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Charity Lotteries and the European Lottery Sector: impact analysis

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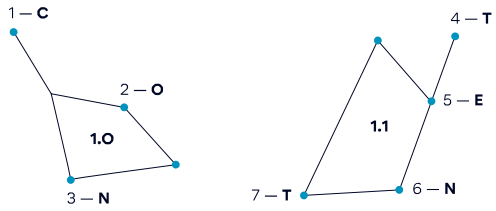

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Foreword from Eva Struving – President of ACLEU

Every year charity lotteries raise a huge amount of money for a wide range of charitable causes across Europe. ACLEU members alone raise around 1 billion euros every year! At ACLEU we are very proud of that work, and our member organisations are always striving to raise more funds for the good causes they support. They are a very important part of the charity fundraising environment in the countries they are based in. We have long believed that they complement other means of charity fundraising – including that by state lotteries.

Many charities will receive funding from numerous sources, and often this can include funds from both charity lotteries and state lotteries. We think this is a good thing as it diversifies the income streams for charities, increasing their resilience and enabling their growth. It is especially important in a time when charitable needs – in areas such as environment and the cost of living – are growing.

Despite this complementarity at the funding level, occasionally it is suggested that charity lotteries could negatively impact on charity fundraising, by impacting state lotteries. We have never believed this to be the case, and indeed have not seen any evidence to back up that suggestion. On the contrary we feel that charity lotteries complement fundraising by state lotteries. Or to put it another way they help "grow the pie" of lottery fundraising – as opposed to cutting up the pie in a different way!

However, we wanted to look into the issue further, to really understand the dynamics going on and to see what lessons there may be for the sector. That is why ACLEU commissioned Regulus Partners to research the impact that charity lotteries have on lottery markets, and to undertake an in-depth analysis of the statistics published on lottery sales by different jurisdictions.

Without giving too much away about the conclusions, we are happy to see the report confirms our firm belief that charity lotteries are complementary to state lotteries and do not pose a threat to their income. We hope this report will help politicians, policymakers and charities to fully appreciate the added value that charity lotteries bring, and to understand some of the dynamics facing the wider lotteries sector. We also hope it will be of interest to our colleagues in the state lottery sector and provide some food for thought for all of us on how we can work together to further grow lottery-based charity fundraising to the benefit of charities, communities and countries across Europe.

The Association of Charity Lotteries in Europe (ACLEU) is an international non-profit organisation established in 2007 to promote the charity lottery model and give a voice to charity lotteries and their beneficiaries in the European debate on games of chance and all matters relating to fundraising through charity lotteries. The charity lotteries united in ACLEU raise around 1 billion EUR annually for civil society in Europe. This structural and unrestricted source of income is essential for hundreds of civil society organisations across Europe to continue their important work in areas like nature preservation, health & wellbeing, human rights, culture, climate change and sports.
www.acleu.eu

Charity Lotteries and the European Lottery sector: impact analysis

Executive Summary

Regulus Partners has been asked to analyse the European lottery market by the Association of Charity Lotteries in Europe (ACLEU). The purpose of the analysis is to identify what impact the presence of a national Charity Lottery sector has on the overall lottery market and the state lotteries. Regulus analysed twelve European markets, using data from 2012 – 2019. The twelve markets were chosen on size, the quality and comparability of publicly available data, and to capture a range of regulatory structures regarding charity lotteries. The data range for our principal analysis cuts of before policy responses to the Covid-19 pandemic created significant and inconsistent disruption across markets in 2020 and 2021. However, we believe our conclusions are very relevant to the 'new normal' of greater digital entertainment consumption and reduced use of cash globally.

Section One analyses the draw-based and instant ticket sales performance of twelve European state lottery monopolies, grouped into three categories: those coexisting with a material charity lottery sector; those with a limited charity lottery sector; and those without any national charity lotteries. Our analysis finds that there is no material causal link between the presence of Charity Lotteries and the performance of State Lotteries. At the margin, we believe that there is a possibility of a 0.3% annual reduction in state monopoly lottery revenue where Charity Lotteries are present, although this is too small to be considered reliable and is more likely to be caused by other factors, in our view.

Section Two analyses those markets which have material Charity Lottery sectors more closely (UK, Netherlands, Sweden, Germany). Our analysis finds that a material Charity Lottery sector consistently increases the scale of the overall lottery market in those countries, generating a larger base for contributions for Good Causes. Equally, Charity Lotteries are typically able to generate materially higher levels of net revenue growth than State Lotteries, which expands Good Cause contributions over time and may be a vital cushion in a higher inflation environment.

Section Three examines the probable causes of Charity Lottery outperformance and identifies three key reasons. First, the Charity Lottery sector tends to be subscription-based, meaning that it is far less reliant on high street use of cash than State Lotteries. The use of cash has been declining in all markets for the last decade, a decline which has accelerated due to pandemic policy responses. The outperformance of Charity Lotteries vs. the cash-based products of State Lotteries could therefore accelerate. Second, Charity Lotteries tend to be draw-based, which is clearly differentiated from other forms of gambling such as slot machines. Conversely, instant products are more similar to slots, especially their online iterations, meaning that the shift to digital gambling consumption creates much greater pressure for instants products than for draw-based products. Finally, the presence of national Charity Lotteries provides consumers with choice, which is structurally better suited to digital consumption (where consumers can easily shop around) and provides higher levels of innovation and customer engagement.

Summary of key conclusions:

1. **Charity Lotteries do not have a material negative impact on State Lotteries**
2. **Charity Lotteries consistently grow the overall lottery segment and therefore funds to good causes**
3. **Charity Lotteries typically outperform State Lotteries in terms of revenue growth**
4. **Decreasing use of cash and increasing digital consumption across European markets is likely to accelerate these trends, putting greater pressure on State Lottery revenue but creating more growth opportunities for Charity Lotteries**

Section I: Charity Lottery Impact on Lottery Monopolies

In this section we analyse State Monopoly sales data since 2012 to establish whether the presence of Charity Lotteries in a market has inhibited growth or distorted State Monopoly Lottery sales. By examining twelve European markets, we identify a negligible and likely non-causal impact on draw-based games, with no negative impact on instants sales. However, we do find a high correlation, which is likely causal, between growth in State Monopoly instant sales and decline in draw-based sales. These findings allow us to state that Charity Lotteries are incremental and complementary rather than competitive products (NB, all figures below are for State Lotteries only).

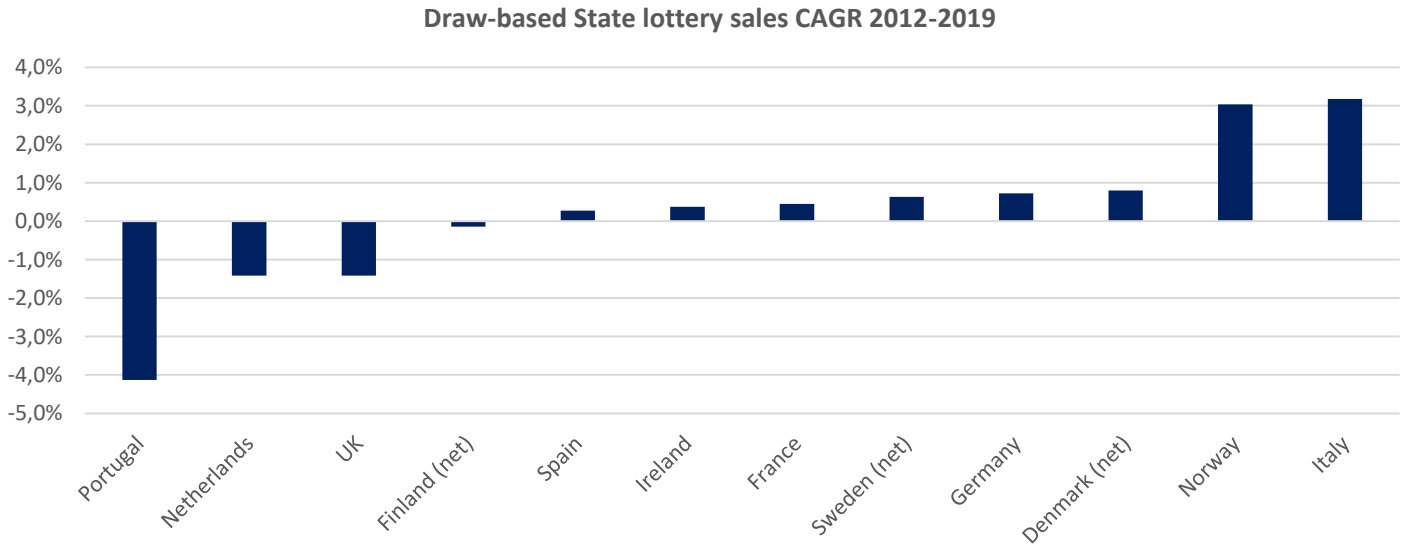
We analyse the impact of charity lotteries on state lottery monopolies by examining the data from twelve European countries grouped into three types, or cohorts:

- **State lottery monopolies exist with licensed charity lotteries**: UK, Sweden, Netherlands, Germany
- **State lottery monopolies exist with limited or 'special' charity lotteries**: Ireland, Norway, Spain (ONCE, which is a 'Charity Monopoly' rather than a Charity Lottery licensing system)
- **Lottery markets with no nation-wide charity lotteries:** France, Italy, Finland, Denmark, Portugal

We have considered draw-based, instant, and total lottery sales for each of these markets over time to establish whether a pattern of competition, substitution or complementary expenditure exists. Since the majority of charity lottery sales are from draw-based products and this is typically the core of the state lottery monopoly offer, we start with an analysis of draw-based sales[1] by country and by cohort. We concentrate on the period 2012 – 2019 since it marks the end of recessionary distortions and is prior to Covid-19 pandemic distortions, while eight years of comparative data provides a long enough time series to draw robust conclusions. All data in this section is entirely for state / commercial lotteries and excludes Charity Lotteries unless explicitly stated (see Appendix for tables of figures).

