

# [The potential impact of the increase in vat on vat compliance in the uk](https://assignbuster.com/the-potential-impact-of-the-increase-in-vat-on-vat-compliance-in-the-uk/)

1. 0 Introduction

## 1. 1 Introduction

If the VAT increases then what potential impact is seen on VAT compliance in the UK is the basic issue which is going to be studied in this research study. To understand the real meaning of the topic we have to understand the meaning of VAT. Value Added Tax commonly known as VAT was introduced in 1973, in consequence of Britain’s entry to the European Economic Community, at a standard rate of 10%. In July 1974, the standard rate became 8%, and from October that year petrol was taxed at a new higher rate of 25% (reduced to 12. 5% in 1976). In 1979, the higher rate was scrapped and VAT consolidates to a single rate of 15%. In 1991 this became 17. 5%, though when domestic fuel and power was added to the scheme in 1994, it was charged at a new, lower rate of 8% (Victor, 1995). VAT is considered a very important factor for understanding the economic problems within a country like UK. Certain goods and services are exempt from VAT, and others are subject to VAT at a lower rate of 5% (the rate reduces, such as domestic gas supplies) or 0% (“ zero-rated”, such as mostfoodand children’s clothing) (HMRC, 2008). Exemptions are intended to relieve the tax burden on essentials while placing the full tax on luxuries, but disputes based on fine distinctions arise, such as the notorious “ Jaffa Cake Case” which hinged on whether Jaffa Cakes were classed as (zero-rated) cakes—as was eventually decided—or (fully-taxed) chocolate-covered biscuits. Until last few years, VAT is charged at the full rate on sanitary towels (HMRC, 2010).

Income tax, National Insurance contributions, and Value Added Tax (VAT) contribute approximately two-thirds to total tax revenue in the UK(Adam and Browne, 2009). The third largest source of government revenues is value added tax (VAT), charged at 20% on supplies of goods and services. It is therefore a tax on consumer expenditure. VAT, which is a proportional tax paid on all sales, has become an important source of revenue in Britain, particularly as the government is under great pressures to raise revenue to ‘ balance the budget’ (Adams and Webley, 2001). A business has to register for VAT when their taxable supplies in the last twelve month period surpass or are expected to surpass the current registration limit of ? 70, 000. The VAT is a flat rate scheme with a current rate of 17. 5%, up from 15% (a rate which applicable from 01 December 2008 to 31 December 2009 as part of an economic stimulus package) (Adam and Browne, 2009). In addition to this flat tax that applies to the vast majority of goods and services purchased, there are a few items that are zero-rated, such as most foodstuff, exempt, such ashealthservices and privateeducation, and some with a lower rate of VAT (5%), such as baby car seats and domestic fuel and power (Adam and Browne, 2009). While items falling into these classes are not affected, the standard rate of VAT is set to increase to 20% from 4 January 2011.

VAT if increases would bring a lot of changes in VAT compliance in UK. Historical researchers have found that small businesses people believe that the present rate of 17. 5% is too high and promotes negative feelings towards VAT and full compliance (Adams and Webley, 2001). Given the increase in January 2010, what will be the impact on compliance ratesThis is an important issue, since research shows that VAT is more efficiently collected when VAT rates are low (de Mello, 2009). While the level of tax evasion in the UK has been found to be much smaller than in some other countries (Agha and Haughton (1996) reported evasion of 3% in the UK compared to 40% in Italy), even small amounts of evasion represent large losses in revenue. Still, there has been little research on VAT compliance over the last three decades, with research focusing mainly on income tax compliance (Mello, 2009; Webly, 2004). The lack of research on VAT in particular makes it difficult to assess the impact of the increase and so I think this is an area worth investigating more. This paper will discuss the VAT in the current situation of UK defining and identifying the implications associated with it. The literature review will discuss at length various theories proposed by different authors regarding the increase in VAT. Literature review tries to explain the reasons behind the existing possibilities of tax and VAT evasion by the consumers and retailers under different situations and scenarios. Furthermore, the literature review tries to analyze existing ways in which the authorities try to identify the problems that may prop up including different examples from the past and present scenarios from the rise and fall in VAT over the years and its implications upon the economy along with different compliance techniques used by then in order to make the work changes. VAT changes would bring in the real changes in the economy which would be the basic factor of importance.

## 1. 2 Research Aims and Objectives

As described above the basic aim of this paper is to study the effect of increase in VAT on VAT compliance in the UK, and this would be studied under the light of old literature of expert researchers and philosophers. Secondly a survey would be performed to develop the generic views of economists and philosophers about this problem. The purpose of this study is to build on previous research into tax evasion in general, and VAT evasion in particular, to present a description of small businesses’ perspectives on VAT and related issues. The specific objectives of this research are:

To view what impact small businesses have while paying VAT and related issues.   
To investigate the degree to which social and psychological factors play an important role in evasion of VAT.   
To investigate the possible impact of the increase in VAT onin evasion.   
Possible reasons and factors behind these increases or changes in VAT.

This paper has two additional sections. The second section is the preliminary Literature Review, in which the research on VAT compliance and important social psychological factors is discussed. Section three details the Methodology, outlining how the research will be carried out. Basic research methodology would be described in the lateral section but here it is important to mention basic objective of the study.

