

Assignment of VAT Revenue and Decentralization of its Administration: The case of Ethiopia

A research project submitted to the graduate school of
Addis Ababa University in partial fulfillment for the
MSc degree in Accounting and Finance

By: Alazar Emiru

Department of Accounting and Finance
Faculty of Business and Economics
Addis Ababa University

June, 2009
Addis Ababa
Ethiopia

Table of contents

	Pages
Abstract	i
Acknowledgement	ii
Table of contents	iii
List of tables	iv
List of abbreviations	V
Chapter one Introduction	1
1.1. Statement of the problem.....	2
1.2. Objectives of the study.....	4
1.3. Methodology	4
1.4. Significance of the study.....	5
1.5. Scope and limitations of the study	5
1.6. Background of the study.....	6
1.7. Organization of the study	7
Chapter two Literature review	8
2.1. Decentralization of VAT administration	8
2.2. Assignment of VAT Revenue.....	19
2.3. VAT refund-.....	24
2.4. VATs in Federal States: International Experience	32
2.4.1 The Dual VAT Approach	32
2.4.2 The compensating VAT (CVAT) Approach.....	33
2.4.3 The Canadian Experience	33

2.4.4 The experience of Brazil	36
2.4.5 Gabon	38
2.4.6 The pacific Island countries (PICs) experiences	39
2.4.7 India	41
Chapter three Research design	49
3.1. Research objectives and questions	49
3.2. Research methods	50
Chapter four Results and discussions	53
4.1. The outcome of the interview.....	53
4.1.1. Assignment of VAT revenue.....	53
4.1.2. Decentralization of VAT administration	56
4.2. Documentary analysis	67
4.2.1. VAT-to-Total indirect taxes ratio.....	67
4.2.2. VAT-to-GDP ratio-.....	68
4.2.3. percentage increase of VAT payers	69
Chapter five Conclusion and recommendation-	71
References	75

Assignment of value added tax revenue and decentralization of its administration: the case of Ethiopia

Abstract

This project tries to look at decentralization of VAT revenue and administration to sub national governments in Ethiopia in light of the international practices. It used individual in-depth interview to collect primary data from Ethiopian revenue and custom Authority (ERCA), Addis Ababa regional city administration tax office and ministry of finance and economic development (MOFED). The methods used for analysis were both qualitative and quantitative. The project discusses the problems in connection with decentralization of VAT administration and assignment of VAT revenue. The project suggests that decentralization of VAT administration needs capable and autonomous regional government and strong central government that could monitor and evaluate decentralization; and the assignment of VAT revenue also needs the central governments' follow up to minimize the distortions and should be applied in consistent with the constitution.

Acknowledgement

First and foremost let me take this opportunity to extend my heart felt thanks to Dr. Wollela Abehodie for her unreserved support from the beginning to an end.

Second I would like to acknowledge interviewees for their cooperation and willingness to give necessary data during the interview.

Next I would like to extend sincere thanks to my families for their gracious morale support.

At last but not least, I would like to thank everyone who contributes to the successful completion of this project.

Table of contents

	Pages
Abstract	i
Acknowledgement	ii
Table of contents	iii
List of tables	iV
List of abbreviations	V
Chapter one Introduction	1
1.1. Statement of the problem.....	2
1.2. Objectives of the study.....	4
1.3. Methodology	4
1.4. Significance of the study.....	5
1.5. Scope and limitations of the study	5
1.6. Background of the study.....	6
1.7. Organization of the study	7
Chapter two Literature review	8
2.1. Decentralization of VAT administration	8
2.2. Assignment of VAT Revenue.....	19
2.3. VAT refund-.....	24
2.4. VATs in Federal States: International Experience	32
2.4.1 The Dual VAT Approach	32
2.4.2 The compensating VAT (CVAT) Approach.....	33

2.4.3 The Canadian Experience	33
2.4.4 The experience of Brazil	36
2.4.5 Gabon	38
2.4.6 The pacific Island countries (PICs) experiences	39
2.4.7 India	41
Chapter three Research design	49
3.1. Research objectives and questions	49
3.2. Research methods	50
Chapter four Results and discussions	53
4.1. The outcome of the interview.....	53
4.1.1. Assignment of VAT revenue.....	53
4.1.2. Decentralization of VAT administration	56
4.2. Documentary analysis	67
4.2.1. VAT-to-Total indirect taxes ratio.....	67
4.2.2. VAT-to-GDP ratio-.....	68
4.2.3. percentage increase of VAT payers	69
Chapter five Conclusion and recommendation -.....	71
References	75

List of tables

Table 4.1 Interview result with tax officials, page -----64

Table 4.2 VAT revenue as percentage of total indirect tax, total
tax revenue and total domestic revenue.

Table 4.3. VAT revenue as percentage of GDP-----67

Table 4.4. Number of VAT payers-----68

List of abbreviations

BPR -	Business process re engineering
CVAT -	Consumption VAT
ERCA-	Ethiopian revenue and custom Authority
EFIRA -	Ethiopian Federal Inland Revenue Authority
ECA-	Ethiopian Custom Authority
ERCA -	Ethiopian Revenue and Custom Authority
FDRE-	Federal Democratic Republic of Ethiopia
FIRA -	Federal Inland Revenue Authority
GST -	Goods and Services Tax
HST-	Harmonized Sales Tax
MOFED-	Ministry of finance and economic development
PLC-	private limited company
QST-	Québec Sales Tax
RST-	retail sales tax
TRC -	Tax Reforms Committee
NST-	National Sales Tax”
VAT-	value added tax

Chapter one Introduction

In the context of Ethiopian, Value Added Tax (VAT) was introduced in January, 2003 as a replacement to sales tax. Since its introduction, VAT has been more revenue productive than sales tax (Teferra 2004). The administration of VAT in most federal countries, until recently, is at the central level (Bird and Gendron, 2005). If the central government wished to share a certain percentage of VAT revenues with sub-national governments, it did so either by using a formula (as in Germany) or by using consumption statistics, as was recommended for the European Union (EU) a few years ago in an important official report (Commission 1996). Again, as Bird and Gendron (2005) stated, even if all or some of the proceeds of the tax are to be distributed to the states, either on the basis of estimated consumption or on some formula basis, a single central VAT has substantial advantages and avoids many problems.

As compared to sales tax VAT is more complex (Ebrill 2001). In spite of its complexities, the global trend to introduce VAT in more countries is continuing. In developing countries as Goode (1993) noted VAT has also become an indispensable component of tax reforms. Until recent years, VAT was collected by the VAT department at the Ethiopian Federal Inland Revenue Authority (EFIRA) (along with its branch offices) and the

Ethiopian Customs Authority. However, very recently the administration of VAT revenue has been delegated to regional governments. As Yesegat, (2008) stated, since September 2004, the EFIRA has delegated to regional governments the administration of VAT for sole traders residing in their respective jurisdictions revealing the trend in decentralizing the VAT administration.

Changes in tax policy and tax structure in any country usually reflect changes in administrative realities as much or more than they do change in policy objectives.

This project tries to assess the problems encountered as VAT revenue and its administration is decentralized. The balance of the chapter has seven parts. Part one presents the statement of the problem. Part two discusses the main research objectives and research questions. This is followed by the methods adopted in part three. Part four discusses about significance of the study followed by limitations and scope of the study in part five.

1.1. Statement of the problem

Tax administration pertains to the duties and responsibilities of tax officials in identification and registration of taxpayers, processing returns, controlling collections, securing of delinquent declarations and

collection of tax arrears, making refunds, auditing taxpayers, investigating for tax fraud and evasion, and levying penalties. Decentralization of these tasks with the assignment of revenue to regional governments enhance local government service by increasing accountability, facilitate financing of sub-national governments, and improve performance. However, to benefit from these salient features of decentralization of VAT revenue and administration, it should be done in the situation where there is enough infrastructures, technology and skilled man power. In the case of Ethiopia where there appears to be limited infrastructures, technology and educated man power, the objective of decentralization may not be attained. It may also create unintended distortions such as revenue loss, regional economic imbalances, increased VAT fraud, and problems of refunding. In addition VAT is a significant tax in the Ethiopian tax system. Its percentage share from the total indirect tax, total tax and countries GDP reached 76.78 percent, 40.49 percent, and 1.40 percent respectively (table 4.2). Thus the government should exercise due care in the design and administration of this tax, for any problem in the VAT system are likely to affect the government's financial position.

The Ethiopian government has assigned VAT revenue to regional government without clearly predicting the distortions which, until recently, have impeded many developed and developing countries from

decentralizing the tax. These problems call for extensive research which intends to examine the decentralization of VAT revenue and administration; and to identify problems of decentralizing VAT.

1.2. Objectives of the study

The main objective of this study is to assess the assignment of VAT revenue to regional governments and the decentralization of the administration. In order to help the examination of this main objective, the following specific research questions are developed.

- What are the roles of assignment of VAT revenue and decentralization of VAT administration on the government's tax revenue?
- Does the assignment of VAT revenue to regional governments in line with the constitution?
- How much regional governments are capable to administer VAT?
- What are the impacts of decentralization of VAT administration on the VAT refund practices in Ethiopia?
- What are the impacts of decentralization of VAT administration on the VAT control and VAT fraud?
- What are the basic differences of the Ethiopian VAT from the international practice?

1.3. Methodology

To address the main objectives and the research questions, the following methods were developed. To collect the primary data concerning assignment of VAT revenue and decentralization of VAT administration individual in-depth interview was used. The documentary analysis was used to analyze statistical figures and relative descriptions were used to analyze interview data.

1.4. Significance of the study

As much as the significance of taxation for the existence of any government, studies that can assess the laws and practices of taxation, productivity and impact of a tax on economic advancement and studies that can suggest some new ideas to the improvement of country's social and economic development in general and to the tax system in particular are mandatory. Therefore, the outcomes of this study are expected to be useful to various parties including, the tax authority and the government at large. This study is also significant to both federal and regional governments to get an insight in to the challenges and problems of administering VAT at regional governments' level. It is also executed to be useful to researchers as a source of information.

