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# Improving VAT compliance – random awards for tax compliance



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# Improving **VAT compliance**

## – random awards for tax compliance

Fiscalis Workshop

06.05.2014

Ispra (IT)

## Report

DG Taxation and Customs Union (TAXUD)

Joint Research Centre (JRC)

**European Commission**

Joint Research Centre

*Institute for Health and Consumer Protection*

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# Executive summary

The use of receipt-based tax lotteries to increase (VAT) tax compliance has been of growing interest amongst EU Member States. Some countries have introduced such lottery schemes, namely Malta in 1997, Slovakia in 2013 and Portugal in 2014. Others have been intrigued about the possibility of introducing a lottery. The use of tax lotteries also has a history outside of Europe, notably in Taiwan since the 1950s. While there is growing interest in the use of tax lotteries throughout Europe, the understanding of best practises and success factors, is still limited. Therefore, this workshop brought together countries with experience and those interested in running tax lotteries. TAXUD and the JRC in this context coordinated, establishing a platform for discussion amongst the Member States.

Tax receipts lotteries are designed to increase the issuance of receipts in business-to-consumer-transactions. This way, transactions are more likely to be part of the official (not the shadow) economy and VAT can be collected. The idea of lottery schemes is to provide consumers with an incentive to ask for a receipt. The incentive is that the receipt is not just a piece of paper documenting the transaction made, but serves as a (potential) lottery ticket, giving consumers eligibility to participate in a tax lottery. The lottery in turn gives the chance to win a prize if for a randomly drawn receipt. Hence, while obtaining the receipt is (for any legal transaction) of no extra cost to the consumer, it becomes valuable, as it serves as a lottery ticket. For the tax authority the cost of paying prizes (and administering the lottery) is, in turn, outweighed by the extra revenue of an increased tax base, and by a citizen-policing effect of detecting VAT-dodging businesses.

While the general idea of a tax lottery is relatively straightforward, the specifics of how best to design and introduce the lottery are often less clear. Also the positive fiscal effect (the cost of the lottery being outweighed by the reduction of VAT evasion) is an empirical question. Furthermore, the political economy (*i.e.*, considerations of how to get such a scheme into the political process) of a tax lottery require consideration in advance. Additionally, the tax lottery can also serve other purposes, such as serving as a communication vehicle to the citizens to stress the importance of tax payments. They may also trigger a public discussion about the two-way character of taxes (them being more than just a tribute, but something from which citizens expect something in return). To discuss these points, European countries who had already a lottery scheme in place (Malta, Slovakia, Portugal) were invited to present their experiences, additional to presentations by a further invited specialist (Georgia), a researcher on this topic (with an implementation proposal for Greece) as well as the TAXUD and the JRC together with interested countries, to discuss the specificities.

Participants came together for a one-day workshop. Points of particular importance were to consider the moral issue of lotteries, to flank the lottery with an informational campaign, to use the lottery as a data collection tool, to keep transaction costs of participating in the lottery low, to consider all the actors involved, and to use the data generated in the process of the lottery. It was also discussed that the fiscal success of the lottery can be significantly increased if focussing on particularly problematic sectors, where cash-in-hand practises are

more prevalent, while putting less emphasis on large corporations and retail chains, for which the fiscal effect is minimal.

This report summarises the workshop, following a pyramidal approach. In the following

section the motivation and elements of the workshop are summarised briefly. More detail is included later, consisting of presentation protocols, the agenda, the participant list, an evaluation and reference to further information.

# Table of contents

<b>3</b>	Executive summary
<b>7</b>	Report
<b>7</b>	Introduction
<b>8</b>	Role of TAXUD and JRC
<b>9</b>	Role of participating countries and speakers
<b>10</b>	Evaluation
<b>10</b>	Outlook
<b>11</b>	Protocols
<b>11</b>	Welcoming by the management of the IHCP
<b>11</b>	Prize competition – a behavioural economic view on a surprising phenomenon
<b>12</b>	Fiscal receipts random awards schemes – experiences of Malta
<b>14</b>	Impact of random awards for VAT tax receipts – the experience of Slovakia
<b>17</b>	APODIXI – An idea for a new random awards for tax compliance scheme in Greece
<b>18</b>	‘Lucky invoice’: a tax citizenship project as an instrument to fight tax evasion in Portugal
<b>20</b>	Impact of random awards for VAT tax receipts – the experience of Georgia
<b>21</b>	Random awards for tax compliance – medicine for all problems? Potential and limitations
<b>23</b>	Programme
<b>24</b>	List of participants
<b>26</b>	Participant evaluation and feedback
<b>29</b>	Further information





# Report

## Introduction

Combatting and reducing tax evasion is an evergreen topic for tax administrations. While many tax administrations are already well-gearred to improve tax compliance using advanced control and fine systems, in recent times interest has been growing in the use of softer measures, many of them being introduced in the wake of research in behavioural economics.

One such behavioural economic tool is the use of fiscal receipts lotteries, mainly to increase VAT compliance. Not least since the introduction of a fiscal receipts lottery in Slovakia in 2013 and the large media echo which followed its announcement, has increased the interest of numerous EU Member States to introduce similar measures. The workshop was therefore designed to collect information about the status quo of the Slovakian and other lottery systems that have already been introduced throughout Europe, to investigate potential success factors and to allow those countries with experience in lottery schemes to exchange their experiences, while potentially also bringing value to those countries new, but open to the idea of introducing a lottery.