## 1. 3 Research Overview

Literature review:

Literature review basically reviews the historical data and research studies done by renowned researchers and scholars. In this specific study following topics would be researched in the literature; VAT and Inflation, Mental Accounting, Satisfaction with the Tax Authorities, Personality/Morality, Equity, Sanctions and Punishments, Adam’s and Webley’s Five Factors and several other related factors. All this would be concluded at the end of the research to make a final conclusion that what historical researches have said about the topic.

Research Methodology:

Research methodology basically tells that how the research is going to be conducted and what procedures are going to be followed to explore the topic and how writer is going to reach the final conclusion. Now here basically two types of methodologies will be used as discussed in the lateral parts, bothprimary and secondaryresearch would be done for the purpose to study the impact of increases in VAT.

Data analysis:

Data analysis as the name indicates is the analysis of the data from all above mentioned methods. Now once we would get the data from both literature and surveys than the next step would be to analyze this data for the purpose to conclude our study. And it is the most crucial part of the papaer because either the hypothesis will be proved or it will be rejected. So an immense importance will be given to this part of research.

2. 0 Preliminary Literature Review

## 2. 1 Introduction

Although Value Added Tax may be considered as something which is not publically known but still it belongs to people living in society thus it is important to study here people’s willingness to pay taxes depends on a range of variables. Economists tend to highlight the importance of the relevance of exogenous variables such as taxrate, income, and probability of detection and the level of sanctions, while psychological research demonstrates that endogenous variables are also significant, including taxpayers’ attitudes toward the government and taxation, personalnorms, perceived efficiency and equity (Hofmann et al., 2008; Kirchler, 2007). In taking these together, Cullis and Lewis (1997: 320) terms this the ‘ economicpsychologyapproach,’ which combines the “ positive approach the empirical world” with “ the softer approach” in which people “ comply with taxes for different reasons and the tax compliance problem isin part socially constructed.” Several other factors related to the Value Added Tax and increases in VAT are included in the upcoming literature review.

## 2. 2 Adams and Webley’s Five Factors

Adams and Webley’s (2001) have undertaken research specifically investigating VAT compliance and uncovered fifteen main concepts falling into five key themes that they thought to be relevant. Of the five major themes, four were recurrent in previous research on income tax compliance research: equity, attitudes toward taxation and tax authorities, sanctions, and personality/morality. The fifth theme they highlighted was ‘ mental accounting,’ which they note is a recognised psychological construct but has not previously been applied in the area of tax compliance. This five-factor model was echoed in Webley et al. (2006), who extended the research undertaken by Adams and Webley (2001) and found that mental accounting and equity were particularly important factors affecting VAT compliance. These five factors are briefly discussed here.

### 2. 2. 1 Sanctions and Punishments

In economics, the basic theory of tax evasion is an application of the theory of choice under uncertainty (Clotfelter, 1983). In the standard approach to tax evasion, a risk-averse individual chooses either the amount or the share of income to be concealed so as to maximise her expected utility of income, considering (1) the probability of detection, (2) the penalty tax rate applied when tax evasion is detected, (3) the marginal tax rate, and (4) the level of true income (Pommerehne and Weck-Hannemann, 1996). Thus, the problem a person has to tackle is whether or not to evade some part of her legal tax liability given that there is a probability of being caught if she decides to be non-compliant. Therefore, economic models focus on the role of penalties and audits, with economists theorising that greater penalties and audit probabilities should increase compliance (Slemrod, 2007). Empirical research indicates that both penalties and audits can lead to greater compliance (Andreoni et al., 1998), although higher penalties have been shown to be less of a deterrent than higher audit probabilities (Hessing et al., 1992).

### 2. 2. 3 Equity

At the centre of tax policy are concepts of equity (fairness) as the perceived fairness of a tax system has been found to be is essential to its acceptability and smooth functioning (Adams and Webley, 2001; Hofmann et al., 2008). This ‘ first, basic rule of taxation’ is based on Adam Smith’s first maxim of a good tax, which reads:

‘ The subjects of every State ought to contribute towards the support of the government as nearly as possible in proportion to their respective abilities – that is, in proportion to the revenue which they respectively enjoy under the protection of the State’ (as cited in Musgrave, 2002: 10).

Wenzel (2003) discusses three types of fairness that are applicable in this area. Distributive justice deals with the fair exchange of resources, benefits, and costs, procedural justice deals with the issue of tax collection and resource distribution, while retributive justice deals with the perceived fairness of audit and punishment as discussed above. Overall, research demonstrates that, where taxpayers feel there is a disparity in the exchange relationship, it is more likely that people will be non-complaint in order to offset or reduce the perceived inequity (Cowell, 1992). In recent work by Webley and colleagues on VAT and small businesses (Adams and Webley, 2001; Webley et al., 2004) the idea that small businesses especially are unfairly treated in the current system was a frequent theme.

### 2. 2. 4 Personality/Morality

In their research, Adams and Webley (2001) discuss the impact of egoism on compliance behaviour. They draw on research by Weigel et al. (1998) indicating that people that have egoistic tendencies are more likely to break rules when these rules are not in their personal self-interest and thus are more likely to try to avoid paying taxes. This idea is supported by research showing that egoism is a good indicator of the individual’s propensity to evade income taxes (Elffers, 1991), engage in benefits fraud (Hessing et al., 1993), and incur parking violations (Adams and Webley, 1996). Researchers have also outlined other important norms that may be important in influencing tax compliance, such as authoritarianism and Machiavellianism (Kirchler et al., 2008), and the overall conclusion from the research in this area is that people with more developed moral reasoning or tax ethics are more likely to be compliant (Hofmann et al., 2008; Trivedi et al., 2003).

