

# **VAT lottery incentives: An opportunity for South Africa?**

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## **Abstract**

Some countries have introduced receipt-based tax lotteries (value-added tax (VAT) lotteries) in recent years in an effort to improve tax compliance. This acknowledges that the traditional method of tax compliance enforcement through audits, fines and penalties alone may no longer be optimal. The idea of a VAT lottery is to incentivise consumers to ask for a receipt when paying for goods or services, which serves as a lottery ticket that gives the consumer an opportunity to win a prize.

The decline in tax compliance globally poses a threat to revenue collection and, ultimately, to governments' ability to meet their spending commitments. Other countries, but particularly South Africa, may benefit from implementing a VAT lottery to assist in improved VAT collection. This study aims to analyse VAT lotteries that have been implemented across the world – particularly in the European Union (EU) member countries – through a systematised review in order to determine whether such a lottery could improve taxpayer compliance in South Africa.

Of the six EU member countries analysed in detail, four showed a decrease in the VAT gap in the years following the VAT lottery implementation. VAT gap data post-implementation was not available for two of the countries. Positive results include an increase in the number of vendors reported for refusing to issue invoices, a reduction in the number of non-validated receipts, and increased VAT collection. The finance ministers of two countries, and the Ministry of Finance of another, publicly declared the VAT lotteries successful.

Keywords: award; behaviour; incentive; reward; tax compliance; VAT lottery

## **1. Background**

“Luck is not as random as you think. Before the lottery ticket won the jackpot, someone had to buy it.” (Nazarian, 2019, n.p.)

Improving value-added tax (VAT) compliance through reward-based initiatives such as VAT lotteries is a topic that has been considered by several researchers (Brockmann, Genschel, & Seelkopf, 2016; Fabbri, 2015; Marchese, 2009).<sup>1</sup> Academic publications focusing on the

impact of positive rewards on taxpayer compliance behaviour, as observed through empirical studies, are available (Bazart & Pickhardt, 2011; Fabbri & Hemels, 2013). Recent years have seen the actual implementation of VAT lottery tax reward initiatives in countries such as Portugal, Slovakia and Romania (Ungureanu & Dascalu, 2015, pp. 3–8).

VAT contributed 24,5 per cent (R297.8 billion) to the revenue collected in South Africa for the 2017/18 period.<sup>2</sup> Since VAT contributes such a large portion of the total tax revenue, it is a problem that there is a decline in tax compliance as acknowledged by the South African Revenue Service (SARS), with VAT specifically noted as one of the areas of concern. Compliance has been impacted by low taxpayer morale, consumer and business confidence, and the reliability of the tax administration. The inability of SARS to collect the taxes due to it will result in the government being unable to meet its spending commitments (Ministry of Finance [South Africa], 2018, pp. 2–4).

The idea of a VAT lottery is to incentivise consumers to ask for a receipt when paying for goods or services. The receipt then serves as a lottery ticket (in some countries the receipt must be registered first, but the general principles remain the same) which gives the consumer an opportunity to win a prize. Consumers ultimately assist in enforcing tax compliance when requesting a receipt from a seller, as the seller will find it difficult to avoid declaring a transaction once a receipt has been issued (Ungureanu & Dascalu, 2015, p. 48).

This study provides important information to policymakers at government level by presenting a consolidated view of some existing VAT lotteries which can be considered as an avenue for improving VAT collection. SARS is considering the potential use of electronic cash registers that would enhance tax administration by monitoring business transactions, and a discussion paper on this is to be released (National Treasury, 2018, p. 50). A VAT lottery system could be rolled out in conjunction with electronic cash registers and this study may provide important information to SARS on how it could combine the two concepts into one rollout. A VAT lottery could also be viewed as a more favourable way of increasing VAT collection than a further VAT increase.

There are limited academic articles that critically evaluate the structure and outcome of the VAT lottery tax reward initiatives which have been implemented by different countries in recent years. Accordingly, this study aims to provide a structured overview of the VAT lotteries that have been implemented in recent years by various countries – with a particular focus on those forming part of the European Union (EU) – that compares rewards, frequency, lessons learnt and subsequent improvements, design, as well as the perceived success of the lotteries, based on subsequent data and the opinions of policymakers. The contribution of this article is that the information is analysed to provide recommendations on whether South Africa should implement a VAT lottery system as a tool to improve taxpayer compliance, after consideration of the potential shortcomings and opportunities of these lotteries (Bornman & Stack, 2015, p. 805). Similarly, any country that has a VAT system could evaluate whether a VAT lottery system should be implemented to improve tax compliance.

According to Brockmann, Genschel, and Seelkopf (2016, p. 384), individuals are more inclined to pay their taxes when government operates in a way that is viewed as efficient. The South African government acknowledges that corruption and poor governance have eroded public confidence and have led to a low tax morale.

The VAT rate in South Africa was increased by one percentage point, from 14 per cent to 15 per cent, effective from 1 April 2018. This was the first increase in the VAT rate since 1993 (National Treasury, 2018, p. 42).