The concept of a tax receipts lottery is based on the idea that a consumer purchase is much easier to record in the official economy, where it can be taxed by the authorities, if sellers issue a fiscal receipt to the customer. In some countries, if an advanced cash register system is in place which directly communicate transactions to the tax authorities, all transactions for which a receipt is issued will be taxed. In any

case, once a receipt is issued it becomes more difficult for sellers to evade VAT, independent of the cash register system of a country.

However, fiscal receipts are often of no use for consumers. They are only an extra piece of paper which can (and is) typically disposed of immediately after the purchase. Even more, in many countries the social norm is not to ask for a receipt. A receipt would only be costly for the seller and the consumer, even though the cost in any legal transaction is minor (ink and paper for the seller, the extra work of disposing the receipt for the consumer). However, not asking for a receipt facilitates evasion by the seller. Particularly from the consumer side this societal cost of facilitating evasion is often not considered and the possibility to obtain the receipt is foregone. To change this attitude is the main aim of a tax receipts lottery. The idea of introducing such a lottery is to make the receipt (even if only psychologically) valuable to the consumer. If the receipt serves as a lottery ticket, consumers might have a reason to request it. Furthermore, in a country where the prevalent norm is not to ask for a receipt, it can also serve in a (desirable) blame game: as there is a (minimal) cost of issuing the receipt for the seller, a consumer who requests a receipt but has no use from the receipt might indicate that he would like to introduce social waste. Or he even distrusts the honesty of the seller and openly states his mistrust when asking for the receipt. The consumer might therefore refrain from requesting the receipt in order not to upset the seller. However, if a lottery is in place, asking for a receipt may not indicate mistrust, but simply the desire to participate in the lottery. The psychological cost

of asking may therefore be reduced. Hence, for the consumer the value of the receipt is increased, while the potential cost is decreased. Therefore, he will be more likely to ask for a receipt and help move transactions into the official economy.

Furthermore, additional to this idea, the tax receipts lottery also often aims to increase awareness for tax evasion. In a way, consumers are pointed to the general problem of VAT evasion and are even potentially given a small policing rule—they are being more aware of whether sellers issue receipts and can identify those who (maybe notoriously) don't. Based on these observations they can report misbehaviour to the authorities and potentially increase the fairness between sellers. Therefore, the consideration of communicating the project well to consumers is important and it is necessary to provide consumers with ways to contribute also to this second element of improved enforcement measures.

Finally, the interest in running lottery schemes is that they may, in comparison to other ways of increasing compliance that are open to the tax agency, be very cheap. This is also why many tax authorities started to be interested into the topic. To meet this increasing interest and to provide potential scientific support, TAXUD and the JRC decided to create a platform for discussion and exchange between the Member States, increasing the knowledge base on the topic and to dwell into concrete and specific issues regarding the question of tax lotteries.

## Role of TAXUD and JRC

As mentioned before, tax collection and enforcement have classically been domains in which legal control and fine systems have

been applied. However, recently, research in the area of behavioural economics has increased in order to gain a better understanding of behavioural factors of decision-making in general and tax payment decisions in particular. The basic idea of behavioural economics is to combine insights from economics and psychology, typically in decision frameworks in which economic decision motivators, often monetary in nature or at least quantifiable, determine decisions jointly with psychological motivators, which are based on potentially latent mental processes and difficult to determine exactly. Tax payment decisions, where moral concerns interact with clear monetary incentives, are one example for behavioural economics. Decisions about the use of lotteries are another prominent example of behavioural economics, as quantifiable factors, mainly the probability of winning together with the prize to be won, play a role in lottery participation decisions in conjunction with non-economic motives, such as the subjective perception of the objective probabilities of winning the lottery (the role of low probabilities in decisions is a major area of behavioural economic research) or the enjoyment individuals may draw from gambling.

Another important characteristic of behavioural economics is that it is less theory-driven and theory-dogmatic compared to the classical economic approach. Therefore, the use of empirical data and particularly of economic experiments is much more central in the field of behavioural economics. This also means that research and (policy) application are connected much closer: the best way to implement a certain policy may not be evident from a (potentially very unrealistic) pre-determined economic model. Instead, much of the fine-tuning and of crucial success factors may still have to be determined. While this does not

mean that behavioural economists start with an unclear idea about what can be expected based on existing theory, research and experience, however, they are often more inclined to find out about the specificities and run a tailored experiment to pre-test potential policies, as the exact interaction of psychological, cultural and economic factors can often not be easily predicted. At the same time, although hard to predict, they may be tested relatively cheaply in a small-scale experiment, while the impact from behavioural insights may be very high for a given policy.

Due to the important influence of behavioural economic factors in tax payment decisions and the research-orientation of behavioural economics when providing policy advice, TAXUD and the Behavioural Economics Team of the JRC have established a research collaboration, mainly aiming to provide a common platform for discussions between the Member States, with members of TAXUD and the JRC present and on tax topics in which behavioural economics factors play an important role, and where exchange and small-scale scientific advice is useful. As tax receipts lotteries are clearly such an area, following a general workshop on the usefulness of a behavioural economic approach in tax compliance which was conducted in the previous year, they decided to organise the current workshop to allow for exchange between relevant experts from EU Member States.

TAXUD and the JRC hence mainly took a coordinating and moderating role between the countries. They also provided an introduction into the logic and methodology of behavioural economics, and guided through the final discussions.

