioners have directed their efforts to force public sector entities information into business reporting frameworks (Mack and Ryan, 2006), instead
of really thinking in reshaping the accrual accounting principles, assumptions and concepts to make them more practice-relevant for the public sector entities. The discussion in this paper is consistent with Lauglin suggestion regarding the reshaping of the recognition principle to allow it to fit the public sector context. It is inferred that the recognition of revenues in the public sector should be based on different approaches and models other than that applied to the private sector. Accordingly, to facilitate the matter for the practitioners this paper has developed the practice-relevant approach for the recognition of revenues arising from the exchange transactions and the non-exchange transactions and this has been based on different approaches and models. The practice relevant approach made clear that the performance obligation approach used in private sector according to IFRS 15 may be used for the exchange transactions but after making some amendments which are required to simplify it and to remove the complexities highlighted in IFRS 15. Furthermore, these amendments are needed to facilitate appropriate application of the Public sector Performance Obligation Approach from the practitioner's perspective in the public sector. Moreover, the non-exchange transactions require different approach for the recognition of revenues, which is the Assets-Liabilities Approach using the control-based model and enforceable legal claim and the occurrence of taxable event. Finally, the practice-relevant approach has attempted to cater for the wide variety of transactions and circumstances prevalent in the Public Sector.
Practice-Relevant Approach for Revenues Recognition in Public Sector

Exchange Transactions
- Sales of goods
- Rendering of services
- Interest, royalties and dividends
  - Recognition of revenue based on Risks and Rewards Model
  - Recognition of revenue based on percentage of completion method
  - Interest: R R based on Time proportion basis
  - Royalties: R R based on substance of relevant agreement
  - Dividends: R R when the shareholder’s right to receive payment is established

Non-Exchange Transactions
- Voluntary Transfers
  - Recognition of Revenue based on Receipt of Funds
  - Control-based Model
- Compulsory Transfers
  - Recognition of Revenue based on when underlying taxable event occurs
  - Arising of Enforceable legal Claim

Public Sector Performance Obligation Approach

*RR = Revenue Recognition
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- GRAP 23 (2014), "Revenue from Non-Exchange Transactions" National Treasury, Republic of South Africa, Published by Department National Treasury.


- IAS 18, " International Accounting Standard 18 Revenue"


- IFRS 15, " IFRS 15 Revenue from Contracts with Customers"