This VAT rate increase was not well received, with unions marching to Parliament and arguing that it punishes the poor, who are not sufficiently protected against such an increase (Jadoo, 2018). The low trust environment that exists between the citizens of South Africa and the government is evident not only in the acknowledgement thereof in the 2018 Budget Review (National Treasury, 2018, p. 38), but also in the negative reaction of the public following the announcement of the VAT rate increase, where corruption at government level was blamed for the need to increase taxes (The Citizen, 2018; Davis, 2018; Omarjee & Niselow, 2018). This VAT rate increase may lead to higher levels of tax avoidance in instances where taxpayers feel that they are not seeing their tax money put to good use by the government.

## **2. Research method**

A qualitative approach is followed where non-numerical data are obtained and an analysis is conducted using conceptualisation. The collection of the non-standardised data is classified into categories (Saunders, Lewis, & Thornhill, 2012). A systematic review approach is followed, whereby the available literature is reviewed comprehensively using a planned strategy. The information is located, evaluated, analysed and the findings synthesised to reach conclusions (Saunders, Lewis, & Thornhill, 2012, p. 112).

A detailed account is provided of the characteristics of the VAT lotteries that have been implemented in various countries, particularly in the EU member countries. Relevant databases were searched to obtain relevant information on VAT lottery systems of various countries and systematically analysed to determine how the systems work, such as the rewards and frequency. Further, the data was systematically analysed to determine whether the system is deemed to be successful by considering the lessons learnt and subsequent improvements noted (Grant & Booth, 2009).

The following countries were identified as having implemented a Lottery Ticket Reward Policy: Taiwan, China, Mongolia, Brazil, Malta, Slovakia, Portugal, Poland, Romania and Slovenia (BBC News, 2015; Borstnik, 2016; European Commission, 2014, p. 3; Fabbri & Hemels, 2013, pp. 9–10; Montsane, 2016; Osborne Clarke, 2016; Ungureanu & Dascalu, 2015, p. 47). Puerto Rico suspended its lottery system soon after implementation (KPMG, 2015, p. 4) and Georgia's was also cancelled, arguably due to a lack of funds to keep the system going (European Commission, 2014, p. 21).

Although the available literature on most of the countries mentioned above as having VAT lottery systems is discussed, the literature is very limited for many countries, probably due to not all literature being available in English, or due to the various systems not having operated for a long time yet. For this reason, although the systems of Taiwan, China, Mongolia and Brazil are discussed based on limited information available, the main focus is on the EU countries that have implemented the system and for which there is available information on the success thereof.

### 3. Research findings on VAT lotteries in general

Limited research on tax lotteries is available. Experimental evidence from Bazart and Pickhardt (2011, p. 145) indicates that lottery winnings used as a reward for compliant taxpayers lead to improved tax compliance. Brockmann, Genschel, and Seelkopf (2016, p. 25) also performed a controlled laboratory experiment and caution that excessive rewards may obscure the obligation of an individual to pay tax.

Fabbri (2015, p. 9) observes: “Empirical evidence shows that the [lottery] policy is effective in reducing tax evasion and increasing net tax revenue.” The theoretical framework developed in Fabbri’s research indicates that where the lottery prize is big enough, it will ultimately reduce tax evasion and result in higher tax collection (Fabbri, 2015, p. 13). This framework supports the Cumulative Prospect Theory regarding the decision making of individuals, where individuals irrationally overweigh the probability of winning a very large amount of money such as the lottery (Fabbri & Hemels, 2013, p. 14).

Bornman and Stack (2015, p. 804) provide evidence that individuals view the idea of rewards for tax compliance as mostly positive. This is based on a survey conducted in Ekurhuleni, Gauteng, and provides insights into how South Africans may view a VAT lottery. However, the survey only included 176 participants in a very specific geographic location, with no other study of this kind having been done before. Thus, caution should be exercised when extrapolating these findings across a country and further research may be required on this matter.

In assessing whether a VAT lottery can be successfully implemented in a country, it is crucial to consider not only the potential positive financial impact, but also the taxpayers’ perceptions of a VAT lottery and how they may react to it.

### 4. Analysis of available literature per country

Table 1 summarises when each country implemented the VAT lottery system.

Table 1. VAT lotteries implemented.

Country	Implementation date
Taiwan	1951*, VAT 1986
China	1998
Mongolia	2016
Brazil	2008
Malta	1997
Slovakia	2013
Portugal	2014
Romania	2015
Poland	2015
Slovenia	2016

\* See Section 4.1.1.

Further information per country is provided below. First, non-EU countries are briefly discussed, after which the EU countries will be discussed in detail.

## 4.1 Countries other than EU countries

### 4.1.1 Taiwan

Although Taiwan had already implemented their uniform-invoice prizewinning lottery system in 1951, they only implemented VAT in 1986. The idea behind the lottery system was to encourage customers to ask for an invoice for every purchase to ensure that sales were not underreported (Fabbri & Hemels, 2013, p. 9; Lin, 1992, p. 137). As technology has advanced, Taiwan's retailers are now obliged to use electronic cash registers that are linked to the revenue authorities. Each receipt has a unique lottery number printed on it (Cunningham, 2013).

