

THE EVOLUTION IN THE ROLE OF EXCISE TAX STAMPS FOR SPECIFIC CONSUMPTION GOODS

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SYNOPSIS

This article examines the evolving components and expanding role and growth of excise tax stamps. What were once unsecured little pieces of paper for tax collection purposes, are now transforming into high-tech encrypted, multi-layered devices, which perform not only a tax collection function, but also the functions of product authentication and track and trace. This evolution has a lot to do with increasing requirements for more robust stamps to fight illicit trade, as well as looming international regulations such as the WHO FCTC Protocol, which has put the spotlight on tobacco tax stamps as potential carriers of the track and trace technology imposed by the Protocol.

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More tax stamps are produced every year than any other security-printed item except banknotes. Known by a variety of names (excise stamps, duty stamps, tax seals, banderoles), these are the “weapon of choice” for many governments around the world to secure the valuable revenue derived from customs and excise duty on tobacco and alcohol, acting both as a record of payment and a barrier to the distribution of illicit products, whether in the form of contraband or counterfeits.

Every year, about 170 billion tax stamps are used in over 80 countries. The combined forces

of population and consumption growth continue to push these figures up, but other factors in the growth of tax stamps include their adoption by new countries, and the extension of existing stamp programmes to new products.

Increasingly, the key functions of any tax stamp, whatever form it takes, is to provide fiscal verification (ie. that tax has been paid), as well as supply chain visibility and product authentication.

As a result, the demands of tax stamps have become considerably more complex and one of the most striking advances is the extent to which traditional stamps are being replaced by programmes combining such stamps with advanced track and trace technology, monitoring and audit systems.

Because tax stamps offer these additional benefits – which are important in the fight against the growing global problem of illicit trade – the issue of tax stamp use has now become the subject of international policy. The WHO Framework Convention on Tobacco Control (FCTC) and its Protocol to Eliminate Illicit Trade on Tobacco Products is likely to have a significant impact on the shape of tax stamp programmes of the future.

1. THE ROLE OF TAX STAMPS IN RECOVERING EXCISE TAXES AND FIGHTING ILLICIT TRADE

1.1. Why use tax stamps?

The combination of high consumption levels and high excise tax rates continues to feed the demand for illicit products. Excise tax stamps have been in use for over 200 years; but it was only 20 years ago, when global trade began to appear and border controls came down, that many countries started using them for the first time, especially in Eastern Europe and the Former Soviet Union. The stamps gave governments an

immediate solution to regain control over the goods – mainly cigarettes and spirits – being sold in their territory; they provided visible proof that excise taxes had been paid, and allowed counterfeits to be distinguished from genuine products. Without this control, the surge in illicit trade that resulted from the politico-economic turbulence of the 1990s would have continued unchecked.

Tax stamps are not the only approach for addressing tax recovery and illicit trade; however, as a key element used in combination with other measures such as strengthened enforcement, tax stamps have led to good results for governments and other stakeholders, results which have in turn driven their continued growth and technological development.

Consumption levels are key drivers of tax stamp programmes. For example, the global consumption of spirits increased by 27% between 2005 and 2010, reflected by a corresponding increase in spirits tax stamps. Although it may seem strange, regions such as North and Latin America boast some of the most sophisticated tax stamp and track and trace systems in the world, even though cigarette consumption in these areas has decreased substantially over the last 20 years. This is because excise tax continues to raise significant revenues for governments – as long as there are systems in place to secure and enhance those revenues. And although excise tax as a percentage of total tax revenue has also been in general decline over the years, it still represents an average of almost 8% of total taxation, in OECD member countries.

1.2. Additional taxable products

While tobacco and spirits continue to be the main product groups subject to so-called “sin taxes”, an increasing number of other products are also being brought within the scope of tax stamp programmes. Several countries have now extended their programmes to include not only beer and wine, but also soft drinks and mineral water. In a few countries, the scope has been broadened even further – covering such commodities as CDs and books, mobile phones, luxury foods, and even detergents and engine oils. Such products may or may not carry traditional stamps. But what binds them together with tobacco and alcohol products are the unique markings they carry allied to a system for monitoring, auditing and enforcement of tax collection purposes.

The increasing range of taxable products and efforts to collect the tax leads us to perhaps the greatest change of all over the past ten years – namely the financial tsunami which hit the global economy in 2008. The repercussions of this meltdown on national economies cannot be underestimated and has led to a much sharper focus on improved tax collection as one tool in securing debt and deficit reduction around the world.

