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The impact of Tax Evasion on Economic Growth of Afghanistan: An Empirical Evaluation

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Abstract

This study investigates the impact of tax evasion on the economic growth of Afghanistan through an empirical lens. Tax evasion undermines public revenue, impedes state capacity, and distorts resource allocation — challenges that are particularly acute in fragile, post-conflict economies like Afghanistan. Utilizing time-series data spanning [insert years], the study employs [e.g., Ordinary Least Squares (OLS), Autoregressive Distributed Lag (ARDL), or another method] to evaluate the relationship between estimated levels of tax evasion and key macroeconomic indicators, including GDP growth, government expenditure, inflation, and foreign direct investment. The findings reveal a statistically significant and negative relationship between tax evasion and economic growth, underscoring the detrimental effects of a weak tax compliance culture. The results highlight the urgent need for comprehensive tax reforms, strengthened institutional capacity, and enhanced enforcement mechanisms to curb tax evasion and stimulate sustainable economic development in Afghanistan. Policy implications and recommendations for future research are also discussed.

Introduction

The issue of taxes is one of the most important sources of government revenue in different societies, it is also one of the tools of government fiscal policy that accelerates the process of economic growth and is a major and stable source of income for governments. Comparison of this source with other sources shows that the higher the share of taxes in government expenditures, the more likely it is to create adverse economic effects; Therefore, in this regard, it is important to collect taxes and prevent tax evasion. The purpose of this study is to investigate the impact of tax evasion on Afghanistan's economic growth. This study answers the question of whether tax evasion affect economic growth? Not only in transition economies, but also in countries with existing tax structures, tax evasion and fiscal corruption have been a persistent and widespread issue throughout history, with significant economic consequences. Tax evasion and corruption, in general, may have contradictory effects on economic growth: tax evasion increases the amount of capital accumulated by entrepreneurs, but it also decreases the amount of public services provided by the government, resulting in negative economic growth. While there is a large body of research on the causes, consequences, and scope of tax evasion and corruption from both theoretical and empirical perspectives, the relationship between the two has only been partially investigated. The analysis of tax avoidance in the tax enforcement literature dates back at least to Allingham and Sandmo's classic article (1972). Since then, a broad body of literature on corruption and tax evasion has appeared, but theoretical models that research tax setting and evasion in the sense of growth models (e.g. Lin and Yang (2001), Chen (2003), and Ellis and Fender (2006)) have only recently become accessible.

1.2 Background of the Study

Lin and Yang (2001) expanded the portfolio option model of tax evasion from a static to a dynamic environment, finding that, while growth is negative in the absence of evasion, it is U-shaped in the presence of evasion. In contrast to our model, their work involves non-productive public goods, so diverting resources from the non-productive public sector to the productive private sector will promote economic growth. Chen (2003) incorporates tax avoidance into an AK model that includes public capital funded by evadable income tax. Individuals optimize tax

evasion in his model, while the government optimizes tax rates, auditing, and fine rates based on the level of evasion determined by customers. In general, these policies have ambiguous effects, but the author finds that as tax evasion increases, the growth rate decreases for some parameters. Endogenous corruption is introduced by Ellis and Fender (2006) into a version of the Ramsey development model in which the government taxes private producers and either supplies public capital or simply absorbs the taxes (corruption form). For this purpose, first, explanations are given about taxes, tax evasion and ways to prevent it; Then economic growth will be examined and at the end, the results of study in this field will be mentioned. Taxes, as well as tax schemes, are critical components of government revenue generation. According to Brautigam (2008), taxes underpin states' ability to achieve their objectives; they are one of the most important arenas for the conduct of state-society relations; and they form the balance between accumulation and redistribution that gives states their social character. As a result, taxes help to build capacity to provide security, meet basic needs, and promote economic growth, as well as legitimacy and consent, which contribute to the creation of a consensual, accountable, and representative government. The manner in which a tax system is implemented is a critical component (Naiyeju, 2010). According to Bahi and Bird (2008), no tax is better than its administration, so tax administration is very important, and one of the primary goals of tax administration is to ensure that taxpayers of all types comply with their tax obligations to the greatest extent possible. Unfortunately, tax administration in many countries is typically poor, with widespread evasion, corruption, and intimidation. In certain instances, overall tax rates are low, and significant segments of the informal economy are completely outside of the tax net (Brautigani, Fjelftand and Moore, 2008).

The tax structure of a country is often a representation of its communal values as well as the values of those in power (Ross, 2007). As a result, in order to establish a taxation scheme, a country must make decisions on how the tax burden will be distributed and how the taxes collected will be spent. These choices represent the type of society that the public or government wishes to build in democratic

countries like Nigeria, where the public elects those in charge of creating the tax system. According to Parkin (2006), in countries where the public has little control over the taxation system, the system can be more of a reflection of the principles of those in power, as governments use various types of taxes and vary tax rates. This is done to spread the tax burden among individuals or groups of people who engage in taxable activities, such as corporations, or to redistribute wealth among individuals or groups of people. Taxes are often used to finance foreign assistance and military projects, to affect the macroeconomic output of an economy, or to change consumption or job habits within an economy by making those types of transactions more or less appealing (Parkin, 2006). According to a report prepared by the Federal Inland Revenue Service (FIRS) and presented to the federal executive council on National Tax Policy for 2009, sustainable development is described as development that meets current needs without jeopardising future generations' ability to meet their own needs. Thus, in this sense, sustainable development refers to a revenue generation pattern that can meet the needs of the current generation of Nigerians while not jeopardising future generations' ability to meet their own needs. Taxation is generally known as a long-term source of government revenue due to the tax system's reliability and predictability (Aguolu, 1999). Taxes, unlike other sources of income, are still available as long as economic activity continues in society (Cobham, 2005). Recent events in the global and local economies, which have had a substantial effect on government revenue, have shifted the emphasis on taxation as a long-term source of revenue (FIRS, 2009). Developing countries typically have an inefficient tax system that is unable to meet the government's financial and fiscal targets. Taxes in Afghanistan, like in other developing countries, have failed to play a significant role in the economy. Reducing the volume of tax evasion can be considered as one of the important and necessary priorities in achieving the goals of the country's economic system. In such a situation, the study gap becomes doubly important in terms of quantifying the size of the underground economy and tax evasion. Given this necessity, the present study examines the factors of tax evasion and its impact on economic growth in the Afghanistan economy to estimate the extent of this phenomenon in the country. Increased prosperity is based on economic growth. The fundamentals

of the growth process are the investment of new resources (both human and physical), the implementation of new manufacturing processes, and the launch of new goods. Taxation may influence what decisions are taken and, eventually, the pace of growth by affecting the return on investment or the projected profitability of research and development. The amount of taxes in most developed countries has risen steadily over the last century. It's not uncommon for GDP to rise from around 5% to 10% at the turn of the century to 20–30% today. Increases in taxes of this magnitude pose serious concerns about their effect on economic development. Taxation has always been a vital aspect of politics, and it will continue to play a crucial role in the future politics of each state because it is the source of his wealth. While everyone understands that taxes are necessary for the government, it is safe to say that no one enjoys paying taxes. In recent years, more and more research has been conducted to identify explanations and strategies to strengthen and inspire taxpayers who, as people, play an important role in the tax collection process through their commitment and obligation. Torgler and Schaltegger (2006) (Torgler & Schaltegger, 2006, p. 2). The fight against tax evasion as one of the primary duties of the Tax Administration should work first inter alia relating to potential corruption in the administration ranks as turn to them as well as an offer made by dishonest taxpayers who stricken with stricken Kosovo is ranked 43 in the “Doing Business Report 2014” by 189 countries as being tax-free (World Bank, 2014). Every patriotic citizen's first desire is to inspire society. The desire to pay the tax is one such desire. Taxation is a civic responsibility and a commitment required by the government in order for it to operate public services and fulfil other social obligations (Adebisi & Gbegi, 2013, p. 125). Although tax evasion and avoidance are problems in every tax system, the Kosovo situation appears unique in that tax administration, i.e. tax audits as a result of tax evasion and avoidance, is primarily a result of government officials' corruption and senior non-functioning of the law.

1.3 History of taxation in Afghanistan

For the first time during the reign of Ala Hazrat Ahmad Shah Baba, finance was given more importance in 1140 AH, among other government organizations, a department called Divan Homayoun Ali (modern Ministry of Finance) was established. **The first person in charge of these affairs, Sardar Abdullah Khan Popalzi, who was known as Diwan Beygi, was appointed and the title of Diwan Beygi became Mastofi Al-Malik over that time, and his authority was the same as of Minister of Finance at present time. The finances affairs were carried out in the center of Mastofi Al-Malik and in the provinces under the Mastofies. Mostofi al-Malik, with the power of his command, united and coordinated the other financial affairs of the provinces and was in charge of public care and supervision. Taxes were collected in different forms and names in different eras. Some of them were mandatory and some of them were paid to the government voluntarily. Meat lubricant, for example, was an optional tax in which Hazara People of central areas of Afghanistan brought a certain amount to the king's palace each year.**

Later, during the reign of Amir Abdul Rahman Khan, some of the taxes that were previously collected from the people were exempted, but the people of Gardez brought some oil and a few horses to the King Palace, which was later counted as a mandatory tax on government revenues. The people of Herat were also taxed under various names. Initially, in the years 1000-1200, taxes were collected from the people in the form of goods, through which the salaries of government officials were transferred to the landowners, and the mentioned officials referred to the landowners with their own remittances. They used to take remittances from the landlords. Until the reign of King Habibullah Khan, the financial arithmetic organization was not clear and, in this era, government revenues and expenditures did not have an advanced form, but taxes and all government revenues had a certain amount, which was generally clear in the accounts of debtors and based on it was transferred to the General Office.