Draw-based sales analysis

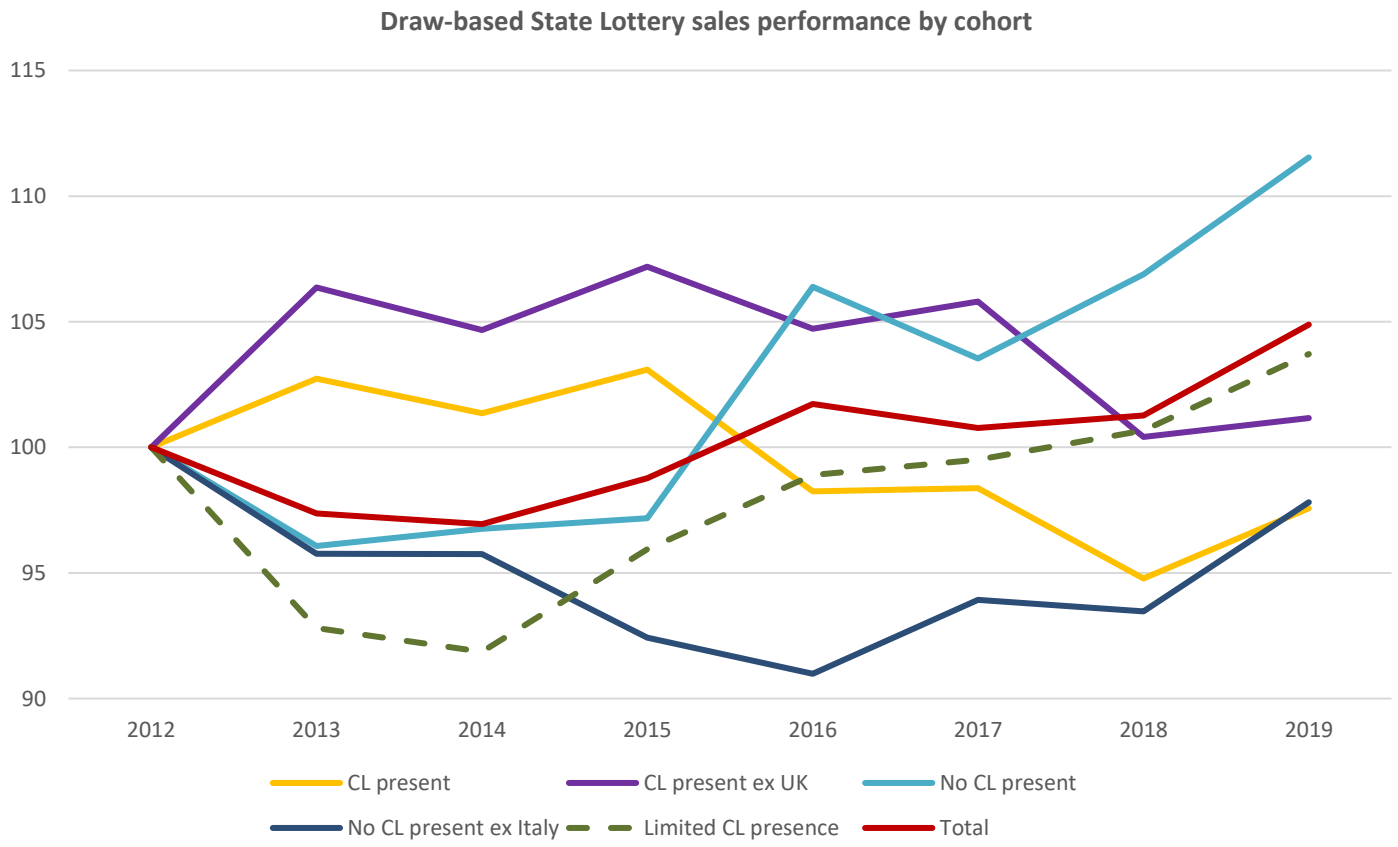
Draw-based sales have seen a very mixed performance by country which initially appears to defy a clear pattern (CAGR stands for Compound Annual Growth Rate and represents average growth per year over the period):



[1] Due to how national data is provided, we have used net sales for Sweden and Denmark (ie, ticket sales less prizes paid out), for all other jurisdictions we use gross ticket sales; given the broad stability of prize payouts in lottery we do not believe that this distinction is distortive to the analysis

It will be noted that while the Netherlands (-1.4%) and UK (-1.4%) have Charity Lotteries present and have seen declining draw-based sales from State Lotteries, Portugal (-4.1%) has seen the largest fall in draw-based sales despite Santa Casa having a protected monopoly. Norway has limited charity lottery availability due to tight restrictions on sales (eg, c. €30m maximum sales per licence issued). Italy might not have Charity Lotteries present, but it does have a competitive lottery environment (with Lottomatica and Sisal operating in the market), meaning that the strength of the Italian market suggests benefits from consumer choice rather than a monopoly structure.

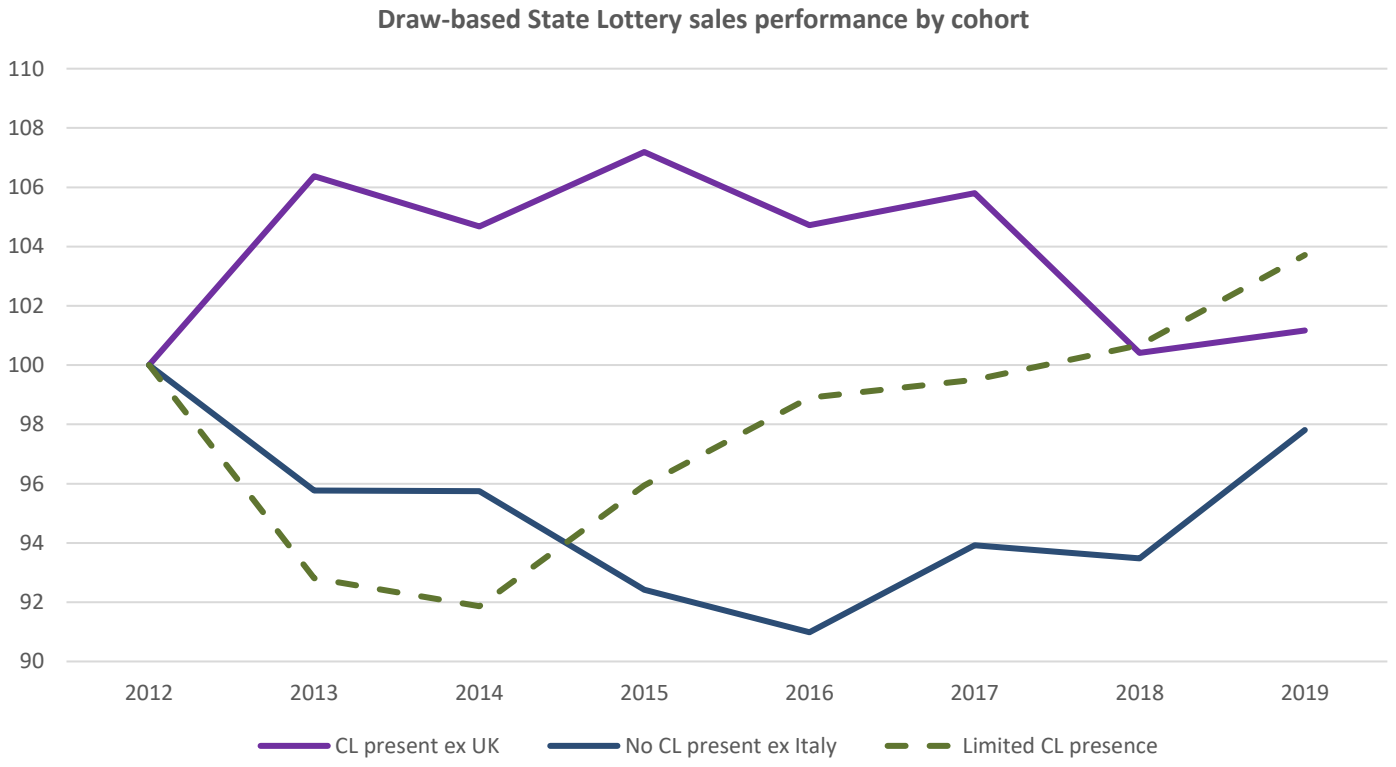
If we consider the progression of sales by each cohort between 2012 and 2019, a similar pattern emerges. In the chart below we index sales to 100 in 2012 at constant Euro prices to provide a comparable pattern of development (CL stands for Charity Lottery; *NB, this graph is broken down into segments that are easier to follow below*):



Analysis of all the groups together would suggest that state / commercial lotteries operating in markets where charity lotteries are not present (No CL present – light blue line) have materially outperformed to the total (red line), whereas the presence of Charity Lotteries (CL present – yellow line) has generated underperformance. However, these results are driven entirely by the relative performance of UK vs. Italy, which have specific drivers that we discuss below. If we strip out these two outliers, then it can be seen that the presence of Charity Lotteries (CL present ex UK – purple line) has not prevented material outperformance of the total for most of the time period in question. Just as significantly, this cohort has significantly and consistently outperformed the cohort of monopolies which operate without Charity Lotteries (No CL present ex Italy – dark blue line):