A lottery draw takes place on the 25<sup>th</sup> of every odd month, with various prizes. One special prize of NT\$10 million (R4 739 930)<sup>3</sup> could be won, depending on the financial situation of the lottery, if the eight-digit number appearing on the uniform invoice matches the winning number drawn for the special prize exactly. One to three grand cash prizes of NT\$2 million (R947 986) each could also be won if the eight-digit number appearing on the uniform invoice matches the winning number drawn for the grand prize exactly. There are also six other prizes ranging from NT\$200 (R95) to NT\$200 000 (R94 799) depending on the number of last digits matching between the uniform invoice and the winning number drawn. There is also a million-dollar prize where the winner receives a cash award of NT\$1 million (R473 993) and a thousand-dollar prize where the winner receives a cash prize of NT\$2 000 (R948). These two awards are specifically for cloud invoices. Customers can see the results of the lottery in the newspaper (Ministry of Finance [China], 2018).

At some stage, the VAT lottery in Taiwan increased VAT revenue by 20 per cent (European Commission, 2014, pp. 11–12). After running this system for so many years, the system has been deemed very successful (Giebe & Schweinzer, 2014, pp. 2–3). However, a problem identified with the system is that consumers could be incentivised to pay for each item separately as one receipt gives them one lottery ticket entry, regardless of the value of the purchase (Fabbri & Hemels, 2013, p. 73).

### 4.1.2 China

Due to the size of the underground economy in China causing tax evasion, a lottery receipt system was first implemented in 1998, but only in a selected area and in limited industries. The area and industries have expanded over a number of years (Wan, 2010, pp. 3–6).

Suppliers are required to use specific equipment to print an official receipt (*fapiao*) which contains the public lottery number. This is in the form of a scratch-and-win ticket and thus, consumers know immediately whether they have won or not. Unfortunately, fraud on the scratch tickets is also present, where *fapiao* tickets are sold on the black market (Chao, 2012; Rosenburg, 2016; Wan, 2010, p.4).

In 2002, the total prize money of 1,67 million yuan (R3 423 150) was paid to 67 129 winners, averaging at 24,87 yuan (R51) per person (Wan, 2010, p. 15).

From experimental evidence, the sales tax revenue increased by 17,1 per cent over the six year period in the areas where the lottery experiment was conducted and it can thus be seen as a success (Wan, 2010, p. 20).

### **4.1.3 Mongolia**

The VAT lottery system in Mongolia was implemented in January 2016 with the aim to decrease the shadow economy, where sales are not reported to cut costs. Any receipt on which VAT is paid, regardless of the amount, can be entered into the draw. To enter, consumers need to download an app on their smartphones to scan the barcodes on the receipts. The prizes that can be won range between 50 000 tugrik (R271) and thousands of dollars. Further, the taxpayers also get a 2 per cent tax refund during the following year based on the receipts scanned (Edwards, 2018).

### **4.1.4 Brazil**

The anti-avoidance program in Brazil, called *Nota Fiscal Paulista*, was created for the city of São Paulo during October 2007 to encourage better compliance under the self-enforcing mechanism of VAT. The city's population is around 42 million people and VAT accounts for 34 per cent of the GDP. The first lottery took place in December 2008 (Centre for Economic Policy Research, 2018, pp. 10–13).

The rewards increase depending on the value of the receipt. A monthly lottery is held and tax rebates (around 1 per cent of the total value of the purchase) are provided. Each taxpayer receives a Social Security Number which has to appear on each receipt. The suppliers making the sales have the duty to report the receipt to the revenue authority for the lottery. The consumers must create an online account and opt in for the lottery. On the online account, they can claim their rewards and they can also verify whether their receipt has been registered with the authority. If the receipt has not been registered, they can blow the whistle on the supplier (Centre for Economic Policy Research, 2018, pp. 12–14).

The monthly lottery takes place around the 15<sup>th</sup> of the month. On average, 1,5 million prizes are given each month, ranging between US\$5 (R71) and US\$25 (R356). There are also three large prizes ranging between US\$15 000 (R213 696) and US\$500 000 (R7 123 200). A consumer receives an automatic lottery ticket (if the consumer opted in for lotteries) for every US\$50 (R712) spent. The prize money can be paid directly into the consumer's bank account, used to pay other taxes, transferred to another person who has an online account, or given to a charity (Centre for Economic Policy Research, 2018, pp. 13–14).

The calculated VAT revenue in Brazil, net of rewards, shows an increase of 9,3 per cent since the lottery was implemented. Furthermore, the prizes have incentivised winners of the lotto, even where the prizes are small, to be more keen to ask for receipts on purchases for at least six months after the lottery (Centre for Economic Policy Research, 2018, p.3, 31). The system can thus be deemed successful.

## **4.2 EU countries**

### **4.2.1 Malta**

Malta is the smallest EU member country with a population of about 429 344 (European Union, 2018). The VAT lottery in Malta was implemented in 1997 to motivate customers to ask for receipts, which would ultimately help in improving VAT compliance (European Commission, 2014).

The monthly draw on the 15<sup>th</sup> takes place in public, where all fiscal receipts are mixed in a large drum and receipts are drawn at random from the eight holes in the rotating drum (Ungureanu & Dascalu, 2015, p. 49). Participation in this draw is therefore not automatic and consumers must mail or deliver by hand all receipts from the previous month by the 10<sup>th</sup> of the following month to qualify for entry into the VAT lottery. Each receipt should show the individual's name, surname and identity document number on the back (European Commission, 2014, pp. 12–13).