1.5. Scope and Limitations of the study

There were different limitations which can be listed here. However, the major constraints include; one- individuals are not co-operative to give necessary data for the study and second because of time and resource constraint the number of study participants could not be increased. Therefore, the conclusion based on these limited number of sample size may have problems.

The scope of this project is assignment of VAT revenue and decentralization of VAT administration to regional governments in Ethiopia in line with the international practice.

1.6. Background of the study

In Ethiopia VAT was introduced in January, 2003 as a replacement to sales tax based on proclamation No. 285/2002. In terms of design VAT is imposed on the supply of goods and services other than exempted supplies (such as bread and milk). VAT is based on the invoice credit method in which taxpayers are given credit for the VAT paid on inputs when it is supported by the relevant documents. The tax is also based on the destination principle in that imports are taxed but not exports. VAT is chargeable at a standard rate of 15 per cent on all taxable supplies of goods and services other than those zero rated (mainly exports). VAT registration⁹ is required by businesses that have annual turnover of Ethiopian Birr (ETB) 500,000 and more. The VAT legislation allows refunds to be made to mainly exporters within two months from the time

applications are lodged. Non-exporting taxpayers are required to carry forward excess credits to the next five accounting periods; if there are still unused excess credits it is allowed (at least in the legislation) to be refunded within two months from the time of lodging applications.

VAT is administered by the ERCA and the Regional Government's Finance Bureaux.

1.7. Organization of the project

The structure of the project is organized in the following manner; the first chapter discusses the introduction in which the statement of the problem, the objectives and research questions, the methods adopted to address the research questions , significance of the study, scope and limitations of the study, and background of the study are presented. The second chapter is the literature review in which different literatures on the VAT revenue assignment and decentralization of administration are reviewed. Chapter three presents the methods adopted for the research in detail. Besides, Chapter four presents and analyses both primary and secondary data. Finally, chapter five presents conclusions and recommendations made based on the data analyzed in chapter four.

Chapter two Literature review

As indicated in the first chapter the objective of this study is to assess the VAT revenue assignment and delegation of VAT administration to regional governments in general and to assess the regional VAT performance, VAT refund practice, VAT control mechanism and capability of regional governments to administer VAT in particular. This chapter reviews the related literatures and is organized in the following manner. The first part reviews the decentralization aspect of VAT administration; the second part discusses about the assignment of VAT revenue to regional governments; the third part reviews the VAT refund practices and difficulties in decentralized administration. The fourth and fifth parts present the international practice in the assignment of VAT revenue and its administration to sub national governments respectively.

2.1. Decentralization of VAT Administration

VAT is a general tax that applies, in principle to all commercial activities involving the production and distribution of goods and the provision of services. It is a fiscal innovation that began tentatively with French sales

tax reform of 1954-55 and spread quickly to cover 130 countries within just about 50 years (Bahl and Bird 2008; Sharma, 2004). In fact, (Bird 2000) noted VAT is considered as the most desirable form of tax from an international perspective especially after global integration of the markets. However to best utilize the benefits of VAT, it must be administered effectively and efficiently. Nothing is more sensible than the administrative aspects of tax policy or, correspondingly, the administrative dimension of tax reform (Bird 2003). As Bird (2003) further stated, the best tax policy in the world is worth little if it cannot be implemented effectively. Tax policy design in developing countries must therefore take the administrative dimension of taxation carefully into account. How a tax system is administered affects its yield, its incidence, and its efficiency; and tax administration is a difficult task even at the best of time and in the best of places (Bird 2003). The "best" tax administration is not simply that which collects the most revenues. VAT is more complex than the sales tax that it replaced (Ebrill et al, 2001).

Despite its perhaps surprising complexity, it is important for those concerned with tax policy and its effects on the economy to understand tax administration. As (Jantscher, 1990) stated tax administration is tax policy.

VAT administration pertains to how tax authorities discharge the responsibilities entrusted to them. According to Jantscher (1990) these responsibilities include a range of related activities such as taxpayer identification and registration, invoicing, filing and payment requirements, control of filing and payments, refunds, audits and penalties. VAT administration is also concerned with issues of who should administer the tax, what organizational setup to use and what resources are available Yesegat (2008).

In principle, the most important benefit from decentralization is the increased efficiency (and consequent welfare gain) that comes from moving governance closer to the people (Oates 1972). The argument is straightforward. Assume that people's preferences for government services vary, e.g., because of religion, language, ethnic mix, climate, economic base or just because of their inclinations or those of the local political leadership. Assume further that people with similar preferences live in the same region. If sub national governments respond to these preferences in structuring their budgets, decentralization will result in variations in the package of services delivered in different regions. In a system in which there is downward accountability, voters will see to this and since people will get what they want, their welfare will be enhanced. In contrast, with a centralized system in which accountability is upward to a higher level of government, service provision will be more uniform so

people in different regions will not get the service mix that they want. The more heterogeneous the country, the greater the welfare costs of uniformity (Bahl 1999) However, Maximizing revenue for a given administrative outlay is only one dimension of the task of tax administration. Revenue outcomes may not always be the most appropriate basis for assessing administrative performance.

In Some countries (Canada, Brazil and Argentina) these and other tasks related to administration are delegated to sub national governments while centralized in others (Thailand and Germany) (Bird and Gendron, 2001). Decentralization of VAT administration is meant to give regional governments' legal authority to perform the administration tasks rather than keeping those tasks at the central level. The administration of VAT by the central or regional governments has its own merits and demerits. The merits of administering VAT by the central government are to use advantage of strong and uniform administration, and easy refunding. However it has its own demerits including high administrative and compliance costs and no participation of regional governments.

True believers in fiscal decentralization argue that, successfully implemented, it will not only improve welfare directly but also contribute to alleviating several key problems facing most developing countries: economic development, revenue mobilization, innovation in public service

delivery, accountability of elected officials, capacity development at the local government level, more willingness to pay for services and grassroots participation in governance (Bird, 2000). As Bird, 2000 stated to achieve any of these benefits local governments must have the power to control their employees and local residents must have the power to control their governments (normally through elections). Moreover, there must be sufficiently accurate information available for voters to evaluate the fiscal decisions of their local governments. Unfortunately, in many developing countries one or more of these conditions is not met. Despite pronouncements, plans and even promises, there has not been a rush to endow sub national governments with significant taxing powers and increased expenditure autonomy.

One reason fiscal decentralization may increase revenue mobilization is because by involving sub national governments more directly in taxation a greater share of GDP may be reached by the tax system. Because when sub national governments are involved in taxation, they can address many citizens and bring them to the tax net. If the revenue mobilization hypothesis is correct, increases in sub national government tax revenues will not be offset by reductions in central government tax revenues (Bird, 2000).

Despite these advantages, decentralization of VAT administration has a disadvantage for the tax system. These include relatively weak administration capacity of local governments, increased corruption, and low capacity of local governments and reduction of voluntary compliance, conflict of interest between central and local governments, Bahl and Linn (1983). As Bahl and Linn (1983) further stated, to avoid or reduce such limitations related to decentralization of VAT administration, the following rules can be applied:

RULE #1: Fiscal decentralization should be viewed as a comprehensive system

Intergovernmental fiscal relation is a term that refers generally to division of fiscal powers and responsibilities among levels of government. Fiscal decentralization refers to an intergovernmental system where the balance of power moves more toward the sub national government sector than has been the case. Other necessary conditions for fiscal decentralization are a significant set of expenditure responsibilities and significant amount of taxing powers, budget making autonomy, transparency and a hard budget constraint. The latter forces local governments to live within their means; and forces local officials to be accountable for hard choices that they make.

RULE #2: There must be a strong central ability to monitor and evaluate decentralization.

A controlled and gradual process of fiscal decentralization will require central government's technical assistance to local governments, in several areas. Especially the smaller local governments require assistance in areas of tax administration. A problem arises because most developing and transition countries do not have a strong ability to monitor the development of local government finances.

RULE #3: Fiscal decentralization requires significant local government taxing powers

Voters will hold their elected officials more accountable if local public services are financed to a significant extent from locally imposed taxes, as opposed to the case where financing is primarily by central government transfers. The VAT is probably a bad choice for sub national governments in most developing and transition countries. The taxation of international trade is one major obstacle. Exports are zero-rated under most VATs, raising the question of whether the local government that is home to the exporter will be responsible for paying the refund; and since imports are taxed at point of entry, it raises the question of whether the local government point of import will receive the revenue benefit.

There are other problems with a sub national VAT. Sub national governments are encouraged to set up protectionist-type measures to enhance their tax base. Finally, differential local tax rates or bases would compromise VAT administration, and local administration could harm the administrative efficiency of a national level, credit-invoice VAT.

There are conditions under which a sub national VAT might work. If there are strong, well administered central government value added taxes a uniform base, and if the local government piggybacks on the central rate, local VATs be workable. These conditions are rarely met in developing and transition countries (Bahl, 1999). These are different arguments concerning decentralization of VAT administration. On the other side, some governments are still reluctant to decentralize the VAT administration. The next section presents the review on centralization of tax administration.

There are good reasons why central governments are often reluctant to give too much discretion to local governments. These include fear of losing macroeconomic control and the desire to control key infrastructure development (Bahl and Bird, 2008). As Bahl and Bird further stated, fiscal decentralization may also shift resources from central governments that have higher rates of capital spending to regional and local governments that spend relatively more on consumption goods and services. If the result is a lower overall rate of

spending on infrastructure, national growth could be harmed. They also added that fiscal decentralization may also lead to a shift in the composition of public capital investments because national priorities for capital investment are unlikely to be the same as those of sub national governments. In addition sub national governments may not have the administrative skills to collect taxes efficiently. There may be duplication of services with the central government and, some argue, perhaps increased corruption.

Developing and transition countries are sometimes quite small, sometimes dependent on a relatively small number of primary exports, prone to inflation, and quite susceptible to external influences. There is an argument that the major fiscal instruments (taxes, expenditures and borrowing) ought to be controlled at the central government level. Under fiscal centralization, the government has a maximum flexibility to respond to macro problems.