### 2. 2. 5 Satisfaction with the Tax Authorities

Theoretical and empirical research indicates that dissatisfaction with the tax authorities is one of the reasons for non-compliance (Adams and Webley, 2001; Elffers, 1991; Hofmann et al., 2008; Webley et al., 2006). One way to look at this is based on efficiency, with research showing that people that think the tax system is inefficient are less likely to comply (Wearing and Heady, 1995).

### 2. 2. 6 Mental Accounting

Finally, Adams and Webley (2001) and Webley et al. (2006) have found that the way in which business people see the VATmoneythey collect is an important factor in whetner they choose to comply with VAT laws or not and use the idea of ‘ mental accounting’ (see to develop this point. According to Webley et al. (2006: 178):

‘ Mental accounting is often described as a psychological mechanism whereby income is framed…. inrespectof personalfinance…people have a number of mental accounts that operate independently of one another. What is interesting in the current context is whether business men and women psychologically separate monies owed to the VAT into a separate mental account from that of business turnover. If they do not, they may be more likely to try to evade VAT as a result of seeing it as ‘ their’ money.’

The results of their research is that most of the business people saw the money collected as theirs and therefore disliked handing it over to HM Revenue and Customs.

## 2. 3 VAT and Inflation

The main rate of VAT, a consumption tax, went up from 17. 5% to 20% on January 4th, 2011. The inflationary relapse is set to get worse in early 2011. The rise is an essential part of Mr Osborne’s plans to plug the budget deficit—but an unwelcome side-effect is that it will add to inflation. Because the tax increase is permanent, it is likely to be passed through to prices in full, whereas only about half the rise was passed on a year ago when VAT returned to its previously normal level of 17. 5%, after being lowered to 15% to fight the recession.

There are other inflationary forces at work too; as Asia’s rapid economic growth stokes up commodity prices. Most food escapes VAT, but that will not spare consumers: global food prices have risen by 27% in the past year, according to The Economist’s commodity-price index. World oil prices have also jumped recently. According to The Economist (2011) this unhappy confluence of upward pressures on inflation may well push the rate up to 4% by the spring.

Just how far below its potential output the economy is operating is a vexed question. One of the malign effects of financial crises is that they impair productive capacity, but estimates of the damage vary widely. With unemployment at 2. 5m—7. 9% of the labour force, compared with 5. 3% in 2007—there are clearly spare resources. The Office for BudgetResponsibility(OBR), which is now in charge of the government’s forecasting, estimated late last year that the output gap was 3. 3% in the second quarter of 2010.

That margin of spare capacity should persist this year since growth is likely to be lacklustre, not least because Mr Osborne’s austerity measures include harsh spending cuts and other tax rises starting in April, as well as this month’s VAT increase. A household survey published by the Bank of England last month showed that people are expecting inflation of 3. 9% over the next year, up from the 3. 4% rate they predicted last August (The Economist, 2011). While business conditions remain tough and unemployment high it is difficult to see these elevated expectations actually leading to higher wages growth.

## 2. 4 VAT Implications on Consumers

A jump in inflation caused by higher commodity prices and a rise in VAT—in an economy with spare capacity—is quite different from one caused by excess demand and a pay-price spiral. It intensifies the squeeze on households from other tax rises and curbs consumer spending. Although the central bank is facing calls to tighten monetary policy soon, that would be warranted only if there were signs of inflation getting embedded into expectations and feeding through to higher wages.

Unsurprisingly, households are now expecting inflation to be higher over the coming year. But other official figures showed no sign of a pay-price spiral. Average earnings are rising by just 2. 1%, a much muted rate by historical standards. According to The Economist and several other official sources it is difficult to envisage wages taking off when the public sector is shedding jobs and facing a two-year pay freeze and there are 2. 5m people unemployed, close to 8% of the labour force. Indeed the youth-unemployment rate has reached 20. 3%, the highest since comparable records began in 1992.

The concerns voiced by Mr. Miliband and the BRC lend weight to wider concerns that Britain is in for a difficult run in the early months of this year as consumers struggle to cope with slower earnings growth, rising inflation and looming public sector job losses as the government cuts spending by ? 81bn over the next four years (Rigby, 2011). Sir Richard Lambert, outgoing director-general of the CBI, the employers’ group, has warned of a “ bumpy” spell in the early months of this year in which economic growth could slow to a standstill.

Shoppers are unlikely to feel the effects immediately as retailers absorb the costs as part of the annual January sales and other promotions. But such activity could only be temporary, with the increases feeding through to shelf prices in the coming months.

Another example for the consumers buying frenzy caused by the announcement of increase in VAT is that the consumers were shopping right up until midnight in an attempt to avoid the hike in value added tax. One website, www. myvouchercodes. co. uk, reported that hundreds of thousands of people logged on to their site last night to look for items before the rise. It said the site experienced more traffic between the hours of 10pm and 12am last night than during peak lunchtime hours; a 23 per cent increase.

A poll of its consumers also found that more than half – 52 per cent – don’t plan on making any purchases that are ? 500 or above until at least autumn. When asked why this was the case, 89 per cent said the VAT rise had put them off (Ching, 2011).