## Role of participating countries and speakers

As outlined in the previous section, the main aim of the workshop was to provide a platform for discussion between the Member States. This included discussion between those countries who had already experience with tax receipt lotteries and those who didn't. Furthermore, it was tried to organise alternative ideas to implement a lottery scheme, to be informative for the participating countries interested in implementing a tax receipts lottery scheme.

Based on these considerations, the countries who had already implemented a lottery were identified: Malta, Slovakia and Portugal. Furthermore, a lottery had also been introduced in Georgia, therefore a specialist from this non-EU state was invited. Finally, another researcher was invited who had developed a framework for how the lottery could be introduced in Greece (or another country), to provide participants with an alternative blueprint and to give those countries with interest of introducing a lottery and idea of what they may want to consider when implementing a lottery.

All of the intended speakers, *i.e.* the relevant specialists from Malta, Slovakia, Portugal and Georgia, as well as the Greek specialist with his lottery design agreed to attend the workshop and to present their design. Additionally, two short presentations were given by the JRC to put everything into a common framework and TAXUD moderated the concluding general discussion.

## Evaluation

The workshop was very successful given its aims. There was a large interest by the Member States, with a total of 39 participants attending. Participating Member States (typically with two representatives) included Cyprus, Czech Republic, Estonia, Finland, Greece, Hungary, Latvia, Lithuania, Luxemburg, the Netherlands, Malta, Poland, Portugal, Spain and Slovakia. Presentations were followed with interest, with the presentations triggering fruitful discussions. Furthermore, much detail was communicated to the participants, making the workshop useful for those interested in introducing similar schemes, as well as leading to real information exchange between those countries with existing experience.

The workshop was also evaluated using a post-workshop questionnaire. The full evaluation can be found at the end of the report. Summarizing from this evaluation, the feedback has been overwhelmingly positive, with the only real request for improvement regarding the workshop's location and limited space, which, however, was largely due to the surprisingly high uptake from interested participants upon short notice.

## Outlook

The workshop was organised as a free-standing event which does not require any formal follow-up. However, due to the large interest by Member States to introduce lotteries, some form of continuation should not be excluded. Furthermore, in the course of the workshop not only known success factors were discussed and exchanged, but also the need for a quantitative evaluation was mentioned by essentially all countries currently running a lottery. Due to this request the JRC offered to provide some small-scale scientific support, given its limited personnel resources. Results from this evaluation could be another outcome to be made available to all interested Member States and to the research community, providing a useful tool for improved government efficiency and governance across Europe.

# Protocols

## Welcoming by the management of the IHCP

C. NICHOLL, Unit Head, *Public Health Policy Support (PHPS), IHCP, JRC*

Unit Head Ciarán Nicholl welcomed participants to the workshop. He also introduced the JRC as one of the organisers of the event, outlining its mission and structure. As such he set the wider framework of the workshop.

## Prize competition – a behavioural economic view on a surprising phenomenon

B. HERRMANN, Team Leader, *Behavioural Economics Team, PHPS, IHCP, JRC*

Benedikt Herrmann, in his role as the team leader of the Behavioural Economics Team (BET), introduced participants to the idea of behavioural economics, the branch of economics which is researching phenomena like the use of lottery schemes and ways to employ soft measures to influence individual behaviour in a desirable way. A central insight from behavioural economics is that economic and psychological factors are jointly responsible for determining decision-making. Hence, monetary incentives together with non-monetary incentives, as well as cognitive effects (the capability to fully understand a decision framework) can interplay in ways that lead to crucial changes in decisions made compared to what would be predicted by classical economic

models that rely exclusively on the assumption of fully rational and selfish decision-makers. As such, behavioural economics tries to observe and understand real behaviour, instead of viewing it mainly through a predefined theoretical framework. This is one reason why behavioural economic research relies heavily on economic experiments, where different scenarios can be investigated and potential causal effects identified in a more clean way.

To make participants familiar with the experimental approach in behavioural economic methodology and to make it more intuitive how non-monetary factors may influence the decisions of individuals, a decision-making experiment was conducted with the participants. The experiment used was a prize contest, where participants overinvest, compared to the prediction when assuming rational decision makers, in order to win a prize. A similar logic driving overinvestment in this experiment (behaviour confirmed by decisions of the participants) is also what is driving participation in the lottery (participation in the lottery would not necessarily be rational for as many people as it is observed, because the opportunity costs of participation may exceed the expected gain from winning the lottery). The experiment was incentivized – towards the end of the workshop two participants were paid (in chocolate) based on the decisions they had written down on their decision paper.

After conducting and discussing the experiment, the logic and approach of tax lotteries was outlined. This was done based on empirical evidence from Taiwan, where the impact of the lottery was argued to have increased VAT



revenue by up to 20%. Further indication, including the intricate dynamics of such a tool, was also given based on experimental economic evidence generated in a study in Greece that had been conducted by the BET of the JRC. The experiment showed that the introduction of a tax lottery increased initial compliance in the laboratory substantially, though the effect of the lottery on total tax payments faded over time. It was therefore argued that both artificial scientific (based on economic laboratory experiments) and field-based empirical (based on data and experience of the Member States) evidence should be used together for designing optimal policies. With this basic idea the topic was handed to the presenters from the Member States.