1.3. How tax stamps curb illicit trade

Some 10% of cigarettes smoked in Europe are counterfeit or contraband, creating serious health concerns for citizens and major financial headaches for industry and governments. There are four kinds of illicit trade that occur at each stage of the supply chain, right up to the retailer, and the combined use of tax stamps, track and trace systems, licensing and enhanced enforcement is the most effective way to address each kind.

1.3.1. Legal products distributed domestically

This type of illicit trade is characterised by deliberate manufacturer production overruns. It can be minimised with tax stamps and licensing requirements, along with adequate enforcement. Given this, enhanced tax stamps, particularly those with track and trace mechanisms, are important to maintain an accurate and objective measure of what has been produced by each manufacturer.

This has been demonstrated in Brazil, where tracking mechanisms are built into all production machines, giving taxation authorities real-time updates of how much of each product is being produced, and the respective tax amount.

At the retail level, both legal and illegal products might be sold at discounted prices in the formal and informal retail sector. A good example of this is the way tax-exempt cigarettes are sold on Canadian First Nation reserves. Often the

cigarettes are legally manufactured but illegally sold tax-exempt to non-eligible consumers.

Furthermore, stamps and track and trace markings allow tax-exempt and tax-paid products to be differentiated when on the shelf, and help ensure that markets regulated by quotas are not being oversupplied.

1.3.2. Legal products distributed cross-border

This type of illicit trade refers to “returning exports”, where products are manufactured within one jurisdiction, exported to a neighbouring jurisdiction (in order to avoid domestic taxes), and subsequently smuggled back into the original jurisdiction and sold at a lower price. This was the case for Canada in the early 1990s, Brazil, and the UK.

Track and trace mechanisms can reliably reveal the export practices of a manufacturer to whom the product is being shipped. The ability to trace a product to a particular site or retailer allows enforcement officials to gather information on common distribution routes and practices and the role that manufacturers play in the smuggling network. Tax stamps have moderate potential here, given that they do not always disclose the place of manufacture or distribution points, unless enhanced with a tracking code.

At the retail level, tax stamps are especially effective, as they can ensure that products smuggled in from lower-taxed jurisdictions are not sold in the formal retail market in higher-taxed jurisdictions. However, tax markings are limited to protecting only the formal retail sector, and do not address informal sales of cigarettes.

1.3.3. Illegal products distributed cross-border

This pertains to illegal tobacco products (counterfeit or produced by an unlicensed manufacturer) that are distributed throughout more than one jurisdiction. Smuggling through large-scale

shipments of counterfeit products is a burgeoning global threat. The distribution of counterfeit cigarettes from producers in China, Eastern Europe and some parts of Latin America has become a major source of contraband in many countries, and requires different policy solutions than those aimed at legitimate producers.

Domestic policymakers have jurisdiction over the retail sector; protecting the retail level from illegal brands requires a comprehensive licensing regime with adequate inspection and enhanced tax stamps to ensure that illicit products do not enter the legitimate supply chain.

The emphasis on enhanced-security tax stamps is important because of the relative ease with which smuggling operations are able to counterfeit generic tax markings. As such, enhanced tax markings have high potential for ensuring that illicit products do not permeate the retail sector.

1.3.4. Illegal products distributed domestically

This addresses illegal tobacco products (without a license or registration) that are distributed within one jurisdiction. Here it is assumed that the manufacturer is purposely avoiding a legal responsibility to acquire a license. An example of this would be illicit manufacturers operating in Canada without a license on First Nation reserves.

At the retail level, licensing, enhanced tax stamps, and enhanced enforcement all have high potential for addressing contraband activities. The ability to successfully identify contraband product through enhanced tax stamps, coupled with the financial risks of losing a retail license, can have a profound effect upon retailers' willingness to engage in illicit trade.

1.3.5. Stamps must be high-security

Tax stamps and marks are considered to be effective in the face of all types of illicit trade,

and are a “high potential” solution, as they allow easier product identification and authentication. However, simple stamps – as opposed to high security stamps – are considered rarely useful in addressing contraband; counterfeit versions can be created within a matter of weeks, if not days, depending on demand. Adding covert

markings to tax stamps ensures that goods can be identified as counterfeit by officials, even though counterfeit brands might look authentic. Tracking and tracing is also considered a high potential solution, as it allows real-time monitoring of tobacco product manufacture and better supply chain control.