The fundamental changes that took place in the field of accounting and finance and the conversion of taxes in form of goods into cash in 1298 during the time of King Amanullah Khan, as some taxes that were collected in a different way or in a forced manner were exempted. After the civil war in 1295, the government of Afghanistan found it necessary to deal with the revenues and expenditures of the government of the modern and modern accounting system, and considering the friendly relations that Afghanistan had with Turkey (Asrat Turk), Mr. Ali Effendi, a financial and accounting expert, employed under his supervision some young Afghans. Taught the new calculation system. The tax system lasted until 1303 and the following year, due to the implementation of the development plan of the government budget, it adopted a budget deficit. The system of calculating the principles of accounting lasted until 1303, and this year (1307-1307) due to the need of the government of the late Seyyed Mohammad Hashem Khan Taxation at that time, the system of tuition (monthly), which was a commodity from the Italian calculation, was promoted, and government revenues and expenditures were re-established under the above system until the time of Habibollah Kalkani. In the time of Mohammad Nader Khan, the tuition system was re-introduced and it was promoted in 1314, but in 1314, along with other developments, the government wanted to use a more modern financial and accounting system, so they hired an Italian calculation specialist called (Mer Siujeniumkholi) and the Manjuli system. From 1312 to 1314, the Ministry of Finance trained a number of officials of the Ministry of Finance in the field of economic and banking finance to study government revenues and expenditures. For the first time, this system was implemented in the government. The Manchuli system (Tablo) was implemented until 1331 in Official offices were promoted and later measured in the Turkish system and government expenditures. In 1339, the Ministry of Finance hired financial and accounting specialists with the help of the Cooperation Office (GNS). The system worked better if the tax law and the new income tax instruction from the beginning of 1345 Implemented In 1351, another law came into force. One of the revenues is set at 60%.

1.4 Tax Evasion

Tax evasion is a general term for the efforts of individuals, companies and organizations, Associations, etc. to avoid paying taxes illegally. Tax evasion can take many forms: individuals or businesses underreporting their income, or failing to report their income all together; companies and individuals also hide or evade obligatory tax withholding on rental income and rental payments, on business services, on dividends and on staff salary payments. Large-scale underreporting of profits in various sectors such as telecommunications, construction, trading and extractive industries is also quite common (World Bank, 2018). Tax evasion is an activity widely practiced in Afghanistan by national and international companies, organizations and individuals. The willingness of a country's citizens to pay taxes and the ability of a country's government to collect taxes is a critical factor in improving the economic situation of a country, especially for third world countries such as Afghanistan which are suffering from terrorism, corruption and poor governance. Taxes also play a crucial role in maintaining the existence of the state. Small firms, large firms and international companies and organization are required to pay taxes and the role of any government should be to establish procedures for the collection of taxes in order to support its public service sectors. For example, public health care, government employees' salaries, education, the work of the National Police and National Army, and the maintenance of public utilities which provide people and industries with energy and water – all such government expenditures rely, at least to some extent, on taxes. Based on the information provided by various sources (Afghan Zariza & AISA) there are 40,000 local and international companies registered with Afghanistan Investment Support Agency (AISA) and investigations shows that some of these companies, especially foreign companies owe billions Afghanis (AFN) as tax to the Afghan government and some of them function without the obligatory business license. Some of these foreign companies which are working in Afghanistan has continuously failed to clear the dues, despite repeated reminders from the Afghan government's Ministry of finance. There are various reasons for the tax evasion problem in Afghanistan. The fundamental problems are manifold, but include the

lack of a strong political will, an overly bureaucratic system, poor government standards, loopholes in the rules, weak enforcement mechanisms, and a lack of resources and expertise. Another reason relates to corruption, the payment of bribes and the use of political influence. Many Afghans who should be paying large tax bills, especially wealthy businessmen, are closely linked to senior officials and political figures. These “untouchables” do not always pay their full tax bill. In addition, customs revenues, which account for about half of Afghan government revenues, have been declining due to the theft of custom duties. (Rosenberg, 2013).

1.5 Tax Avoidance

Tax avoidance is one of the methods that taxpayers can use to reduce the amount of tax. In this study to investigate and identify the factors affecting tax avoidance; The variables of disclosure quality, financial constraint, conservatism, managerial confidence, auditor expertise, product market competition, and board independence are independent variables, and the tax avoidance variable is a dependent variable. Also, to examine the effect of tax avoidance, this variable will play the role of an independent variable and the variables of return on assets, return on equity, economic value added, company value and operating cash will be dependent variables. For this purpose, the data of 103 companies in the years 1390 to 1394 were analyzed using SmartPLS3 software and partial least squares method. The results show that the quality of disclosure, managerial uncertainty, auditor expertise, financial constraints and company size have a significant and positive effect on tax avoidance. On the other hand, no significant relationship was observed between product market competition, board independence and conservatism with tax avoidance. The results also show that tax avoidance has no significant effect on the return on assets and economic value added, but has a significant and positive effect on the return on equity, company value and operating cash.

The factor of tax avoidance is one of the important and at the same time ambiguous components of economic growth. Increasing tax avoidance can have a positive or negative effect on economic growth depending on the economic conditions of different countries. Increasing tax avoidance can reduce economic growth by

reducing government revenues and reducing government investment, and increase economic growth by increasing disposable income and personal capital. In addition, the existence of human capital can theoretically complicate the impact of tax avoidance and its effects on economic growth. Increasing human capital, on the one hand, can lead to a reduction in tax avoidance by increasing social capital, and on the other hand, it can lead to people in the community finding new ways to avoid taxation and increase this rate. For this reason, in the present study, the effects of tax avoidance on economic growth have been investigated by considering the role of human capital and by introducing a mathematical model, solving and calibrating it. The results show that the existence of tax avoidance along with human capital has an adverse effect on economic growth, which with the growth of tax avoidance, economic growth also decreases.

1.6 Research Questions:

The research questions for this study are as below:

- 1 What is the current status of tax evasion in Afghanistan?
- 2 What is the impact of tax evasion on economic growth of Afghanistan?

1.7 Research Objectives

1. To identify the current status of tax evasion in Afghanistan
2. To investigate the impact of tax evasion on economic growth of Afghanistan

1.8 Significance of the Research:

Large and small companies both national and international, as well as individuals in Afghanistan are avoiding the tax payment. This study will investigate the status of tax evasion and its impact on the economic growth of Afghanistan. With the help of this paper, the governmental agencies can bring effectiveness in their tax collection to reduce tax evasion by companies and individuals in the country. It will further add to the knowledge of tax evasion, tax avoidance and the challenges for tax collection in the country. Further researchers can use this paper as a source for enriching their researches and studies on tax evasion in Afghanistan.

2. Literature Review

2.1: Economic Growth and its determinants

The growth theory of the 1950s and 1960s, as exemplified by Solow (1956) and Swan (1956), was based on a production function that included capital and labour (measured in man-hours) as inputs. Constant returns to scale and diminishing marginal productivity of both inputs were assumed. Growth was achieved in the model through the accumulation of capital, but there had to be a limit to this process in the absence of any exogenous changes.

Endogenous Growth Models are those that allow for long-term growth while also determining the degree of growth. To accomplish this, the declining marginal product of capital must be circumvented in a way that is dictated by the choices made by the economy's agents. In the literature, four basic methods for accomplishing this have appeared. All of these methods aim for the same goal — long-term development — but take different paths to get there.

The most basic method, known as the "AK model," assumes that capital is the only input into production and that returns to scale are constant. The production function is given by $Y = AK$ under these assumptions, hence the model's name. The output would then rise at the same rate as net capital investment. This model is constrained, despite its simplicity, because it ignores the obvious importance of labour. ¹ The second strategy is to balance capital increases with similar increases in other inputs. One view is that human resources, rather than just raw labour, is the second input. Investing in education and training, which increases human resources, allows labour time to be made more efficient.

The model then has two investment processes: physical capital investment and human capital investment. If both human and physical resources have constant returns to scale in the production function, then investment in both will increase output indefinitely. Human capital can be developed using the same technology as physical capital in one sector (Barro, Mankiw, and Sala-i-Martin, 1992), or it can be produced separately in two sectors (Barro, Mankiw, and Sala-i-Martin, 1992). (Lucas, 1988; Uzawa, 1965). The latter method will integrate different human and

physical capital intensities in the two industries, confirming the finding that human capital development is more intense in human capital — due to the need for professional teaching workers, for example.

Alternatively, productivity may be believed to be influenced by labour and a variety of other factors. The introduction of new inputs into the production function, without any of the old inputs being dropped, is what technological advancement looks like (Romer, 1987 and 1990). This allows for increased output because the expanded input range prevents any one of the inputs from being too large in relation to the labour input. Another perspective on technological change is that it manifests itself as an improvement in the quality of inputs (Aghion and Howitt, 1992). Investing in research and development produces higher-quality, more profitable inputs. Old inputs are gradually replaced by new inputs, resulting in an improvement in overall productivity. Firms are compelled to innovate in order to profit from the monopoly status that comes with owning the most recent invention. This is the so-called "creative destruction" method, which Schumpeter (1934) saw as a necessary part of technological development.

The final strategy for ensuring long-term growth is to presume that companies have externalities. Learning by doing (Arrow, 1962; Romer, 1986) is the process by which this externality operates: a firm's investment leads to simultaneous increases in labour efficiency as new skills and techniques are learned. Furthermore, since increased awareness is a public benefit, one firm's investment and learning transfer to other firms. As a result, the degree of expertise, and thus labour output, is determined by the economy's total capital stock. Declining returns to capital for a single company (given a labour supply) result in constant returns for the economy.

2.2: Tax Evasion and Economic Growth

It's crucial to understand the tax rate and the reasons for non-compliance before moving on to the consequences of tax evasion. Tax compliance is described as the timely reporting of tax due to the appropriate authority in accordance with current tax rules and legislation (Jackson & Milliron, 1986). Furthermore, taxpayers must

correctly report all profits in order to pay the required tax obligation under current tax laws and regulations (Palil & Mustapha, 2011b). Administrative and judicious enforcement are two types of tax compliance. Administrative enforcement refers to following the rules of the law, whereas judicious compliance refers to correctly filling out tax return forms (Chow, 2004). Tax enforcement may be imposed or achieved by the taxpayer's voluntary cooperation.