The prize attached to each receipt drawn is equal to 100 times the value of that receipt (Ungureanu & Dascalu, 2015, p. 49). A minimum and maximum prize value per receipt is set at €233 (R3 707) and €11 647 (R185 309) respectively. If a receipt has a value lower than €2,33 (R37) or higher than €116,47 (R1 853), the prize money will be brought to the minimum or maximum prize threshold as appropriate. A total monthly budget of €58 234 (R926 527) is allocated to the lottery and receipts are drawn until all prize money is allocated. On average, 30 people are chosen as winners each month (S. W. Burger, personal communication, May 18, 2018).

Cheques are issued to the winners by the Public Lotto Department and the outcome of the lottery is published both by the local newspaper and online by the Department of Information. All receipts remaining in the drum are recycled and, based on the weight of the drum, estimates are made of the number of receipts submitted (European Commission, 2014, p. 13).

To date, no quantitative evaluation has been conducted on the success of the Maltese lottery and the question remains as to whether the introduction of this lottery has led to improved VAT compliance. The Public Lotto Department estimated that the number of receipts submitted had increased from 32,5 million in 2007 to 35,7 million in 2013. This indicates that there is a growing interest in the lottery (European Commission, 2014, p. 13).

On average, an individual in Malta submitted 80,13 invoices to the VAT lottery during 2007. During 2013, this average increased to 84,5. Whether this slight increase is attributable to a growing interest in the lottery cannot be confirmed by the numbers alone. Other factors to consider would relate to the age of the population as the inclusion of babies (for example) would not add value to the analysis (European Commission, 2014, p. 13; Eurostat, n.d.).

Concerns were raised during an audit that the drum, which is kept in a warehouse, had become too small to ensure adequate shuffling for the roughly three million receipts received monthly. Further concerns expressed were the fact that there is no audit trail of the bags of receipts delivered from the Public Lotto Department's premises for the draw at the warehouse, and that access to the warehouse is granted without any verification (Sansone, 2018).

The VAT gap in Malta during 2015 was 23 per cent, which is 13 percentage points higher than the EU average of 10 per cent (Center for Social and Economic Research, 2017, p. 40). This raises the question of how successful the VAT lottery in Malta is in driving improved VAT compliance. It may well be that the onerous task of manually gathering and posting the invoices at each individual's own cost, combined with the lack of certainty that all the invoices are put into the lottery drum (Ungureanu & Dascalu, 2015, p. 50), decreases the willingness of individuals to participate and assist in enforcing tax compliance.

#### **4.2.2 Slovakia**

The VAT receipts lottery in Slovakia was implemented in September 2013 as a measure to fight VAT evasion and address the increasing VAT gap (Organisation for Economic Co-operation and Development, 2015, pp. 51–52). The VAT gap peaked in 2012 at 37 per cent (Poniatowski, Bonch-Osmolovskiy, Duran-Cabré, Esteller-Moré, & Śmietanka, 2018, p. 47). The goal was to motivate individuals to ask for receipts and to create awareness around VAT compliance, ultimately leading to improved VAT collection (European Commission, 2014, p. 14).

Less than one year after implementation, a decrease in participation resulted in an overhaul of the VAT lottery, beginning in late September 2014. With the new system, monthly winners have increased from 29 to 408. The approach was aligned to survey results which indicated that people want a higher probability of winning something of lower value rather than a higher value prize with a lower probability of winning (Cuprik, 2014).

A receipt of at least €1 (R16) can be registered with the National Lottery through a text message, through the National Lottery company, online, or automatically through the seller who registers the receipt on behalf of the purchaser. This must be done within a period of two months from the date of the invoice and must include compulsory information regarding the date and time as well as the amount of the transaction, and the cash register's unique identification number (Ungureanu & Dascalu, 2015, p. 51).

Each receipt stands an equal chance of winning, regardless of the value (European Commission, 2014, p. 15). Lottery draws take place weekly, with 101 winners selected every time. The weekly first prize is estimated at €10 000 (R159 104), but it fluctuates based on the number of receipts registered. The remaining 100 winners each receive only €100 (R1 591). A second draw takes place every 28 days for an opportunity to take part in TV Chance, where one person is guaranteed to win €3 000 (R47 731) and 40 contestants win various prizes. This is broadcast on weeknights and creates further awareness, serving as an advertising campaign for the lottery (Cuprik, 2014).

The overall fiscal impact of the lottery was estimated by extrapolating 2013 final quarter data in the restaurant and retailer sector, where the biggest impact was anticipated, indicating an increase of €8 million (R127 283 000) per annum. The estimated costs in 2014 of €1,6 million (R25 456 700) indicate that the lottery generates additional revenue, albeit on a smaller scale when compared with other available methods of combating tax evasion (European Commission, 2014, p. 16).

According to the European Commission (2014), only 2 per cent of the receipts submitted in 2014 came from the service industry, which is deemed one of the more risky sectors in terms of VAT compliance. The lottery was therefore not successful in reaching the problematic areas (European Commission, 2014, p. 16).