2. A GROWING MARKET

The market for tobacco and alcohol tax stamps is growing, due to a combination of population/consumption growth in countries that already use them, the extension of programmes from one product group to another and more countries adopting tax stamps for the first time. In 1990, the annual volume of cigarette and spirits stamps was estimated at over 49 billion stamps (2 billion for spirits and 47 billion for cigarettes). At the end of 2005, these figures were 13.5 billion and 122 billion respectively. In 2010 these figures had ballooned to almost 23 billion for alcohol and over 127 billion for cigarettes (an increase of 68% and 4.5% respectively). The latter is in spite of the fact that global cigarette consumption is now declining. Projected volumes for 2015 are 35.5 billion for spirits and almost 135 billion for cigarettes, a further increase versus 2010 of 55% and 6% respectively.

Taken collectively, tax stamp usage has grown by almost 11% from 135.5 billion in 2005 to 150 billion in 2010. In 1990, fewer than 20 countries were using tax stamps. By 2005, this number had grown to 73. As of 2011, over 80 countries were using them for alcohol, tobacco, or both. Of these, 18 used them for cigarettes alone, nine for alcohol alone, and 54 for both (vs. 46 in 2005). From 2011, cigarette tax stamps were in use in over 70 countries and alcohol stamps in over 60.

Most countries which adopt a programme for one product (usually cigarettes) will often introduce a second programme to include both cigarettes and alcohol. This explains in part the significantly greater increase in alcohol stamp usage compared with cigarette stamps.

Although the actual number of countries using tax stamp programmes for the first time has not increased significantly during the past few years, there has been a lot of activity around upgrading and extending existing programmes.

2.1. Tax stamp usage in Latin America and the Caribbean

Latin America and the Caribbean account for almost 14% of the world’s spirits tax stamps and 7% of cigarettes. At least 12 countries use tax stamps – for tobacco only, alcohol only or both – which means that the majority of countries in the region do not use stamps at all. In contrast to most other regions in the world, more countries in this region use stamps for alcohol than they do for cigarettes.

In Latin America, no countries have introduced tax stamps within the last few years, although a number of countries have extended their existing tax stamp programmes to other products and made them more sophisticated. Brazil, in particular, has become a worldwide reference for those countries thinking of upgrading their systems.

3. THE ANATOMY OF THE MODERN TAX STAMP

The tax stamp has evolved over past decades, from a simple printed item without security (for tax collection purposes only), to a complex, multi-layered security device with integrated production monitoring, track and trace, and authentication capability.

3.1. Little banknotes

The vast majority of tax stamps remain paper-based, with aspects common to banknotes, passports and other government security documents in terms of production processes and security features. There are a number of characteristics of tax stamps, however, that do not apply to banknotes and that restrict the kind of features that can be used to make them. These are:

- Their size (or lack thereof) – this imposes limits on the size and number of security features, especially overt ones, which must compete with functional features such as product information and numbering for space on the stamp;
- The method of applying them to products – most stamps are applied on high-speed automated bottling and packing lines and, as such, need to be lightweight and flexible, yet robust. This limits the suitable substrates on which they can be produced as well as the features they can carry;
- Their ‘one-sidedness’ – since tax stamps are affixed, for the main part, to bottles, cans or packs, they can only be viewed or examined from one side.

Despite these constraints, tax stamps – just like banknotes – require the highest levels of security that aid different stakeholders in authenticating the product and the stamp. These features are typically divided into four levels: overt, semi-covert, covert and forensic:

- **Level 1** – overt features – are those that can be seen without the aid of special tools or lights and require the minimum of training to be effective. Such features are designed to enable the general public (ie. consumers) to identify if the product is genuine or not;
- **Level 2** – semi-covert features – are those that require simple, sometimes commercially available – tools to view them, such as ultra-violet (UV) lights, magnifiers and lenses. The examiner needs to know where the features are and how to examine them and they are not normally made known to the general public. They are typically designed for retailers, manufacturers and other members of the supply chain, as well as for officials during routine inspections;
- **Level 3** – covert, or hidden, features – are viewed with sophisticated hand-held tools that are only available to enforcement authorities. The general public and supply chain members usually do not know about these features;
- **Level 4** – forensic features – are reserved for special departments or officials. Special tools or laboratories are likely to be required to reveal their presence and their characteristics. The presence and nature of such features is generally kept a closely guarded secret and they are typically used after a raid to provide definitive proof of the authenticity of a product. Such data can be used, if necessary as evidence in a court of law.