## Fiscal receipts random awards schemes – experiences of Malta

C. VELLA, Director-General, *VAT Department of the Ministry for Finance, Malta*

First experience on the use of a tax receipts lottery was presented by Malta. Malta has been the first European country to introduce a tax receipts lottery, as early as 1997, and consequently has a long history and experience with running the lottery. To give the audience a better idea, first the lottery was put into the scope of Malta, as some particularities of Malta as an island-state have to be taken into account when contemplating to extrapolate the Maltese lottery scheme to another (and necessarily larger) European country. That is, it was outlined that Malta is the EU's smallest Member State, with a population of about 400 000 living in a geographically small area. Furthermore, the role of VAT in the government budget was outlined, with EUR 587 mil-

lion. VAT revenues being responsible for raising 22% of government income. It was also outlined that the issuing of receipts for business-to-consumer purchases is important for the tax authority to know the tax base. For this reason it is also a legal obligation (though it cannot be legally sanctioned) for customers to retain receipts from purchases for 24 hours after the purchase has been made. This obligation was introduced into the legislation to facilitate field audits. A similar motivation as for this legal obligation to get a fiscal receipt in purchases is the reason for the existence of the Maltese tax receipts lottery. Hence, the lottery is seen to provide consumers with an incentive to ask for the receipt and keep it, which in turn makes it easier for tax authorities to control VAT compliance.

Afterwards, more detail was provided about the lottery scheme. The lottery was originally introduced in 1997 and was partly electronic, and partly contained the physical draw of lottery tickets. The current scheme, which is employing an actual draw of physical receipts from a very large drum, is in place since 2000. More specifically, there is one draw per month, taking place on the 15<sup>th</sup> of every month (provided it is a weekday), with all fiscal and VAT-relevant receipts from the previous month being eligible to be part of the lottery. Eligible receipts are handwritten receipts (on forms provided by the VAT department to the supplier), fiscal cash register receipts (with sealed memory), and receipts issued by computerised systems that have been authorised by the tax authorities. To be able to participate in the lottery, receipts have to be submitted by the 10<sup>th</sup> of the month by hand or sent by mail, following the month in which the receipt has been issued. Receipts have to be identifiable by having the name, surname and identity card number recorded on the back side of the receipt.

Lottery participants can also (optionally) record their address and telephone number.

The lottery itself pays every receipt that has been drawn 100 times its value, while there is a minimum prize threshold of EUR 233 and a maximum threshold of EUR 116.47. If the winning receipt is below the minimum (of EUR 233) or above the maximum (of EUR 116.47), it is treated as if it had the minimum or maximum value, respectively. Furthermore, the lottery works with a fixed winning amount. That is, further lottery tickets are being drawn until the allocated budget of EUR 58234 has been exhausted (or exceeded, as further tickets are being drawn until the number of awarded prizes has reached this number). There are no limits on the number of receipts a single individual can enter into the lottery and the same individual may win several times in the same lottery draw.

Practically, the lottery is done by mixing all participating fiscal receipts in a large drum, organised by the Department of Lotto. The draw is public, conducted in a public place and supervised by an ad-hoc board. There are representatives from the Notary to Government, VAT department, the Lotto department, the National Audit Office, the public present at the drawing. Single receipts are being drawn from 8 holes of a rotating drum in a successive order. When being drawn, receipts are verified by the board and the respective prize is allocated if the receipt has been found valid. Based on these draws winners are being determined and receive cheques with the winning amount, organised by the Lotto department. Results are also published online by the Department of Information and in the local newspaper on the day after the draw. Due to data protection issues (since more recent times) the winners can be identified only by their ID number. After the lottery draw receipts are removed from the drum and recycled.

While no major data analysis takes place in the course of the lottery, some figures have been recorded. It has been observed that the lottery is becoming more popular with a tendency of a rising number of receipts submitted for the lottery, with 32.5 million in 2007 up to 35.7 million in 2013. The number of receipts is thereby estimated from the weight of total receipts in the lottery drum. While this is an indicator of the sustained popularity of the lottery, no scientific or quantitative evaluation of the success of the lottery has been conducted. Hence, it is not known whether the lottery has increased VAT compliance in the short or long term. This, together with practical issues that would have to be considered when implementing the Maltese lottery to a country with much larger population makes it more difficult to directly provide advice to other Member States of how to introduce a similar scheme in their country.

*Discussion:* The presentation was followed by a discussion of the Maltese representatives with the audience. This included:

- the eligibility of foreigners to the lottery,
- the further use of receipts by the tax authorities (e.g. to support audits),
- how the collection of receipts is done practically and if it is necessary to submit them physically,
- the data that is collected in the process and what it is used for.

## Impact of random awards for VAT tax receipts – the experience of Slovakia

M. FILKO, Director, *IFP, Ministry of Finance of the Slovak Republic*

The second country presentation was given by the tax authorities of the Slovak Republic. The tax lottery scheme in Slovakia has been introduced in the second half of 2013, receiving widespread media attention and causing a large increase in interest regarding the use of such lottery schemes across Europe. The workshop described in this report is partly a response to the interest which has followed the media echo on the Slovakian tax receipts lottery scheme.

The presentation of the lottery scheme in Slovakia first provided a larger picture of why the issue of fighting tax evasion had come about to be a major topic for government policy. That is, while the effective tax rate (the share of VAT revenues in the tax base) had been rising in Slovakia prior to joining the European Union (EU), since Slovakia's membership in the EU in 2005 it had been significantly falling, reaching levels that were much worse than EU average and also clearly lower than during the pre-EU era. Also the VAT gap (the difference between collected VAT and the VAT that should be collected if all transactions were legal) had been one of the highest in Europe and almost twice the EU average in 2011. Furthermore, the VAT gap had been increasing from its low point of 18.2% in 2003 to a high point of 40.1% in 2012. Hence, tax evasion, and VAT evasion in particular, was a pressing issue for government revenues. For this reason, concerted efforts to reduce tax evasion were launched in 2012, and the tax receipts lottery was part of these efforts.