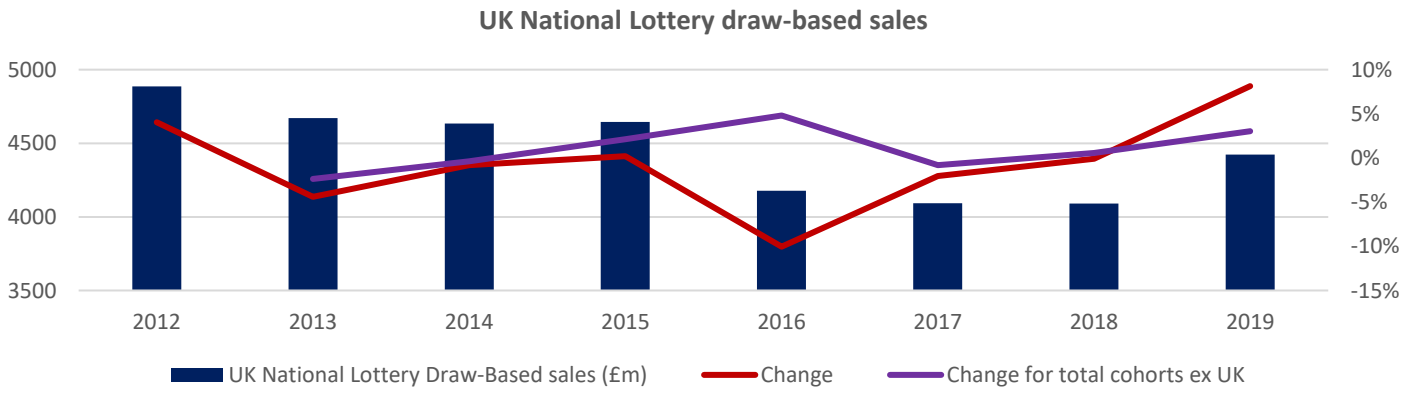
- total draw-based lotteries across all cohorts increased sales by 0.7% CAGR
- the cohort with a Charity Lottery presence (ex- UK) grew sales by 0.2% CAGR
- the cohort without Charity Lotteries (ex- Italy) saw sales decline by 0.3% CAGR

We therefore repeat the chart above including only the most comparable data:

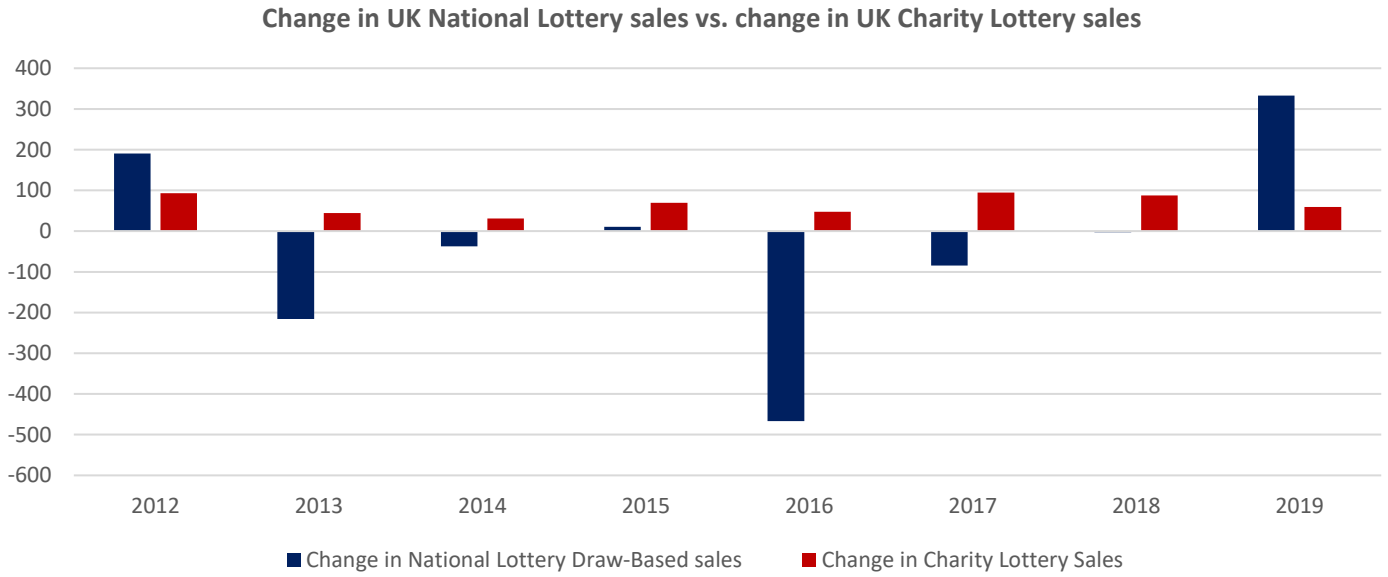


It can be seen that the presence of Charity Lotteries has not led to underperformance in monopoly draw-based sales and has arguably driven outperformance since the group of State Lotteries (ex-Italy) which have no Charity Lottery sector have the weakest draw-based sales performance. It is not possible, therefore, to draw the conclusion that the presence of Charity Lotteries reduces the draw-based revenue of State Lotteries. We analyse the possibility that the presence of additional lottery choices helps to drive overall lottery performance in section three of this report.

Given the importance of the UK in shifting the delta of this analysis, it is worth examining the drivers of UK performance in more detail, to explain both cause and effect and why long-term UK data needs to be excluded from broader comparisons when assessing Charity Lottery impact (NB, we include the UK National Lottery as a State Lottery for ease of comparison, but in the UK the monopoly is granted to a commercial licensee on a tender basis). The chart below provides the annualized draw-based performance of the UK National Lottery during the relevant period:



It can be seen that the Draw Based performance of the UK National Lottery tracks its European peers very closely except for in calendar 2016, which explains substantially all of the UK National Lottery's relative underperformance over the period being analysed: what happened in 2015-16 is the reason why the UK National Lottery looks weak. Before we analyse other causes for this weakness, we consider whether the UK National Lottery's underperformance can be attributed to the presence of Charity Lotteries



In calendar year 2016 the UK National Lottery lost £466m of draw-based sales while Charity Lotteries added only £47m, or 10% of the total loss. Moreover, the annual gains of the UK Charity Lottery sector have been relatively consistent over time, which should impact National Lottery sales with similar consistency if there were any correlation or causation. Instead, the gains made by the Charity Lottery sector in 2016 are not materially different to those in the years in which the National Lottery was able to grow draw-based sales. Given that the correlation of change is just 0.37 it is implausible to suggest that there is any causation between the growth in Charity Lottery sales and the changes to National Lottery sales in the UK. Just as significantly, the National Lottery has been able to recover strongly in 2019 despite the continued growth of Charity Lotteries. The National Lottery issue therefore revolves around 2016 and cannot be attributed to the presence of Charity Lotteries.

In 2015 and 2016 Camelot, the operator of the National Lottery, made fundamental changes to the nature of its draw-based games products:

- in September 2015, the price of a Euromillions ticket was increased by 11% to £2.50 while also the odds of winning were cut from one in 117m to one in 140m

- in October 2015 the main Lotto game was changed from the international standard 49 numbers draw to 59, reducing the chances of winning the jackpot from one in 14m to one in 59m

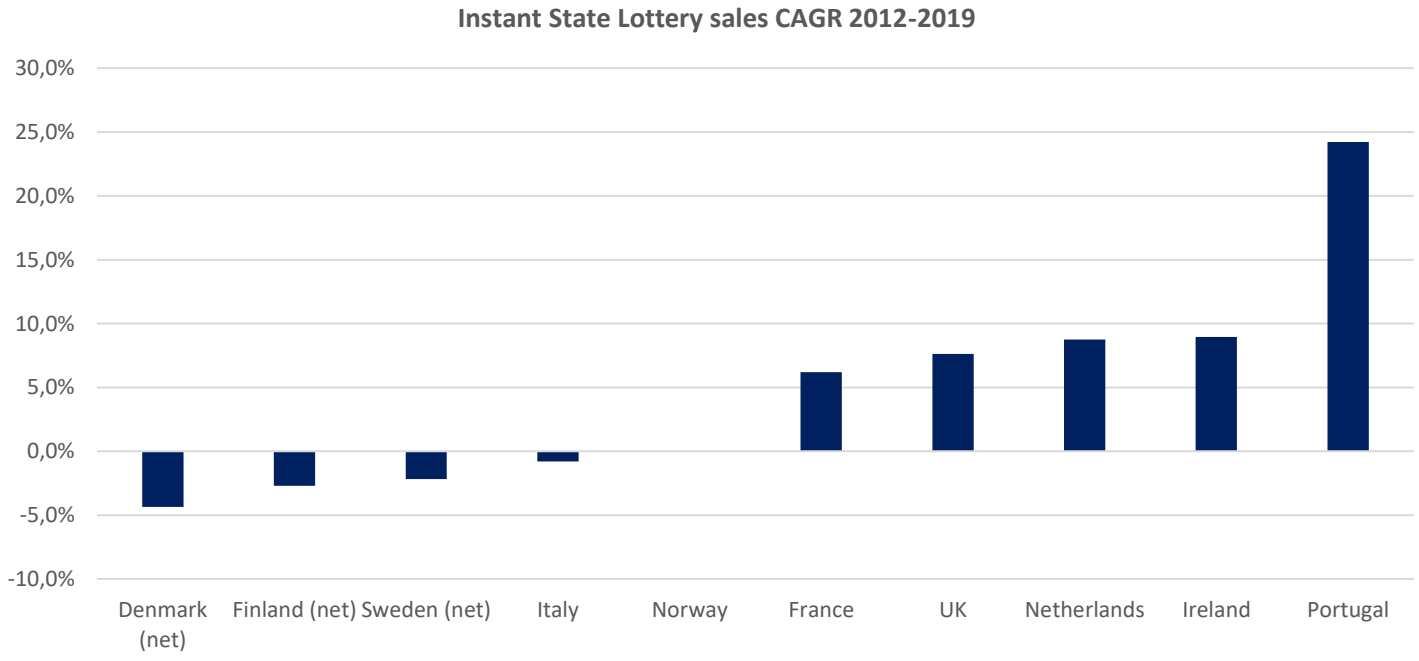
These changes led to a Year-on-Year to March 2017 reported loss of £620m, before sales started to recover (hence the impact being understated in annualized figures). There was an immediate public backlash directly linked to the changes and the then CEO of Camelot, Andy Duncan, had to step down in April 2017. The immediate cost to Good Causes from these product changes was £273m or 17%.

In other words, the UK monopoly operator seriously misread the perhaps obvious impact of increasing prices and reducing the chance of winning, which caused an entirely self-inflicted disaster to lottery sales and income for good causes to occur.