In a similar vein, it was discovered that the first ever theories of tax enforcement were developed through the efforts of Allingham & Sandmo (1972) and Srinivasan (1973), both of whom used economic crime models. Tax enforcement was modelled as a function of three deterrent variables: tax rate, tax audit, and likelihood of detection. Despite the fact that it lays the groundwork for determining enforcement attitudes, it has been roundly criticised for excluding psychological and sociological determinants with the “intrinsic motivation” of taxpayer compliance in the absence of legislation (Alm, 1999). In response to criticism of the traditional model, (Yitzhaki, 1974) extended the Allingham and Sandmo model by providing authorization in the case of underreported and skewed tax payments, as opposed to underreporting of profits.

As a result, Yitzhaki's extension of the traditional model was unable to justify why people paid taxes even though there were no penalties and a slim chance of detection. (Sour, 2004) expanded on the traditional model by including individual morality and group conformity. Nonetheless, the underlying issue is that, as the theory explains, the tax rate is still a critical component of enforcement. It is important to identify the key causes of tax evasion in order to gain a better understanding of how tax evasion has impacted economic development. The following are the reasons for this: The high cost of enforcement is another aspect that leads to tax evasion. In addition, Haig and Ecker-R (1935) stated in a study that most countries' VAT enforcement costs are higher than their taxation costs. He went on to say that SMEs face higher enforcement costs than larger companies. Furthermore, a World Bank survey on VAT enforcement costs in emerging economies conducted from 2006 to 2011 found that compliance costs are

"regressive." Knowing human nature, it is understandable that tax payers want to avoid paying taxes and no one wants to pay more than they already do.

According to Slemrod (2007), people can continue to engage in tax avoidance as long as tax rates remain large. Furthermore, Sousa et al. (2008) estimated the impact of import tariffs on tax evasion and came to the conclusion that an increase in the tariff leads to an increase in tax evasion. Allingham and Sandmon (1972) have stated that a person would decide to engage in tax evasion only after weighing the costs and benefits of noncompliance and deciding to engage in tax evasion in the event that they are caught.

In other words, if an individual makes a profit of \$500,000 by tax evasion and the fine is \$100,000, the latter would undoubtedly continue to evade tax. However, according to Siqueira and Ramos (2006), if the ability to detect tax evasion improves in tandem with the introduction of penalty fees, tax evasion would decrease. Despite this, the MRA included a countermeasure in the form of the Tax Arrears Settlement Scheme (TASS). TASS has the authority to impose a levy and interest rate of up to 100% on unpaid taxes, whether they are owed by individuals or businesses. It compels debtors to pay all of their tax liabilities.

Tax evasion leads to instability in economic and productive activities and, consequently, reduces GDP, capital, costs and consumption. Tax evasion reduce the government's ability to raise funds to finance economic growth, as both are used for private use. While bribes are often consumed (spent on rental activities), tax evasion revenue can be reinvested in the private property of businesses.

In the history of economic literature, there have been extensive discussions about the power of taxes to influence the true values of the economy by the followers of the classics and the maids. But in examining the effect of taxes on economic growth in endogenous growth models, is one of the first studies by Carlocas (1990) in which in a closed economy using a production function with a constant succession elasticity, it is shown that policy change Taxation does not have a significant effect on the development of the Lucas model and its transformation from an economy to a re-growth of the economy.

Finally, we discover that per capita GDP and tax morale are positively correlated. Our model predicts that countries with high per capita income would have low levels of evasion and a low share of evaders in their economy. Since the majority of the population pays what they owe and this is viewed as the right action, a low share of evaders means higher moral costs of evasion. As a result, the more honest other taxpayers are considered to be, the more people are able to pay their own taxes and minimise evasion. Weck (1983) and Torgler (2003) show that there is a positive relationship between tax evasion and tax morale for a large number of countries. Their results back up the theory that a taxpayer's conduct is heavily affected by his perceptions of other taxpayers' behaviour. Furthermore, according to Frey and Torgler (2007) and Torgler and Schneider (2007), countries with higher rates of tax evasion have poor institutions or limited direct democratic rights, and Acemoglu et al. (2005) and Bethencourt (2013), among others, these countries are traditionally developing countries with low per capita income. As a result, empirical evidence supports the conclusion that high-income countries have high-quality institutions, high tax morale, and therefore low levels of evasion.

Theoretical Background

Richardson (2006) examined the factors influencing tax evasion in 45 countries. He emphasizes the importance of doing this by identifying the factors influencing tax evasion that led to the right conclusions in this area and allows law enforcement to regulate and implement the right policies and policies. Appropriately reduce the destructive effects of this phenomenon as much as possible. Using the panel data method, he concluded that non-economic factors and among all the factors affecting tax evasion, the complexity of laws and regulations had the greatest impact on tax evasion. Among the economic factors, we can mention the level of education, income level, justice and tax ethics. He concludes that by reducing the complexity of tax laws and regulations, increasing the level of education of individuals and improving sources of income, the rate of tax evasion in countries will decrease.

2.3: Empirical Review

It is estimated that USD 9.3 trillion of developing country assets are hidden offshore (Hearson, 2014). Tax evasion is facilitated by tax havens through the opacity of financial information. Tax havens are jurisdictions with a system of financial secrecy in place, often levying taxes at low rates. In these jurisdictions, financial institutions are often allowed to accept money from virtually anywhere without reporting it to the authorities in the country where it originated or from which it is controlled. For this reason, tax havens also easily facilitate money laundering. Laundering criminal proceeds through a tax haven is merely a matter of finding a bank in that jurisdiction to accept one's deposit without asking questions, shuffling the money around a bit, and then sending it to the next destination to be received or spent (GFI, 2015). Placement Layering Integration Tax-motivated IFFs are another major challenge facing Afghanistan. The International Monetary Fund (IMF) conducted a confidential assessment of Afghan finances which reportedly indicated the government's 2013 financial woes were caused by widespread tax evasion and smuggling abetted by government officials and the increasing theft of Customs revenues by provincial governors (Rosenberg, 2013). The issue is more widespread than government corruption, however. As IWA addressed in an August 2015 policy brief, tax evasion in Afghanistan is rampant, including the large-scale misappropriation of revenue across sectors such as telecommunications, construction, and extractive industries; the concealment of staff withholding tax by businesses and organizations; and even underreporting of income at the individual level. There are various reasons that tax evasion is such a significant problem in Afghanistan. Poor government standards, loopholes in the rules, weak enforcement mechanisms, and lack of resources and expertise are several key contributing factors. Furthermore, lack of familiarity with this legal custom, lack of confidence or trust in the government, and lack of awareness⁵ are also notable causes. Corruption, bribery, and political influence are also relevant factors. All of these factors contribute to a pandemic tax evasion problem in a country where the wealthiest citizens are sometimes exempt from many tax laws to begin with. Plenty

of Afghanistan's wealthy businessmen, who should be paying large tax bills, are closely linked to senior officials and political figures and are thus granted a type of "untouchable" status (New York Times, 2013). Foreign firms are also complicit in IFFs linked to evasion of Afghan tax laws. According to recent investigations by the Afghanistan Investment Support Agency (AISA), some foreign companies owe billions of Afghanis (Afs) as tax to the Afghan government, and some companies function without the requisite business license, taking the law into their own hands with willful disdain. As reported by AISA, one firm responsible for providing logistic support to American soldiers stationed in Afghanistan has continuously failed to clear its dues, despite repeated reminders. This firm owes the Afghan government Afs 4 billion in taxes. AISA officials suspect the firm might be working at the behest of powerful people in the government (Amanpoor, 2014). Tax evasion provides fertile ground for corruption and bribery, as evidenced in the extractive industries. Corruption, in turn, is linked to IFFs, as discussed in the next section.

3. Research Methodology

3.1 Research Design

In comparison to the qualitative approach, the quantitative approach is more controlled, highly formalized, closely related to the range defined by social sciences, and more explicitly controlled (Creswell & Clark, 2007; Kumar & Phrommathed, 2005; Leedy & Ormrod, 2005). Procedures in a qualitative approach, on the other hand, are less narrowly formalised, and the spectrum is unclear (Mouton & Marais, 1990). Because of the advantages of the two approaches listed, the pragmatic approach is required (Murphy, 1990; Creswell, 2003). Pansiri, 2005; Pansiri, 2005; Pansiri, 2005; Pansiri, 2005; Pansiri, 2005; Pansiri, 2005; Pansiri, 2005; Pansiri, 2005; Pansiri, 2005; Pansiri, 2005 2003 (Badley). The researcher used quantitative study in this research.

3.2 Type of Data Collection

The study made use of secondary form of data because the purpose of this research is to produce an empirical evidence in this area of study. The secondary

form of data for the variables employed in this study covered a period from 2010 to 2020. The dependent variable is the Real GDP while the independent variables were underground economy and tax evasion.

3.3 Measurement

Tax evasion is generally described as tax that should have been paid but was unlawfully evaded rather than prevented or minimised. If you want to quantify tax avoidance, this is the sum that the government should have raised but didn't. So you're attempting to quantify something about which there is no evidence. You can estimate it by comparing your country's actual tax collections to what they should have been based on an economic model that includes rates for the different types of taxes collected, as recorded in the IMF World Economic Database (income taxes, stamp duties, land taxes, sales taxes, consumption taxes etc). The disparity between what should have been collected based on your model and what was actually collected based on the IMF database should be used to calculate how much tax was evaded. The economic growth was measured through GDP of Afghanistan.

3.4 Statistical Analysis

In this study, the researcher used both descriptive analysis and correlational analysis.

4. Results and Findings

4.1 Summary of the Variables and Data Set

Table 4.1 indicating an overview of the data set regarding the economic indicators of Afghanistan for the period of 2010 to 2020. The table reports regarding projected tax revenue, tax collection, tax evasion and gross domestic product. All the amount is quoted in billion Afghani.