The second argument for fiscal centralization has to do with the direction of investment on social overhead. Central governments properly have an interest in investment in projects with big externalities (Bahl, 1998). The notion is of course, that such infrastructure investments are central to national economic development. If decision making powers are turned over to the local governments, the preferences will move toward local

benefit projects, e.g., roads, wells, municipal auditoriums, small rural electrification, and the like. In fact, this shift to local choice of projects is what decentralization is all about. It is almost certain that fully honoring local choices would come at the expense of additional investment in the national power grid, trunk highways, ports, and the like.

As (Bahl, 1998) stated, equalization potential is clearly greater in a centralized public sector. The more money the central government has to distribute, the greater is the potential to equalize. Central governments may not equalize very well across the regions, but the potential is greater. Fiscal decentralization inherently is very counter equalizing, and leads to a much less equalizing system under a fiscal decentralized system. It has been argued that VAT operates more successfully as a national VAT (McLure 1993; Tait 1988).

A full understanding and evaluation of these tradeoffs is essential for developing a thoughtful decentralization strategy. To find a champion to promote fiscal decentralization in a developing country means that one must defeat the very strong centralization arguments (Bahl, 1999)

Effective tax administration requires establishing an environment in which citizens are induced to comply with tax laws voluntarily, while efficient tax administration requires that this task be performed at minimum cost to the community. This is not a simple task anywhere.

The job is particularly difficult in developing countries with large informal sectors, low levels of literacy and public morality, poor salary structure for public servants, poor communications, malfunctioning of judicial systems, and entrenched interests against radical reform. Despite such handicaps, the experience of several countries in recent years shows that substantial improvement can be achieved with determined effort and an appropriately designed strategy. What a tax administration can do, however, and how it can best be reformed depends largely upon the environment in which it operates (Tait, 1988).

Grandcolas (2005) suggests that VAT performance in Africa may depend on significant variations to the conventional view of VAT practice, and that the main objective of a tax administration should be to improve voluntary compliance. Grandcolas further suggests that the level of VAT compliance is particularly influenced by the design of the VAT and the quality of the tax administration; and discusses that the lack of skilled tax administrators poses a struggle for developing countries, including those in Africa. As Grandcolas further suggests that the overall performance of the VAT systems in Africa depends on three main factors: The capacity of policymakers to take into consideration the structural weaknesses of the tax administration; commitment to apply the designed penalty system; and development of a client-oriented tax administration and an effective audit program. Grandcolas discusses in great detail strategies to modernize the tax administration, such as simplifying filing and payment processes and streamlining refund

procedures. The next part of the chapter discusses about the assignment of VAT revenue to regional governments.

2.2. Assignment of VAT revenue

One basic purpose of Tax Assignment is to Provide sub national governments with revenues they can control to implement their expenditure responsibilities (improved resource allocation) and to Increase the accountability and responsibility of sub national government officials to their constituencies. Sub national governments can significantly affect their total revenues at the margin through their choices of taxes, bases, or more preferably tax rates.

In particular, this section examines the economic rationale of local tax assignment and tax sharing and also studies the economic role of equalization grants.

In vertical tax issues, assigning appropriate taxes or tax revenue to a local budget is necessary, while centralizing all or most taxation powers to the central government is undesirable. If we consider that substantial amounts of public services are provided by sub-national governments, the centralization of taxation power breaks the link between the benefits of public expenditures and tax burdens and weakens the fiscal responsibility and accountability of sub-national governments. To maintain fiscal incentives of sub-national governments, assigning them with appropriate accountable revenue is desirable.

However, first should come the assignment of expenditure responsibility to local governments, and then the assignment of revenue responsibility should be determined. This is an important rule, for two reasons. The first is that the central government must establish expenditure needs for each level of government before tackling the question of revenue assignment and the second is that the economically efficient assignment of revenues requires knowledge of expenditure assignment. For example, services that may be priced (public utilities, buses) should be largely financed by user charges; general services with a local area benefit zone (roads, parks) should be financed with local taxes; and goods characterized by significant externalities should be financed from region-wide taxes and intergovernmental transfers. Governments must settle on the assignment of expenditure responsibilities to local governments, at least an assignment that will hold for the near term future, before it can choose an efficient mix of taxing.

The correct revenue assignment in a multi-level government structure is by no means clear in principle, and is often controversial in practice (Bird et al, 2006). According to Bird et al (2004), the fundamental problems are two. First, the central government can inherently collect most taxes more efficiently than can sub national governments. Second, the potential tax bases available to the latter vary widely from

jurisdiction to jurisdiction. The first of these problems gives rise to vertical imbalance (higher expenditure responsibility than revenue right); the second produces horizontal imbalance (Regional economic imbalance.) However, even if vertical imbalance is resolved by adjusting revenue assignments, horizontal imbalance is invariably worsened by decentralizing taxing powers since those who have more to tax are obviously better off under this system than those less favored. Consequently, in countries where inter jurisdictional disparities are, for whatever reason, of policy concern more decentralized taxes imply a need for more balancing transfers to poorer regions. The present assignment of taxes in most countries with important regional levels of government, such as India, Brazil, Pakistan, South Africa, and Russia falls short of ideal. As Bird et. al (2006) further indicates, one common problem is that there is a significant vertical imbalance between expenditures and revenues, with consequent implications for autonomy, efficiency, and accountability. Another problem is that the present confused and confusing system results in significant costs — costs of administration, costs of compliance, and costs arising from tax-induced inefficiencies in the allocation of scarce resources.

Common problems with revenue assignments

- Vertical imbalance; inadequate correspondence between expenditure responsibilities of sub national governments and their assigned sources of revenue;

- Lack of meaningful tax autonomy;
- Assignments are decided in the annual budget rather than stated in the laws and fixed for a number of years;
- Tax assignments are customized for each local government to fit a “minimum budget”;
- Confused system resulting in the misallocation of resources and significant administration and compliance costs;
- Unfair apportionment of tax revenues among sub national jurisdictions;
- Large horizontal disparities; economic imbalance between regions; and
- The uneven distribution of tax bases requires the introduction of equalization grants.

Despite such potential problems there are nonetheless strong arguments for assigning some significant taxes to sub national governments.

Local residents are likely to hold officials more accountable if local public services are financed to a significant extent from locally imposed taxes and charges as opposed to central government transfers. Ideally, to have this beneficial effect, local taxes must be both visible to local voters and large enough to impose a noticeable burden (one that should not be easily exported to non-residents).

Reliance on own-source taxes also has the important advantage of imposing fiscal discipline on sub national governments. A greater share of financing from own sources drives up the tax price of public services and reduces the upward pressure on sub national government expenditures. Heavy reliance on intergovernmental transfers (the common situation in most developing countries) has precisely the opposite effect unless unusually great care is devoted to ensuring that transfers have no effects at the spending margin. Significant tax assignment to sub national governments is common in developed countries (OECD 1999, 2006).

Good sub national taxes should thus in principle satisfy two main criteria. First, they should provide sufficient revenue for the richest sub national units to be essentially fiscally autonomous. Second, they should clearly impose fiscal responsibility at the margin on sub national governments. The simplest and probably best way to achieve this goal is by allowing those governments to establish their own tax rates with respect to at least some major taxes. The most immediately important issue facing larger countries, for example, is undoubtedly the need to develop a satisfactory revenue base for regional governments, that is, one for which those governments are politically responsible.

One possibility is to permit regional surcharges on personal income taxes. Another promising approach is to establish sub national value-added taxes that are not subject to the well-known problems that have long been thought to preclude such taxes. Such a tax already exists and works well in Canada, and it now seems feasible to implement it even in countries with less well-developed tax administrations.

In the circumstances it was not surprising that, until recently, most federal countries solved the problem simply by keeping all VAT at the central level. If the central government wished to share a certain percentage of VAT revenues with sub-national governments, it did so either by using a formula (as in Germany) or by using consumption statistics, as was recommended for the European Union (EU) a few years ago in an important official report (Commission, 1996). If, as was true in the Russian Federation, a nationally uniform VAT was administered by sub-national authorities and the revenues were shared on the basis of origin, much the same undesirable and distortionary incentives were created as in the case of non-uniform sub-national origin-based VATs (Baer et. al, 1996).

The next part reviews the VAT refund practices and related challenges when VAT is administered at the regional governments' level.

2.3. VAT Refund

In the previous section the Assignment of VAT revenue and decentralization of its administration are discussed respectively. Even though VAT refund is administrative issue, it is the core concept of VAT and this section discusses the VAT refunding procedures separately from administration. Therefore, this section discusses the VAT refunding practice and its difficulties in decentralized VAT administration.

VAT refund is meant to return the amount of money the tax payer paid at the time of purchase (input VAT) if it is higher than VAT collected by him/her (output VAT). A key feature of the invoice-credit form of VAT is that some businesses (notably exporters) will pay more tax on their purchases than is due on their sales, and so can seek refunds of excess credits from government (Harrison and Krelove, 2005). As they stated, while refunding is straightforward in principle, serious problems arise in practice, including opportunities for fraud and corruption, and denial of refunds by governments with cash shortages. This makes the refund process the “Achilles heel” of the VAT.

Grandcolas (2005) and Jantscher (1990) noted that managing VAT refunds is one of the challenges of VAT administrations in developing countries. As Grandcolas (2005) and Jantscher (1990) further stated, the processing of refunds in relation to exports is one of the most

problematic features of the VAT in developing countries because the magnitude of the refunds can be substantial (more than 25% of the VAT collected) and fraud (e.g. overstatement of exports, falsification of invoices, production and purchase records, and underreporting of sales) is at times used to support claims of excess discretionary credit to be refund. Also, the fact that the administration has the power to make refunds, can open up opportunities for corrupt practices (favoritism, prejudices, and overprovision of refunds) and for governments to be tempted to delay the payment of refunds as temporary source of funds for their budgets. Without effective treatment of excess credits, the VAT can introduce significant distortions. To speed up the process, the law should provide for interest on the amount of VAT not refunded within a reasonable period of time. This acts as a self-disciplinary tool for the administration. Unfortunately, where this provision exists, it is often not implemented. A number of reasons are given for this situation, one favorite being the claim that the credit were the subject of an audit (and hence no interest is payable).