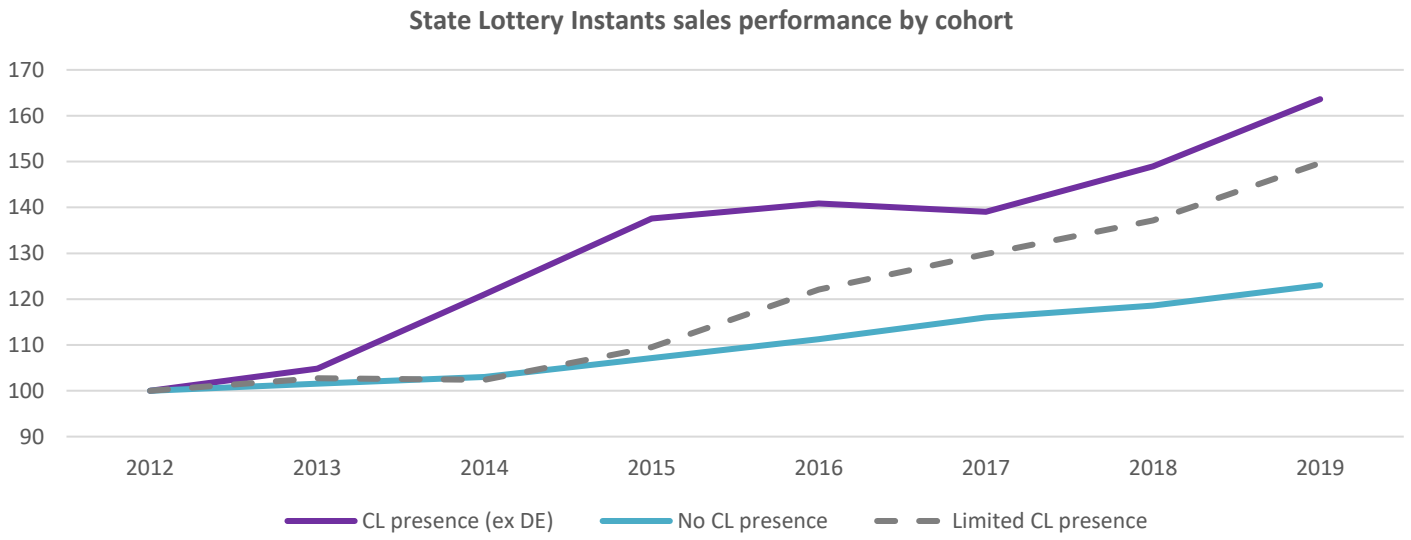
It can be seen from the subsequent sales performance that the National Lottery has subsequently recovered its draw-based performance to the international benchmark in calendar years 2017-18 and outperformed it in 2019. The ability of the UK National Lottery to recover also demonstrates that the problem of 2016 was self-inflicted rather than structural. During this recovery period, UK Charity Lottery sales growth remained consistent: self-inflicted National Lottery problems did not boost Charity Lottery sales while the National Lottery was able to recover strongly despite continued Charity Lottery sales growth. Even in the UK, therefore, it cannot be plausibly argued that the presence of Charity Lotteries has diminished draw-based monopoly sales. It can be plausibly argued, however, that monopolies concentrate a level of power which can be harmful to both consumers and good causes if the management of the monopolies is allowed to make bad decisions. For example, in a situation where the UK National Lottery did not have a monopoly, it is plausible to suggest that the 2015 changes in price combined with lower chances of winning would have been less likely to be implemented, as the operator would have likely been more cognizant of the consumer impact of the changes in a competitive market. The UK needs to be excluded from broader analysis because of the significant performance issues caused by The National Lottery's product changes, but a narrow analysis of the UK lottery sector reinforces our broader conclusions with market-specific context.

Instant lottery sales analysis

Even though most Charity Lottery revenue is from draw-based games, it could be argued that their generally lower prize values mean that they are also comparable to scratch cards and online instants (collectively 'instant') as well as draw-based products. We therefore apply the same analysis to the instants market, with the exception of Spain (where ONCE controls the instants market) and Germany (where instant lottery sales data is incomplete for later periods).

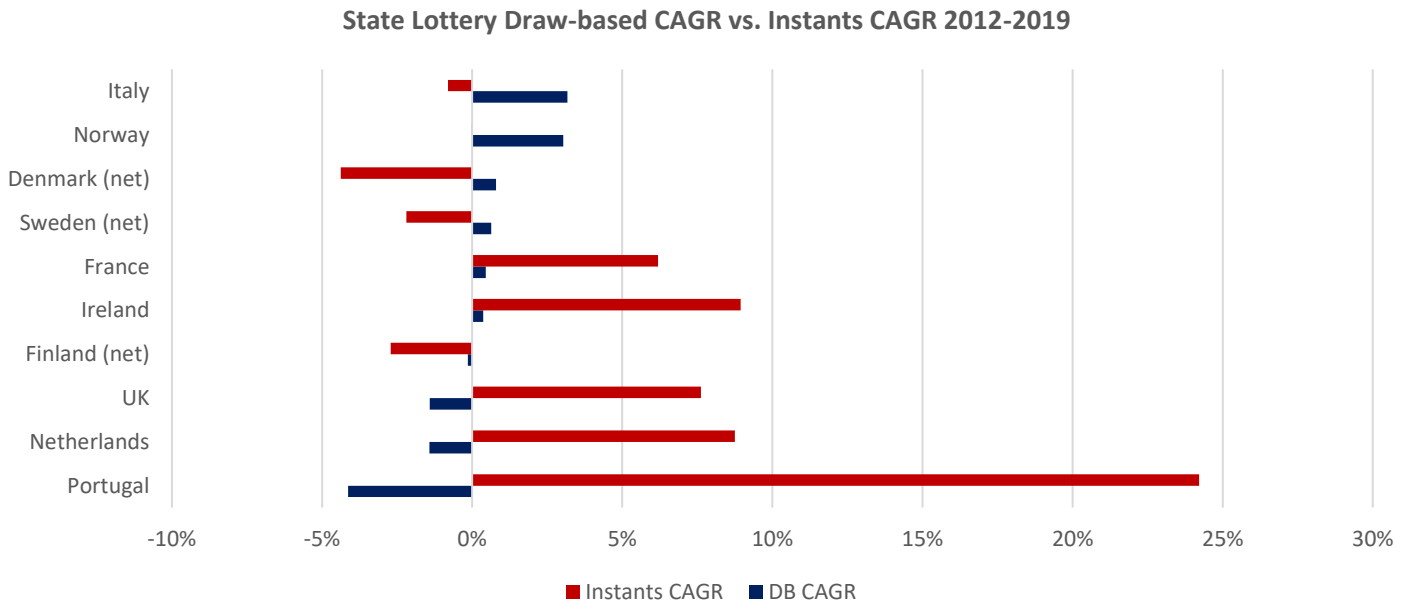


What might stand out the most is that the Portuguese monopoly Santa Casa has grown its instants market the most, while also seeing its draw-based market shrinking the most. We analyse correlation and causation between changes in draw-based and instants product sales below.



It should be noted first that all cohorts have been able to grow instant sales regardless of the presence of Charity Lotteries. More significantly, the markets which contain Charity Lotteries have seen instant ticket sales grow materially more strongly than those without. It is not possible therefore to state that the presence of Charity Lotteries inhibits instant ticket sales.

However, it may be significant that the growth in instant ticket sales could be directly linked to a decline in draw-based sales.

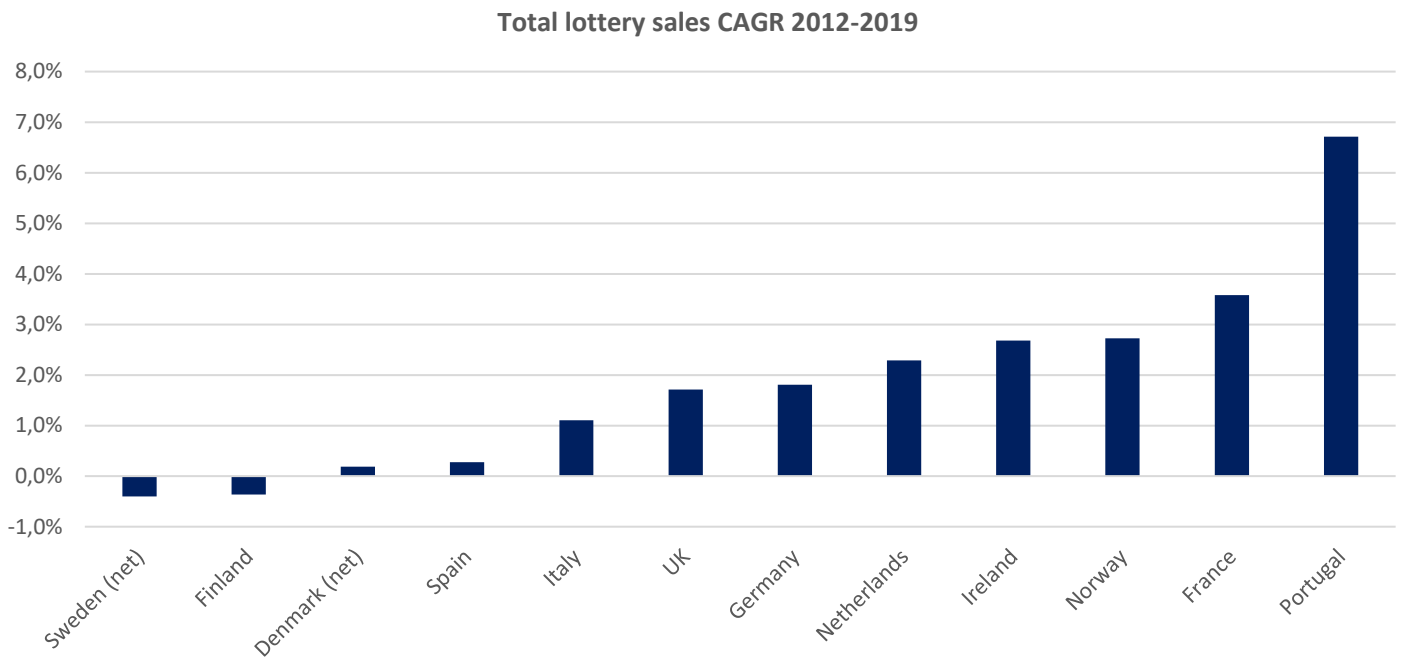


It can be seen that the monopolies (and Italy) which have grown draw-based games the most have consistently seen the biggest draw-based declines while the same is true in reverse. Indeed, the correlation between draw-based sales change and instants sales change is -0.78, an impressive inverse correlation which suggests causality, as indeed does a commonsense view of customer behaviour.