Table 4.1 Details of Dataset

Year	Projected Tax	Tax collection	Tax Evasion (Projected Tax - Tax Collection)	GDP in LCU
2010	86.5722	66.594	19.9782	959.661
2011	97.05472	75.824	21.23072	963.753
2012	99.12125	79.297	19.82425	1086.653
2013	98.9603	81.115	17.8453	1147.513
2014	117.286	80.966	36.32	1178.778
2015	111.3012	92.751	18.5502	1195.886
2016	141.1	116.21	24.89	1222.916
2017	168.3	127.241	41.059	1255.287
2018	189.8	135.4	54.4	1270.215
2019	209	157.2	51.8	1319.901
2020	208.6	165.5	43.1	1349.456

Note: All amounts are in Billion Afghani

Source: International Monetary Fund and World Bank Data base

4.2 Descriptive Analysis

The descriptive statistics of the entire data are presented in Table 4.1. The graphical representation of GDP with all the economic indicators such as tax collection and tax evasion is presented in Figs. 1-3.

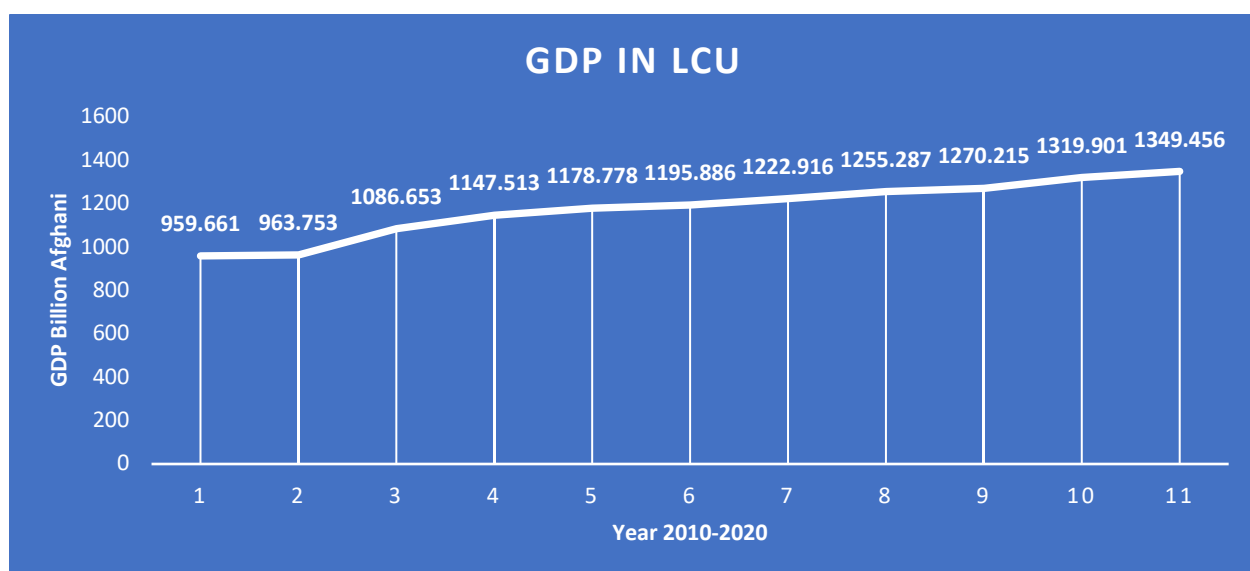
Table 4.1 shows the mean value of the Gross Domestic Product to be 1177.3 billion Afghani, with a maximum value of 959.7 Billion Afghanis and a minimum value of 1349.5 billion Afghanis.

Similarly, the tax collection value is 107.1 billion Afghani, with a maximum value of 165.5 billion Afghani and a minimum value of 66.59 billion Afghani.

The mean value is for tax evasion is 175.64 billion Afghani, with a maximum value of 1619.32 billion Afghani and a minimum value of 17.85 billion Afghani.

Table 4.2 Descriptive Statistics

Variables	1st		Median	Mean	3rd	
	Min	Quartile			Quartile	Max
Projected Tax	86.57	99.04	141.1	282.74	199.29	117.29
Tax Revenue	66.59	80.13	92.75	107.1	131.32	165.5
Tax Evasion	17.85	19.9	24.89	175.64	47.45	1619.32
GDP	959.7	1117.1	1195.9	1177.3	1262.8	1349.5

**Figure 1: GDP in Billion Local Afghani**

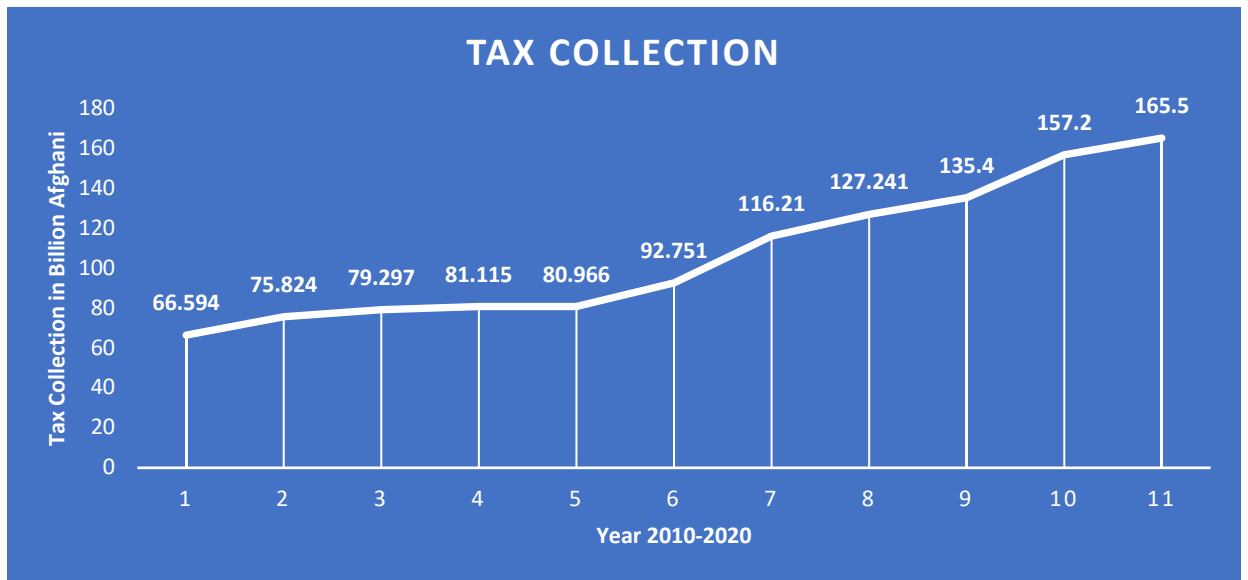


Figure 2: Tax Collection in Billion Local Afghanis

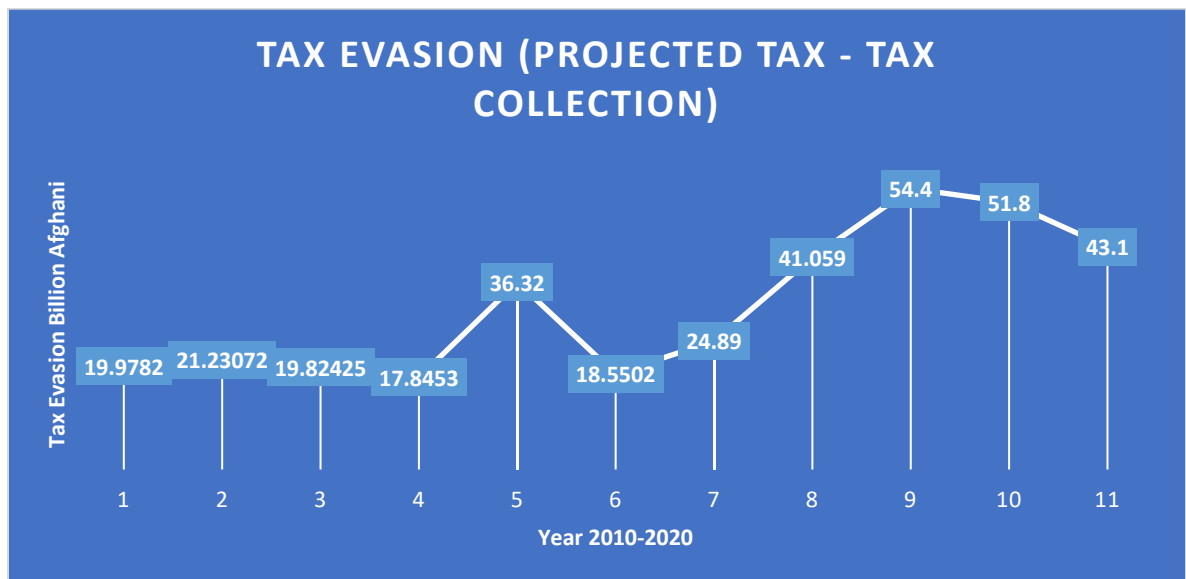


Figure 3: Tax Evasion in Billion Local Afghanis

4.3 Correlation Analysis

Table 4.3 displays the correlation matrix. Both the correlation coefficients and the likelihood are shown in the data. All of the variables have a strong and constructive relationship with one another. Tax collection has a significant and optimistic relationship with Afghanistan's GDP, according to statistics. Furthermore, tax evasion has a strong correlation with Afghanistan's GDP. Since the relationship between the two variables is important at the 5% level of significance.

Table 4.3 Correlation Analysis

		logGDP	logTaxCollecti on	logTaxEvasio n
logGDP	Pearson Correlation	1		
	Sig. (2-tailed)			
	N	11		
logTaxCollection	Pearson Correlation	.894**	1	
	Sig. (2-tailed)	.000		
	N	11		
logTaxEvasion	Pearson Correlation	.719*	.811**	1
	Sig. (2-tailed)	.013	.002	
	N	11	11	11

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

4.4 Regression Analysis

4.4.1 Model Summary

From table 1 above, the correlation value is ($R = 0.894$) showing the existence of a strong and positive relationship between the dependent variable (NGDP) and the independent variables (Tax collection and Tax Evasion). Similarly, the R Square value is ($R \text{ square} = 0.799$) which is equally very strong signifying that tax collection and tax evasion determine a very high degree of variability in GDP of Afghanistan.