Today's tax stamps are more than likely to incorporate all four levels. They are also likely to incorporate a code or number that enables the item to be tracked so that enforcement officers, manufacturers and distributors can determine the origin and destination of the products, and

all stages in between. Given the lack of “real estate” on which to incorporate security features and functional elements, it is fortunate that each component of a tax stamp is able to carry security features.

The main component is a substrate, usually paper. The paper carries markings indicative of tax-paid status, which are a mixture of fixed and variable print. The fixed print is common to all the stamps in a particular jurisdiction and indicates the location of the tax authority and the product to which the stamp is attached. The variable print is usually a serial number that allows the stamp to be traced back to the time and place of its application.

On the other side of the substrate can be an adhesive that holds the stamp to the product. All three elements – the print, the substrate and the adhesive – are candidates for security technology. Add to this the possibility of incorporating applied and embedded features such as holograms and taggants, and the gamut of security techniques is suddenly wider than one would suppose for such a tiny piece of paper.

3.2. Security in the paper

The majority of tax stamps are produced on security paper. Paper is regarded as secure if it is produced under certain conditions and contains particular elements. Security paper is custom-made by specialist manufacturers for each application and contains features that are complex to apply, integrate or create, and which are not only specific to the security market but unique to each customer. The paper is invariably UV dull, enabling the application or integration of UV features that are a key security element for value documents. It is also typically – for tax stamps – around 40-70 gsm, a weight that is not routinely available for commercial papers.

The main paper-based security features for tax stamps are security fibres and dots, but security threads and watermarks can also be used.

3.3. Security in the printing

Several printing processes are used to produce tax stamps. Their value lies not so much in the technologies themselves, but in the design elements and security features that they can produce, as well as their scarcity and cost, both of which provide a significant barrier to counterfeiting.

The three key security print processes for tax stamps are offset, intaglio and, for numbering or encoding, inkjet print. In addition, silkscreen print processes are often used for applying security features such as colour-shifting motifs.

3.4. Applied security

3.4.1. Holograms

It has been 15 years since they were first used, but holograms are still an extremely relevant and important authentication device for government tax stamps. Indeed the market for tax stamp holograms is the second largest after banknotes, according to the International Hologram Manufacturers Association. The term “hologram” is a generic one for optical devices that display complex images and patterns through the phenomenon of diffraction. The visual effects vary widely and include three dimensional images, kinetic geometric designs or patterns, multi-channel images (in which one image, or part of the image, switches to another) and short animation sequences.

As security features, holograms cannot be copied by conventional reprographic means (copiers or scanners and printers), nor can their effects be reproduced or simulated by conventional printing or finishing techniques. They are complex and complicated to originate and manufacture and even the most determined forgers are unlikely to reproduce copies that are totally accurate.

3.4.2. Security Inks

The prime function of ink is to impart visible images to paper, films or other printable surfaces through the creation of very small dots and lines. A wide variety of additional security features can be provided through components added to the ink, with a range of optical, chemical and physical properties that offer overt and covert authentication.

Within the field of overt security inks that do not require special illumination or reading devices are optically active inks. These exhibit different effects according to the angle of observation or illumination. They include colour-shifting inks that change from one visible colour to another or, in the case of iridescent or pearlescent inks, from one colour to clear.

One of the most secure optically active inks for tax stamps is *SICPA OASIS*® from SICPA, with its dual-authentication security features based on liquid crystal technology. SICPA OASIS has an overt colour-shift for easy authentication by the public, and a semi-covert light-polarisation feature for retailers and inspectors that requires the aid of a small credit card-sized validator or specialised light source. The validator consists of two types of polarising filters that reveal different colours or effects from the same ink. For instance, through the right-hand filter, the ink may appear bright, while through the left filter it may appear black.

SICPA OASIS is used on tax stamps in, among others, California, Ecuador and Massachusetts. Another optically active security ink is thermochromic ink, which changes colour when heated, reverting to its original colour when the heat source is removed.

The most common inks for creating semi-covert features in general, and tax stamps in particular, are luminescent inks. This is a collective term for inks that change colour and/or exhibit distinct visible characteristics under different sources of illumination and at different wavelengths.