In some countries, refunds of taxes are paid from a specific account which is limited by an approved allocation specified in the budget or an account that has insufficient funds to cover all the legitimate refunds. As a result, claimants may have to wait many months to receive tax refunds. These procedures are inappropriate. Refunds are not expenditure; they

are a normal part of tax administration. This is particularly true in a VAT where tax credits and resulting refunds are a vital element of the tax. It would be inappropriate to restrict payment of VAT refunds from a budget account limited by an annual appropriation. Ideally, refunds should be paid directly from a sub account of the main account to which VAT revenues is deposited. To limit risks, it is advisable to offset excess credits against VAT and other tax arrears, require excess credits (other than for exporters) to be carried forward for some specified time (3 to 6 months) and pay refunds only if they cannot be set off.

In theory, VAT refunds should be paid promptly following receipt by the tax authority of a VAT return giving rise to an excess credit (Harrison and Krelove, 2005). That is the practice of most developed countries, where refunds are generally paid within four weeks of a refund claim being made. The situation is different in developing and transitional countries, however, where it often takes several months, and sometimes more than a year, to process refund claims. In export-oriented countries, such practices can seriously undermine the competitiveness of the export sector.

The prevalence of fraudulent claims is often cited by tax officials as a major reason for delaying payment of refunds. Often, less advanced tax administrations pursue time-consuming and labor-intensive processes to

verify claims before approving refunds, resulting in backlogs of refund requests and considerable disquiet among business taxpayers who have been deprived of their working capital. In contrast, the most effective and efficient tax administrations tackle refund-related fraud as part of a broader VAT compliance strategy based on risk management principles, and generally limit pre-refund verification checks to perceived high-risk claims.

When tax authorities deny payment of legitimate refund claims, the nature of the VAT is effectively altered, in part, from a tax on final consumption to a tax on production. To avoid this happening, VAT policymakers often advocate that the same tight statutory timetables imposed on persons paying VAT should also apply to tax authorities in refunding VAT.

As (Harrison and Krelove, 2005) state, with the aim of further shielding the VAT system from refund abuse, and controlling taxpayer behavior, some countries (like, Azerbaijan, Bulgaria, China, and Korea) have attempted to cross-check vast quantities of purchases and sales transaction data. With similar objectives in mind, Bulgaria requires its business enterprises to deposit the VAT due on their supplies into special bank accounts.

Another approach adopted by countries with large shadow economies (e.g., Azerbaijan), has been to simply deny VAT credits on large purchases where payment is made in cash (i.e. under the law, VAT taxpayers are entitled to input tax credits only where payment has been made through the banks). Of interest, also, is Kenya's requirement that all large refund claims must be certified by registered CPAs (Harrison and Krelove, 2005).

2.3.1. Time taken to process refund claims

Most countries have statutory deadlines for payment of VAT refunds. Policymakers have often advocated that, to make the operation of the VAT fair, the same tight statutory timetables imposed on persons paying VAT should also apply to tax authorities refunding VAT. The VAT refunding period ranging from 24 hours (as in the case of Peru) to 90 days (in France). The most common statutory period for making refunds is 30 days.

Tax officials invariably argue that overly tight deadlines place them at a disadvantage in dealing with evasion and fraud because they need sufficient time to monitor claims and conduct verification checks on suspect cases. In setting deadlines, it is therefore necessary to strike a balance between the time needed by authorities to safeguard the system and the time standards that are acceptable to the trade community.

Taxpayers are often entitled to interest on refunds paid late.

Many VAT systems impose a mandatory carry-forward period for excess VAT credits

The rationale of the carry-forward scheme is that, for a non exporting business, an excess VAT credit in one tax period should normally be followed by periods where net VAT liabilities are sufficient to absorb the credit brought forward. As a general rule, carry-forward measures are not applied to regular exporters, given that a business that exports most of its products will consistently have excess VAT credits that are unlikely to be absorbed by VAT liabilities in subsequent tax periods. Carry-forward periods range from 30 days to more than a year, but are generally in the range of three to six months. Carry-forward measures are not welcomed by firms that make large investments in heavy equipment prior to beginning operations. Having to wait long periods to recover VAT can add substantially to their costs. To overcome this problem, some countries (e.g., Albania) allow businesses to defer their VAT liabilities on certain imported capital goods. Many VAT systems allow for refunds to be offset against other tax liabilities. Sometimes, small claims are not accepted. Some countries have denied payment of all refund claims

2.3.2. Types of VAT fraud and evasion

There are different types of VAT fraud and evasion (Harrison and Krelove, 2005). According to Harrison and Russell Krelove (2005), the following are basic types of VAT fraud and evasion.

Inflated refund claims: - The simplest method is to create fake invoices for purchases never made. Indeed, organized crime networks have been known to establish businesses solely to fabricate invoices for sale to those wishing to defraud the revenue.

Under reported sales: - This is the most usual way of evading VAT. Evasion by small operators is common, particularly in retail services where taxable inputs are small relative to taxable sales. By concealing sales to the domestic market, traders may not only evade their own obligation to charge VAT on their output, but, also, generate excess credits to be refunded.

Fictitious traders: - This involves creation of short-lived sham enterprises that register for VAT and create the illusion of trading in goods and services. A common ploy is to invent fake export invoices on nonexistent goods and claim VAT refunds.

Domestic sales disguised as exports: - Under this scheme, traders sell goods on the domestic market but claim a refund using a fake export invoice.

Other forms of evasion and fraud include:

- ✓ Traders that are liable to VAT but do not register;
- ✓ Credit claimed for taxable supplies used in exempt activities, and credit claimed on private purchases;
- ✓ Credit claimed for invoices from unregistered suppliers;
- ✓ Goods imported illegally, and then sold with VAT added but not remitted to the tax authorities; and
- ✓ Barter arrangements hidden from the authorities

2.4. VATs in Federal States: International Experience

This section presents cases of different countries in administering VAT. It first discusses the types of federal VATs.

2.4.1 The Dual VAT Approach.

What lessons might Canadian experience with the GST-QST system offer for developing federal countries such as Brazil, Argentina, and India? One lesson appears to be that the best base for a sub-national VAT system is a well-designed and comprehensive national VAT. In this respect, as we note below, Argentina seems better positioned than either Brazil or India. Both of the latter countries would clearly need to make

considerable improvements their existing central government sales tax before attempting to reform their sub-national sales tax regimes.

A second key to the Canadian solution appears to be the existence of an adequate degree of (justified) trust in each other's competence by the sub-national and central governments. That the system works between two such bitter political opponents as the federal government of Canada and the current provincial government of Québec suggests that the level of trust required may not be all that high. Nonetheless, it is probably asking too much to expect an equivalent relationship (or quality of administration) to exist soon in most developing countries.

2.4.2. The compensating VAT (CVAT) Approach.

What can be done when there is no realistic prospect of "good" tax administration in the near future, especially at the sub-national level? As Varsano (1995, 2000) and McLure (2000) have shown, a promising approach is to impose what is in effect a supplemental central VAT, which McLure has called the "compensating" VAT or CVAT. This simple proposal has the major virtue of protecting the revenue when tax administration (at all levels of government) is far from well-developed. Specifically, it reduces the risk that households (and unregistered traders) in any state can dodge state VAT by pretending to be registered traders located in other states. How might such a CVAT work? Briefly, assuming that states can levy their own independent VAT rates (a central

objective of the system) CVAT would be imposed by the central government on sales between states at some appropriate rate such as the weighted average of state rates (McLure, 2000).

2.4.3. The Canadian Experience

Bird and Gendron (2001) present the experiences of Canada in administering VAT at sub national level. At present Canada is probably the most interesting country in the world for those interested in sales taxes. There is a federal VAT, the Goods and Services Tax (GST), that is imposed throughout the country. In one province (Alberta), the GST is the only sales tax. In four provinces (British Columbia, Saskatchewan, Manitoba, and Ontario), in addition to the GST there is a separate retail sales tax (RST) applied to the GST-exclusive tax base. (In one province (Prince Edward Island), the provincial RST is applied to the GST-inclusive tax base.) In three provinces (Newfoundland, Nova Scotia, and New Brunswick), there is a joint federal-provincial VAT, called the Harmonized Sales Tax (HST) and administered by the federal government at a uniform rate. Finally, in one province (Québec) there is a provincial VAT, the Québec Sales Tax (QST), applied to the GST- inclusive tax base. The QST is administered by the government of Québec, which also administers the GST in the province on behalf of the federal government. Canada thus offers a variety of interesting situations: separate federal and provincial VATs administered provincially, joint federal and

provincial VATs administered federally, and separate federal VAT and provincial RSTs administered separately.

This situation emerged as the result of the federal decision in 1991 to replace an archaic federal manufacturers' sales tax with the GST, a fairly standard invoice-credit destination-basis consumption VAT. This sparkling new tax quickly ran into heavy political and popular opposition, however, not least because of its implications for provincial finances, which depended heavily on (uncoordinated) RSTs (Bird 1994).

Such problems were not unexpected. When the GST was first proposed the variant preferred by the federal government was a so-called "National Sales Tax" (NST) that would have been administered federally on a uniform base and at uniform rates, with the proceeds being divided between the federal and provincial governments and among the provincial governments in accordance with some formula. As noted above, this is essentially how the VAT works in Germany. Such a centralist solution was never likely to be acceptable in Canada; however, since the base and rates of the NST would have been set federally, the fact that some of the proceeds would have been paid to the provinces has no significance. The same results would be obtained if the NST were entirely federal and then, in a separate step, some or the entire amount thus collected were paid to the provinces in accordance with some formula. If the tax base, the tax rates, and the distributive formula were all to be determined by joint federal-provincial agreement, matters would

of course be different, as noted below in the discussion of the HST, which is essentially such a “joint” tax. But such agreements are not easy to reach in Canada, especially not with the larger and richer provinces.