## 2. 5 ComplianceCosts

Analysing the above causes and effects of the increase in VAT and the ripple effects in the economy that could possibly be caused by it leads to the variable that is discussed before. The different relations between the increasing inflation and unemployment as discussed above may pose a valid question as to the use of compliance and the ways in which it can be helped and encouraged.

Given taxpayers’ crucial role in making the VAT system work, the efficiency of their relationship with the tax authorities will greatly influence the cost of administering the system, for both parties. This relationship is determined not only by reporting, payment or auditing obligations but also by the quality, reliability and accessibility of information provided by tax authorities. Tax administration issues are primarily the Member State’s responsibility.

Tax administrations must prove knowledgeable in each individual case. This is a lengthy, costly and complicated procedure. In addition, it risks leaving taxable persons in a vulnerable position, particularly when dealing with a new supplier. They have to perform additional checks on thecompliance of each supplier. Bona fide businesses nonetheless run a risk that their right to deduct will be challenged because they have inadvertently been dealing with fraudsters.

Income Tax is a tax on profits and clearly a cost on businesses, as accountants are paid to calculate the liability and complete the tax returns. PAYE/Income tax is levied by the employer on the payroll and, like VAT, collected by them as ‘ an unpaid tax collector’ – this is rarely complained of, presumably because, they regard it as a service they provide for employees. However, the operation of VAT is a cost to businesses – they are unpaid tax collectors. Should one recognise this?

There are many papers and studies on the costs that Value Added Tax place on business. Cedric Sandford (Sandford C, M R Godwin, and P J W Hardwick, 1989, Administrative and Compliance Costs of Taxation, Bath, United Kingdom, Fiscal Publications) found that across a sample of UK industry, VAT compliance costs in broad terms were some 4% of revenues raised. Later studies have found that small businesses and those involved in cross border trade bear disproportionately higher compliance costs compared to other businesses. Sandford laid out three separate elements to the costs of compliance:-

(1) The fiscal costs associated to establishing and registering a company, the employee costs of running day to day VAT accounting, the cost of expertise to understand and keep up with changes in policies and rates, the cost of submitting VAT returns, and the cost of external accountants for operational and advisory services;

(2) The costs of the time of senior management in overseeing the function – in theory these can be turned into money, but in reality this is a very scarce resource in a company;

(3) The psychological costs caused by the onus being on the business to conduct their VAT affairs properly, with financial and civil/criminal sanctions for failing to do so.

Studies suggest that it is the very small companies just above the VAT threshold who bear the heaviest burden – in the UK a National Audit Office study in 1994 found that, in the smallest companies, the cost of VAT compliance was some 20 per cent of the tax paid. A European Commission survey (European Tax Survey, Working paper n°3 October 2004) found that the absolute compliance costs (for VAT and corporate taxes combined) corresponded to 1. 9% (of sales) for Large Businesses but 30. 9% for Small and Medium-sized Enterprises (SMEs).

## 2. 6 Summary

As noted in the Introduction, there has been little research on VAT compliance over the last three decades and this is reflected in the literature that has been reviewed here. However, brief review of the literature on VAT compliance, combined with the insights from the research on income tax compliance, indicates that businesses’ willingness to comply with VAT laws is influenced by sanctions, but also by a number of internal factors, important among which are perceptions of equity and their mental accounting. Furthermore the implications of increase in VAT are also associated with inflation and the behaviour of consumers in recent times as an example. Lastly the compliance costs are also discussed in detail. Now next step of this research study is the methodology which is very important in context of both historical researches and the data collection tools. So methodology will be better explained in the next topic which is dedicated to the methodologies.

3. 0 Methodology

## 3. 1 Introduction

By looking at different type of research methods and discussing which method to adopt researcha deep insight was done for this purpose. And then following methodology was selected to carry out the research and in order to obtain results. Following basic steps would be involved in order to carry out the whole research.

Literature review as already done before.   
Data collection through questionnaire and surveys.   
Data interpretation systematically.   
Results and implication of results.

### 3. 1. 1 Primary Research

Primary research is the one where we collect data from primary sources like direct interviews, data collection through questionnaires etc (Colman 2006). This will contribute to the knowledge of VAT and its implications in the field of economy. Secondly what changes are brought in VAT compliance in UK by the increase in VATBy conducting questionnaires and interviews, this can pose as justification for any secondary research found.

### 3. 1. 2 Secondary Research

Secondary research is in the form of a detailed literature review acting as the basic foundation to test the research objectives. Wallace (2009) described secondary research as the systematic search to answer questions, empirical evidence is gathered as well as logical arguments to provide theories and increase understanding of the topic. For this project, academicsources of literature such as books journals and newspapers are analysed to form a debate on VAT and increases in VAT and later on its impact.

## 3. 2 Research Approach

By using a combination of the two research approaches; primary and secondary research on VAT, the researcher can achieve a framework in order to increase the knowledge of the topic (Wallace 2009). By combining the research methods and VAT facts related to the topic, a more conclusive argument can be reached.

In constructing in method, a secondary information search strategy was put together with two main steps. The first step is to specify the data needs, which empirical and theoretical articles were dealing with VAT compliance. The second step includes specifying the data retrieval method. Both manual and electronic retrieval methods will be used. In the electronic search, two approaches will be used to locate relevant articles. First, a keyword search will be conducted, meaning that keywords relating to VAT evasion will be identified and then used in various search engines to locate relevant material. The next approach will be based on the previous searches, meaning that relevant material cited in the data sources already collected will be located and collected. Data will be presented using traditional narrative reviews, which use a narrative format to summarise the findings of primary studies on a coherent topic to attempt to draw conclusions or inform theory (Robson, 2002).