The Finance Minister of Slovakia declared in 2015 that the VAT lottery was a huge success because of the increased number of vendors reported for refusing to issue invoices, as well as because of the increase in VAT collection (BBC News, 2015).

The statement made by the Finance Minister is supported by the data presented in a study on the VAT gap, which shows a steady decline from 31 per cent in 2013 and 2014 to 29 per cent



in 2015 and 26 per cent in 2016. The study also acknowledges the role played by the introduction of various other measures to improve VAT compliance, such as the wider introduction of fiscal cash registers during 2014, in addition to the VAT lottery launched in the third quarter of 2013 (Poniatowski, Bonch-Osmolovskiy, & Belkindas, 2017, p. 48).

VAT compliance in Slovakia has therefore been encouraged by the implementation of more than one initiative; and the increase in VAT collection and the ultimate decrease in the VAT gap cannot be attributed solely to the VAT lottery. It is therefore acknowledged that there is a need for further quantitative analysis to determine the precise reason for the increase in VAT collection (European Commission, 2014, p. 16).

#### ***4.2.3 Portugal***

Portugal launched its VAT lottery in April 2014 in an attempt to get individuals involved in daily tax monitoring by requesting receipts when purchasing goods or services. The goal of the lottery is ultimately to ensure a fair trade environment, where all vendors charge VAT on the price to the customer, thereby eliminating unfair competition and fighting tax evasion (Wise, 2014).

The lottery is known as the “Lucky Invoice Lottery” and it involves one weekly draw and two bi-annual draws, which are all televised to create improved awareness of the lottery. The weekly prize is an Audi A4; and three individuals each stand a chance to win an Audi A6 in each of the bi-annual draws (European Commission, 2014, p. 19).

Entry into the draws is based on coupons which are obtained through the registration of invoices, either by the purchaser directly or by the seller at the time of purchase. The value of the invoice determines the number of coupons an individual is entitled to by working in multiples of €10 (R159) spend for each coupon. One coupon is assigned for a fraction of €10. Coupons have equal chances of being selected in the draw, with no limit placed on the number of coupons an individual is allowed to register (Ungureanu & Dascalu, 2015, p. 53).

All invoices issued in a particular year qualify for the Lucky Invoice Lottery in that year. Individuals should ensure that their fiscal identification numbers are included on the receipt issued, which will then, in most cases, be registered by the business issuing the receipt. The availability of an online platform facilitates a transparent process where consumers can ensure that their receipts have been correctly registered, and if their receipts have not been registered, they can proceed to register the receipts themselves. The online platform also provides individuals with an option to opt out of the lottery; and the winners are also notified through this platform, which allows them to decide whether to donate the prize or collect it, and if they want it done with or without public attention (European Commission, 2014, p.19).

Government sources indicated in 2014 that the number of transactions reported to the tax authorities had increased by 45,4 per cent compared to the previous year and, as a result, the cost of giving away cars was far less than the increased tax collection (Fabbri & Wilks, 2016, p.31).

The first draw on 17 April 2014 involved more than 207 million coupons, 7,9 million purchasers and 171 000 vendors. This is seen as significant participation (Ungureanu & Dascalu, 2015, p. 53) as the population of Portugal was estimated at 10 427 301 on 1 January 2014 (Eurostat, n.d.)

The VAT gap decreased from 16 per cent in 2013 to 14 per cent in 2014, with half of this decrease attributed to the increase in VAT compliance. It decreased even further, to 13 per cent, in 2015 without significant changes being introduced to the VAT regime during that year; and it decreased to 10 per cent in 2016 (Poniatowski, Bonch-Osmolovskiy, & Belkindas, 2017, p. 45; Poniatowski et al., 2018, p. 44). This improved compliance trend in 2014 coincided with the rollout of the VAT lottery and, in the absence of further known VAT initiatives being applied in 2015, provides strong evidence that the VAT lottery was successful.

#### ***4.2.4 Poland***

Poland launched its VAT lottery in October 2015 (BBC News, 2015) as part of an educational campaign to create awareness amongst consumers that they should ask for a receipt when paying for goods or services. Participation was limited to individuals who were 18 years and older; and a minimum purchase amount was set at zł10 (R37,54) (Ministry of Finance [Poland], 2015b).

Individuals had to register their receipts on a special website and they stood a chance to win laptops, tablets and cars each month (Ministry of Finance [Poland], 2015b). There was also a prize for the issuer of the invoice that ultimately won the car (an Opel Astra), who received a tablet as a token of appreciation for participating in honest business practices. In order to claim a prize, the original receipt needed to be handed over (Ministry of Finance [Poland], 2015a).

This educational campaign only ran for 18 months, with a focus on six industries that had been identified as high risk in terms of compliance. However, the VAT lottery was not rolled out across all of these industries for the full 18 months; instead, individuals stood a chance of winning exclusively for receipts that were issued by a specific industry for each of six three-month periods. The following industries were included in the campaign (Ministry of Finance [Poland], 2017): hairdressers and beauty treatments, personal taxi services, restaurants and caterers, dental and medical practice of a private nature, mechanical services on vehicles, and fuel sales at petrol stations.