Table 4.4.1 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.894 ^a	.799	.749	.02497

a. Predictors: (Constant), logTaxEvasion, logTaxCollection

4.4.2 ANOVA Model

The consequence of the F-statistic is 15.933 with a p-value of 0.002 0.05, as shown in Table 2. This finding indicates that the predictor variables (tax collection and tax evasion) have a positive impact on Afghanistan's economic growth (NGDP).

The outcome is statistically significant, indicating that the model is sufficient.

Table 4.4.2 ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.020	2	.010	15.933	.002 ^b
	Residual	.005	8	.001		
	Total	.025	10			

a. Dependent Variable: logGDP

b. Predictors: (Constant), logTaxEvasion, logTaxCollection

4.4.3 Regression Coefficient

Table 4.4.3 reports results of regression coefficient, standard errors, t statistics and significant values. According to statistics tax collection has a significant influence on the GDP of Afghanistan. Because, coefficient value is significant at 5

percent significant level ($B = 0.328$; $\text{sig } 0.010 < 0.05$). This indicates that tax collection has a significant and positive effect on GDP of Afghanistan.

Further, the effect of tax evasion on GDP is negative which is consistent with the majority of previous studies. However, this relationship is insignificant as the coefficient is insignificant ($B = -0.005$; $\text{sig} = 0.946 > 0.05$). This indicates that Tax evasion has no significant effect on economic growth of Afghanistan.

Table 4.4.3 Coefficients^a

		Unstandardized		Standardized		
		Coefficients		Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	2.417	.127		18.999	.000
	logTaxCollection	.328	.098	.909	3.359	.010
	logTaxEvasion	-.005	.071	-.019	-.070	.946

a. Dependent Variable: logGDP

5.1 Conclusion

In general, tax avoidance refers to the use of fraudulent methods to avoid paying taxes. To do this, taxable revenue, taxable gains, or other taxable activities are hidden, the number and/or source of income is misrepresented, or tax-reducing factors such as deductions, exemptions, or credits are purposefully overstated. Tax evasion may happen as a one-time occurrence within activities that are otherwise legal. Alternatively, tax avoidance happens in the informal economy, where the entire operation is conducted in an informal manner – this means that the company is not only evading tax payments but is also not registered as a formal enterprise at all.

Tax revenue has been very low over the years, and little physical growth has occurred, so the effects on the poor has been minimal. Many people believe that

ineffective and incompetent tax administration is to blame for the loss of revenue caused by widespread tax evasion and tax avoidance in Afghanistan. The main concern is whether the government is making significant efforts to curb the underground economy without displacing people from their employment. The impact of the underground economy on government revenue is negative, but the participants are not to blame because the government fails to perform its functions.

According to a study by Akinboade (2015), the Cameroon government was losing between \$5 and \$10 million per year in revenue from the tree felling tax alone due to illegal activities, according to a World Bank report from 2000. Tax evasion has also been linked to economic growth in Tanzania, according to studies. Magesa (2004) examined the effect of tax evasion on revenue collection efficiency in Tanzania in another report. According to the report, the amount of tax collected in Afghanistan between 2010 and 2020 did not meet the planned tax collection goal. High tax rates, complexity of tax laws, systems, and procedures, taxpayer perceptions of government ability to use tax collection for social welfare, limited resources and capacity of tax administration, low literacy and lack of tax education, poverty and nature of business/production, legal provisions in tax, and a low tax morale were all linked to tax evasion. Tax evasion has resulted in low revenue collection and service delivery capability, according to a report by Mughal and Akram (2019).

5.2 Recommendations

In Afghanistan, tax evasion and avoidance is a major problem. Every year, governments lose a significant amount of money due to tax evasion and avoidance. This report suggests the following suggestions after reviewing all of the data and facts on tax evasion and avoidance:

- First and foremost, taxpayers must change their mindset. Since paying taxes is their moral obligation;
- Tax rules should be reformed so that no one can take advantage of loopholes in the tax code.

- Implementation of a fully automated tax collection system and the facilitation of e-governance.
- Corruption by tax officials should be dealt with harshly.
- The severity of the penalty should be increased. As a result, no one could worry of tax evasion or avoidance.
- Tax investigation programmes must be implemented. Tax investigations will go a long way toward preventing tax evasion and avoidance.
- Improving the revenue board's performance, openness, and accountability would help increase tax collection.
- Rewarding the highest tax payers would inspire people to pay their taxes rather than evade or stop them.
- Tax attorneys and chartered accountants are often accused of assisting taxpayers, including businesses and corporations, in evading taxes. Similarly, Clearing and Forwarding agents assist in the avoidance of Customs duties. The elimination of the human interface has been proposed as a viable solution to this problem.
- Organizing a tax fair would encourage taxpayers to pay their taxes.
- A television commercial stating that if we pay taxes, people will prosper, as well as other positive aspects.
- Identifying potential tax payers and gathering all relevant information on their sources of income.
- To find alternative sources of revenue for long-term taxpayers.
- Tax evasion is a criminal offence in almost every developed country, punishable by fines and/or imprisonment – in China, the penalty may be as serious as the death penalty. It is commonly assumed that the degree of evasion is proportional to the severity of the penalty for evasion. As a result, the penalty in our country should be so serious that no one might consider engaging in tax evasion or avoidance.

REFERENCES

- Agell, J., Lindh, T. and Ohlsson, H. (1997), 'Growth and the public sector: a critical review essay', *European Journal of Political Economy*, vol. 13, pp. 33–51.
- , — and — (1999), 'Growth and the public sector: a reply', *European Journal of Political Economy*, vol. 15, pp. 359–66.
- Aghion, P. and Howitt, P. (1992), 'A model of growth through creative destruction', *Econometrica*, vol. 51, pp. 675–92.
- Ando, A. and Modigliani, F. (1963), 'The "life cycle" hypothesis of saving: aggregate implications and tests', *American Economic Review*, vol. 53, pp. 55–84.
- Arrow, K. J. (1962), 'The economic implications of learning by doing', *Review of Economic Studies*, vol. 29, pp. 155–73.
- Akinyomi, O. J. (2013). Appraisal of factors influencing tax avoidance and evasion in Nigeria. *International Journal of Research in Commerce and Management*, 4(5), 107-111.
- Asea, P. K. and Turnovsky, S. J. (1998), 'Capital income taxation and risk-taking in a small open economy', *Journal of Public Economics*, vol. 68, pp. 55–90.
- Atkinson, A. B. and Sandmo, A. (1980), 'Welfare implications of the taxation of savings', *Economic Journal*, vol. 90, pp. 529–49.
- Barro, R. J. (1974), 'Are government bonds net wealth?', *Journal of Political Economy*, vol. 82, pp. 1095–117.
- (1990), 'Government spending in a simple model of endogenous growth', *Journal of Political Economy*, vol. 98, pp. S103–25.
- (1991), 'Economic growth in a cross section of countries', *Quarterly Journal of Economics*, vol. 106, pp. 407–44.
- Mankiw, G. G. and Sala-i-Martin, X. (1992), 'Capital mobility in neoclassical models of growth', *National Bureau of Economic Research, Working Paper no. 4206*.
- Bertola, G. (1996), 'Factor shares in OLG models of growth', *European Economic Review*, vol. 40, pp. 1541–60.
- Blanchard, O. J. (1985), 'Debts, deficits, and finite horizons', *Journal of Political Economy*, vol. 93, pp. 233–47.
- Bovenberg, A. L. and de Mooij, R. A. (1997), 'Environmental tax reform and endogenous growth', *Journal of Public Economics*, vol. 63, pp. 207–37.
- Buiter, W. H. and Carmichael, J. (1984), 'Government debt: comment', *American Economic Review*, vol. 74, pp. 762–5.
- Burbidge, J. B. (1983), 'Government debt in an overlapping-generations model with bequests and gifts', *American Economic Review*, vol. 73, pp. 222–7.

- Chamley, C. P. (1986), 'Optimal taxation of capital income in general equilibrium with infinite lives', *Econometrica*, vol. 54, pp. 607–22.
- Chari, V. V. and Kehoe, P. J. (1998), *Optimal Fiscal and Monetary Policy*, Report no. 251, Minneapolis: Federal Reserve Bank of Minneapolis.
- Correia, I. (1996), 'Should capital income be taxed in the steady state?', *Journal of Public Economics*, vol. 60, pp. 147–51.
- Fuente, A. (1997), 'Fiscal policy and growth in the OECD', Centre for Economic Policy Research, Discussion Paper no. 1755.
- Diamond, P. A. (1965), 'National debt in a neoclassical growth model', *American Economic Review*, vol. 55, pp. 1126–50.
- Dowrick, S. (1993), 'Government consumption: its effects on productivity growth and investment', in N. Gemmel (ed.), *The Growth of the Public Sector: Theories and Evidence*, Aldershot: Edward Elgar. Taxation and Economic Growth 167
- Easterly, W. (1993), 'How much do distortions affect growth?', *Journal of Monetary Economics*, vol. 32, pp. 187–212.
- and Rebelo, S. (1993a), 'Marginal income tax rates and economic growth in developing countries', *European Economic Review*, vol. 37, pp. 409–17.
- and — (1993b), 'Fiscal policy and economic growth', *Journal of Monetary Economics*, vol. 32, pp. 417–58.
- Einarsson, T. and Marquis, M. H. (1997), 'Fiscal policy under alternative mechanisms of endogenous growth', University of Iceland, Institute of Economic Studies, Working Paper no. W97:08.
- Engen, E. M. and Skinner, J. (1996), 'Taxation and economic growth', National Bureau of Economic Research, Working Paper no. 5826.
- Feinstein, C. H. (1972), *National Income, Expenditure and Output of the United Kingdom, 1855–1965*, Cambridge: Cambridge University Press.
- Fölster, S. and Henrekson, M. (1999), 'Growth and the public sector: a critique of the critics', *European Journal of Political Economy*, vol. 15, pp. 337–58.
- Galor, O. and Zeira, J. (1993), 'Income distribution and macroeconomics', *Review of Economic Studies*, vol. 60, pp. 35–52.
- Goulder, L. H. (1995), 'Environmental taxation and the double dividend: a reader's guide', *International Tax and Public Finance*, vol. 2, pp. 155–82.
- Gradus, R. and Smulders, S. (1993), 'The trade-off between environmental care and long-term growth: pollution in three prototype growth models', *Journal of Economics*, vol. 58, pp. 25–51.