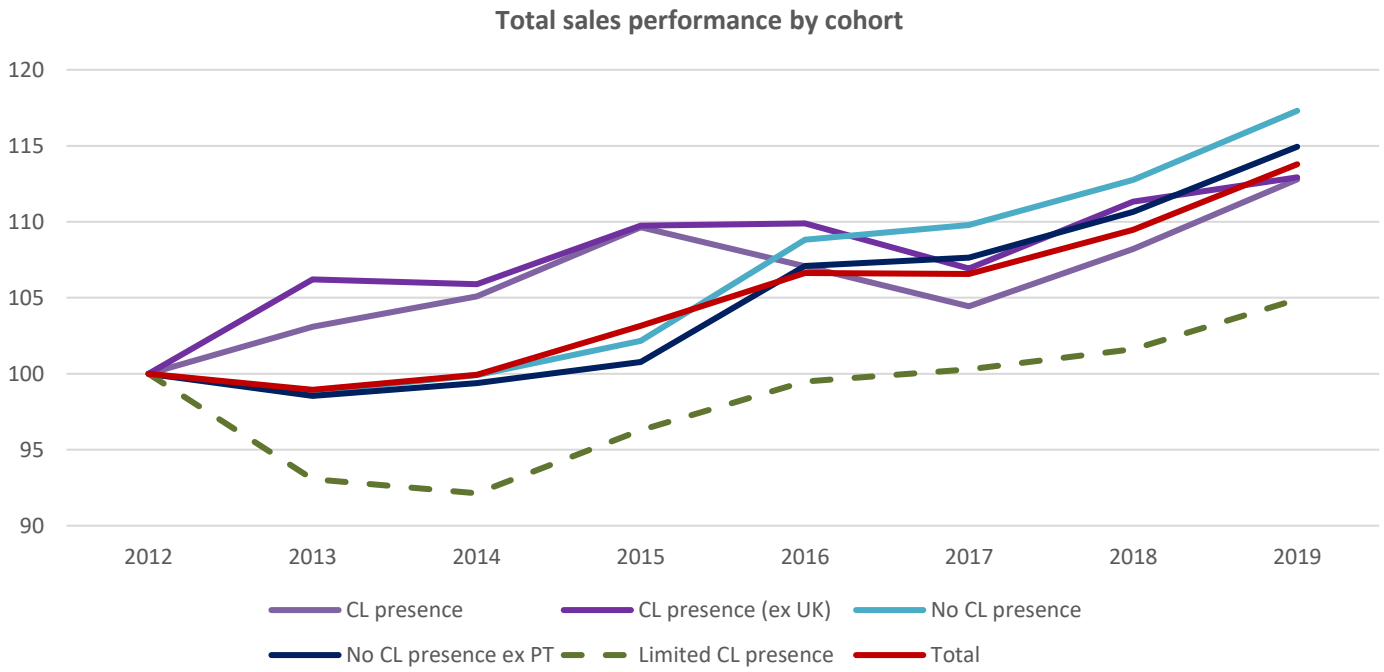
In other words, the biggest structural reason for a decline in draw-based lottery sales is the growth of instants sold by the same monopolies. Conversely, the biggest structural reason for a growth in draw-based lottery sales is the absence of instants growth. While this may raise important policy considerations around safer gambling and returns to good causes for some jurisdictions, it can be seen that the presence of Charity Lotteries is not a negative causal factor in either draw-based or instant lottery sales performance.

Total State Monopoly (+Italy) lottery sales analysis

We analyse total sales by cohort last because, as the analysis above demonstrates, it is less instructive than the changes in mix and product driven by the monopolies. This is because overall sales are largely driven as an outcome of draw-based and instants lottery mix.



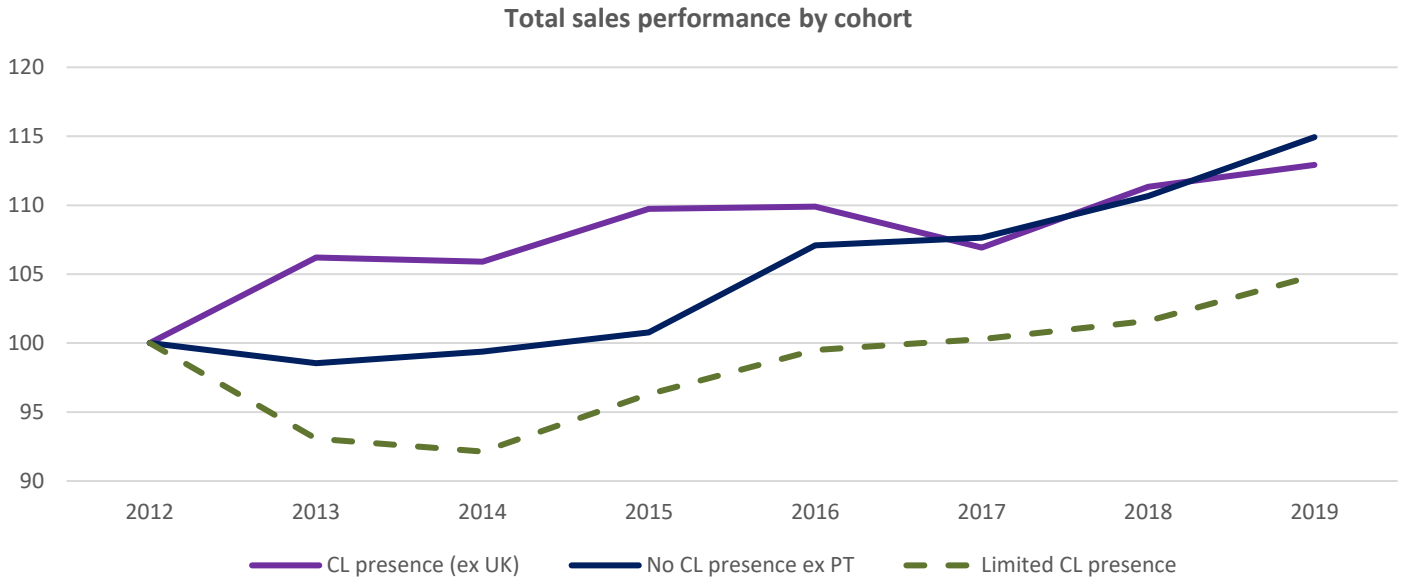
For example, it can be seen that Santa Casa (Portugal) has seen strong overall sales growth due to the switch in mix from draw-based to instants products. This was driven by an increase in instants as a proportion of total sales from 22% in 2012 to 63% in 2019, a 41ppts increase. The next largest increase in instants mix is the Netherlands (16ppts and UK (14ppts), while the average (excluding Portugal) is 4ppts. Portugal has therefore been unique in its ability to grow instant lottery sales from a low base, which has driven very strong overall sales growth. As we have analysed above, this has nothing to do with the presence or absence of Charity Lotteries and everything to do with the evolving product strategies of the monopolies. It is therefore important to strip out the outlier Portugal in comparing overall performance.



In overall sales by cohort:

- state lottery monopolies with a charity lottery presence grew at 1.7% CAGR (NB, UK)
- state lottery state lottery monopolies with a limited charity lottery presence grew at 0.7% CAGR
- state lottery monopolies with no charity lottery presence grew at 2.3% CAGR
- state lottery monopolies with no charity lottery presence, excluding Portugal, grew by 2.0% CAGR

When the outliers are removed it can be seen that Monopolies with a Charity Lottery presence outperformed those without for much of the period and then benchmarked; the level of very recent underperformance is both very small (0.3%) and likely to be noise in the data given the lack of consistency: there is no clear-cut underperformance.



It could be argued that such a small difference is within the margin of error, especially given that lottery monopolies with only a limited Charity Lottery presence have materially underperformed the average. Such a treatment of this small performance gap would be particularly valid when considering the impact by product, since we have seen that driving instants sales has been the main driver of overall state monopoly lottery performance, while there is no clear correlation between draw-based performance and the presence of charity lotteries. However, the fairest possible treatment on the level of sales is to consider whether the addition of charity lotteries grows the overall lottery sales footprint to close a very recent (2019) 0.3ppt performance gap, which we analyse in the following section.

To summarise the key points of Section One:

- **there is no evidence to suggest that the presence of Charity Lotteries adversely impacts the draw-based sales of State Monopoly Lotteries**

- **there is clear evidence to suggest that the growth of the monopolies' own instant ticket sales is the main cause of draw-based sales declines (along with specific management decisions in the UK)**

- **the underlying overall sales outperformance of State Monopoly Lotteries without a charity lottery presence is very small vs. those which do operate with a charity lottery presence (0.3ppts per annum) and this can be explained by the growth in instants**

- **however, the 0.3ppts annual performance gap provides the benchmark to assess whether charity lotteries are additive to the overall lottery ecosystem and therefore contribute additional revenue to good causes; ie, whether the revenue generated by charity lotteries outweighs this potential 0.3ppts annual performance impact**

Section II: Charity Lottery Impact On Overall Lottery Revenue

In this section we analyse the extent to which Charity Lotteries are incremental on a revenue basis and so grow the overall value of lottery expenditure available to distribute to Good Causes. By examining four European Charity Lottery markets, we demonstrate that a significant level of incremental consumer expenditure is created by Charity Lotteries in each market where they exist, especially if they are relatively mature and not significantly restricted. In markets with these characteristics Charity Lotteries have been key to driving overall lottery revenue growth.

