Value Added Tax-Theoretical Aspects and Empirical Evidence for Pakistan
Qamruz Zaman*, Okasha**, Muhammad Iqbal***

Abstract
Consumption based, value added tax (VAT) has been praised for years for its ability to generate revenues. Organizations and authorities claimed it to be an effective form of taxation. But their claim was based on assessment of mere developed economies and its implementation in developing/underdeveloped economies was overlooked. Consequently, this paper is aimed at analyzing the impact of VAT when enforced in an underdeveloped country such as Pakistan. Using household survey data, the paper tries to grasp the effect this tax would have on social and economic life of the populace. Results suggested that VAT would disturb economic order of the society and hence the concept was inappropriate in current state of affairs.

Keywords: Value added, Tax reform, Inflation, Developing economy, Pakistan

Introduction
Tax revenue, all over the world plays a major role in development of an economy. It is important as it helps financing expenditure part of national budget. Tax imposition and its collection, mostly depends upon a country’s economic structure, its phase of development, extent to which the country has been industrialized, growth of its service sector, contribution of agriculture in its GDP, employment level along with diversity in work force and amount of wages and salaries.

However, tax enforcement and its collection is based on the efficiency of tax administration that greatly depends upon government system and its policies, principally its monetary and fiscal policies, legal framework, transparency of its processes, use of information technology,

* Qamruz Zaman, Department of Statistics, University of Peshawar. Email: ayanqamar@gmail.com
** Okasha, Institute of Management Studies, University of Peshawar
*** Dr. Muhammad Iqbal, Department of Statistics, University of Peshawar
cooperation of stakeholders, essentially the taxpayers, as well as the personnel of the tax department.

Pakistan has an advanced taxation system, including an legislative framework and an administrative body. Its tax system is based on two pillars, Direct and Indirect mode of taxation. Customs, Sales and federal excise tax are all key components of indirect taxation. By introducing Value Added Tax (VAT) into the system all such indirect taxes would be collected by this mechanism.

VAT is basically a multiple stage tax. According to which, a person has to pay tax at every stage of production and distribution. Hence, tax would be charged at every step of value addition. Since, the tax is charged on commodities purchased for consumption, it is therefore a consumption tax.

From a buyer’s viewpoint, it is a tax charged on purchase price while from a seller’s perspective; it is levied on value addition made to any product, service or material at a particular stage in the supply chain. The difference between the two amounts is paid to the government and the remainder is kept by the producer to makeup the changes they have incurred in purchasing inputs.

VAT is similar to sales tax in the manner that it is charged only on end consumer. However, it differs in the aspect that sales tax is only collected when the product is purchased by final consumer while in case of VAT; taxes are paid each time a purchase is made in the supply chain.

Though the concept of VAT was initially perceived in the early 1950s in France and Japan, yet it was implemented for the first time in 1960s in Brazil. In case of European Union, its history for VAT implementation can be divided into two eras. The time duration before 1993, and that afterwards during the period of market integration, initiated after signing Maastricht Treaty.

Two value added tax directives were adopted in 1967. Later on, in 1997 another directive was made part of the system. Then, in 2009, recast tax directive was further introduced and it is effective till date.

A research aimed at determining standardization and differences among the various OECD countries was conducted. Findings revealed that USA was the only member state that did not have VAT implemented at Federal level. Further, the study showed that not only VAT applicable rates differ among the major states but there were certain prominent differences in its implementation. The deviations were mainly on account of goods and services exempted and those categorized as zero rated. Moreover, the countries differed in the way consumer essentials were treated, e.g. Food and healthcare in New Zealand are taxed at a rate of 12.5% while in UK, these are zero-rated.
In some instances, application of a single VAT rate becomes difficult within same country. Its enforcement poses problems among provinces and differences prevail. India has presented multiple issues in this aspect and after years of debates and considerations, she announced the commencement of VAT, at Union level from 2010.

Pakistan has a single central tax organization at federal level. Uniform rate is enforced all over the country and it is collected centrally. However, its redistribution is still an issue for our federation. Yet these are two different sides of the same coin and should be dealt with accordingly.

According to IMF, introduction of VAT in Pakistan is a practical proposition. But actually, whatever research they have conducted, it is done while considering the developed economies. No work has been done to understand its implementation in backward economies.