Green, J. and Sheshinski, E. (1976), 'Direct versus indirect remedies for externalities', *Journal of Political Economy*, vol. 84, pp. 797–808.

Ihori, T. (1996), *Public Finance in an Overlapping Generations Economy*, London: McMillan.

Jones, L. E., Manuelli, R. E. and Rossi, P. E. (1993), 'Optimal taxation in models of endogenous growth', *Journal of Political Economy*, vol. 101, pp. 485–517.

King, R. G. and Rebelo, S. (1990), 'Public policy and endogenous growth: developing neoclassical implications', *Journal of Political Economy*, vol. 98, pp. S126–50.

Koester, R. and Kormendi, R. (1989), 'Taxation, aggregate activity and economic growth: crosscountry evidence on some supply-side hypotheses', *Economic Inquiry*, vol. 27, pp. 367–86.

Laitner, J. (1995), 'Quantitative evaluations of efficient tax policies for Lucas' supply side models', *Oxford Economic Papers*, vol. 47, pp. 471–92.

Lambert, P. (1993), *The Distribution and Redistribution of Income*, Manchester: Manchester University Press.

Leibfritz, W., Thornton, J. and Bibbee, A. (1997), 'Taxation and economic performance', *Organisation for Economic Co-operation and Development*, Working Paper no. 176.

Levine, R. and Renelt, D. (1992), 'A sensitivity analysis of cross-country growth models', *American Economic Review*, vol. 82, pp. 942–63.

Lucas, R. E. (1988), 'On the mechanics of economic development', *Journal of Monetary Economics*, vol. 22, pp. 3–42.

— (1990), 'Supply-side economics: an analytical review', *Oxford Economic Papers*, vol. 42, pp. 293–316.

Mabey, N. and Nixon, J. (1997), 'Are environmental taxes a free lunch? Issues in modelling the macroeconomic effects of carbon taxes', *Energy Economics*, vol. 19, pp. 29–56.

Mendoza, E., Milesi-Ferretti, G. M. and Asea, P. (1997), 'On the ineffectiveness of tax policy in altering long-run growth: Harberger's superneutrality conjecture', *Journal of Public Economics*, vol. 66, pp. 99–126. *Fiscal Studies* 168

—, Razin, A. and Tesar, L. L. (1994), 'Effective tax rates in macroeconomics', *Journal of Monetary Economics*, vol. 34, pp. 297–323.

Mughal, M. M., & Akram, M. (2012). Reasons of Tax Avoidance and Tax Evasion: Reflections from Pakistan. *Journal of Economics and Behavioral Studies*, 4(4), 217- 222.

Mohtadi, H. (1996), 'Environment, growth, and optimal policy design', *Journal of Public Economics*, vol. 63, pp. 119–40.

Myles, G. D. (1995), *Public Economics*, Cambridge: Cambridge University Press. Ordovery, J. A. and Phelps, E. S. (1979), 'The concept of optimal taxation in the

overlappinggenerations model of capital and wealth', *Journal of Public Economics*, vol. 12, pp. 1–26.

Oats, L. ed. (2012). *Taxation: A Fieldwork Research Handbook*. Abingdon, Oxon; New York, NY: Routledge

Oberholzer, R., & Stack, M. E. (2014). Perceptions of Taxation: A comparative study of different population groups in South Africa. *Public Relations Review*, 40, 226–239.

Organisation for Economic Cooperation and Development. (2004). *Compliance Risk Management: Managing and Improving Tax Compliance*. Centre for Tax Policy and Administration, Organisation for Economic Co-operation and Development: Paris.

Organisation for Economic Cooperation and Development. (2008). *Forum Taxation of SMEs: Key Issues and Policy Considerations*. Paris: OECD Tax Policy Studies.

Organisation for Economic Cooperation and Development. (2013). *Tax and Development: What Drives Tax Morale?*. Organization for Economic Co-operation and Development.

Retrieved from: http://www.oecd.org/ctp/tax-global/TaxMorale_march13.pdf

Organisation for Economic Cooperation and Development. (2014). *Financing SMEs and Entrepreneurs* [Online]. Paris: Organisation for Economic Co-operation and Development. Available from: http://www.oecdilibrary.org/content/book/fin_sme_ent-2014-en

Olivier de Sardan, J. -P. (1999). African corruption in the context of globalisation. In R. Fardon, W. van Binsbergen, and R. van Dijk (eds.) *Modernity on a Shoestring: Dimensions of Globalisation, Consumption and Development in Africa and Beyond*, Leiden and London: EIDOS.

Omoriegie, E. D. (2013). *Moral Suasion as a Monetary Policy Instrument*. Understanding monetary policy series No. 28, Central Bank of Nigeria.

Onu, D. (2016). *Measuring Tax Compliance Attitudes: What surveys can tell us about tax compliance behaviour*. In *Advances in Taxation* (pp. 173–190). Emerald Group Publishing Limited.

Opp, K.-D. (1983). *Die Entstehung sozialer Normen. Ein Integrationsversuch soziologischer, sozialpsychologischer und ökonomischer Erklärungen*. Tübingen: Mohr (Siebeck).

Orviska, M., & Hudson, J. (2003). Tax Evasion, Civic Duty and the Law Abiding Citizen. *European Journal of Political Economy*, 19(1), 83–102.

Pakistan, of Government (1978). *Income Tax Act 1922 adopted as amended up-to-date by the Government of Pakistan after independence*

Pakistan, of Government (2000). *Income Tax Ordinance 1979 adopted as amended up-to-date*.

Pakistan, of Government (2018). Income Tax Ordinance 2001 adopted as amended up-to-date. Available at <http://www.fbr.gov.pk/DisplayDocs/25412>, accessed on April 17, 2018 at 19:48.

Palil, M. R., Md-Akir, M. R., & Wan-Ahmad, W. F. (2013). The Perception of Tax Payers on Tax Knowledge and Tax Education with Level of Tax Compliance: A Study the Influences of Religiosity. *ASEAN Journal of Economics, Management and Accounting*, 1 (1), 118–129.

Pansiri, J. (2005). Pragmatism, a methodological approach to researching strategic alliance in tourism. *Tourism and hospitality planning and development*, 2(3), 191–206.

Paris, H., & Broucke, S. V. D. (2008). Measuring cognitive determinants of speeding: An application of the theory of planned behaviour. *Transportation Research, Part F* (11), 168–180.

Park, C., & Hyun, J. K. (2003). Examining the determinants of tax compliance by experimental data: A case of Korea. *Journal of Policy Modeling*, 25(8), 673–684.

Parry, J. (2000). The crisis of corruption and the idea of India - a worm's eye view. In I. Pardo (ed.) *Morals of Legitimacy: Between Agency and System*, Oxford: Berghahn Books.

Parsons, T. (1951). *The Social System*. London: Routledge and Kegan Paul.

Pashev, K. (2006). Understanding Tax Corruption in Transition Economies: Evidence from Bulgaria. MPRA Paper 974, University Library of Munich, Germany.

Pate, A. M., & Hamilton, E. E. (1992). Formal and Informal Deterrents to Domestic Violence: The Dade County Spouse Assault Experiment. *American Sociological Review*, 57(5), 692.

Paternoster, R. (1987). The deterrent effect of the perceived certainty and severity of punishment: A review of the evidence and issues. *Justice Quarterly*, 4(2), 173–217.

Paternoster, R. (1989a). Absolute and Restrictive Deterrence in Panel of Youth: Explaining the Onset, Persistence/Desistence, and Frequency of Delinquent Offending. *Social Problems*, 36(3), 289–309.

Paternoster, R. (1989b). Decision to Participate in and Desist from Four types of Common Delinquency: Deterrence and the Rational Choice Perspective. *Law & Society Review*, 23(1), 7–40.

Paternoster, R. (2010). How Much Do We Really Know about Criminal Deterrence. *Journal of Criminal Law and Criminology*, 100(3), 765–824.

Paternoster, R., & Iovanni, L. (1986). The Deterrent Threat of Perceived Severity: A Re-Examination. *Social Force*, 64(3), 751–777.

Paternoster, R., & Piquero, A. (1995). Reconceptualizing deterrence: An empirical test of personal and vicarious experiences. *Journal of Research in Crime and Delinquency*, 32(3), 251–286.

- Paternoster, R., Saltzman, L., Waldo, G., & Chiricos, T. (1983a). Estimating Perceptual Stability and Deterrent Effects: The Role of Perceived Legal Punishment in the Inhibition of Criminal Involvement. *Journal of Criminal law and Criminology*, 74, 270–297.
- Paternoster, R., Saltzman, L., Waldo, G., & Chiricos, T. (1983b). Perceived Risk and Social Control: Do Sanctions Really Deter?. *Law & Society Review*, 17, 457–479.
- Pau, C., Sawyer, A., & Maples, A. (2007). Complexity of New Zealand's tax laws: An empirical study. *Australian Tax Forum*, 22(1), 59–92.
- Perry, C. L., Barnowski, T., & Parcel, G. S. (1990). How individuals, environments, and health behavior interact: Social learning theory. In K. Glanz, F. M. Lewis & B. K. Rimer (Eds.), *Health Behavior and Health Education: Theory Research and Practice*. San Francisco, CA: Jossey-Bass.
- Pickhardt, M. and Prinz, A. (2014). Behavioral Dynamics of Tax Evasion – A survey. *Journal of Economic Psychology*, 40 (1): 1–19.
- Picur, R., & Riahi-Belkaoui, A. (2006). The Impact of Bureaucracy, Corruption and Tax Compliance. *Review of Accounting and Finance*, 5(2), 174–180.
- Piliavin, I., Thornton, C., Gartner, R., & Matsueda, R. C. (1986). Crime, Deterrence, and Rational Choice. *American Sociological Review*, 51, 101–119.
- Polinsky, A. M., & Shavell, S. (2000). The economic theory of public enforcement of law. *Journal of Economic Literature*, 38, 45–76.
- Pommerehne, W. W., Hart, A., & Frey, B. S. (1994). Tax Morale, Tax Evasion and the Choice of Policy Instruments in Different Political Systems. *Public Finance*, 49 (Supplement), 52–69.
- Pope, J. (2008). Small Business Taxation: An Evaluation of the Role of Special Treatment Policies [Online]. Perth: Curtin University of Technology School of Economics and Finance. Available from: http://espace.library.curtin.edu.au:80/R?func=dbin_jump_full&object_id=20674
- Pope, J., & Abdul-Jabbar, H. (2008). Small and Medium-Sized Enterprises and Tax Compliance Burden in Malaysia: Issues and Challenges for Tax Administration. *Small Enterprise Research*, 16 (1), 47–60.
- Pope, J., & McKerchar, M. (2011). Understanding Tax Morale and Its Effect on Individual Taxpayer Compliance. *British Tax Review*, 11(2), 587–600.
- Porcano, T. M. (1988). Correlates of tax evasion. *Journal of Economic Psychology*, 9(1), 47– 67.
- Posner, R. (1998). *Economic Analysis of Law* New York: Aspen Law and Business. Google Scholar, 284-287.