The political cost and difficulty of arriving at such a joint tax design suggested an alternative approach to sales tax reform. Instead of trying to devise some form of “dual” (same base, different rates) or “joint” (same base and rates, with a formula-based distribution) form of NST, why not turn over the entire sales tax area to one level of government or the other? The most obvious way to go, as discussed in the previous Section, would be to follow the German model and turn the sales tax over to the federal government. In Canada, however, the Royal Commission on Taxation (1966) had earlier recommended that the federal government should turn over all sales taxes to the provinces. Even after the GST was introduced, Ip and Mintz (1992) argued that the federal GST should be replaced by appropriately augmented provincial (retail) sales and excise taxes both to reduce the administrative and compliance costs of taxation.

2.4.4. The experience of Brazil

The first country to introduce a full-fledged VAT was not France (which had indeed pioneered with this form of taxation but did not initially carry it through the retail stage). Perhaps surprisingly, that country was Brazil

(Guérard 1973). Indeed, Brazil liked the idea of a VAT so much that it introduced not one VAT but several—one for the federal government (the IPI) and one for each of the state governments (the ICMS).

The federal IPI was essentially a rather selective tax applied at various rates to manufactured goods. In 2000, the legislated standard rate of IPI was (in tax- inclusive terms) 17 percent, or 20.48 percent in tax-exclusive terms. The ICMS, although it too excluded many services, had a broader base and applied through the retail stage, but still fell far short of anyone's idea of a "good" VAT – for example, credits were severely limited and there was much cascading.

States can set their own rates on intrastate trade, subject to federally-determined floors and ceilings (and some interstate agreements). In 2000, for example, state VAT rates (tax- inclusive) varied from the "standard" (floor) rate of 17 percent to 25 percent.

It soon became clear that Brazil's enthusiastic adoption of VATs at two levels had resulted in a series of complex technical and administrative problems as to how to apply different VATs in different states in addition to a federal VAT. Over the years, these problems were in part resolved in various (and ultimately unsatisfactory) ways. For example, the overlap in taxes was reduced by confining the federal IPI essentially to the

manufacturing stage. In part, the problems were simply ignored, perhaps because the resulting distortions in resource allocation seemed unimportant compared to those resulting from inflation. And in part, issues were avoided by various unsatisfactory administrative fixes such as the introduction of some border controls between states

As Shome and Spahn (1996) stress, at present in Brazil the origin principle applies with respect to interstate trade. Moreover, there is no meaningful conceptual or administrative integration between the federal and state versions of the VAT. Brazil in a sense thus has the worst of both worlds. It has all the problems of dealing with cross border trade that have, for example, bedeviled the EU. In addition, it also has excessive compliance and administrative costs, tax exporting and tax competition- problems that are often alleged to be inevitable byproducts of such “dual” VAT systems

The traditional literature on tax assignment suggests that the best form of taxation for intermediate-level governments is a sales tax. Some form or another of sales tax does

2.4.5. Gabon

The VAT in Gabon is administered at the regional governments level.

- ✓ Tax Policy

The VAT introduced in Gabon in April 1995 (same date as Ghana) has a broad coverage, a single rate, few exemptions, a high threshold, and special procedures to expedite VAT refunds to exporters through the Tax Department.

- ✓ Tax Administration

The Gabonese authorities made a strong commitment to implementing the VAT, two years before its introduction. They benefited from two years of technical assistance from France and the IMF. Before the introduction of the VAT, the authorities gradually implemented a strategy that included: (1) a reliable taxpayer identification number system; (2) a pilot large taxpayers unit to monitor registration, collection, audit, and enforcement; and (3) a basic computerized tax system to detect, control, and enforce late filers and stop filers.

- ✓ Results

- ✓ *Compliance is high:* Eight hundred VAT payers have been registered with a threshold of more than US\$1 million. Since the implementation of the VAT, all receipts and notices have been issued by computer. Eighty percent of returns are filed on time and 87 percent after the first notice.

- ✓ *VAT was a money maker:* During its first year of implementation (April 1995-March 1996), the VAT revenue has been 45 percent greater than the revenue from the taxes it replaced. In 1995, for the first six months of its implementation, the VAT accounted for about 32 percent of the total non-oil revenue and 5.5 percent of the non-oil GDP.
- ✓ *Tax reform and Statistics:* In Gabon, most of the fiscal data are available from computer analyses provided by the Tax, Customs and Treasury Departments on a regular and reliable basis.

2.4.6. The pacific Island countries (PICs) experiences

According to Grandcolas (2004), at least ten implications can be drawn from the country experiences. A successful VAT requires:

- A committed Government to implement the VAT (and not to repeal it);
- A well designed VAT implementation time-table;
- A well designed VAT law with few exemptions, no zero rating of domestic consumption, and an adequate threshold to limit the number of taxpayers to the capacity of the tax administration;
- A well-designed organization, client-oriented, to administer the VAT and large taxpayers;
- A close cooperation (and not rivalry) between the revenue administrations (with single Tax Identification Numbering system);

- A well trained tax administration;
- A comprehensive public education campaign;
- An effective refunds mechanisms;
- A strong and computerized compliance enforcement mechanism with an adequate penalty system; and
- An effective audit program.

Of course it goes without saying that no tax reform is possible if the country concerned does not enjoy stable economic conditions.

As indicated above, experience has shown that a successful introduction of a VAT requires careful planning over a period of about two or three years. Resources need to be devoted to preparing appropriate legislation, developing administrative procedures, training staff, registering taxpayers, and educating both taxpayers and the public in the operation of the new tax. Part of the reason why it takes so long, is that the VAT acts as a tool to modernize the administration. The fact is that the VAT is a very effective revenue generating instrument, both in developed countries and in the PICs. It imposes a discipline on both tax collectors and taxpayers that is unparalleled in other tax instruments.

2.4.7. India

Over the last few years, many attempts have been made to implement VAT in India. Initially, all states were to move to VAT system by 2000, but administrative problems and concern over the revenue implications

of the change delayed the scheduled implementation. It has been postponed for five times in past five years. In fact, introduction of a full fledged VAT in India seem to present numerous administrative and constitutional difficulties, including the vexed question of union-state relations. In addition to this, implementing VAT in India in context of economic reforms has paradoxical dimensions. On one hand economic reforms have led to more decentralization of expenditure responsibilities which in turn demands more decentralization of revenue raising powers if fiscal accountability is to be maintained. But on the other hand the process of implementation of VAT can lead not only to revenue loss for the states but can also steal away the states' autonomy indicating more centralization. Thus the need is to develop such a 'federal friendly model' of VAT (along with a suitable compensation package) that can be implemented in India without compromising federal principles. (Sharma, 2004)

A wide study of the experiences of different countries with VAT across the globe shows that there can be different models of VAT depending upon the circumstances prevailing in each country. Theoretically speaking VAT is mainly of two kinds viz national and sub-national VAT but there are some hybrid types as well. In this section the federal constraints in implementing two models namely; the national vat and sub-national vat;

The National Model

The Tax Reform Committee (1992) chaired by Raja J. Chelliah suggested the conventional model of vat (National VAT) for India. This was seen as an arrangement that will reduce administrative and compliance costs. Conventionally, National VAT is considered as an ideal form of VAT. It has been argued that VAT operates more successfully as a national VAT (McLure 1993; Tait 1988). Norregaard (1997) states that the requirements needed to operate VAT are generally best met by the central government. For instance the extensive administrative capability required to manage vat is at best a function of the central government. Similarly the need to make VAT neutral with respect to the spatial allocation of production and consumption and the need to exercise extensive border control between jurisdictions strengthens the belief that it is appropriate to assign value added taxes to the central government. Tax Reforms Committee (TRC) concluded that the ideal solution to India's sales tax.

Problems of Implementing VAT in India would be a single VAT to replace not only the present federal sales tax (the Union excise) but also the state sales taxes (which are, for the most part, imposed at the production level), with the revenue being shared between the levels of government.

In fact, a single 'National VAT' is of distinct advantage even if all/or some of the proceeds of the tax are to be distributed to the states, either on the

basis of estimated consumption or on some formula basis. This approach of intergovernmental transfer may be the best approach to finance sub-central levels of governments. While the total to be transferred is fixed as designated share of VAT collections, the amount to be allocated to each state is determined by a formula laid down by the central government. This model is in operation in Germany. TRC thus recommended a “German solution.” But it is to be kept in mind that even in Germany the federal issues were not easily resolved and the formula of revenue sharing with sub-national levels could not be implemented without considerable disagreement.

In Indian case, strong regional governments (in the era of coalition politics and regionalization of national politics), will make it extremely difficult either to enforce a centrally determined formula or even to arrive at mutually agreed tax-sharing formula. The regional governments may also oppose the said arrangement because they will not be ready to lose control over jobs that will become inevitable under single administration of national VAT. The governments will also grudge the loss of revenue due to loss of power over sales tax, which is the only major source of revenue for sub-national governments.

Thus federal issues may stand in the way of smooth switchover to a central VAT in India. As Tait (1988) argues, “(The) system can not work

in a federal system where the states try to retain more discretion over their own exemptions, rates and revenues.” Thus the successful implementation of VAT (esp. the conventional model) in a federal country lacks theoretical backing. In fact Tait (1988) concluded in his study that in a federal system the workability of vat was uncertain.

The Sub-national Model

It has been argued that the conventional/national model of vat is the most popular and workable model; (Supported by the fact that even some of the federal countries like Argentina, Austria, Germany and Mexico have chosen to adopt national model despite difficulties in resolving federal issues). However, in India where regional governments are quite strong (especially after regionalization of national politics) consensus among states is a precondition to introduce VAT and more so when it is apprehended that implementation of vat in context of economic reforms can create problems for finances of the regional governments in India.

This is the reason behind attempts in India to develop and implement model of VAT that will not compromise decentralization principles. Infact, McLure (2000), and Bird and Gendron (1998) discuss the problem of imposition of VAT at two levels of government and that of application of VAT to interstate trade within the same country. Bird (1999, 2000) argues that the conventional model of tax assignment is no longer viable because sub national governments are increasingly being asked to pick up a larger portion of social expenditures on health and education. As a

consequence the sub-national VAT is being considered in context of countries like India with important regional governments.