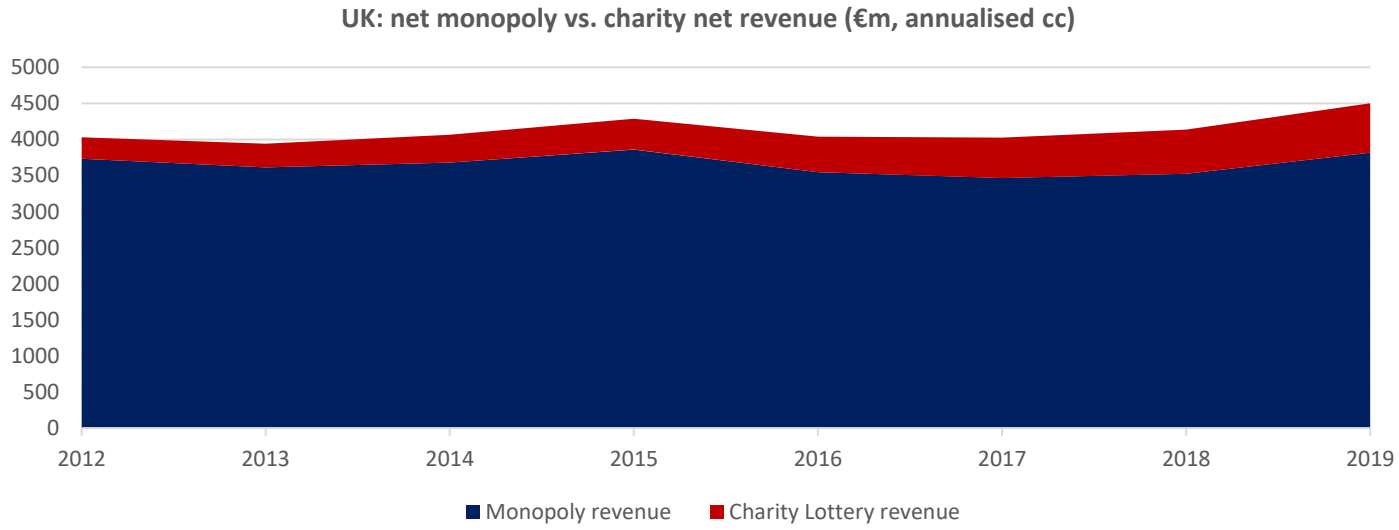
In Section One we demonstrated that the presence of a largely draw-based Charity Lottery sector does not reduce the draw-based sales of State Monopoly Lotteries. The widespread growth in instant ticket sales over the last decade has, however, created the conditions for a marginal outperformance in overall sales from the cohort of state monopoly lotteries that do not have a charity lottery presence vs. those that do. It is therefore important to establish the extent to which Charity Lotteries are additive to the overall lottery ecosystem. It will be remembered from Section One that the threshold of this outperformance is 0.3ppts of growth and/or additive sales. Given that only income can be distributed, even if the mechanism is expressed as a proportion of gross sales, in this section we examine net revenue (sales less prizes) as the key comparable metric.

We therefore analyse the net revenue performance of four countries which have a material Charity Lottery sector working alongside a state monopoly:

- UK
- Netherlands
- Germany
- Sweden

UK Monopoly and Charity Lotteries

In the UK, the total Charity Lottery sector has grown from representing 7% of all lottery net revenue in 2012 to 15% in 2019, generating €684m in revenue after prizes.



In absolute growth terms:

- Total UK lottery revenue (ie, State and regulated Charity lotteries combined) has grown by €472m between 2012 and 2019 (on a constant currency basis, ie stripping out changes in the sterling-euro exchange rate)
- Charity Lotteries added €385m of additional net revenue

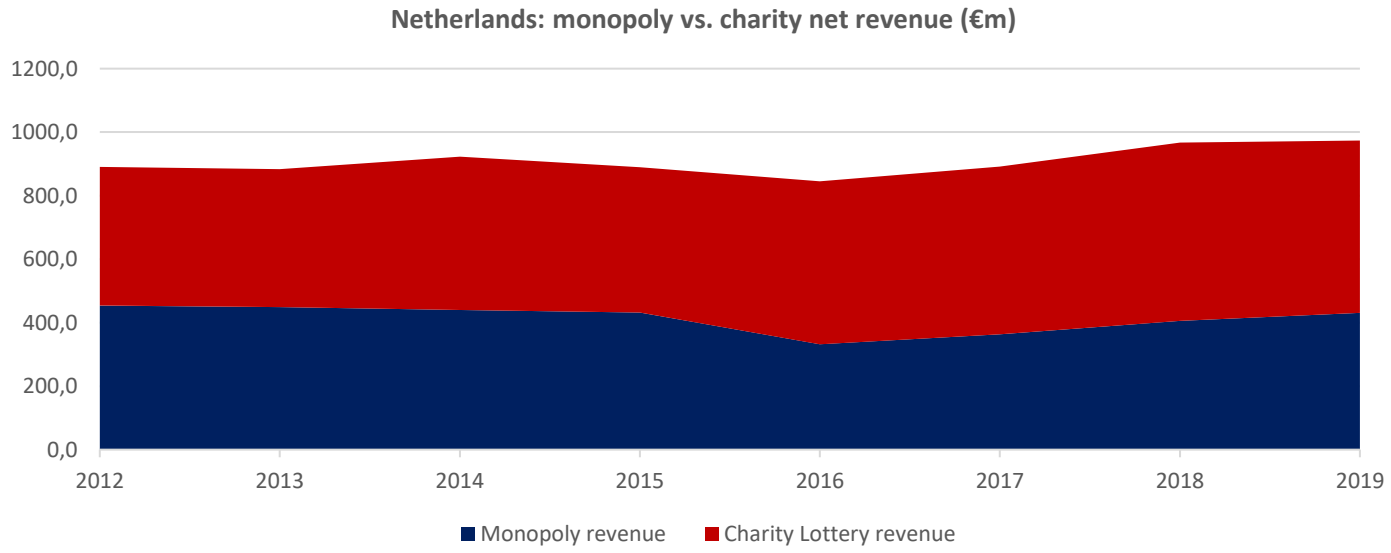
- The National Lottery added €68m of additional net revenue

Charity Lotteries therefore represented 82% of all the growth attributable to UK lotteries between 2012 and 2019. This enabled overall lottery revenue to grow by a CAGR of 1.6%, while the National Lottery managed only 0.3%. Given our analysis in Section One, we can state that this Charity Lottery growth was overwhelmingly incremental. If we take the highly conservative 0.3% per annum of possible substitution (which we believe to be overstated), this means that the UK Charity Lottery sector was been able to contribute 1ppt of net overall growth to the UK lottery sector per annum (1.6% - 0.3% from NL – 0.3% of arguable substitution), which is still substantially all the growth generated.

Perhaps even more significantly as economies enter a period of high inflation, the UK Charity Lottery sector has been able to maintain a CAGR of 12.6%, which is clearly ahead of even current high levels of inflation (c. 8%). This rate of growth therefore protects lottery revenue, and therefore potential returns to good causes against real declines. Conversely, the UK National Lottery's weak sales performance (+0.3%) makes its returns to good causes very vulnerable to inflationary pressure, since this represents a decline in real terms. We have already seen from the failed product experiments in 2015-16 that the UK National Lottery's ability to offset inflationary pressure by increasing prices is potentially very limited and could be counter-productive, The ability of Charity Lotteries to drive above-inflation growth may therefore be critical to a sustainable overall lottery ecosystem in the coming years, as we discuss in Section Three.

Netherlands Monopoly and Charity Lotteries

In the Netherlands, the total Charity Lottery Sector has grown from 49% of total lottery net revenue in 2012 to 56% in 2019, generating €543m revenue after prizes. The Postcode Lottery launched in 1989 and was already therefore well established in 2012.



In growth terms:

- Total Netherlands lottery revenue has grown by €83m between 2012 and 2019
- Charity Lotteries added €106m of revenue
- The State Lottery saw a revenue decline of €23m (in part due to an issue of the State Lottery confusing customers with misleading advertising, which ended up in court)[2]

[2] https://www.kalffkatzfranssen.nl/en/news/netherlands-state-lottery-held-accountable-for-misleading-advertisements/

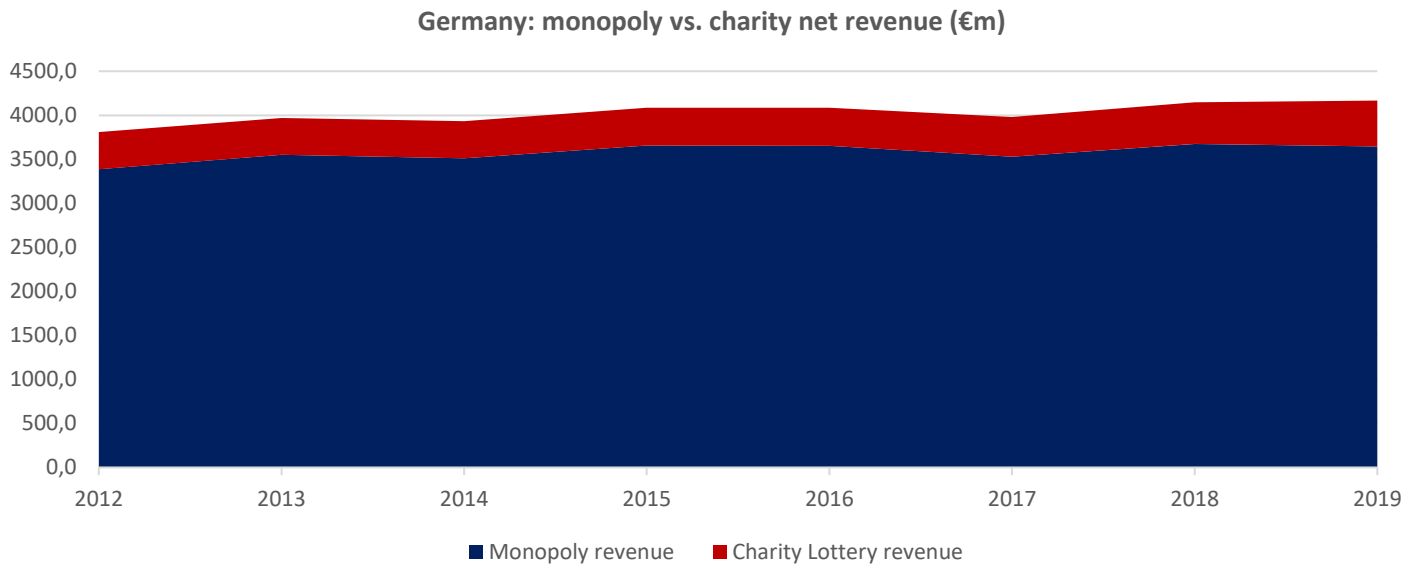
In the Netherlands therefore, the Charity Lottery sector represents more than 100% of the total market growth and by maintaining a CAGR of 3% it has kept pace with inflation. As with the UK, the Netherlands State Lottery has seen overall revenue decline in real terms, meaning that returns to good causes from the monopoly were under pressure even before the significant increase in inflation in the Netherlands (c. 10%). The Netherlands Charity Lottery growth of 3.2%, driving system-wide growth of 1.3% is clearly also far in excess of the potential 0.3ppts underlying performance gap identified in Section One. In the Netherlands Charity Lotteries are significantly incremental as well as being crucial to any level of system-wide lottery growth that has been seen in the country over the last decade.