- Povoledo, E. (2011). Italy Tries to Get Tax Cheats to Pay Up. *New York Times*, August 8. Retrieved from http://www.nytimes.com/2011/08/09/business/global/italy-tries-to-get-tax-cheats-to-pay-up.html?_r=0.
- Preacher, K. J., & Leonardelli, G. J. (2001). Calculation for the Sobel Test: An Interactive Calculation Tool for Mediation Tests [Online software]. Retrieved from <http://quantpsy.org/sobel/sobel.htm> on April 18, 2017 at 14:22.
- Prochaska, JO.; DiClemente, CC. The transtheoretical approach. In: Norcross, JC; Goldfried, MR. (eds.) *Handbook of psychotherapy integration*. 2nd ed. New York: Oxford University Press; 2005. p. 147–171. ISBN 0-19-516579-9.
- Propheter, G. (2012). Use Tax Awareness and Compliance: A Survey Analysis. *State Tax Notes*, 65(4), 257-264.
- Pyle, D. J. (1991). The Economics of Taxpayer Compliance. *Journal of Economic Surveys*, 5, 163–198.
- Park, N-H. (1991), 'Steady-state solutions of optimal tax mixes in an overlapping-generations economy', *Journal of Public Economics*, vol. 46, pp. 227–46.
- Pecorino, P. (1993), 'Tax structure and growth in a model with human capital', *Journal of Public Economics*, vol. 52, pp. 251–71.
- (1994), 'The growth rate effects of tax reform', *Oxford Economic Papers*, vol. 46, pp. 492–501.
- Perotti, R. (1993), 'Political equilibrium, income distribution, and growth', *Review of Economic Studies*, vol. 60, pp. 755–76.
- Plosser, C. (1993), 'The search for growth', in *Policies for Long Run Growth*, symposium series, Kansas City: Federal Reserve of Kansas City.
- Rabin, M. (1993). Incorporating Fairness into Game Theory and Economics. *American Economic Review*, 83, 1281–1302.
- Rajmane, M. R. (2014). A critical study of the services provided by the income tax consultants to the selected individual firm and company assessee in the Sangli Miraj Kupwad corporation area (Published doctoral thesis). Shivaji University, India. Retrieved from: <http://hdl.handle.net/10603/25482>
- Ramayah, T., Yusoff, Y. M., Jamaludin, N., & Ibrahim, A. (2009). Applying the theory of planned behavior (TPB) to predict internet tax filing intentions. *International Journal of Management*, 26(2), 272.
- Rametse, N., & Yong, S. (2009). Small Business Taxpayers' Attitudes to Complying with a Tax System: Lessons and Experiences from Australia and New Zealand. *Journal of Applied Law and Policy*, 09(1), 83–104.

- Rasak, A. A and Adafala, C.J. (2013). Evaluating Taxpayer's attitude and Its Influence on Tax Compliance Decision in Temele, Ghana in the Journal of Accounting and Taxation, 5(3), 48–57.
- Rawls, J. (1971). A Theory of Justice. Oxford: Oxford University Press.
- Rehman, A. C. (2013). Human resource management and the performance of university teachers of Pakistan: A test of the mediating model from the perspective of a developing country. (a doctoral thesis).
- Reiss, P. C., & White, W. (2008). What changes energy consumption? Prices and public pressures. RAND Journal of Economics, 39(3), 636–663.
- Rest, J. R. (1984). The Major Components of Morality. In W. L. Jurtines and J. L. Gewirtz (eds.), Morality, Moral Behavior, and Moral Development (Wiley, New York).
- Riahi-Belkaoui, A. (2004). Relationship between Tax Compliance Internationally and Selected Determinants of Tax Morale. Journal of International Accounting, Auditing and Taxation, 13 (2), 135–143.
- Ahmad, S. S., & Wani, N. U. H. (2018). Trade potential of Afghanistan against SAARC: An application of gravity model approach. *Kardan Journal of Economics and Management Sciences*, 1(4), 1-19.
- Bazgar, S. & Wani, N. U. H. (2022). Enhancing Entrepreneurial Education and Self-Efficacy through Technical Vocational Education and Training- Authority of Afghanistan (TVET-AVI): Evaluation and Way Forward. *Kardan Journal of Economics and Management Sciences (KJEMS). Management*, 5(3), 1-21. DOI: [10.31841/KJEMS.2022.121](https://doi.org/10.31841/KJEMS.2022.121)
- Burhani, G., & Wani, N. U. H. (2019). Afghanistan-India Trade Linkage: Collaboration and Future Prospects. *Kardan Journal of Economics and Management Sciences*, 2(1), 88-103.
- Chandran, A. B., Wani, N. U. H., & Kumar, S. (2014). Economic Latent and Emerging Pattern of Merchandise Trade in SAARC Countries. *International Journal of Trade & Global Business Perspectives*, 3(1), 759.
- Dhami, J. K., Wani, N. U. H., & Sidana, N. (2020). Trade Potential of India against BRICS Economies: An Empirical Analysis based on Gravity Model. *Kardan Journal of Economics and Management Sciences*, 3(2), 13-26.
- Hotak, K., & Wani, N. U. H. (2019). Impact of Trade Liberalization on the Environment: The Case of Afghanistan. *Kardan Journal of Economics and Management Sciences*, 2(1), 1-16.
- Kakar, M., & Wani, N. U. H. (2016). Nexus between foreign direct investment (FDI) and economic growth in Afghanistan: An econometric analysis. *Kardan Journal of Economics and Management Sciences*, 1(2), 148-156.

Muram, S., & Wani, N. U. H. (2020). Linkage between International political relations and foreign direct investment: A case study of Afghanistan. *Kardan Journal of Social Sciences and Humanities*, 3(1), 1-32.

Muram, S., & Wani, N. U. H. Nexus between International Political Relations and Foreign Direct Investment for Sustainable Trade: A Case Study of Afghanistan. *Munich Personal RePEc Archive*

Naseri, M. E., & Wani, N. U. H. (2020). Export Competitiveness of Afghanistan with Pakistan: An Economic Evaluation. *Kardan Journal of Economics and Management Sciences*, 3(2), 1-12.

Naseri, M. E., Wani, N. U. H., & Sidana, N. (2018). Determinants of Exports in SAARC Countries: An Empirical Evaluation. *Kardan Journal of Economics and Management Sciences*, 4(3), 38-57.

Nazary, P. W., Wani, N. U. H., & Hatam, A. K. (2020). Women in Peace Process in Afghanistan: Meaningful Participation and its Impact. *Kardan Journal of Social Sciences and Humanities*, 3(2), 17-34.

Qazizada, Y., & Wani, N. U. H. (2020). Terrorism as a Challenge to Good Governance in Afghanistan: An Evaluation. *Kardan Journal of Social Sciences and Humanities*, 3(2), 1-13.

Qazizada, Y., Afghan, M. W., & Wani, N. U. H. Challenges of Good Governance in Afghanistan: An Introspection for Sustainable Development. *Munich Personal RePEc Archive*.

Sadiqi, M. K., & Wani, N. U. H. (2018). Latency of Afghanistan-SAARC Merchandise Trade Relation: An Economic Evaluation. *Kardan Journal of Economics and Management Sciences*, 1(2), 101-20.

Taj, Z., & Wani, N. U. H. (2019). Evaluation of Afghanistan export performance: a constant-market-share analysis approach. *Kardan Journal of Economics and Management Sciences*, 2(2), 16-40.

Taneja, K., & Wani, N. U. H. (2014). Economic performance of Indo-China merchandise trade: An analysis of RCA and RID approaches. *Journal of International Economics*, 5(1), 88.

Wani, N. U. H. (2018). Performance and Prospects of India's Trade Linkage With BRCS Economies. At Lovely Faculty of Business and Arts. Lovely Professional University. (PhD Thesis)<http://dspace.lpu.in:8080/jspui/bitstream/123456789/4141/1/Nassir%20Ul%20Haq%20Wani%20Ph.D%20thesis.pdf>

Wani, N. U. H. (2018). Trade compatibility between Afghanistan and India: An empirical evaluation. *Munich Personal RePEc Archive*

Wani, N. U. H. (2018). Trade compatibility between Afghanistan and India: An empirical evaluation. *Kardan Journal of Economics and Management Sciences*, 1(1), 11-12.