During the 18-month period of the campaign, over 140 million receipts were registered. Prior to the launch of the VAT lottery, only every 14<sup>th</sup> consumer remembered receiving an invoice for purchases, whilst after the lottery this improved to every third consumer (Ministry of Finance [Poland], 2017).

An analysis of the VAT gap indicates that during the 2014 and 2015 years, the VAT gap was 24 per cent, decreasing to 21 per cent for 2016. This decrease could have been because of the Standard Audit File for Tax that was introduced for large economic operators, but it could also have been as a result of the VAT lottery system (Poniatowski et al., 2018, p. 43).

#### ***4.2.5 Romania***

A VAT lottery was implemented in Romania in January 2015, with the first draw held in April 2015. This followed recommendations made by the Ministry of Finance to create awareness amongst consumers of asking for a receipt, which would help to reduce tax evasion (European Commission, 2017).

The lottery is open to residents and non-residents who have purchased goods or services in Romania. The monthly lottery is based on receipts issued in the previous month only and the draw takes place on the first Sunday after the 15<sup>th</sup> of the month (Ministry of Public Finance, 2018).

No upfront registration of receipts is required; an individual merely has to request and keep the receipts until the draw takes place the following month. A fixed monthly amount of approximately €220 000 (R3 500 290), which is then divided equally between the number of winning invoices, is allocated to the Romanian VAT lottery. The lottery selects a date and invoice value and all individuals in possession of an invoice issued on that date with that value can claim a prize. The allocated monthly total lottery prize is then divided by the number of winners to determine how much each individual receives. In instances where there are more than 100 people claiming a prize, there will be a second draw to select only 100. An individual who is in possession of an invoice meeting the criteria of value and date of issue will be able to claim a prize only if the invoice was issued by an electronic cash register and contains all the required information, clearly legible (European Commission, 2017; Ministry of Public Finance, 2018).

Prizes have to be claimed within 30 days by submitting the original winning receipt, together with a copy of the individual's identification document or passport, to any territorial unit of the National Agency of Fiscal Administration. In the event that the prize remains unclaimed in a month, it is rolled over to form part of the total winning prize of the following month (Ministry of Public Finance, 2018).

Transparency is guaranteed as withdrawals are broadcast on television and the results are published by the media. The draws are public, are attended by representatives of the National Agency for Tax Administration and the Ministry of Public Finance, and take place in front of the Commission that supervises the draws. Prizes are only paid into bank accounts, which indirectly supports the notion that individuals need to move away from paying for goods and services with cash. Results are also posted on the websites of both the National Agency for Tax Administration and the Ministry of Public Finance for a period of 30 days (Iacob, 2015, p. 527; Ungureanu & Dascalu, 2015, p. 56).

The Minister of Finance of Romania indicated in 2016 that the VAT lottery was very successful and that VAT collection had increased significantly (Mercer, 2016). Compared with the same period in 2014, the declared VAT amounts for the first seven months of 2015 had increased by 5,85 per cent. This increase is believed to be a result of the combined compliance measures implemented, of which the VAT lottery is one (European Commission, 2017). In line with these observations it is noted that, according to the MasterCard director in Romania, the consumption of paper rolls for cash registers had shown an 80 per cent increase since the implementation of the VAT lottery (Ghinea, 2015).

Although VAT revenues had increased by 12,6 per cent in 2015, they decreased again in 2016. Furthermore, the VAT gap decreased from 40 per cent in 2014 to 34 per cent in 2015, but increased again to 36 per cent in 2016 (Poniatowski et al., 2018, p. 45).

There is no research evidence currently available that proves that the increase in VAT revenue collection correlates directly with the implementation of the VAT lottery. However, the lack of evidence should not be confused with a lack of correlation; there may well be a link between the two, even if only to a small extent.

#### **4.2.6 Slovenia**

In Slovenia, mandatory fiscal cash registers were introduced at the start of 2016 in an attempt to reduce the shadow economy and allow for the traceability of issued invoices. A VAT lottery was introduced simultaneously to limit the risk of non-issuing of invoices and to provide an incentive for customers to request their invoice (Financial Administration of the Republic of Slovenia, 2018).

Participation in the Slovenian VAT lottery requires an individual to collect and register ten receipts issued by different suppliers. Registration can be done through three different channels (Borstnik, 2016):

- A mobile application where the consumer verifies whether the invoice is already archived on the Tax Administration server (one automatic entry into the draw will be effected once ten invoices have been verified);
- An online portal, where a similar procedure to that of the mobile application is followed; or
- The manual gathering of ten invoices from different suppliers and the posting of them to a specified address.

Quarterly lottery draws take place, with three cash prizes of €10 000 (R167 334) each. Each prize is related to a specific method of verification of the issued invoices, namely: the use of the online portal, the mobile application, or the verification of the accounts of service providers such as hairdressers and taxi drivers (Financial Administration of the Republic of Slovenia, n.d.).

Slovenia had a low VAT gap of 8 per cent for 2016 (Poniatowski et al., 2018, p. 46). The introduction of mandatory fiscal cash registers and the VAT lottery resulted in a net increase of €43,1 million (R685 739 000) in the payment of VAT compared with the year before the introduction of the fiscal cash registers and the VAT lottery (Financial Administration of the Republic of Slovenia, 2017). During the first year after implementation, consumers checked more than 21 million receipts. These consumers had used their phones to check receipts issued by three-quarters of all fiscal cash registers, reducing the number of non-validated receipts and allowing for government staff to shift their focus to the control of other risky areas of late and incorrect tax payments (Financial Administration of the Republic of Slovenia, 2017).