Since the time of its introduction, VAT has been praised for its effectiveness in raising revenues. Keen and Lockwood (2007) showed that more than 130 countries have adopted this simple form of indirect taxation. VAT has been claimed as a money machine as it helps in increasing tax revenues in the long run. However, when varying country circumstances were taken into account, it was found that high income and open economies gain more from this form of taxation. Therefore, it was suggested that while some countries would be at a benefit while others won’t gain by its adoption. Similarly, Chapter 1 from World Bank (2003) reviewed empirical researches on the prevalence of VAT and some additional implied taxes in certain African and Asian States. Majority of the studies reported that tax structures in those states were progressive since consumption commodities used by poor were zero-rated. However, it was highly regressive in case of India and Pakistan.

Gemmell and Morrissey (2005) conducted their research in developing countries and studied the impact of various forms of taxes and the underlying taxation structure on wealth distribution and poor. They reported that taxes on luxurious items including alcohol, cars, and beverages were progressive while those on exports or goods consumed by the poor were regressive. Moreover, sales tax was found to be less regressive than tax imposed on imports.

Moreover, Rodriguez et al. (2005) used Almost Ideal Demand System (AIDS) model to determine the benefits of VAT cut while considering cultural commodities and found gains to be regressive.

More recently, Newhouse and Zakharova (2007) studied the impact of VAT modification in Philippines and evaluated the various methods that were adopted to mitigate the expected consequences faced by poor households. Their survey revealed that as VAT was reformed,
real household consumption experienced reduction in both poor and high income households. Further, they revealed that poor relied more upon unrefined agricultural products for consumption as they were exempt from VAT. They also found that by lessening measures aimed at social protection, hostile effect of VAT reform could be reduced.

Salti and Chabaan (2010) studied the effect of increasing rate of VAT by targeting poverty and inequality in Lebanon. An empirical model “Almost Ideal Demand System” based on consumer theory of demand was established to study the impact. Simulation results showed that increased rate of VAT would have significant impact on poverty. Although the increased rate would have a negative impact on overall consumption, yet its effect on poor is greater compared to rich populaces.

**Key Features of VAT for Pakistan**

IMF requires Pakistan to replace general sales tax by VAT which would result in increasing prices up to 15%. Typically sales tax is imposed on goods only, while VAT encircles both goods and services.

In 1996, limited scope VAT was introduced into the country. However, the law was distorted because of the changes taking place in the revenue body, which ultimately led to its failure. The following are the key features of Value Added Tax proposed for Pakistan.

- It is a single rate tax (15%) applicable to all goods and services.
- Its collection mechanism should eradicate any cascading effects.

Replacing GST by VAT would increase cost of above 122 major classes of items, including food products. It has also been reported that 22 categories of food and agricultural products that are currently not subject to taxation would be taken up by VAT. From the 122 categories that were exempt from taxation, only 14 would be spared from VAT.

According to Pakistan VAT 2010 Act, only three classes of food items would be spared from tax. These involve:
  i). Unrefined peas, whole wheat and wheat flour.
  ii). Table salt along with iodized salt. However, it excludes those sold under trademarks or brand names.
  iii). Ice and waters with exceptions of those bearing trademarks or brand names.

Other items exempted under VAT include:
- Books, newspapers, journals and periodicals
- Ambulances and fire brigade trucks.
Tourists spared from custom duties.
Imports of goods considered zero rated.
Exports are also subject to VAT except for the bona fide baggage and personal wearing apparel, exported to overseas Pakistanis.

Medical equipment such as those meant for lenses and glucose testing, saline and dextrose infusion giving sets, diapers used for adult patients, artificial body parts and contraceptives are also not charged under VAT. Similarly, imports made by Gulf Sheikhdoms, diplomats and UN agencies would now be liable to pay taxes under VAT. Also, goods of transit trade with Afghans would be subject to VAT.

Analysis of Survey Statistics
In order to analyze the impact of value added taxation when enforced into the country, a survey was conducted. The section shows descriptive statistics for the survey. The research on VAT involved a sample of 350 respondents, out of which 200 were male and 150 were female, indicating 57% male and 43% female responses. About 47% of the respondents were single; responses from married subjects were also 47%, while remaining 6% replies were provided by divorced and widowed. Further information about education background is illustrated in table 1. Table indicates that 6% of the respondents were illiterate, 46% had attended university, 26% had attended college and the remaining 24% had studied up to primary and secondary level.