- Wani, N. U. H. (2019). Nexus between openness to trade and economic growth: an empirical investigation of Afghanistan. *South Asia Economic Journal*, 20(2), 205-223.
- Wani, N. U. H. (2022). The Trade-Conflict Nexus in SAARC Region: A Gravity Model Approach. *Kardan Journal of Social Sciences and Humanities*. 4 (2) 56-74. DOI:[10.31841/KJSSH.2021.45](https://doi.org/10.31841/KJSSH.2021.45)
- Wani, N. U. H. (2023). Decoding Social Media's Role in the Resurgence of the Taliban: A Literature Review. *Munich Personal RePEc Archive*.
- Wani, N. U. H. (2024). Trade Potential of Afghanistan With SAARC Region and European Union: A Gravity Model Approach. In *Policy Solutions for Economic Growth in a Developing Country: Perspectives on Afghanistan's Trade and Development* (pp. 41-57). Emerald Publishing Limited.
- Wani, N. U. H. Performance and Prospects of India's Trade Linkage with BRCS Economies. *Munich Personal RePEc Archive*.
- Wani, N. U. H., & Dhimi, D. J. K. (2016). Ecopreneurship: The reality cultured for today and tomorrow? *Munich Personal RePEc Archive*.
- Wani, N. U. H., & Dhimi, J. K. (2013). Indo-China trade: intensity and potential for future trade. *International Journal of Enhanced Research in Management and Computer Applications*, 2319-7471.
- Wani, N. U. H., & Dhimi, J. K. (2014). Economic Concert, Collaboration and Prospective of Trade between India and Brazil. *Foreign Trade Review*, 49(4), 359-372.
- Wani, N. U. H., & Dhimi, J. K. (2016). Indo-ASEAN Trade: A Study with Reference to Agriculture Sector. *Asian Journal of Research in Social Sciences and Humanities*, 6(2), 1-21.
- Wani, N. U. H., & Dhimi, J. K. (2017). India's Trade Linkage with BRCS Economies: Trends, Patterns and Future Potentialities. *Journal of International Economics* (0976-0792), 8(1).
- Wani, N. U. H., & Dhimi, J. K. (2018). Trade Prospective of India against BRCS Economies: An Empirical Evaluation Based on RCA and RID Approaches, *American Journal of Economics*, 8(1): 31-46, doi:[10.5923/j.economics.20180801.06](https://doi.org/10.5923/j.economics.20180801.06)
- Wani, N. U. H., & Dhimi, J. K. (2021). An empirical investigation of the effects of health and education on income distribution and poverty in SAARC Countries. *Kardan Journal of Economics and Management Sciences*, 4(3), 1-15.
- Wani, N. U. H., & Hatam, A. K. (2022). Afghanistan's Regulatory Business Environment: Exploring the Impact on Trade. *Munich Personal RePEc Archive*.
- Wani, N. U. H., & Kabir, H. (2016). An evaluation of the relationship between public debt and economic growth: A study of Afghanistan.

- Wani, N. U. H., & Latif, L. (2022). India's Security Strategy in South Asia: Visualizing Afghanistan's Past, Present, and Future. *Kardan Journal of Social Sciences and Humanities*, (2022), 5(2), 11-25.
- Wani, N. U. H., & Latif, L. (2022). India's Security Strategy in South Asia: Visualizing Afghanistan's Past, Present, and Future. *Kardan Journal of Social Sciences and Humanities*, (2022), 5(2), 11-25.
- Wani, N. U. H., & Rasa, M. M. (2023). Dynamics of Trade Specialization and Performance of SAFTA: A Case Study of Afghanistan. *South Asia Economic Journal*, 24(2), 153-179.
- Wani, N. U. H., Dhami, J. K., & Rehman, A. U. (2016). The determinants of India's imports: a gravity model approach.
- Wani, N. U. H., Dhami, J. K., & Sidana, N. (2020). Indo-Russia Trade: An Evaluation of Symmetry, Complementarity, Intensity and Similarity. *Kardan Journal of Economics and Management Sciences*, 3(1), 14.
- Wani, N. U. H., Khan, F. N., & Paruthi, R. (2022). International Trade in Services and FDI: A Review and Bibliometric Analysis (2000-2020). *Management*, 5(1), 1-14.
- Wani, N. U. H., Mir, A. S., & Dhami, J. K. (2013). The experience and future potentialities of BRICS as a trading bloc. *Asian Journal of Research in Business Economics and Management*, 3(7), 271-289.
- Wani, N. U. H., Rahman, A., Grover, V., Mirzakhidova, S., & Mirwais Rasa, M. (2024). Regional trade expansion opportunities in Central and South Asia: exploring trade complementarity, diversification and similarity. *Cogent Economics & Finance*, 12(1). <https://doi.org/10.1080/23322039.2024.2363461>
- Wani, N. U. H., Taneja, K., & Adlakha, N. (2013). India and Pakistan: Economic Recital, Collaboration and Prospective of Trade. *International Journal of Trade & Global Business Perspectives*, 2(2), 412.
- Wani, N.H., Dhami, J.K., and Sidana, N. (2022), Impact of education on poverty alleviation in Afghanistan: An empirical evaluation, *Kardan Journal of Social Sciences and Humanities*, 5 (1), 1-14. DOI: 10.31841/KJSSH.2022.47
- Wani, N.U., Khan, F.N. & Naderi, F. Electricity consumption and economic growth nexus in Afghanistan: impact, causality, projections, and policy implications. *SN Bus Econ* 4, 113 (2024). <https://doi.org/10.1007/s43546-024-00671-0>
- Wani, N.U.H. (2024), "Drivers of Export Supply in SAARC: Investigating the Cross Evidence From Afghanistan", *Policy Solutions for Economic Growth in a Developing Country*, Emerald Publishing Limited, Leeds, pp. 61-82. <https://doi.org/10.1108/978-1-83753-430-220241004>
- Wani, N.U.H. (2024), "Impact of Non-Tariff Measures on Trade Within the SAARC Region: An Empirical Investigation of Afghanistan", *Policy Solutions for Economic*

Growth in a Developing Country, Emerald Publishing Limited, Leeds, pp. 181-200. <https://doi.org/10.1108/978-1-83753-430-220241009>

Wani, N.U.H. (2024), "Incidence of Reverse Capital Flight to Afghanistan: An Empirical Examination", *Policy Solutions for Economic Growth in a Developing Country*, Emerald Publishing Limited, Leeds, pp. 131-154. <https://doi.org/10.1108/978-1-83753-430-220241007>

Wani, N.U.H. (2024), Afghanistan's Regional and Bilateral Free Trade Agreements: An Evaluation of Trade Effects, Diversion and Creation, *Policy Solutions for Economic Growth in a Developing Country*, Emerald Publishing Limited, Leeds, pp. 155-179. <https://doi.org/10.1108/978-1-83753-430-220241008>

Wani, N.U.H. (2024), Afghanistan's Regional Integration With Central Asia: Identifying Trade Linkages, Economic Recital and Future Latency, *Policy Solutions for Economic Growth in a Developing Country*, Emerald Publishing Limited, Leeds, pp. 13-39. <https://doi.org/10.1108/978-1-83753-430-220241002>

Wani, N.U.H. (2024), Export Diversification in ASEAN and SAARC Regions: Exploring Trends Patterns and Determinants Through Empirical Investigation, *Policy Solutions for Economic Growth in a Developing Country*, Emerald Publishing Limited, Leeds, pp. 83-103. <https://doi.org/10.1108/978-1-83753-430-220241005>

Wani, N.U.H. (2024), Glossary of Afghan Expressions, *Policy Solutions for Economic Growth in a Developing Country*, Emerald Publishing Limited, Leeds, pp. 201-201. <https://doi.org/10.1108/978-1-83753-430-220241016>

Wani, N.U.H. (2024), Index, *Policy Solutions for Economic Growth in a Developing Country*, Emerald Publishing Limited, Leeds, pp. 203-209. <https://doi.org/10.1108/978-1-83753-430-220241010>

Wani, N.U.H. (2024), Introduction to the Book, *Policy Solutions for Economic Growth in a Developing Country*, Emerald Publishing Limited, Leeds, pp. 3-9. <https://doi.org/10.1108/978-1-83753-430-220241001>

Wani, N.U.H. (2024), Prelims, *Policy Solutions for Economic Growth in a Developing Country*, Emerald Publishing Limited, Leeds, pp. i-xxii. <https://doi.org/10.1108/978-1-83753-430-220241011>

Wani, N.U.H. (2024), Trade Costs of Afghanistan With Its Major Trading Partners: Measurement and Its Determinants, *Policy Solutions for Economic Growth in a Developing Country*, Emerald Publishing Limited, Leeds, pp. 105-127. <https://doi.org/10.1108/978-1-83753-430-220241006>

Wani, N.U.H. (2024), Trade Potential of Afghanistan With SAARC Region and European Union: A Gravity Model Approach, *Policy Solutions for Economic Growth in a Developing Country*, Emerald Publishing Limited, Leeds, pp. 41-57. <https://doi.org/10.1108/978-1-83753-430-220241003>

- Wani, N.U.H. and Rasa, M.M. (2024), Mapping trade opportunities in Central and South Asia: an exploration through trade indices and metrics, *Competitiveness Review*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/CR-02-2024-0023>
- Wani, N.U.H., (2018). Terrorism and foreign direct investment: An empirical analysis of Afghanistan. *Kardan Journal of Economics and Management Sciences*, 1(3), 40-59.
- Wani, N.U.H., Dhami, J.K., and Sidana, N. (2022), Impact of education on poverty alleviation in Afghanistan: An empirical evaluation, *Kardan Journal of Social Sciences and Humanities*, 5 (1), 1-14. DOI:10.31841/KJSSH.2022.47
- Yama, M., & Wani, N. U. H. (2021). Nexus between export diversification and economic growth: A case study of Afghanistan. *Kardan Journal of Economics and Management Sciences* 4 (1) 1–24, 10.31841/KJEMS.2021.8 <https://kardan.edu.af/Research/CurrentIss>
- Wani, N.U.H., Majidi, B.S., Sidana, N. and Goel, R. (2024), *Self-Help Groups in Afghanistan: A Ploy of Economic and Social Empowerment of Women for Sustainable Development*, Goel, R., Singh, T., Rahman, M.M., Islam, Q.T. and Baral, S.K. (Ed.) *Understanding the Multi-Dimensional Nature of Poverty*, Emerald Publishing Limited, Leeds, pp. 147-170. <https://doi.org/10.1108/978-1-83753-292-620241008>