Even though the increased VAT payments cannot be attributed solely to the implementation of the VAT lottery, it does form part of a combined set of measures aimed at curbing non-compliance that has ultimately increased VAT collection. This has also freed up time to allow the tax administration to focus on other risk areas.

### **5. Could a VAT lottery be beneficial for South Africa?**

One cannot conclude that a policy implemented successfully in one country would automatically be successful in another. Various factors need to be considered and compared between the countries in order to draw a conclusion. The next section discusses items of importance in assessing whether a VAT lottery could be beneficial for South Africa. The focus is on the EU countries for which sufficient information could be obtained. The items of importance will be discussed in 5.1 to 5.4 below.

## 5.1 Significance of VAT collection

It is important to understand the contribution of VAT collection to the total tax revenues collected for each country. This requires a comparison between the EU member countries and South Africa in order to assess whether South African VAT is comparable to other countries in terms of its materiality for the fiscus.

Even though South Africa has the lowest VAT rate when compared to the EU countries considered in this study, VAT is the second biggest contributor to total tax revenue in South Africa, as indicated in Table 2. Romania is the only country where VAT contributes more to total tax revenue. It should be noted that during 2016 the Romanian VAT rate was 20 per cent (Babici, Crivelli, & Marinkov, 2018: p.14).

Table 2. Standard VAT rates and contribution to total taxes.

Country	Current standard VAT rate	VAT contribution to total taxes <sup>4</sup>
South Africa	15%	25,3%
Malta	18%	22,5%
Romania	19%	26,0%
Slovakia	20%	21,3%
Slovenia	22%	22,9%
Portugal	23%	24,8%
Poland	23%	21,6%

Source: Babici, Crivelli, and Marinkov (2018, p. 6); National Statistics Office (2017, p. 4); Organisation for Economic Co-operation and Development (2017, p. 18); South African Revenue Service (2017, p. 29); VATlive (2018).

Table 2 is a clear indication of the importance of South African VAT collection for the government. VAT represents more than a quarter of the total South African taxes, at a rate of 15 per cent. It is therefore submitted that it is reasonable to consider the implementation of a VAT lottery in South Africa as a measure to protect, and potentially to further improve, collection of this critical tax.

## 5.2 Country size and population

Of the countries investigated in this study, South Africa is by far the biggest in terms of area and population (see Table 3). It is 3,8 times as big as Poland, which is the largest EU member country of the six analysed and is bigger in square kilometres than the selected EU member countries combined.

Table 3. Comparison of territory and population.

Country	Size (square kilometres)	Population <sup>5</sup>
South Africa	1 219 090	57 725 600
Malta	316	475 701
Romania	238 391	19 523 621
Slovakia	49 035	5 443 120
Slovenia	20 273	2 066 880
Portugal	92 225	10 291 027
Poland	312 679	37 976 687

Source: European Union (2018); Eurostat (n.d.); Statistics South Africa(2018a, p. 21); Trading Economics (2018).

The size and diversity of the South African population may impact the cost of implementing a VAT lottery in South Africa. Depending on how a VAT lottery would be implemented in South Africa, one of the biggest expenses could relate to the outlay on electronic cash registers; however, as SARS is already considering the use of such registers to enhance tax

administration by monitoring business transactions (National Treasury, 2018, p. 50), it would not be a cost incurred solely for the implementation of a VAT lottery.

The size of South Africa also indicates that a VAT lottery system where all receipts are mailed to a specific location, such as the one implemented in Malta, will not be appropriate. Registration of invoices on an online platform, via a cell phone or directly by the supplier, or having the customers keep the invoices (as in the case of Romania), may be the most viable options for South Africa.

### 5.3 Unemployment

In assessing the viability of a VAT lottery in South Africa, the economy of the different analysed countries should be considered. The state of the economy may impact the willingness and ability of people to participate in a VAT lottery, especially in circumstances where “customers and business owners could collude to evade taxes due to the collectivity and privately sharing of benefits” (Fabbri, 2015, p. 9).

Table 4 indicates the unemployment rates in the selected EU member countries for July 2018, whereas the rate for South Africa is for the period April to June 2018.

Table 4. Unemployment rates.

Country	Unemployment rate
South Africa	27,2%
Malta	4,0%
Romania	4,2%
Slovakia	6,8%
Slovenia	5,8%
Portugal	6,8%
Poland	3,5%

Source: Eurostat (2018); Statistics South Africa (2018b, p. 1)

South Africa’s unemployment rate of 27,2 per cent is significantly higher than that of any of the EU member countries. Even though there may be slight differences in the methodologies adopted to calculate these rates in South Africa versus in member countries of the EU, these differences would not fully account for the significant gap in the shown unemployment rates.