It has been argued that in India, sub-national vat would enable the regional governments to deal with the new expenditure responsibilities shifted to them especially after 1991. It is to be noted that Ip and Mintz (1992) in their sub national vat model recommended that the Federal government should turn over all sales taxes to the provinces to reduce the administrative and compliance costs of taxation and to give more revenue discretion to provinces and hence make them more responsible for financing more of their own spending on health or education. McLure (2000) also emphasizes the desirability of permitting state governments to set their own VAT rates. But in case of India sub national VAT would pose problem as to which state should receive revenues from VAT on imports and which should bear the burden of VAT refunds on exports. The difficulties associated with the levy of VAT at the sub-national level can be judged from the experience of Brazil. According to Norregaard, Brazil offers an example of VAT assignment system that is generally believed to have had detrimental effects on economic performance.

In fact international experience suggests that the developed and non federal countries have a better record of smooth transition to VAT. When VAT is sought to be implemented in a federal state, various problems

prop-up pertaining to federalism in general and fiscal federalism in particular.

Problems are more severe when the country where VAT is sought to be implemented is a developing country in addition to being federal. The difficulties associated with the levy of VAT at sub national level can be appreciated from the experience of Brazil (a developing federal economy). Shome and Spahn (1996); Silvani and dos Santos (1996); Serra and Afonso (1999) and Versano (2000) have shown in their studies that Brazil's enthusiastic adoption of VAT at two levels had resulted in complex administrative and technical problems that seemed insurmountable. Silvani and dos Santos (1996) have suggested a 'German solution' for Brazil]. Norregaard (1997) also affirms that Brazil's VAT assignment system had detrimental effects on economic performance. It is to be noted that sub national VAT arrangement is quite unpopular. Out of 130 countries implementing vat, the province of Québec in Canada, the state of Michigan in USA and Brazilian states are the only examples (of sub national vat) so far. Michigan's VAT being slated to be repealed by 2009 and Brazil being an unsuccessful case Quebec is the only successful experience.

Conventional literature supports implementing a sub national VAT on origin principle. Neumark (1963) states that, the only way in which sub

national units can effectively levy a VAT was on origin basis. But to avoid any distortion they have to levy VAT at uniform rates. This however involves a federal predicament because the above mentioned system can work only if sub national governments give up their fiscal autonomy. Thus it defeats the very purpose of the sub national VAT which is to preserve federal principle of sub national autonomy. Moreover, if a nationally uniform VAT is administered by sub national authorities and revenues shared on the basis of origin as in case of Russian Federation, then the same distortions would be created as in the case of non-uniform sub national origin based VATs (as revealed by Baer and etal, 1996). The theoretical debate about relevant merits and demerits of the two principles of origin and destination, clearly converge in favor of the destination principle (Lockwood et al. 1994 & 1995; Bovenberg 1994; Lopez-Garcia 1996; Genser 1996).

Different researches are conducted on decentralization of VAT administration and assignment of VAT revenue between sub national governments in both developed and developing countries. However in Ethiopia, studies including Teferra (2004), Yesegat (2008), and Bekure (2004) focus on the administration of VAT and VAT exemptions, VAT voluntary compliance and so on. None of this studies had taken the decentralization of VAT administration and assignment of VAT revenue as their main research agenda. Therefore, undertaking a research on this

issue expected would contribute a lot to the country in general and the tax system in particular.

Chapter three Research design

The preceding chapter attempted to examine the related literature on VAT revenue assignment and decentralization of its administration. Through the review of the literature the gap in knowledge in respect of the decentralization of VAT revenue and administration were identified and the need to conduct research was emphasized. This chapter tries to present the research design. Accordingly the first section presents the research objectives along with the specific research question. Section two discusses the research methodology.

3.1 *Research objectives and questions*

As indicated in the first chapter the objective of this paper is to assess the assignment of VAT revenue and decentralization of its administration to regional governments. Further, in order to address this general objective the following specific research questions were developed.

- What are the roles of assignment of VAT revenue and decentralization of VAT administration on the government's tax revenue?
- Is the assignment of VAT revenue to regional governments in line with the constitution?
- How much regional governments are capable to administer VAT?
- What are the impacts of decentralization of VAT administration on the VAT refund practices in Ethiopia?

- What are the impacts of decentralization of VAT administration on the VAT control and VAT fraud?
- What are the basic differences of the Ethiopian VAT from the international practice?

3.2 *Research methodology*

In order to address the above research objectives and hence question the appropriate research methods have to be adopted. The sections below hence examine respectively the philosophy of the different research methods and the choice of the appropriate research method for this study.

There are different approaches including quantitative, qualitative and mixed (cooper, 2006). As (cooper, 2006) stated, quantitative research method is used to precisely measure something and answer the questions related to how much, how often, how many, when and who. It is used when the sample size is large and the sample design is probability. Cooper (2006) in addition stated that qualitative research method is used when the focus of the research is to understand and interpret rather than describing, explaining, and predicting variables. It is also used when the sample size is small and selected using non probability or purposive sampling method. Qualitative research method aims to achieve an in depth understanding of a situation.

Mixed research method is the combination of two research methods: qualitative and quantitative methods (cooper, 2006). As cooper (2006) stated, most researchers recognize that qualitative method compensates for the weaknesses of quantitative methods and vice versa.

Looking at the research problems and the philosophy of the different research methods together triangulation method was adopted in this study. In this triangulation, both qualitative and quantitative methodologies were used to increase the perceived quality of the research.

To examine the assignment of VAT revenue and decentralization of administration and to identify the major problems both qualitative and quantitative research methods (mixed methods approach) were used.

Individual in-depth interview, administered face-to-face, was used to collect data from tax policy makers and tax administrators because to explore and analyze data from limited number of respondents. Both Open ended and closed ended (semi structured) questions were included in the interview to let respondents express their understanding freely.

The sampling method used was purposive sampling and the sample size was limited to only 20 because the respondents were selected purposively to be higher level tax administrators and policy makers those believed to have better understanding of VAT. From the total sample size, 10

respondents were selected from tax administrators in ERCA and 7 respondents were selected from tax administrators in Addis Ababa city administration tax office and the remaining 3 respondents were from tax policy makers working in ministry of finance and economic development. To supplement the data obtained through interview, the constitution and different publications of government offices including, media reports, web resources and other researches made on the area were examined. The relevant statistics referring VAT were assessed. The analysis methods used were relative descriptions.

Based on this analysis method adopted the data obtained through interview and from publications, books and web resources are thoroughly analyzed. The outcome of the analysis is presented in the next chapter.

Chapter four Results and discussions

In the previous chapter, the methodologies used for conducting this study were briefly discussed. Based on the data collection method selected for the study, the data were collected from tax administrators and policy makers in addition to secondary data taken from publications, books, and web resources. This section presents and analyzes the data obtained through interview and from examination of documents including publications, books, and websites. The first part of this section presents the results of the study pertaining to the interview with tax officials and policy makers and then documentary analysis.

4.1. The outcome of the interview

This section analyses the data obtained through face to face interview with tax officials and policy makers. The interview participants are tax policy advisors working in ministry of finance and economic development, revenue planning and execution officers, VAT advisors, and tax administrators working in ministry of revenue and custom authority and tax administrators working in Addis Ababa city administration. The educational background of most of these respondents is Bachelors.

4.1.1. Assignment of VAT revenue

Article 97 of the constitution of the Federal Democratic Republic of Ethiopia (FDRE) classifies the taxing power of regional and federal governments. It proclaims States shall levy and collect profit and sales taxes on individual traders carrying out a business within their territory and Article 98 in addition states concurrent power of taxation for regional and federal governments. It states that the Federal Government and the States shall jointly levy and collect profit, sales, excise and personal income taxes on enterprises they jointly establish. In addition to these articles of the constitution, Article 99 stated that the House of the Federation and the House of Peoples' Representatives shall, in a joint session, determine by a two-thirds majority vote on the exercise of powers of taxation that have not been specifically provided for in the Constitution. According to the discussion with tax officials, the VAT assignment to regional governments in Ethiopia appeared to be based on article 99 of the constitution.

According to the discussion with tax officials, 20 percent of the respondents stated that the assignment of VAT revenue reduces the federal government's revenue. However, 60 percent of the respondents said that the assignment of VAT revenue does not affect the federal

governments' budget because the assignment of revenue was present in the case of sales tax and then the VAT that replace the sales tax is also assigned to regions. The assignment of VAT revenue was assigned to regions even at the time when VAT was administered centrally.

Assignment of tax revenue to regional governments may create distortions like economic imbalance between regions, revenue loss for the federal government and other obstacle in the intergovernmental relations. According to the discussion with tax officials, the problem of economic imbalance between regions due to the assignment of VAT revenue to regional governments is solved. As they respond the budget prepared by the federation council takes into consideration not only the expenditure assignment but also the regional difference in population size, and socio-economic situation of regions; and there is a balancing grant from the federal government. According to the discussion with tax administrators and Policy makers, vertical imbalance is one basic problem. The regional governments' expenditures are mostly higher than the revenue they have. This may increase the government's budget deficit.

The assignment of VAT revenue to regional government may create unnecessary competition between state governments. This competition in turn may affect the intergovernmental trade relation. According to the

interview with the tax officials, the assignment of VAT revenue to regional government is done in the way that avoid unnecessary intergovernment competition because the assignment of VAT is uniform to all states and regional governments have no authority to set their own VAT rate and VAT threshold. This avoids the possibility of competition between state governments.

4.1.2. Decentralization of VAT administration

The administration of VAT in Ethiopia was centralized at the federal level. Both federal and regional VATs were administered by the federal government. The Federal Inland Revenue Authority (FIRA) which is now merged with the Ethiopian Custom Authority (ECA) and organized as Ethiopian Revenue and Custom Authority (ERCA) was responsible to administer VAT. In addition, there was a VAT department organized to administer solely VAT which is now ceased due to Business Process Re-engineering (BPR) the government has been taking. The VAT collected by Ethiopian Inland Revenue Authority was shared between federal government and regional governments according to the VAT revenue assignment determined in advance. However, starting from the year 2004, it is partly decentralized to regional governments. It is to let regional governments administer their own revenue and reduce administrative and compliance costs. According to the discussion with the tax officials, the regions that are given authority to administer their

own VAT are only Addis Ababa and Oromiya (table 4.1). This is because, according to the interview participants, these regional governments are believed capable to administer their own VAT. Of course, according to respondents, there was no extensive study taken to assess the impact of decentralizing VAT to regional governments.