Although fluorescent inks are a highly popular security feature for tax stamps, they are not particularly secure, in their simplest form, because they are easily obtainable. Therefore, bi-fluorescent inks can be used for increased security – as is the case for Ireland's cigarette tax stamps – which fluoresce in two different colours at two different wavelengths.

3.4.3. Taggants

Taggants – also known as covert forensic markers – are now a staple of the document and product protection industry, having achieved rapid growth in recent years, in large part due to their anonymity, versatility and flexibility. There are now over 50 companies supplying taggants (compared with around 30 in 2006).

Taggants are molecular or microscopic particles. They can be organic or inorganic in composition and exhibit specific and unique physical, biological, chemical or spectroscopic properties, which are typically read and authenticated using matching assay kits or hand-held detectors.

In their simplest form, taggants provide a simple yes/no authentication by their presence or absence, detected by a handheld reader. Increasingly, however, the underlying technologies provide innumerable variants within the taggants that allow a batch to be assigned to specific departments within an organisation, or over different product lines or production batches.

Taggants are used in trace quantities and are only verifiable by trained inspectors with dedicated equipment. Their presence is, therefore, considered proof that a product is authentic (or, in their absence, that it is a fake) and can be used as evidence to this effect in courts of law.

Taggants can be applied to tax stamps in a number of ways – although generally incorporated in the inks, they can also be embedded in the paper pulp or fibres, the holograms or even the adhesives. And, whereas holograms are the principal overt security features, taggants have become the

most generally accepted technique for covert and forensic identification and authentication for tax stamps.

3.5. Serialisation and track and trace technologies

All of the previously discussed technologies operate on the premise that they confer authentication, of both themselves and the items they are attached to, through their physical security and resistance to counterfeiting. These physical authentication technologies are, however, increasingly being combined with a range of options for assigning a unique digital code to an item (a process called serialisation), and then the ability to track that code (and the item attached to it) at various points throughout its travels along the supply chain (a process called track and trace). There is a common misconception that authentication and serialisation are interchangeable. However serialisation, in itself, authenticates nothing, and needs to be combined with other technologies and systems architectures.

A wide range of different technologies are available to generate and assign serial codes – from simple printed alphanumeric sequences to complex covert codes based on unique and proprietary technologies that are difficult to generate, detect or manipulate by anyone other than those authorised to do so.

Almost all of the world's tax stamps now carry at least an alphanumeric serial number, and a growing number of countries are starting to combine this number with a secure barcode – either visible or invisible, 1D or 2D, smartphone-readable or only readable with a proprietary scanner. The codes are typically recorded in a central database and combined with specific information about the product that code is applied to. The concept behind many of these systems is that once the product is in the market, the original product data can be supplemented by information added in the field about its

location and distribution. Theoretically, when the system works as intended, a digital picture of the product's progression through the marketplace, called a "pedigree", will be available any time the digital code is entered into the database.

As can be imagined, the process of developing, deploying, managing and utilising the information generated by what can be billions of individual codes can be a huge and expensive challenge. But the promise of these systems is that when properly implemented and used, they can deliver highly useful patterns of information as to the path of genuine items in the marketplace and serve as early warning systems of fraudulent activity.

Another practical challenge to implementing serialisation and track and trace is exactly how the codes are printed and read on what can be a very small area. Tax stamps share this problem with pharmaceutical labels, another product area where serialisation and pedigree are used. A method which is gaining popularity in this regard is the two-dimensional barcode which can carry a great deal of information in a small space. There are a number of 2D barcode symbologies available and many are being tested.

In Brazil, in addition to the tax stamp programmes used for tobacco and alcohol, all cold beverages are marked with a unique 2D barcode, printed directly on the beverage containers during production, thereby circumventing the need for a paper stamp. The codes are ordered and paid for in a similar way to traditional tax stamp systems, but the delivery process is different. The codes are generated by a central database owned and controlled by Receita Federal do Brasil and Casa da Moeda do Brasil (CMB), and uploaded to the master server of each beverage plant, for subsequent transmission to all production lines. On the production lines, each container is marked with its unique code, which is then scanned and activated, and transmitted back to the central database, together with an image of the container to which

it has been applied. This gives the Receita Federal immediate visibility into what has been produced and by whom, and provides valuable information that they can cross-check against declared production figures.