In order to understand the sources of the tax gap, authorities took several steps. One included the identification of *problematic candidates*, that is, sectors in which VAT evasion is more prevalent. This identified some *usual suspects* in agriculture, construction, wholesale and retail trade, hotels and restaurants, as well as (surprisingly) also in the professional services industry. As a result an action plan was introduced to combat tax evasion. Most of the plan included typical control measures, which made the monitoring and detection of tax evaders easier from the side of the authorities. Furthermore, it was decided to introduce the tax receipts lottery, which has a much stronger behavioural component and involves participation and support by third parties, namely normal citizens involved in consumer transactions. The lottery in this context had namely the aims of being a tool for communicating the importance of VAT compliance to citizens, to increase surveillance by the citizens, and ultimately to improve the ability to collect taxes more effectively. As for the case of Malta, the logic behind the introduction of the lottery was to motivate consumers to ask for a receipt and to get them involved in – comparatively mild – citizen policing in daily transactions.

In the following, the details of practical implementation of the lottery in Slovakia were described. The rules for the lottery were that all receipts with value of EUR 1 or higher were eligible to participate. Furthermore, receipts were only valid to be registered in the lottery for two months after the purchase. In order for a consumer to participate in the lottery, receipts had to be registered using any of four alternative channels: (1) online via the internet, (2) via a SMS text message, (3) through the National Lottery Company which served as the operator of the lottery, or (4) through automatic registration by the retailer issuing



the receipt. In order to be registered in the lottery draw, the registration had to include the unique identification number of the cash register issuing the receipt, the date and time of the transaction, and the amount of the transaction. Particularly the first was necessary to identify and trace back the transaction, and was also feasible as any seller in Slovakia needs to employ such an electronic machine, which can be identified by the tax authorities.

In the following, the lottery was operated by the National Lottery Company and implemented similar to a regular lottery. Prizes were awarded with equal chance for every receipt, independent of the value of the purchase. Each submitted receipt had a chance of winning via three different channels, named the *first*, *second* and *third chance*. The *first chance* included a draw every two weeks in which ten prizes valued from EUR 100 to EUR 10 000 were awarded. This represents a significant amount and corresponds to 0.12 to 12 times the average monthly wage. The *second chance* in turn is drawn once per month and is based on regional characteristics. More specifically, in this draw there was one winner each from the 8 administrative regions of Slovakia. The winner in this monthly draw was one particular cash register, and a second lottery amongst all receipts submitted using this register was drawn. In this lottery both financial and non-financial (a car) prizes were drawn, and under the current framework each winner of this lottery receives a EUR 5 000 cash prize. Finally, a *third chance* was used over all submitted receipts, in which the winner became eligible in a TV show (*Cena je sprána* = 'The prize is right').

Since the introduction of the lottery scheme, it has proven to be popular, with 7 million receipts registered in the first run of the lottery, and still a relatively stable number of around

3 million submitted every two weeks. In total about 10% of the population registered to participate in the lottery at least once. Further detail about the participation in the lottery was provided, including information about the structure of participation in the lottery. For example, the number of individuals participating in the lottery has declined before becoming more stable around 80 000, while the number of cash registers included in the lottery is more or less stable since the beginning. This indicates that the monitoring of companies issuing cash receipts is similar to what it was at the start. On the other hand, the number of receipts submitted per player has increased, mainly driven by 'professional' players, *i.e.* individuals who devote significant time to participation in the lottery. These players also appear to register more receipts than the average household's purchasing power, indicating that these individuals are submitting tickets of purchases that they have not made themselves. Furthermore, it is also worth noticing that these players tend to be attracted to the lottery due to gambling motives and the misperception of probabilities, as even for professional players the expected gain from participating in the lottery measured by the time required to register tickets is below the typical average wage. *I.e.*, participation of these individuals cannot be explained from a fully rational income-maximization point of view.

There was also information provided about the regional distribution of players, with most players from the Bratislava region, however, also indicating a significant total uptake of the lottery in all regions. Additional detail was also provided on the distribution of submitted receipts by sector. Non-surprisingly, the by far largest share of receipts is sourced from the retail sector, again here with a concentration on big retail chains. This also hinted to a short-

coming of the lottery, as these chains tend to issue receipts for purchases or at least formally register the transaction anyway; hence, the extra gain through policing due to the lottery is minimal. On the contrary, the more problematic service industry (in terms of tax evasion) is only responsible for 2% of submitted receipts. Hence, from the big shot of the lottery only a small hit is reaching the main target of these problematic candidates.

There was also some first analysis on the impact of the lottery in fiscal terms. The analysis of success factors focussed on small companies, as those are suspected to be those more likely to engage in tax evasion. For similar reasons there was also a focus on service industries. However, first analysis did not show a significant increase of revenue from particular firms from whom also more receipts had been issued. There was, however, a higher rate of sales increases from the pre- to the post-lottery period in small retail compared to the sales increase in larger retailers. However, the attribution of this increase is not identifiable to the lottery alone, mainly due to the multiple channels with which improved tax compliance was promoted. It was also discussed that the policing of sellers not issuing receipts has been increased, however, the impact of this measure (and the cost-effectiveness compared to other measures) has not yet been assessed.