## 3. 3 Questionnaire used for Research study

As it is an investigation to gather the reasons and explanations for our topic which is basically the changes brought in UK compliance by increase in VAT so, open ended questionnaires were asked to get open views and reasons of our respondents. Following open ended questions were asked to the businesses and people who were selected for the interviews and questionnaire survey purpose:

What does your business mainly produce or make   
What do you think increase in VAT could bring a prominent impact over VAT compliance or not   
What was your company’s total turnover excluding VAT   
How did your business carry out Vat activities like Record keeping, VAT return entries, and while sending the returns to excise and custom departments   
What rules you follow considering VAT as a main issue of your business   
Give a percentage answer for how much advise you prefer to take from VAT advisors and how much successful it was   
How do you think VAT and inflation could be dependent over each other   
Have you ever used mental accounting while making adjustments for VAT   
How much total cost you think you bear to deal with VAT issues   
In the context of VAT and increase in VAT are you satisfied with the Tax authorities   
What do you think which VAT arrangements reduced the VAT compliance costs for your company   
What role do you think Equity plays in increase of VAT   
What do you think Sanctions and Punishments should be made necessary while dealing with VAT   
While quantifying the VAT for the value of goods and services what factors you mainly focus   
If you want to give any comments regarding impact of increase in VAT on VAT compliance in UK, You are most welcome.

There are two main limitations of this method. First, the research subject deals with matters that relate to contemporary issues and may be restricted by deep-seated social, historic and regional biases. Second, the insufficiency of published information on VAT compliance in comparison to other more well-researched aspects of tax compliance is underlying limiting factors that restrict availability of requisite secondary information. This may result in the omission of significant information that may well have improved the research conclusions.

4. 0 Research Findings   
After analyzing the respondent’s feedback data and the historical research findings few very important findings came in front which are going to be discussed in this part of the paper. Firstly if we observe, most countries deal with the new challenges by adopting new taxes, including the Value Added Tax (VAT). A historical data analysis showed that today, VAT is a major part of the tax system in over 136 countries, rising about one-quarter of the world’s tax revenue (Ebrill et al. 2001; 2002). According to respondents the debate regarding the welfare gains associated with switching from trade taxes to VAT is not over. Literature showed some very important findings for our paper like Emran and Stiglitz (2005) cautioned that the welfare gains from a switch to the VAT are questionable in the presence of a large informal sector. Baunsgaard and Keen (2005) found that for middle-income countries, revenue recovery following trade liberalization has been about 50 cents for each dollar of lost trade tax revenue, and the revenue recovery has been very weak in low income countries. According to the selective research methodology we founded out that there is much evidence that the mere presence of avalue-added tax has made it easier to cope with the revenue effects of trade liberalization. As a lead citation points out that adopting the VAT also remains a debated issue in the USA, framed occasionally as ‘ A too easy tax to collect’ by advocates of the ‘ Starve the beast’ approach to government’s size, versus views that focus on the welfare cost of alternative taxes.

Majority of our respondents supported the fact that a frequently cited advantage of the VAT is that this tax is collected throughout the production chain, giving it a practical advantage. Specifically, the VAT should be associated with easier enforcement, as it allows the fiscal authority to compare reported sales of each intermediate product with reported purchases of producers using that intermediate 392 J. Aizenman and Y. Jinjarak product as an input in a vertical production chain. While the VAT may indeed be an easier tax to enforce than income tax, the VAT is not a panacea– enforcing it involves spending resources on collecting and processing information, prosecuting and penalizing agents found underpaying the taxed. Hence, one expects that VAT collection efficiency increases with their sources spent on enforcement, and with the efficiency of monitoring, collecting and processing information. Theory suggests that the enforceability of taxes is impacted by political economy considerations – greater polarization and political instability would tend to reduce the efficiency of tax collection, reducing the resources devoted to tax enforcement. In addition, collection is impacted by structural factors that affect the ease of tax evasion, like the urbanization level, the share of agriculture and trade openness.

The purpose of this paper is to verify the dependence of VAT collection efficiency on key structural and political economy factors. The first section outlines a model determining VAT efficiency, extending Cukierman et al. (1992). Specifically, we model the optimal tax evasion of agents, in an economy where the government determines optimally the probability of audit and the penalty associated with underpaying the VAT. We show that greater political instability and polarization tends to reduce tax efficiency. Similarly, economic structures that increase the cost of enforcement, like less urbanization, less trade openness and higher share of agriculture, reduce the collection efficiency of the VAT.

In the sample, the earliest implementation of VAT was by Brazil in 1967, and the latest by Cameroon in 1999. There is no systematic difference in statutory VAT rates between high-income and developing countries. The size of VAT revenue in total tax revenue varies from 6. 6% in Japan to40. 5% in Chile. Figure 1 relates cross-country VAT revenue to a set of economic variables. VAT revenue to GDP tends to increase with real GDP per capita, urbanization share of population, and decrease with the agriculture share of GDP. To answer how this cross-country variability can be explained by economic variables, we estimate panel linear equations of VAT collection efficiency controlling for a set of explanatory variables suggested in the literature.