<table>
<thead>
<tr>
<th>Education level</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illiterate</td>
<td>22</td>
<td>6.3</td>
</tr>
<tr>
<td>primary</td>
<td>31</td>
<td>8.9</td>
</tr>
<tr>
<td>secondary</td>
<td>51</td>
<td>14.6</td>
</tr>
<tr>
<td>college</td>
<td>84</td>
<td>24.0</td>
</tr>
<tr>
<td>university</td>
<td>162</td>
<td>46.3</td>
</tr>
<tr>
<td>Total</td>
<td>350</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Out of 350 respondents, almost 13% were unemployed, 85% were employed and remaining 2% were retired. More than half of the respondents were having income.
Ranging below 16000, 24% were having income ranging below 12000, 16% up to 8000 and only 3% having less than 4000 Rs. as monthly income (Figure.1).

Out of 350 respondents, 59% were aware of value added taxation but 41% were had no knowledge about the concept. Survey also revealed that 42% of the respondents were aware of the difference between the two modes of taxation; 10% considered them equivalent while 48% of the sample had no idea about the difference. According to 32%, VAT is not preferable over GST; 9% think it is better form of tax while 59% respondents had no idea about it. 65% respondents said that VAT should not be imposed, 8% said it should be imposed while the remaining 27% were not having any idea about it. 20% of the sample believed that VAT will help in controlling tax evasion, 35% was of the view that VAT won’t be able to do so while rest of the 45% were had no idea about it. 64% people thought that VAT would be a cause of inflation, 13% believed it won’t result in increased prices while 22% were did not have any idea about it. Out of these 350 respondents 4% said that this new tax will have a very small impact on their lives, 6% said small impact, 26% claimed that the impact would be moderate, 21% said that it will have a large impact while 43% declared very large impact. When asked that whether increase in their income was proportionate to tax payment, only
1% replied to very large extent, 10% said to a large extent, 37% stated to a moderate extent, 27% said to a small extent and 25% revealed that it was fair enough to a very small extent. When asked that whether the increased taxes affect their need fulfillment, 17% replied that their need fulfillment is affected to a very large extent, 20% said to a large extent, 34% stated to a moderate extent, 18% answered to a small extent, while the remaining 11% spoke to a very small extent. 5% strongly disagreed with the fact that VAT will lower their living standard, 8% disagreed with the opinion, 26% remained neutral, 36% agreed to the notion, and 24% strongly agreed. 47% said that they would no longer be able to afford recreation, 20% said they would continue such activities, while 33% said they enjoy refreshment sometimes. According to table.2, 40% respondents said they have planned to spend less this year, 34% intend to follow same spending pattern as before, while 26% expect to spend more.

Table 2: Statistics indicating Respondents idea on curbing their spending

<table>
<thead>
<tr>
<th>You plan to spend more or less?</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I plan to spend less</td>
<td>139</td>
<td>39.7</td>
</tr>
<tr>
<td>I plan to spend the same</td>
<td>120</td>
<td>34.3</td>
</tr>
<tr>
<td>I plan to spend more</td>
<td>90</td>
<td>25.7</td>
</tr>
<tr>
<td>Total</td>
<td>349</td>
<td>99.7</td>
</tr>
<tr>
<td>Missing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>System</td>
<td>1</td>
<td>.3</td>
</tr>
<tr>
<td>Total</td>
<td>350</td>
<td>100.0</td>
</tr>
</tbody>
</table>

34% people replied that they have no idea about the impact of VAT on investments and national welfare, 45% held that VAT will further decrease national welfare and investment projects while 21% expect national welfare will increase. When asked whether VAT would have any effect on the sale of scrap and second hand goods, 56% respondents had no idea about it; 21% suspect that sale of these goods will be effected while remaining 21% disagreed (Figure.2).
Success and amount of revenue generated under VAT eventually depends upon the household income and upon the tax being regressive to the least possible extent. VAT cannot be made successful solely by tax managers; rather it chiefly depends upon the plans and policies along with the vision articulated by economic managers.

VAT is a mode of indirect taxation and is regressive. It neither replaces nor does it substitutes the direct tax; rather poses a challenge for
tax administrators and economists to lessen its subjugation, and encourage private consumption by making it consumer friendly.

For a country like Pakistan, enforcing VAT is not an appropriate idea. Our economy contains a blend of certain informal and undocumented components. The population is food insecure, economic growth rate is low, inflation rate is already high and employment opportunities are not even sufficient; all these have contributed to growing poverty in the country. Implementing VAT in such an environment would have a negative impact on the welfare of extremely poor, those belonging to middle class families and those living just above the poverty line.

Since, VAT would result in rising prices, lower middle class families risk dropping into poverty. Hence, VAT might be feasible for developed states but for underdeveloped nations like Pakistan, it is not a workable option.

It is therefore recommended that VAT should not be enforced unless appropriate measures aimed at poor and susceptible have been enacted and strategies to ease the vulnerable have been explored.
References