Germany Monopoly and Charity Lotteries

In Germany, the total Charity Lottery sector has grown from 11% of total lottery net revenue in 2012 to 13% in 2019, generating €521m in revenue after prizes (NB, this data excludes Class Lotteries and Savings Lotteries, which are separately regulated lottery structures).

In growth terms:

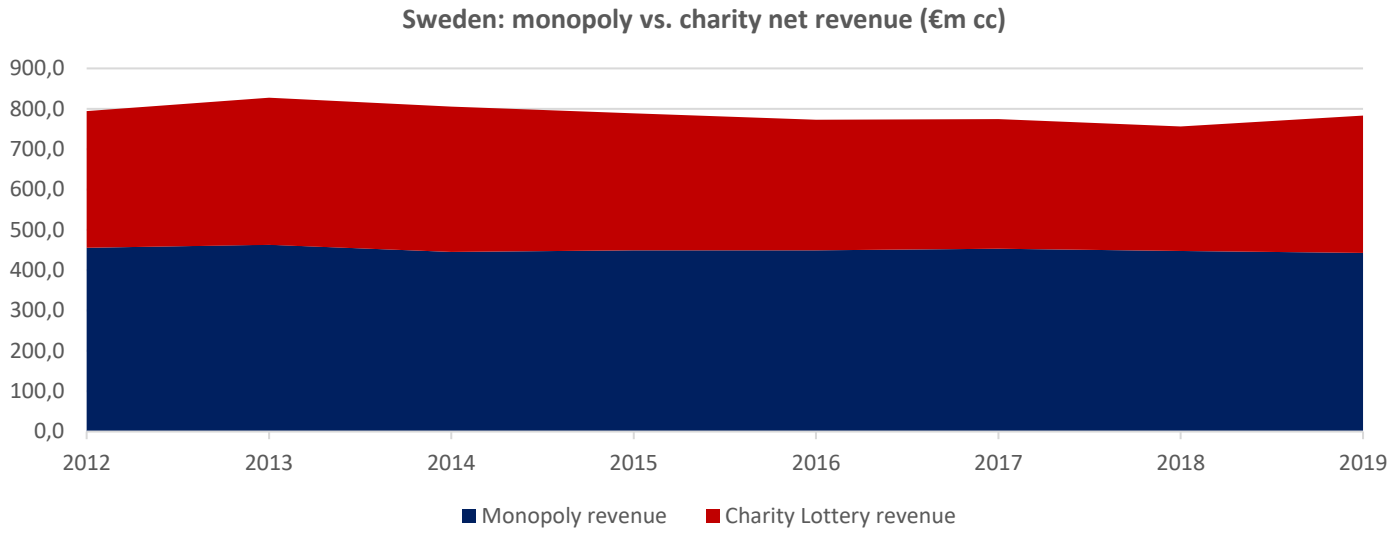
- Total German monopoly and charity lottery revenue has grown by €359m between 2012 and 2019
- Charity Lotteries added €100m of revenue
- The State Lotteries (Deutscher Lotto- und Totoblock) added €259m of revenue



In Germany therefore Charity Lotteries represent 28% of the system-wide growth. Overall growth during the period was 1.3% per annum, while Charity Lotteries grew at 3.1% and the monopoly at 1.1%. In Germany the presence of charity lotteries has been a more marginal benefit overall because the sector is smaller than the Netherlands and lower growth than the UK, but they are clearly a sustainable engine of revenue growth and Good Cause potential, especially in an inflationary environment. The ability of Charity Lotteries to generate additional growth is a key theme of three highly disparate markets.

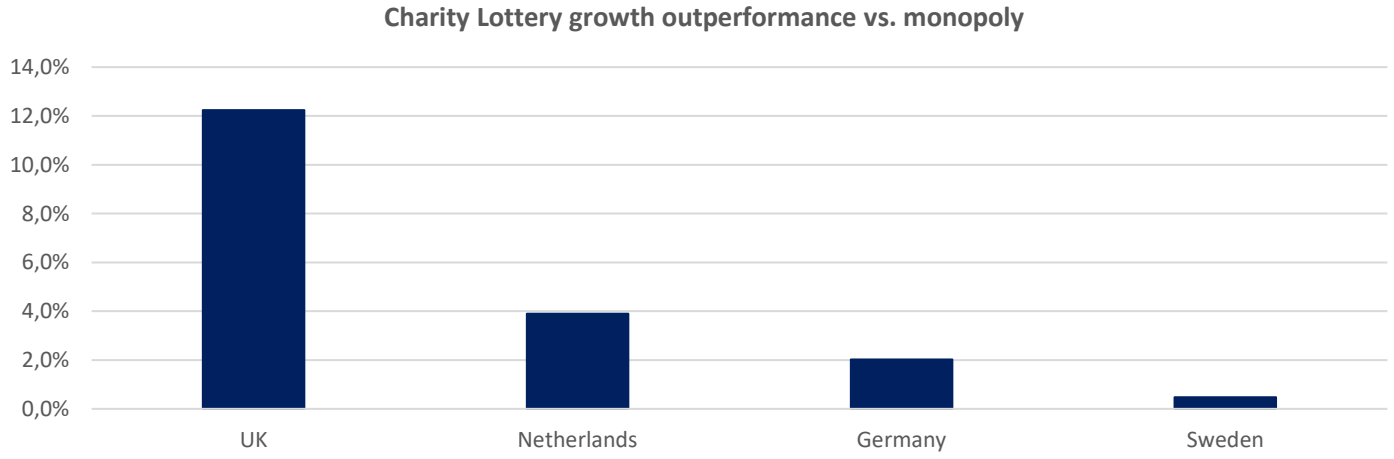
Sweden Monopoly and Charity Lotteries

In Sweden, total Charity Lotteries have maintained a consistent 43% mix, exhibiting the same broadly flat net revenue as Svenska Spel (+0.1% CAGR vs -0.4%), but as with UK, Netherlands and Germany, the Charity Lottery sector has outperformed the monopoly in term of overall long-term growth.



It can also be seen that a mature Charity Lottery sector in Sweden is significantly additive to overall lottery revenue, much as in the Netherlands. Given the maturity of the Charity Lottery sector, overall growth rates are far less important than the total amount that has been added to the lottery sector overall. As with the Netherlands, the existence of Charity Lotteries in Sweden is not so much a question of growth but a powerful third sector addition which significantly enhances the overall lottery market.

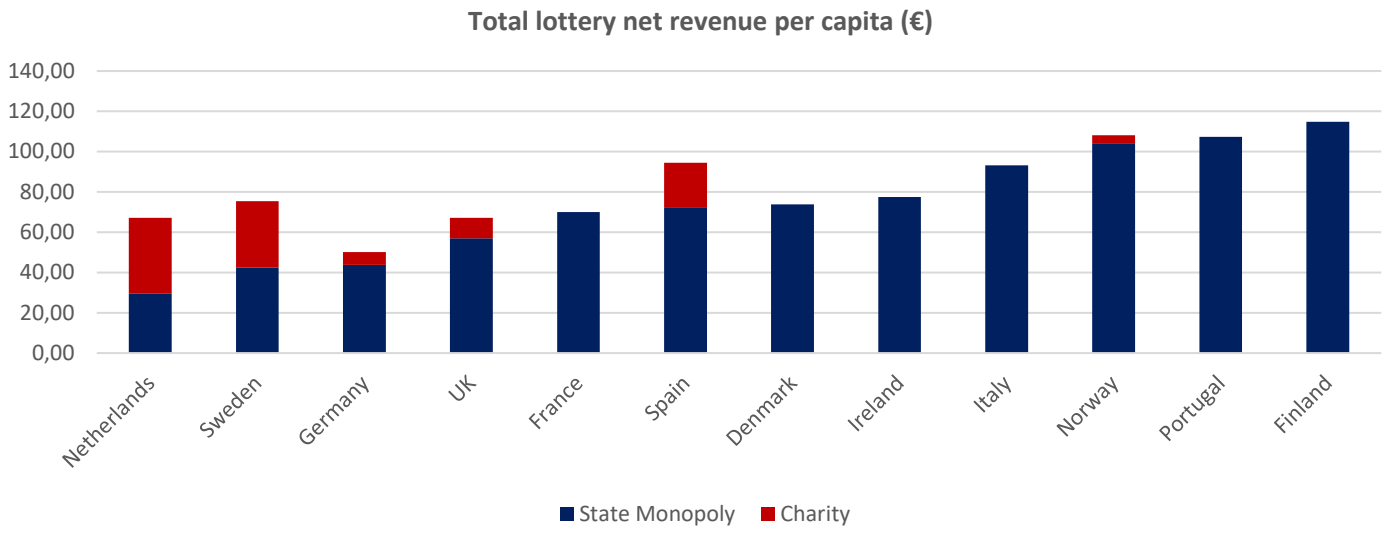
It has been seen that the Charity Lottery sector has outperformed monopoly growth over the medium-term in every market analysed.



While the rate of annual growth outperformance varies by maturity, its consistent presence even in the most mature

markets is worthy of note. Charity Lotteries are not just sources of incremental lottery revenue, they are sources of incremental lottery growth. This is key to a sustainable future for Good Cause distributions, which rely on system-wide growth to protect their income.

The extent to which Charity Lotteries assist overall lottery income can be seen from net revenue per capita analysis from the markets examined.