We calculate VAT collection efficiency using two alternatives: (refer to figure 2 and the table below)

C-efficiency ratio, defined as annual VAT revenue/consumption divided by the year 2003’s standard VAT rate; (ii) Efficiency ratio, defined as annual VAT revenue/GDP divided by the year 2003’s standard VAT rate. The difference between the two alternatives is that the C-efficiency ratio is normalized by reference to a consumption-type VAT, whereas the Efficiency ratio is normalized by reference to an income-type VAT.

The explanatory variables are:

(a) Measures of economic development: real GDP per capita. We expect that a higher level of income should be associated with higher VAT collection efficiency.

(b) Composition of gross domestic product and population: agricultural share in GDP, trade openness and urbanization of population. We expect that it is more difficult to administer and collect VAT in less urbanized, more rural countries. We also include trade to GDP since imports are an important base for VAT, and represent the part of the VAT that is more easily enforced.

(c) Measures of political instability and fluidity of political participation: durability of political regime and regulation of political participation. We expect higher VAT performance in countries with a more stable political regime and highly regulated political participation (hence, more homogeneous societies with relatively fluid political participation), than less stable, more polarized political systems.(as depicted in figure 2 and the table below)

Figure 2: Effects of a one standard deviation change in explanatory variable

A brief discussion on VAT in other economies for instance China: (refer to figure 1 below)

There were significant changes or challenges in the Chinese economy, and the world economy, in the second half of 2008. Due to dramatic price increases of raw materials and energy, appreciation of RMB (Chinese currency) and intensified global competition, the volume of foreign trade and exportation dropped significantly while economic growth slipped considerably in China in the second half of 2008. In order to revitalize the slowing Chinese economy, the government is contemplating the introduction of new measures to accelerate economic growth. Therefore increasing attention was given to an official implementation of the VAT reform in the last quarter of 2008. The advocates argued that the VAT reform should be introduced nationwide on the following grounds:

The government should stop the restrictive fiscal and monetary policy that was adopted in late2007 and change to an expansive fiscal policy in order to prevent the Chinese economy from slipping into a recession. Both expenditures, expansion and tax reduction, are needed to fulfil the purpose. The nationwide VAT reform will reduce annual tax revenues by RMB? 100–200billion, which can substantially reduce the tax burdens of business enterprises. This reform should encourage enterprises to increase spending on production facilities, thus expanding the aggregate demands in the domestic market to offset the drops in foreign trade and export. In particular, under the current global financial and credit crisis, VAT reform may assist the government in stimulating economic growth and avoiding economic recession in China;

The VAT reforms will benefit enterprises nationwide in having more funding for investment in capital assets, adoption of high-tech equipment or production facilities, expansion of spending on R & D, and upgrading product quality. As a result, more enterprises will transform from labour-intensive to capital intensive productions, which will promote the restructuring of Chinese economy and provide better infrastructures for sustainable growth. In addition, the reform can help business enterprises to reduce production costs, enhance product quality and production efficiency and effectiveness through the reduction in tax payables and accelerated technological renovation. Eventually the VAT reform should benefit consumers of the end products as well;

Although the early experiments of VAT reform since 2004 have accelerated economic growth in some less-developed regions, they have inevitably brought about varied tax burdens for enterprises located in different regions or areas, which is against the principles of equal taxation and fair competition in the market. Thus a nationwide implementation of VAT reform will help to overcome this problem;

The VAT conversion can also further promote their form of the tax system in China. At present, tax revenues remain mainly based on indirect turnover taxes such as VAT, business tax and consumption tax, while direct income taxes account only for a small proportion, much lower than that in the developed countries. The VAT reform can relatively reduce the indirect turnover taxes and facilitate the increase in production and effectiveness of business enterprises, thus expanding the tax base for direct taxes and raising the proportion of direct taxes in the Chinese tax system.

Conversion to consumption-based VAT can also promote a harmonization of the Chinese tax system and the prevailing international norms. Furthermore, the reform can allow the tax authority to apply tax preference policy tools by using preferred tax rates to direct tax reduction (tax rebates), as the latter approach is generally perceived as more cost-effective in tax administration; With the implementation of full scale VAT reform, there is no need for granting VAT exemption for enterprises producing exported goods as the input VAT paid to acquire capital assets by exporting enterprises and other domestic-sales enterprises can be equally applied as VAT credits to determine VAT payables. As a result, Chinese exporting enterprises can be freed from the accusation of receiving government subsidies by VAT exemption or rebates they can claim and reduce the risk of anti-dumping law sanctions imposed by foreign countries. This will help to enhance the competitiveness and market-entry capability of Chinese products in the international markets; and

Although the VAT reform will reduce government’s VAT tax revenues considerably, the potentially lost tax revenues are tolerable undercurrent fiscal conditions in China. According to government statistics, the average annual increase of tax revenues is about RMB? 1. 3 trillion in recent years, thus the government should beagle to absorb the estimated costs of RMB? 120billion for implementing VAT reform nationwide.

As a result of expanded production and improved operating effectiveness of businesses due to VAT tax credits to which they are entitled, as well as increasing employment in business sectors, the direct enterprise- and individual income taxes should increase thanks to the expansion of tax bases. In addition, according to the outcome of the small-scale experiments in certain regions or industries, the actual volume of VAT tax loss is less than the original prediction. 6 Hence, many scholars and tax professionals are optimistic that the total VAT revenue loss could similarly be less than the projected figures for nationwide VAT reform and will not be a heavy burden to the state’s treasury.