Finally, the costs and benefits of the lottery were discussed. The fiscal impact of the lottery is estimated to be modest, leading to extra revenue of about EUR 8 million annually when extrapolating from the experience in the last quarter of 2013 and when basing the effect from a focus on restaurants and retailers (who are, however, arguably the most critical sectors; *i.e.* most of the effect should accrue in these sectors). This compares to initial costs of

EUR 1.6 million, which included marketing. Total cost in 2014 is in turn estimated to be another EUR 1.6 million. While this indicates that the lottery would break-even, it is generally judged to be of modest impact compared to other available measures in fighting tax evasion.

There was also some outlook with future recommendations presented. This included measures to keep the lottery attractive, such as new features in the prize scheme (similar to the *first*, *second* and *third chance*), and the goal to motivate consumers to ask for receipts in small shops, restaurants and when purchasing services. Furthermore, the additional possibility for consumers to register invoices, not only cash receipts, was advocated. Finally, the need for further quantitative analysis was pointed out.

*Discussion:* Again, the presentation was followed by discussion with the audience, which included:

- questions about how to introduce the lottery, which in Slovakia was fully administered by the National lottery company; this company took care of prizes, draws, receipts collection and recording of tickets,
- questions about data collected and how it was used; however, here only preliminary results were available,
- questions about cross-checking the submitted receipts; that is, checking not only the registration of the cash register with the tax authorities, but also cross-checking if the claimed purchase had been equally recorded by the register as required,
- a discussion of how to best address the fact that there are 'problematic candidates' who are more prone to evasion and how it would best be possible to target these specific sectors in the lottery.

## APODIXI—An idea for a new random awards for tax compliance scheme in Greece

V. GEORGIU, *National Centre of Scientific Research DEMOKRITOS, Athens, Greece*

The following presentation was done by the representative of a Greek research centre, outlining the idea and the required technology to implement a tax receipts lottery scheme in Greece. The presentation started with some information on the problem of tax evasion in Greece in general, and of VAT evasion in particular, with an estimated 30% of VAT which is evaded. In short, considering existing statistics together with common sense suggests that tax evasion of small business and of the self-employed is a massive problem.

Consequently, attempts to reduce tax evasion and to motivate consumers to contribute moving transactions from the shadow to the official economy have a history. For example, fines had been introduced for consumers leaving the premise of a business after the purchase without a fiscal receipt. After failure of this measure, mainly due to public criticism, patriotic campaigns were used, again asking consumers to demand receipts from sellers. Also tax deductions had been introduced on fiscal receipts submitted, however, with detrimental effect on fiscal revenues and little effect on compliance. Also a fine for non-submitters of receipts had no positive effect. In light of the unsuccessful measures in the past, the idea of a tax lottery was promoted, as it had been shown to be successful when being introduced in some Asian countries, most prominently Taiwan.

However, the Taiwanese system appeared to be difficult to be introduced in Greece, as most cash registers would have to be changed for such a scheme. Therefore a more flexible approach with a registration and award scheme using mobile phones was advocated. This system was to work such that buyers would be able to register purchases to the lottery via SMS, including the necessary data of the receipt: namely, the nine-digit fiscal code of the seller, the date and time of the transaction, as well as the amount. The lottery participant in turn would be uniquely and positively identifiable through his or her mobile phone number. Based on the SMS received, a computer server would record all data and generate draws, and prizes could be easily adjusted often to keep interest in the lottery high. It was further argued why the use of mobile phones was particularly suitable for the lottery. These included an existing infrastructure (as in Greece almost everyone has at least one mobile phone) relatively good security, high convenience (as receipts could be recorded during periods of idle time of the user), high flexibility in rewards (as even small rewards could easily be implemented and rewards could even be paid immediately).

In the following, further detail on the practical implementation was included. A method was outlined using cryptography that allowed the use of the mobile phone to streamline monetary prize collection and to facilitate small prizes in kind. It was also outlined which further, potential real-time use of the data generated in the process of the lottery could be made of. For example, the data could be used as an economic barometer, recording the amount of economic activity at a certain time in a certain place. Also the use of data for public communication on the issue of compliance was described, and the role of tourists was

outlined. Furthermore, one critical argument against the lottery was addressed, namely the concern that the lottery could be regarded as gambling. However, this is not the case, as for gambling lottery participants would need to have a stake at risk. But this is not the case for this lottery, as the receipt is of no extra costs to the consumer, provided he is not engaging in illegal activity. Also according to Greek law it would not be considered as gambling.

Finally, the presentation included a history of the evolution of the lottery to be implemented, from its original design, patenting, and a number of attempts to gain political and public support for the scheme. Finally, some possibilities of use of the scheme in private industry as well as in private-public partnerships were elaborated. However, the exact form of whether and how the scheme may be introduced remained open.

*Discussion:* The discussion was moved to a break; therefore no formal protocol was prepared. However, the discussion of the political process was a frequent topic in the break and many participants from the audience highly appreciated the idea of a relatively easy implementation via phone and very happy to being equipped better for the potential argument of promoting gambling in the population through the lottery scheme.

## **‘Lucky invoice’: a tax citizenship project as an instrument to fight tax evasion in Portugal**

G. DELGADO, Director of the IT Department, and E. M. SEQUEIRA, Taxpayers Quality Services Department, *Ministry of Finance, Portugal*

The following presentation was provided by the Portuguese tax authorities. Portugal had introduced several measures to increase tax compliance in VAT-relevant consumer transactions and presented these measures. In a first effort, the presenters emphasized that the fight against tax evasion was not only a matter for the tax authorities, but a societal task. Therefore, the programs implemented were envisaged to be citizen projects, where the state together with other actors in the community took efforts to increase compliance.