The Governor of the Reserve Bank has acknowledged that the current growth forecast remains too low to address the high unemployment levels experienced in South Africa (Menon, 2018). According to Statistics South Africa (2018a, p. 1), “The South African economy has slipped into a recession in the second quarter of 2018, shrinking by 0,7 per cent quarter-on-quarter (seasonally adjusted and annualised).” This does not bode well for the unemployment rate in the near future.

The high unemployment rate in South Africa has the potential to encourage those that are unemployed to request receipts in order to potentially win prizes in the lottery, should a VAT lottery system be implemented.

### 5.4 Factors for consideration in South Africa

South Africa consists of nine provinces that differ significantly from each other in terms of population and economy. Table 5 indicates that Gauteng contributed over a third of South Africa’s economic output, with a 35 per cent contribution to the national economy in the

fourth quarter of 2017. KwaZulu-Natal is in second place, with a 16 per cent contribution, indicating just how significant a contribution Gauteng makes to the South African economy.

Table 5. South Africa: provincial comparisons.

Province	Mid-year population estimates: 2018	Unemployment Rate per province: April – June 2018	Provincial contribution to the national economy: quarter 4 2017
Gauteng	14 717 000	29,7%	35%
KwaZulu-Natal	11 384 700	21,8%	16%
Western Cape	6 621 100	20,7%	14%
Eastern Cape	6 522 700	34,2%	8%
Limpopo	5 797 300	19,3%	7%
Mpumalanga	4 523 900	33,2%	7%
North West	3 979 000	26,1%	6%
Free State	2 954 300	34,4%	5%
Northern Cape	1 225 600	28,9%	2%

Source: Statistics South Africa (2017, p. 48; 2018a, p. 2; 2018b, p. 7).

There is a direct correlation between the population and the contribution that each province makes to the economy. The unemployment rates vary significantly by province, from 34,4 per cent in the Free State to 19,3 per cent in Limpopo. These points should be considered when deciding on how best to implement a VAT lottery, and whether provincial lotteries (in addition to a country-wide lottery), such as the one originally implemented in Slovakia, would be preferable.

The research done on other countries and South Africa led to the identification of limitations for implementation of a VAT lottery system in South Africa, and possible recommendations on how to implement it. The limitations and recommendations will now be discussed.

## 6. Limitations of the study and recommendations for South Africa

Two possible limitations should be mentioned: The first is that South Africa follows the modern VAT system, whereas most European countries follow the traditional VAT system (Krever, 2008, p. 14, 18, 199). Although there are differences in the way the various systems work, tax compliance could be improved under both systems by a VAT lottery system. The second limitation is that the improved VAT gaps as identified per country are possibly not always (just) due to the VAT lottery system. It is acknowledged that there are other factors that could have played a role in improving tax compliance in each case.

With the exception of Malta, all of the EU member countries analysed indicated a decrease in the VAT gap after the implementation of their VAT lotteries. The finance ministers of Slovakia and Romania each publicly declared their VAT lotteries a success. The Ministry of Finance for Poland indicated that before it launched the VAT lottery as an educational campaign, only every 14<sup>th</sup> consumer remembered receiving an invoice, whereas after the VAT lottery, every 3<sup>rd</sup> consumer remembered receiving one. Slovakia experienced an increase in the number of vendors reported for refusing to issue invoices. Furthermore, in Slovenia, consumers used their phones to check receipts issued by three-quarters of all fiscal cash registers, reducing the number of non-validated receipts.

From the above, it is evident that the success of a VAT lottery is not only measured by the additional revenue declared and paid over to government, but also by the culture and awareness of compliance that it creates amongst consumers (Internationaal Belasting Documentatie Bureau, 2015).

South Africa's VAT revenue represents a significant portion of the total tax revenues for the country. High unemployment rates and an economy in a recession mean a constrained environment for growth and tax revenue collection. Ensuring that compliance with VAT is maintained or simply achieved is thus crucial.

SARS is already considering the implementation of electronic cash registers, which provides the perfect opportunity to assess how a VAT lottery could be implemented in conjunction with the rollout of electronic cash registers. Only paying out prize money into a bank account and only issuing the prize if the receipt was generated by an electronic cash register should also assist in forcing suppliers to use electronic cash registers and in encouraging consumers to use electronic means of payment rather than cash.

Further studies need to be conducted in South Africa to determine the preference of the citizens: would they be interested in a VAT lottery, and if so, would they prefer there to be many small prizes or fewer large prizes.

A VAT lottery would start a conversation and create awareness amongst consumers of how they can help to ensure that transactions are reported, thus ensuring that SARS receives the taxes due to it, and enabling the government to meet its spending commitments. It would therefore likely be beneficial for South Africa to implement a VAT lottery system.

## Notes

<sup>1</sup> The difference between the estimated potential net VAT collections for a specific period and the accrued net VAT collections for that same period (Fiscal Affairs Department, 2015, p.5).

<sup>2</sup> Other major tax contributors are personal income tax (38%) and company income tax (18%) (Ministry of Finance [South Africa], 2018, p. 3)

<sup>3</sup> All currencies were converted using the exchange rate on 8 January 2020 (Oanda, 2020).

<sup>4</sup> EU member country contribution data reflects information for 2015, except for Malta and Romania. Malta and Romania reflect 2016 data. South African data reflects 2017 estimated data.

<sup>5</sup> Based on 2018 information.

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