Figure 1 . GDP, Total Tax Revenues and VAT Amounts in China over 2001-2007#

Year

National GDP (? billion) (a)

Annual increase (b)

Total tax revenues (? billion) (c)

Annual increase % (d)\*

% of total tax reven. to GDP (e)=(c)/(a)

VAT (? billion) (f)

Annual increase % (g)\*

% of VAT to total tax revenue (h)=((f)/(c)

2001

10, 965. 52

8. 3 %

1, 516. 553

13. 83

15. 81

709. 082

15. 31

46. 76

2002

12, 033. 27

9. 08

1, 699. 664

12. 07

14. 12

814. 125

14. 81

47. 89

2003

13, 582. 28

10. 03

2, 046. 631

20. 41

15. 07

1, 009. 634

24. 01

49. 33

2004

15, 987. 83

10. 09

2, 571. 852

25. 66

16. 09

1, 258. 894

24. 69

48. 95

2005

18, 387. 88

10. 43

3, 086. 584

20. 01

16. 99

1, 069. 829

-15. 02

34. 67

2006

21, 087. 13

11. 7

3, 763. 627

21. 94

17. 85

1, 289. 461

20. 52

34. 26

2007 24, 661. 92 11. 9 4, 844. 928 28. 73 19. 65 1, 560. 991 21. 06 32. 33 Notes: # Data sources: China Statistical Yearbook (2001 to 2008); and State Administration of Taxation, Tax Revenues Statistics (2001 to 2007), www. Chinatax. gov. cn \* the annual increase is calculated by comparison to the level in prior year respectively.

5. 0 Discussion

In the previous discussion, we have shown how the openness of a country matters for its own unemployment and welfare effects. Now, we briefly illustrate how unilateral tax policies spill over to other countries, in particular if bilateral FDI relations are strong.

In particular, unemployment in Ireland declines in response to a corporate tax increase in the UK, the Netherlands, Italy and Germany. The reason is that foreign multinationals expand their subsidiaries (and therefore employment) in Ireland, in response to a higher tax in the parent country. The corresponding response in the UK is much smaller for two reasons. Firstly, employment of subsidiaries constitutes a relatively small part of total employment. Second, because the corporate tax rate is higher in the UK, which makes this country less attractive for foreign multinationals to escape their higher domestic tax burden. In exceptional cases (like Irish multinationals investing in the UK), a tax increase may raise unemployment in other countries, because the multinational cuts down overall investment in all countries in response to the higher domestic tax. Overall, corporate taxation in one country tends to reduce unemployment in countries with which the bilateral investment relations are strong.

These regressions account for 55–67% of the variance in the data. The economic significance of these variables is sizable. The two most important variables explaining the VAT performance are the urbanization share of population, and real GDP per capita. A one standard deviation increase in the urbanization share (18. 1% of the total population) raises the VAT C-efficiency ratio by 12. 7%, and the Efficiency ratio by 4. 4%. A one standard deviation increase in per capita GDP (US $5, 960) raises the C-efficiency ratio by 8. 1% and the Efficiency ratio by 4. 6%. A one standard deviation increase in trade openness raises the C-efficiency ratio by 3. 9%, and the Efficiency ratio by1. 7%. A one standard deviation increase in the GDP share of agriculture reduces the C-efficiency ratio by 4. 8%, and the Efficiency ratio by 3. 5%.

Political economy variables also provide a significant explanation of the VAT performance. A one standard deviation increase of the durability of the political regime, and the regulation of political participation, raise the VAT C-efficiency by 3. 1% and 3. 6%, respectively. Similar results apply to the impact of political economy variables on VAT measured by the Efficiency ratio.

The age of the VAT has an unexpected negative sign, but it is insignificant and provides essentially no explanatory power to the regressions of VAT performance. Ebrill et al. (2001) found weak support for the role of VAT age in collection efficiency. One interpretation is that while administration of, and compliance with, the VAT may improve with experience, the structural and political factors of the economy are more important considerations.

If we talk about the historical researches then a number of researchers talked about important topics related to VAT and its compliance but few also ignored many important aspects among them. Initially if we talk about Sanctions and Punishments according to my survey only five among many researched this topic and this shows that a lot of research is still required at this topic. Now if we move towards Equity section than again among a huge database only five researchers talked about this topic as well, and looking at the Personality/Morality I, found seven major researches which really talked about the importance and significance of this topic and majority also ignored it. Satisfaction with the Tax Authorities was another big debate which I discussed in my literature and this topic was also observed to be very rare in the old researches. Mental Accounting is although a very important topic which needs to be explained well through researches but it has been the centre of attention of only few researchers and major among them is Webley. VAT and Inflation and Compliance Costs are also discussed in literature and majority of researchers ignored this phenomenon too so it is an opportunity for upcoming researchers to consider these topics for their research studies.

Households

Following the standard overlapping-generations model of Diamond, households are assumed to live for two periods. 4 Household decisions on consumption and leisure are derived from the maximization of lifetime utility. An individual only supplies labor when young (i. e. the first period), taking into account that he will be unemployed for a fraction of his time. Young households receive wage income (after taxes), unemployment benefits and lump-sum transfers. This income is allocated over consumption (including taxes) and savings. Savings are invested in a mix of bonds and stocks, which are assumed to be imperfect substitutes. Households retire in the second period. Their consumption is financed by capital income (net of taxes), pure profits and lump-sum transfers.