The first part of the presentation was dedicated to the introduction of the e-invoice system. This system requires all traders to always issue invoices on all transactions, even if not requested by the buyer. Additionally, all companies had to report all invoices and their elements on a monthly basis to the tax authorities. Furthermore, in connection to the e-invoice system, consumers were able to receive tax benefits based on their invoices, more precisely 15% of the paid VAT in four sectors, namely (1) car maintenance and repair, (2) motorcycle maintenance and repair, (3) accommodation and food services and (4) hairdressing and other beauty treatment. While this was not explicitly mentioned in the presentation, these sectors evidently would be amongst sectors to be considered ‘problematic’ in terms of VAT compliance in most countries. The idea of the e-invoice system was to decrease the tax gap

but also to improve enforcement of VAT collection, and, amongst other things, increase the fairness in the business world between honest taxpayers and those willing to cheat. Furthermore, some detail on the technical implementation of the measure, mainly based on a central homepage usable for businesses and consumers, was provided. It was also shown that the introduction of the system had a positive effect in terms of generating more transactions being recorded in the official economy, as the performance of the four sectors chosen to profit from the tax benefit followed a similar growth trend as other sectors, but performed noticeably better (2.5%-9.5% higher growth in 2013 than other sectors compared to the previous year). Similarly, also the number of companies issuing receipts increased by almost 40%.

In a second step the second policy of the Portuguese tax authorities was presented, a tax invoice and receipts lottery on all VAT relevant transactions (*i.e.*, not only those four chosen before), called 'Lucky Invoice Lottery'. This lottery is again similar to the tax receipts lotteries described by other countries before. More particularly, there is one random draw per week (on Thursday, starting from April 2014) selecting winning receipts that have been submitted to the lottery. Furthermore, there are two semi-annual draws, in June and December, for an 'extraordinary lottery'. All draws are publicly broadcasted on TV to gain widespread attention. The weekly draw of the regular lottery works on the basis of so-called coupons. Individuals can get coupons to the lottery by registering invoices or having them registered by sellers. The number of coupons an individual receives is dependent on the value of the receipt that is registered for the lottery. The higher the amount of the purchase, the higher the number of coupons, as

one coupon is assigned to each multiple of EUR 10 in the receipt. If the lowest fraction is below EUR 10, a coupon is assigned (an invoice of EUR 10.20 would for example get two coupons assigned). There is no limit on the number of coupons per individual in each draw. Every coupon has an equal chance of winning a prize in the lottery, whereas the prize is to win an Audi A4 each draw. The bi-annual draw again provides a second chance to win with the same coupons, whereas in this draw the lottery runs over three Audi A6 per draw.

To participate in the two lotteries every invoice issued in 2014 is valid; however, the fiscal identification number of the consumer needs to be recorded on the invoice. Invoices include also consumer receipts in regular business-to consumer transactions, for example when making regular purchases. However, in this case the consumer also has to request the inclusion of his or her fiscal identification number to be included. The registration of invoices is typically not done by individual consumers, but by businesses. Consumers can however verify if the invoices they had requested to be registered are uploaded, using an accessible online portal. If they cannot find an invoice which ought to have been registered, consumers can register invoices themselves. In case these invoices are verifiable in the retailer's accounting system, the respective coupons are also eligible for the draw. Using the online platform, buyers can also decide that they do not want to participate in the lottery. Furthermore, winners are informed about their winnings using the online platform. Winners can then decide if they would like to claim the prize themselves or if they would like to donate the prize. They can also decide to receive the prize with or without public attention. Finally, also the issuer of the receipt is informed about the fact



that one of its receipts has won in the lottery. The experience with the lottery scheme so far is relatively limited. The first draw was on April 17, 2014 over 207 million coupons and with 7.9 million buyers and 171 000 issuer companies involved. Given the size of Portugal, this can be seen as significant participation. The draw was broadcasted live on television, attracting 600,000 viewers. While no evaluation of the lottery scheme exists, further steps are currently in planning, including an App to the platform to be usable for mobile phones.

*Discussion:* The discussion with the audience included some technical aspects as well as questions about the best approach to running the lottery. These included a question about possible returned products, for example due to faults in the functionality of the product. In this case an invoice may be registered without the purchase having taken place. Another question evolved around how the data of the consumer (his or her fiscal identification number) is communicated and stored, and which role data protection issues play. Finally, it was emphasised that the lottery was an integral part of a community project of combatting tax evasion. Hence, similar to the case of Slovakia, the lottery scheme was partly described as a communication tool to increase public awareness about the problem of tax evasion and the role everyone may play in helping to combat it.

## Impact of random awards for VAT tax receipts – the experience of Georgia

D. CHACHANIDZE, Advisor, *Georgia Revenue Service, Department for International Relations*

The last country talk was given about the VAT receipts lottery operated in Georgia in 2012. The lottery was started together with the goal to introduce GPRS-based cash registers throughout the country. These machines allowed the Georgian Revenue Service to immediately gather information about current company income on its online servers. This was done in efforts to fight the shadow economy and to control company income, hence to be able to have efficient means of VAT collection. Again, the lottery had the simple aim to motivate consumers to ask for receipts in their transactions, as it served as a valid lottery ticket. Furthermore, there was again a communication aspect, using the lottery as a tool to increase awareness about the necessity to have a formal receipt issued when making transactions. Furthermore, it was aimed to change the formerly negative attitude towards the tax authority to be more positive. The project was fully funded by the Georgia Revenue Service, hence not from the government's budget. The Revenue Service allocated about EUR 3.7 million (GEL 9 million) to the lottery.