According to the interview with tax administrators, the decentralization of VAT administration follows the revenue assignment. As discussed earlier, the VAT collected from the sole proprietors and 30% of VAT collected from PLCs and share companies located in the region are revenues of regional governments and 70% of VAT from PLCs and share companies is revenue for federal government and the decentralization of VAT administration to regional governments is done accordingly. Regional governments (Addis Ababa and Oromiya) are responsible to administer their own VAT from sole proprietors. Regional governments have no right to collect federal government's VAT unless they are assigned the responsibility to administer the tax. According to the discussion with tax officials, this delegation of authority empower regional governments only to register, collect and refund (if the VAT payer can not refund itself from the output VAT it collect from customers) the excess input VAT from and to sole proprietors located in their region. The authority to set the VAT threshold, the VAT rate, the VAT refund period and other salient features is still on the hand of the

federal government. From this one can understand that the delegation of VAT administration authority to regional governments is limited to only registering and collecting VAT revenue and making refunds (ERCA working paper, 2004). This makes the accountability of regional governments' limited.

Other measure taken by the federal government of Ethiopia to give the VAT administration power to regional governments is assessing the power of regional governments. Administration of VAT is not delegated to all regional governments. Still the VAT of some regions, those that are believed incapable, is administered by federal governments. These regions are Amhara region, Afar region, Somalia region, Tigray region, south people nation and nationalities, Harare region and Dire Dawa (table 4.1). This regional VAT collected by the federal government is remitted to the respective region on monthly basis.

About 75 percent of the respondents said that decentralization of VAT administration reduces the VAT fraud because the regional government can easily control the regional VAT registered businesses than the federal government. On the other side, 25 percent of the respondents stated that decentralization of VAT administration increases VAT fraud. As per the respondents the regional governments have weak administration as compared to the federal government. It seems like to mean centralized

VAT administration is better than decentralized administration to control VAT fraud by VAT payers.

Decentralization of VAT administration has many advantages if it is done in the situation where there are capable regional governments. The capability of regional government could be assessed based on the number of skilled man power, the technology, and the level of infrastructures used for the administration of VAT. In Ethiopia, it appeared to be less number of skilled man powers, less technology and infrastructures; and this will limit the capability of regional governments to administer VAT effectively. The administration tasks mainly controlling, auditing and refunding will be limited because facilitating these activities needs sophisticated technology. In addition, incompatible number of tax administrators and tax payers decrease the voluntary compliance and increase VAT fraud.

Internationally noted problems of decentralization include relatively weak administration of local governments, increased corruption, and low capacity of local governments and reduction of voluntary compliance, conflict of interest between central and local governments (Bahl and Linn, 1983).

According to the interview with tax administrators and policy makers, there is weak administration in regions as compared to the federal government's administration. Most respondents believe that it is because regional governments have less number of tax officials, poor technology and inadequate infrastructures. This may create a reduction in voluntary compliance.

Another problem that makes decentralization of VAT administration complex is the problem of re-funding. Of course, Refunding is straightforward in principle; however serious problems arise in practice, including opportunities for fraud and corruption, and denial of refunds by governments with cash shortages. This makes the refund process the "Achilles heel" of the VAT.

Further, as shown in the literature review, Grandcolas (2005) and Jantscher (1990) noted that managing VAT refunds is one of the challenges of VAT administrations in developing countries. A refund in relation to exports is one of the most problematic features of the VAT in developing countries because the magnitude of the refunds can be substantial and fraud (e.g. overstatement of exports, falsification of invoices, production and purchase records, and underreporting of sales) is at times used to support claims of excess discretionary credit to be refund. As discussed in the literature review, unlike developed countries,

refunding in developing countries takes much time. The prevalence of fraudulent claims is often cited by tax officials as a major reason for delaying payment of refunds. On the side of the government, less advanced tax administrations which are time-consuming and labor-intensive processes to verify claims before approving refunds is cited as a major problem for delaying payment of refunds.

The decentralized administration to regional governments creates over VAT claim. 10 percent of the respondents replied it is because of cross transaction between two regional governments (table 4.1). For example if one VAT registered sole proprietor reside in Addis Ababa purchase commodities from another VAT registered sole proprietor that reside in Oromiya; since the purchase price include 15 percent VAT, the purchaser will pay VAT to the seller in turn the seller will pay the VAT to Oromiya regional government tax office. However, the purchaser claims an input VAT credit from Addis Ababa regional government tax office. Therefore Addis Ababa regional government will be asked to pay the VAT which is paid to Oromiya Regional government. This distortion is because of decentralization of VAT administration. On the other side, 60 percent of respondents replied that over claim of input VAT credit is because of timing problem between when VAT payers claim for refund and the time they collect VAT on sale of their stock. Respondents believe that even though the claim of input VAT is higher in one period, that government

will collect the VAT when the customers' stock has been sold entirely. They further stated that the problem has occurred because most VAT registered sole proprietors claim input VAT credit as soon as they purchase the commodities. To solve this problem, the government does not refund the money from its revenue rather VAT payers (except exporters) can refund themselves in five consecutive fiscal years from the output VAT they collect from consumers as the stock is sold. From this one may understand that the tax officials have no common ground on the issue. This further may indicate the problems in administration.

According to the discussion with tax officials, the rationale of the carry-forward scheme is that, for a non-exporting business, an excess VAT credit in one tax period should normally be followed by periods where net VAT liabilities are sufficient to absorb the credit brought forward.

In Ethiopia there are not enough number of tax schools to train the staffs selected to monitor and audit VAT. There are no free seminars, workshops and conferences for enterprises and accountants. These may decrease the revenue of the government due to poor administration of untrained tax officials; and poor level of compliance due to lack of awareness of tax payers.

In India VAT is implemented without taking in to consideration the decentralization principles. A wide study of the experiences of different countries with VAT across the globe shows that there can be different models of VAT depending upon the circumstances prevailing in each country. This can satisfy the needs of both parts of the government.

According to the interview with tax officials, since ERCA is working together with consultants from International Monetary Fund (IMF), the design feature of VAT is appeared to be a copy of other country having different socio-economic situation. This may again create distortions in the tax system when implemented in a country that has different socio-economic culture. In fear of this some of the federal countries like Argentina, Austria, Germany and Mexico have chosen to adopt national model despite difficulties in resolving federal issues (Grandcolas, 2005).

Table 4.1. Interview results with twenty tax officials and policy makers

Questions	Responses	Number of respondents	Percentage
What is the base to assign VAT revenue to regional governments?	Assignment of VAT revenue is done by federation council	15	75%
	Assignment of VAT revenue is constitutional	3	15%
	Neutral	2	10%
Is assignment of VAT revenue create regional economic imbalance	Yes	12	60%
	No	0	-
	Neutral	8	40%
Do regional governments capable to administer VAT?	Not all Regional governments are capable to administer VAT. Only Oromiya and Addis Ababa are given the right to administer VAT	9	45%
	Regional governments are not capable to administer VAT	8	40%
	Neutral	3	15%
Decentralization of VAT administration causes over VAT claim	Yes	2	10%
	No	12	60%
	Neutral	6	30%
What is the reason for over VAT claim	Cross transaction between regions	2	10%
	VAT payers claim VAT refund as they maintain material stock.	12	60%
	I don't know	6	30%
What are the effect of decentralization on VAT fraud	Decentralization reduce VAT fraud because regional governments can nearly control VAT payers	15	75%
	Decentralization increases VAT fraud because relative to the federal government, regional governments have weak control	5	25%
	Neutral	0	-
Assignment of VAT revenue reduce federal governments revenue	Yes	4	20%
	No	12	60%
	Neutral	4	20%

Source: interview with tax officials

4.2. The result of documentary analysis

In addition to the data revealed through the in-depth interviews with tax officials and policy makers the project tried to assess the role of VAT in terms of generating revenue for the regional, federal governments and the nation as a whole

Table 4.2. VAT revenue as percentage of total indirect tax, total tax revenue and total domestic revenue (in million Ethiopian Birr (ETB))

Year	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00	2000
TVAT*	–	–	372.26	1220.70	1542.80	1819.85	2390.31	3243.37
TIT*	1135.24	1249.12	1406.45	1820.31	2167.01	2533.34	3155.63	4224.21
TTR*	2660.07	3072.26	3026.81	3350.84	3850.76	4590.16	5804.94	8009.59
VAT/TIT*	–	–	26.5%	67.1%	71.2%	71.84%	75.75%	76.78%
VAT/TTR*	–	–	12.3%	36.43%	40.06%	39.65%	41.18%	40.49%

Source: MOFED Annual report, 2008/09

The total VAT revenue is divided by the total indirect taxes to calculate for the percentage share of VAT from the total indirect taxes. In addition the total VAT revenue is divided by the total tax revenue which is the sum of direct taxes total and indirect taxes total to calculate for percentage share of VAT to the total tax.

As indicated in table 4.2 above, the revenue obtained from Value Added Tax is increasing from year after year. This may be due to different factors. According to the discussion with tax officials, there are different

factors that may contribute to an increase in VAT revenue. These may be due to an increase in the number of VAT payers or may be because the good administration of the tax authority and it may also be due to forced registration of different business sectors with out considering the threshold of 500,000 ETB.

The VAT revenue share from the total indirect taxes is higher and increasing year after year. The percentage share of VAT from total indirect taxes and from total tax revenue has reached 76.78 percent and 40.49 percent respectively. From this one can understand that, VAT is a good money maker and has a significant contribution to the government budget.

Table 4.3. VAT revenue as percentage of GDP (In million)

Year	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00
TVAT*	-	-	372.26	1220.70	1542.80	1819.85	2390.31
GDP*	68026.8	66556.6	73432.2	86661.0	106472.8	131671.7	170921.4
VAT/GD P	-	-	0.51%	1.41%	1.45%	1.38%	1.40%

Source: MOFED Annual report, 2008/09

The total VAT revenue is divided by the country's Gross Domestic Product (GDP) to assess the significance of VAT with relate in to GDP.