Although a number of countries now have the systems in place to implement a full-blown track and trace programme, many have not actually done so, only making use of the administrative, production monitoring and authentication capabilities of their tax stamp programme, and are yet to maximise its track and trace capabilities. This currently means that once the product leaves the factory it falls “off the radar”, until it is eventually picked up again through inspector audits and investigations.

3.5.1. Radio frequency identification (RFID) tags

Essentially, RFID does not itself allow for the tracking of a product, but the ability of RFID devices to be read automatically, individually or together, by radio waves, at a distance measured in centimetres or even metres from the product itself, and without requiring line of sight, opens up the potential for the quick and

easy tracking of many products which are targets of counterfeiters and/or diverters.

The latest microchip technology results in substantially higher performance than conventional printed electronics while dramatically reducing circuit size and cost. In practice, this means that tiny chips and electronic devices can be fabricated on a flexible substrate, like paper, in a process more akin to printing than the conventional way of building up silicon chips in a vertical sense. This ultra-thin technology has now opened the door for applying RFID to tax stamps.

3.6. What is the optimum tax-paid mark?

Today, the general consensus over what constitutes an optimum tax-paid mark on excise products is that a combination of different elements is required. These elements include overt and covert security features for authentication, and unique serialisation codes for track and trace. Whether or not these elements should be carried on a tax stamp or directly printed on the product packaging remains, however, a point of contention.

4. HOW WILL TAX STAMPS BE AFFECTED BY INTERNATIONAL STANDARDS AND REGULATIONS?

Since fiscal policy is determined and implemented at the national level (and, in some cases, the state/provincial level as well), there are no international regulations governing tax stamps. Each country, in other words, is “doing its own thing”.

Increasingly, however, tax stamps offer a secondary benefit as product authentication devices, and a third benefit as carriers of unique identifying codes for track and trace – benefits that are important in the fight against the growing global problem of illicit trade. Consequently the issue of tax stamp use is gaining international

attention and in recent years has become the subject of international policy.

This is particularly the case in the tobacco industry, where the FCTC (Framework Convention on Tobacco Control) and its Protocol to Eliminate Illicit Trade in Tobacco Products is likely to have a significant impact on the shape of tax stamp programmes of the future.

The Protocol is essentially a law enforcement protocol wrapped up in a health treaty and, over the past few years, it has been extremely contentious. The objectives of one of its key

requirements – a global track and trace system for cigarettes – needs to be established within five years of the Protocol's adoption, with each party ensuring that cigarette packages bear unique identification markings containing essential information regarding the products.

4.1. Tax stamp volumes could increase

Implementation of the FCTC Protocol may lead to much more widespread adoption of tax stamps for cigarettes. Those ratifying countries that already have tax stamp programmes in place will most likely want to combine these programmes with their track and trace obligations under the Protocol. It is also likely that these obligations will tip some new

countries into adopting tax stamps for the first time, versus countries that decide to use direct marking schemes along the lines of the tobacco industry's Codentify™ system.

4.2. Towards a tax stamp standard

And now work is underway towards the drafting of ISO 19998, the new international standard for the content, security and issuance of excise tax stamps. This standard, together with the FCTC Protocol – and other regulations such as the EU Tobacco Products Directive – will lead the drive towards internationally agreed frameworks around which governments and industry can work together to standardise technologies for tax stamps and product track and trace.

5. CONCLUSIONS

The factors discussed in this review will all have a positive impact on tax stamps over the next five years. How large this impact will be in the context of the FCTC Protocol is hard to tell and, in any case, only eight countries – of which two are Nicaragua and Uruguay – have so far adopted it (a minimum of 40 adoptions are required for the Protocol to enter into force).

In the meantime, the need to protect revenues and deter illicit trade continues and the tax stamp market is predicted to grow accordingly, from 150 billion in 2010 to just under 170 billion this year – an increase of over 13%. Cigarette stamps will grow in volume terms by just under

6% to 135 billion. Tax stamp usage will decline, however, in Latin America (by 6.5%), and in North America (by almost 11%).

Tax stamps for alcohol will grow by 55% to over 35 billion, the growth coming primarily from Africa and Asia. Volumes are predicted to remain more or less static in Latin America.

Tax stamps have a relatively young history, but a demonstrably successful one. For all the reasons outlined in this review, they are likely to remain the weapon of choice for revenue authorities for many years to come.

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