The calibration of the household model is based on data for 2002. For each country, the model thus reproduces consumption shares, employment (in hours) and unemployment rates in that year. Values for the main parameters are given in Table A1. Labor supply decisions are governed by the standard income and substitution effects. The uncompensated elasticity of labor supply is set at 0. 2, which is based on a Meta analysis of existing estimates (Evers et al., 2005). The income elasticity is set at 0. 05. In the sensitivity analysis, we look at an uncompensated labor supply elasticity of 0. 4 instead of 0. 2.

Firms

CORTAX distinguishes between two types of firms: domestic firms and multinationals. A domestic firm operates in the home country. A representative multinational headquarter is located in each country. Multinationals own one subsidiary in each foreign country. 5 Firms are assumed to maximize the value of the firm. Production in each firm uses three primary factors: labor, CapitaLand a location-specific factor (e. g. land). Labor is internationally immobile so that wages are determined on national labor markets. Capital is assumed to be internationally mobile so that the return to capital after source taxes is given for each country on the world capital market. This fixed return to capital implies that the user cost of capital depends on country-specific corporate taxes, which thus affect investment behavior. The location-specific factor is supplied in elastically and is internationally immobile. Its return, being a rent, is subject to corporate tax. Income from rents earned by subsidiaries accrues tithe parent country. Accordingly, countries can partly export the tax burden abroad through the corporate income tax.

Firms finance their investment by issuing bonds and by retaining profits (issuing new shares is excluded). The equity capital of a subsidiary, defined as foreign direct investment (FDI), is provided by its parent. The optimal financial structure of companies depends on the difference between the cost of debt financing (deductible for corporate taxation) and the required return on equity. The latter is determined by the marginal equity holder, which is assumed to live in the home country. As a consequence, the required return on firms’ equity depends on the personal income tax on equity. As debt financing is tax favored in corporate tax systems, extreme debt positions are avoided by specifying financial distress cost that increases in the debt ratio of a company. Production in a subsidiary needs in addition an intermediate input that is provided by its parent company. A headquarter can charge a transfer price for these inputs that deviates from an arm’s-length price. In particular, with separate accounting, a multinational has an incentive to shift profits to low tax countries by setting an artificially low transfer price. Profit shifting remains bounded by specifying convex costs arising from manipulated transfer pricing.

6. 0 Conclusions and Recommendations

This paper explores the impact of corporate taxes on unemployment in a general equilibrium model that is calibrated for the European Union. We find that, by increasing the cost of capital, corporate taxes raise equilibrium unemployment. The magnitude of this effect declines with the substitution elasticity between labor and capital in production and the responsiveness of wages to unemployment. It rises with the initial marginal investment distortion associated with the corporate tax system. A broader tax base renders the corporate tax more distortion for marginal investments, which magnifies the labor market effects of corporate tax increases. The analysis reveals that corporate taxes are more costly for welfare in

European countries that are relatively open in terms of hosting a large share of multinational companies.

In particular, with openness corporate taxes create relatively large distortions in multinational decisions such as foreign direct investment and international profit shifting. If spillovers work primarily through foreign direct investment, like in Ireland, corporate taxes hurt welfare especially via exacerbating unemployment. This is because multinationals have largely exploited the opportunities for profit shifting because of a low initial corporate tax rate in combination with convex cost of the manipulation of transfer prices. If spillovers operate primarily through profit shifting, like in Belgium/Luxembourg and the Netherlands, corporate taxes exert smaller effects on unemployment. This is because multinationals can largely escape the higher corporate tax by exploiting new opportunities for profit shifting. This reduces the need for reducing their foreign investments in these countries. Still, the welfare costs of corporate taxes are large also under profit shifting because of the substantial erosion of the corporate tax base.

Compared to labor and value-added taxes, we find that corporate taxes are less harmful in terms of labor market performance. Labor supply drops less since part of the corporate tax is borne by the owners of the firm who receive pure profits. Unemployment rises more only under the assumption of relatively strong real wage resistance. This effect is subject to considerable empirical ambiguity. Yet, even though the corporate tax causes smaller labor market distortions, it induces larger welfare costs in many European countries due to distortions in production efficiency. It holds in particular for the open economies Ireland and the Benelux, where international spillovers make corporate taxes relatively distortion.

The evidence presented in this paper is consistent with the structural, political economy approach to taxation. While our paper does not the possibility of efficiency gains associated with greater reliance one VAT, it points out that these gains are not automatic, and may depend on structural factors. We close the paper with a discussion of limitations and future research. Our analysis focused on the de-facto efficiency of VAT. A limitation of this concept is that it is affected by both tax evasion, and statutory exemptions from VAT (like allowing for lower tax rates on some categories). The absence of detailed information prevents us at this stage from a more detailed decomposition of the de-facto collection efficiency between tax evasion and statutory exemptions. Similarly, we assumed limited time variation in the standard VAT in each country.

Better data should allow us to improve the precision of the empirical part. Despite these data limitations, our empirical investigation supports the prediction of a political economy, public finance approach to taxation. This approach may be useful in addressing the design and use of other taxes, including income, sales and trade taxes. Identifying the tradeoffs between a VAT and other taxes remains a topic worthy of future research.

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