Table 4.3 shows the VAT revenue level and its share of the gross domestic product (GDP) of the country. The percentage share of VAT revenue to the country's GDP has reached 1.4 percent which is very less as compared to the average VAT/GDP ratio of European countries of 6.55 percent.

Table 4.4. No. of VAT payers

Year	1993/ 94	1994/9	1995/9	1996/97	1997/98	1998/99	1999/00	2000
VAT Payers	-	-	4686	10307	17223	22146	28993	31214
%age increase	-	-	-	120%		67.1%	30.92%	7.66%

Source: ERCA, revenue department statistical bulletin, 1998 E.C

Table 4.4 shows that the number of tax payers is increasing. This may be because that decentralized administration brings many VAT payers to the VAT net and may be because the government forced some business sectors to register for VAT even though their annual turnover is under the determined threshold of 500,000 Br. According to the interview with tax administrators, the government has forced some businesses, including gold jewelry shops and car spare part shops, to register for VAT. This is one reason behind an increase in the number of VAT payers.

One advantage that most respondents stated is that decentralization can reduce the administrative and compliance costs and increased efficiency as government move closer to the tax payers. In decentralized tax administration, tax officials can easily train and create awareness in the tax payers; and can easily register tax payers, collect and refund. As respondents state the decentralization also reduces the VAT fraud because of easy to control nearby tax payers.

Chapter five Conclusions and recommendations

The Ethiopian government is in process of to decentralize the VAT administration to all regional governments. In doing so the federal government is still responsible to give support to regional governments. The regional governments' capacity must be built in terms of human power, infrastructures and technology. Tax administrators of regional governments should be well trained. There must be a strong central ability to monitor and evaluate decentralization.

The decentralization of VAT administration to regional governments with out provision of significant taxing power may not be efficient. When significant taxing power is delegated to regional government, their accountability to finance their own expenditure would be increased. This taxing power includes the autonomy to set their own VAT threshold, determining the tax rate and identifying items to be taxed. Fiscal decentralization requires significant local government taxing powers because the main objective of decentralizing VAT administration to sub national governments is to increase accountability of regional governments. Therefore, regional governments should be given full autonomy to set their own tax base, tax rate and others to increase their own revenue and to make them accountable for.

One problem in VAT administration is the challenge to refund the input VAT credit. Fraudulent claims in one side and less advanced administration on the other make the refunding difficult. Therefore the government is strongly advised to create awareness to VAT payers how to maintain accounting records because the fraudulent claims may be due to lack of knowledge of VAT payers. On the other hand, the tax administration offices should be computerized rather than manual operation because manual operating system reduces efficiency of tax administrators.

On the other side, weak administration of local governments, increased corruption, and low capacity of local governments and reduction of voluntary compliance, are problems related to the decentralization of tax administration, Bahl and Linn (1983). To avoid these and other problems fiscal decentralization should be viewed as a comprehensive system; there must be a strong central ability to monitor and evaluate decentralization and significant local government taxing powers. Therefore the government should create an environment that every one to understand fiscal decentralization as a system that bring economic development to the country rather than ignoring the success and failure of regional tax administration to regions.

VAT is one type of tax that is highly depending on voluntary compliance. Therefore, to improve the voluntary compliance of businesses, importers and exporters, free workshops, seminars and conferences should be prepared to increase tax payers' awareness. In addition to this, tax payers should be given better and fast service during registration, audit and refunding. Tax payers should be assisted to maintain necessary documents for VAT assessment. To cope up with this responsibility, the tax system of regional governments should be improved in terms of man power, infrastructures, and technology.

Assignment of VAT revenue between regional governments should take the expenditure assignment in to account. The expenditure assigned to sub national governments should not outweigh the revenue assigned. The two types of problems that are related to assignment of VAT revenue are vertical imbalance and horizontal imbalances. Of course, in Ethiopia the horizontal imbalance is resolved by the budget formula of the federation council. However the vertical imbalance is a basic problem for the Ethiopian VAT system. This problem can be resolved by letting regional governments to set their own tax base and tax rate. Therefore regional governments can raise the revenue level that can cover their expenditure and vertical imbalance could be resolved. Local residents are likely to hold officials more accountable if local public services are financed to a significant extent from locally imposed taxes. These are the

research outcomes and related recommendations. In addition to the analysis of the assignment of VAT revenue and decentralization of VAT administration to regional governments, the economic impact of VAT revenue assignment and decentralization of its administration needs further assessment and is a way forward for future research undertakings.

References

- Baer, K., V. P. Summers, and E.M. Sunley (1996) "*A Destination VAT for CIS Trade*," MOCT- MOST, Economic Policy in Transitional Countries, 6: 87-106.
- Bahl, R. (1999), '*Implementation Rules For Fiscal Decentralization*', paper presented at the International Seminar on Land Policy and Economic Development, Land Reform Training Institute, Nov 17.
- Bahl, R. and R.M. Bird (2008), '*Sub national Taxes in Developing Countries: The Way Forward*', Georgia State University
- Bahl and Linn (1983), "*The Assignment of Local Government Revenues in Developing Countries*," Australian National University.
- Bird, R.M (2000), "*Sub national Taxes: Potentials and Problems*," paper presented at the Annual World Bank Conference on Development in Latin America and the Caribbean, Washington.
- Bird (1999), '*Rethinking VAT assignment: the need of better sub national taxes*', IMF, Washington.
- Bird, R.M (2003), '*Administrative Dimensions of Tax Reform*', University of Toronto, Canada
- Bird, R.M and P.P Gendron, 1998, "*Dual VATs and Cross Border Trade: Two Problems, One Solution*," University of Toronto, International Center for Tax Studies.

- Bird and Gendron, (2001), *‘the VAT in Developing and Transitional Countries*, New York: Cambridge University Press).
- Bovenberg, L. (1994) "*Destination and Origin-based Taxation under International Capital Mobility*", *International Tax and Public Finance*, 1: 247-73.
- Grandcolas, C. (2004), "*VAT in the Pacific Islands*", *Asia Pacific Tax Bulletin*.
- Grandcolas, C. (2005), *‘The occasional failure in VAT implementation: Lessons for the Pacific’* *Asia-Pacific Tax Bulletin*, 11(1): 6-13.
- McLure, Charles (2000) "*Implementing Sub national VATs on Internal Trade: The Compensating VAT (CVAT)*," *International Tax and Public Finance*, 7: 723-40.
- Commission of the European Communities (1996): *A Common System of VAT: A Programme for the Single Market* (Brussels).
- Ebrill, L. (2001), *the modern VAT*, international monetary fund, Washington.
- Graham Harrison and Russell Krelove, 2005, *‘VAT Refunds: A Review of Country Experience’*,
- Guérard M. (1973), "*The Brazilian State Value-Added Tax*," *International Monetary Fund Staff Papers*, 20: 118-69.
- Ip, I. and J. Mintz (1992): *‘Dividing the Spoils: The Federal-Provincial Allocation of Taxing Powers’*, (Toronto: C.D. Howe Institute).

Jantscher, M. Casanegra de 1990, 'Administering the VAT' in M. Gillis, Shoup C.S. and G.P. Sicat 'Value Added Taxation in Developing Countries', World Bank, Washington DC.

Keen, M. and S. Smith 1996, 'VIVAT: An alternative VAT for the EU' *Economic Policy*, Oct 96: 375-420.

López-García, M. (1996) "The Origin Principle and the Welfare Gains from Indirect Tax Harmonization," *International Tax and Public Finance*, 3: 83-93

Lockwood, B., D. de Meza, and G. Myles (1994) "The Equivalence between the Destination and Nonreciprocal Restricted Origin Tax Regimes," *Scandinavian Journal of Economics*, 96: 311-28.

Lockwood, B., D. de Meza, and G. Myles (1995) "On the European Union VAT Proposals: The Superiority of Origin over Destination Taxation," *Fiscal Studies*, 16: 1-17.

McLure, C.E. (1993) "The Brazilian Tax Assignment Problem: Ends, Means, and Constraints," *National Tax Journal*, 50: 731-49.

Norregaard (1997): 'Fiscal Federalism in Theory and Practice,' International Monetary Fund, Washington, DC, pp 65-66.

Neumark Report (1963) "Report of the Fiscal and Financial Committee," in the EEC Reports on Tax Harmonization

OECD 1999, 'Centre for Tax Policy and Administration Tax Administration in OECD Countries; Comparative Information Series', Paris.

- Oates 1972 '*An essay on fiscal federalism*', Journal of Economic Literature 37(3): 1120–1149.
- OECD, 2006 '*Committee on Fiscal Affairs Report on the Use of Simplified Registration Systems*,' DAFFE/CF (2003)43/ANN4, July.
- Sharma, 2004 '*fiscal decentralization and sub national fiscal autonomy in India*,', National Institute of Public Finance and Policy, New Delhi
- Shome, P. and B. Spahn (1996) "*Brazil: Fiscal Federalism and Value Added Tax Reform*," Working Paper No. 11, National Institute of Public Finance and Policy, New Delhi
- Silvani, C. and P. dos Santos (1996) "*Administrative Aspects of Brazil's Consumption Tax Reform*," International VAT Monitor,7:
- Serra, J. and J. Afonso (1999) "*Fiscal Federalism Brazilian Style: Some Reflections*," Paper presented to Forum of Federations, Mont Tremblant, Canada, October 1999.
- Tait, A.A, (1988), '*Value Added Tax: International Practice and Problems*', Washington: International Monetary Fund
- The Tax Reform Committee (1992) '*Final Report-Part I*, New Delhi; Ministry of Finance, Department of Revenue
- Versano, (2000), '*Sub national Taxation and Treatment of Interstate Trade in Brazil: Problems and a Proposed Solution*', Annual World Bank Conference on Development in Latin America and the Caribbean, Washington DC.

Yesegat, W A (2008) '*Value Added Tax Administration in Ethiopia: A Reflection of Problems*', Paper presented at the *20th Annual ATTA Conference* held in January 2008 at University of Tasmania, Hobart