The lottery was drawn on receipts every day, giving out a number of relatively small prizes (GEL 10, 20, 50 and 100; corresponding to EUR 4-40). This was supplemented by a larger prize twice per month (GEL 10 000 or EUR 4 087) and a prize of GEL 50 000 (EUR 20 436) every three months. Amounts were provided as net payments to winners, and presented significant amounts compared to the average wage level. To administer the full process seven agencies were involved:

- the Georgia Revenue Services, initiator of the lottery
- the Georgian Lottery Company, which created the winning algorithm and administered the technical part of the lottery
- Georgian Mobile Operators, as it was possible to check the receipt via mobile phone
- companies who own 'fast payment machines', as these provided another channel to check receipts
- Georgian banks, as they administered the payments of all prizes
- advertising companies, who promoted the lottery via various channels (video and audio clips, banners on the street, brochures, etc.)
- a call centre, to resolve misunderstandings and answer concerns, questions and comments.

In order to participate in the lottery, customers had to collect the receipt issued by a GPRS-based cash register. They were then able to check the validity of the receipt by mobile phone, online, or using a fast payment machine. Receipts could be checked from the moment of issuing the receipt until the expiry in one month. By checking the unique code of the receipt, the buyer automatically received the lottery result. In case of winning buyers could then bring the receipt to any bank in Georgia and collect the prize.

Although the tax receipts lottery was originally envisaged to run for one year, it was terminated after parliamentary elections in late 2012. The termination was arguably due to the lack of financial resources for the lottery, and as an analysis had shown that the lottery had only been effective at the first stage of implementation.

*Discussion:* The discussion of the lottery scheme with the audience mainly regarded why the lottery may have been prematurely terminated. The speaker pointed out that the goals of the lottery, *i.e.* the support of the introduction of GPRS-based cash registers and an improved view of the tax authority had been accomplished. There had not been any statistical analysis of the success of the lottery; therefore, its fiscal impact had not been assessed rigorously. Furthermore, as the lottery was introduced together with other measures, the impact of just the lottery would be very difficult to determine. However, it was again pointed out that there was a positive effect by getting into the public opinion and to positively influence social norms and discussions about tax compliance.

## Random awards for tax compliance – medicine for all problems? Potential and limitations

T. HEMMELGARN, *DG TAXUD*

The workshop was summarized briefly in a short discussion by the organiser. First, some of the main issues which had been important for countries potentially interested in implementing the lottery scheme were reemphasised. One included the issue of gambling. The argument that the lottery motivated individuals to gamble was evaluated to be not valid. As participants in the lottery do not have any stake at risk, it cannot be considered as gambling. The lottery is, besides opportunity costs of registering receipts or checking the result, not costly in any way for individuals who are engaging in legal purchases. It was also pointed out that the idea of introducing a lottery was not an issue for mere developing coun-

tries. On the contrary, those countries which had introduced the lottery were using often highly technologically and administratively advanced techniques to carry out the lottery. It was also reiterated, partly from lunch-break discussions, that lotteries besides their role of motivating consumers to ask for receipts, also serve as data-collection tools. The possibility to use some of the data collected should be considered when designing and implementing a tax receipts lottery scheme. As such, lotteries can serve both as a carrot, being an unequivocally positive way to motivate consumers to ask for receipts, but can also support the enforcement side by allowing a better detection of evaders through the tax authorities directly using data generated in the process of the lottery.

Furthermore, some common elements and differences between the lotteries were outlined. These included, for example, whether prizes or winning probabilities were dependent on the amount of the purchase, as in the case of Malta and Portugal, or if any purchase was participating in the lottery with equal chance, as in the case of Slovakia and Georgia. There was also some consideration about the potential transaction costs of participation—an issue which would be particularly considerable when extrapolating from the Maltese scheme. However, it was overcome reasonably well in practice by the schemes used in Slovakia, Portugal and Georgia. Also the proposal for Greece would have proven relatively low opportunity cost for participation, even including the possibility for tourists to participate in the lottery. In any case, however, it would have to be considered that many actors might potentially be involved. One of the most critical ones, the public, would be the main target of discussion, and that there would be a good chance to trigger a positive debate about the necessity to improve tax compliance using the public.

Also, the topic of evaluation was considered. While difference concerning the evaluation between the countries existed, it was agreed by all participating countries that further evaluation would be beneficial to improve the understanding of possible success factors and obstacles. This was particularly the case considering that not all sectors are equally affected by VAT evasion, and that lotteries should be able to tackle evasive behaviour particularly in the problematic sectors.

Finally, there was a further summary of potential recommendations from those countries with first experience aiming to inform those countries interested in introducing tax receipt lotteries. These recommendations included the emphasis of the necessity to communicate the lottery well to the public and to make it as much of a community effort as possible. Indeed, a lottery scheme seemed to have a great potential to trigger fruitful discussions in the public on the problem of tax evasion and ways to combat it. Furthermore, the necessity to target problematic sectors was reemphasised. Another important point was the importance of data—to collect data in the course of implementation, but also the use of the generated data for audits and the evaluation of policies. In this context also the fact that a good IT framework should be in place was underlined. Finally, the pitfalls of internal (inner-tax authority) and external (public, lobby groups, etc.) stakeholder communication was mentioned, which needs to be considered well.



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