We have demonstrated in Section One that the presence of Charity Lotteries has not materially impacted the growth or decline of State Monopoly products, either draw-based or instant. We can therefore take the State Monopoly Lottery net revenue per capita as a relative constant regardless of whether Charity Lotteries are present. It can be seen that Charity Lotteries in the Netherlands and Sweden have done much to alleviate otherwise relatively low levels of expenditure on State Lottery products (NB, Spain includes ONCE as a Charity Lottery). Since Charity Lotteries combine choice and digital capability, this segment would seem best place to deliver this overall growth potential, in our view (see Section Three)).

In Section Three we examine the reasons why Charity Lotteries have been able to grow more strongly than State Monopolies and why they have been particularly powerful in the Netherlands and Sweden, over and above market maturity. We also draw some conclusions about likely net revenue developments as digital adoption continues to grow in all markets, accelerated by policy responses to the Covid-19 pandemic.

To summarise the key points of Section Two:

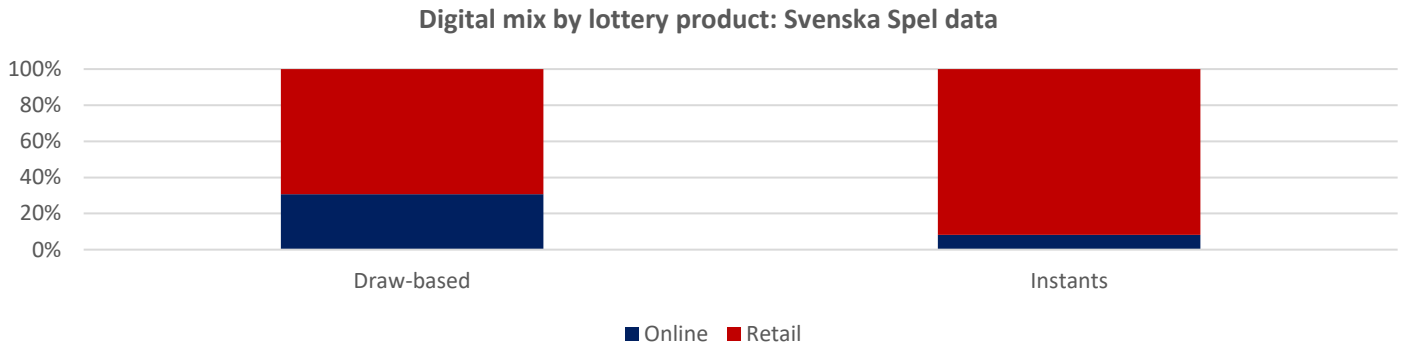
- **Charity Lotteries add significant additional lottery revenue to state lottery systems, far exceeding the 0.3% threshold impact identified in Section One**
- **Charity Lotteries typically exhibit stronger growth characteristics than State Lotteries, for reasons which we explore in Section Three**
- **Many markets across Europe have the potential for material further overall lottery revenue growth, which the higher-growth Charity Lottery sector can be key to unlocking**

Section III: Drivers of State Monopoly and Charity Lottery Divergence

In Section Three we examine the underlying reasons why Charity Lotteries have outperformed State Monopoly Lotteries in revenue terms during the last decade. We believe that there are three key reasons for this, all of which will continue to drive lottery sector trends across markets. First, because Charity Lotteries are more draw-based in mix, they are better adapted to digital consumption. Second, as the use of cash by retail consumers continues to decline, the convenience and impulse-driven nature of State Monopoly products will be increasingly squeezed, especially in the instants segment. Third, greater digital adoption promotes greater consumer choice, which monopolies are poorly placed to fulfill but a well-regulated Charity Lottery sector can provide.

In Section One we demonstrated that the presence of Charity Lotteries has not impacted the growth or decline of State Monopoly lottery products. In Section Two we demonstrated the significant additional contributions to overall lottery revenue and growth that a licensed Charity Lottery sector can provide. However, while this analysis shows the absence of a substitution problem and the presence of a significant economic benefit from the presence of Charity Lotteries, it does not explain the cause. Especially given that in two countries (Sweden, Netherlands) it would appear at first glance that the presence of Charity Lotteries has caused State Monopolies to be smaller over time, understanding consumer cause and effect is critical to developing an effective lottery market.

State Monopolies tend to be heavily retail driven despite broader digital developments in the consumer economy, which have been accelerated by Covid-19 pandemic responses. For the State Monopolies where there is data, the pre-pandemic digital penetration was between de minimis (Italy) and 30% (UK, Sweden), with France (8%), Germany (14%) and Ireland (21%) in between. Just as importantly, given the importance of instant lottery sales to most State Monopolies, Instant Lotteries do not translate as well as Draw-Based lotteries online, as published evidence from Svenska Spel demonstrates (2016 data):

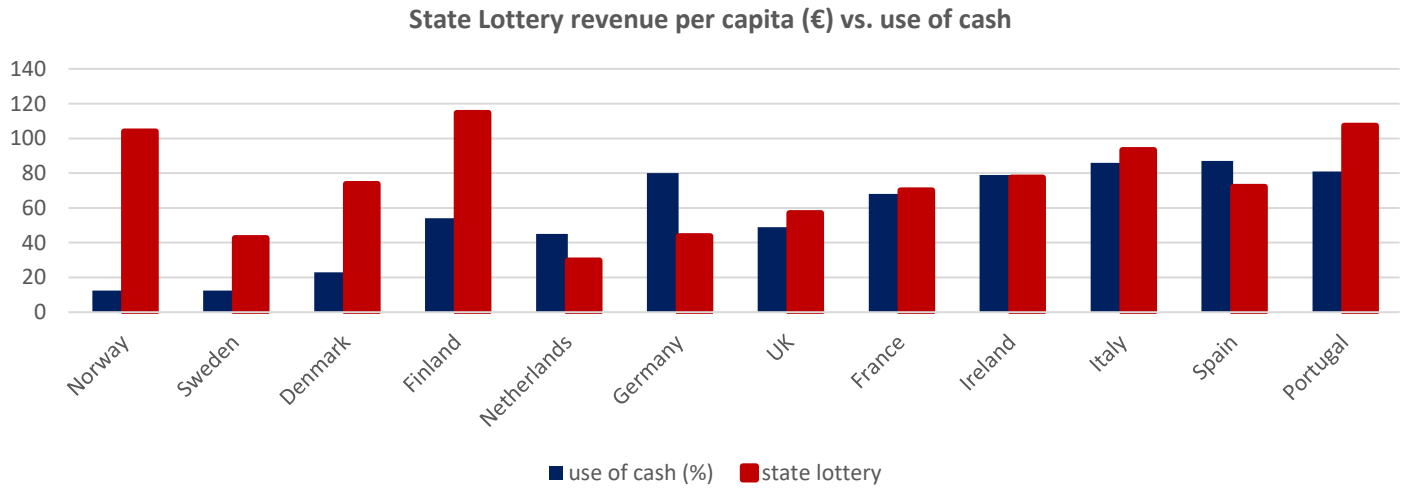


There are four main reasons for this difference in performance, in our view:

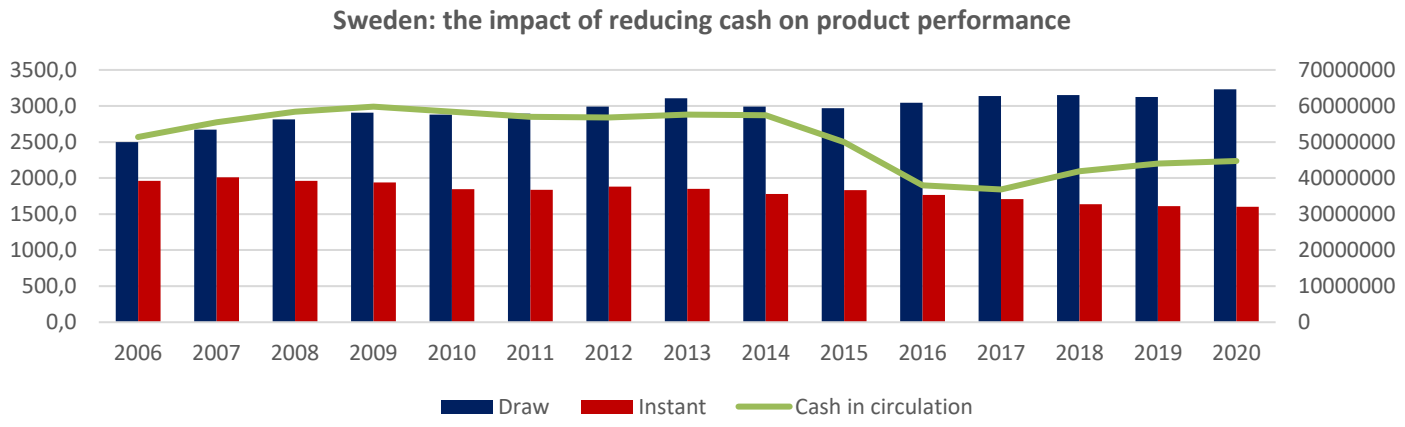
1. draw-based games tend to be considered as regular purchases, with additional engagement driven by high prizes; the digital channel is ideally suited to making deliberate transactions more convenient and communicating large jackpots via media and marketing channels
2. instants tend to be an impulse purchase in a retail environment; their prominent display drives sales to customers primarily engaged in grocery or convenience shopping; this dynamic does not exist online
3. instants tend to be bought with change (coins) and their game play reflects this; the loose change and direct scratch dynamic does not exist online
4. online instant lottery products are broadly similar to online slots as a user experience, but usually have less attractive payout ratios; so customers wanting to be entertained by online instant win games are potentially more likely to use commercial slots than lottery products

In addition, while retail distribution can be used to reinforce a monopoly, it is much easier for customers to seek choice in digital channels: there is no enforced consumer convenience factor implicit in a digital monopoly as there is in a retail monopoly.

Therefore, State Monopoly lotteries generally, and especially those which have significant instants revenues, are highly geared to the retail cash economy. Indeed, this hypothesis is borne out by examining State Monopoly lottery sales per capita relative to the use of cash in retail across the countries we have analysed (the use of cash data is 2017, which is the best available across Europe):



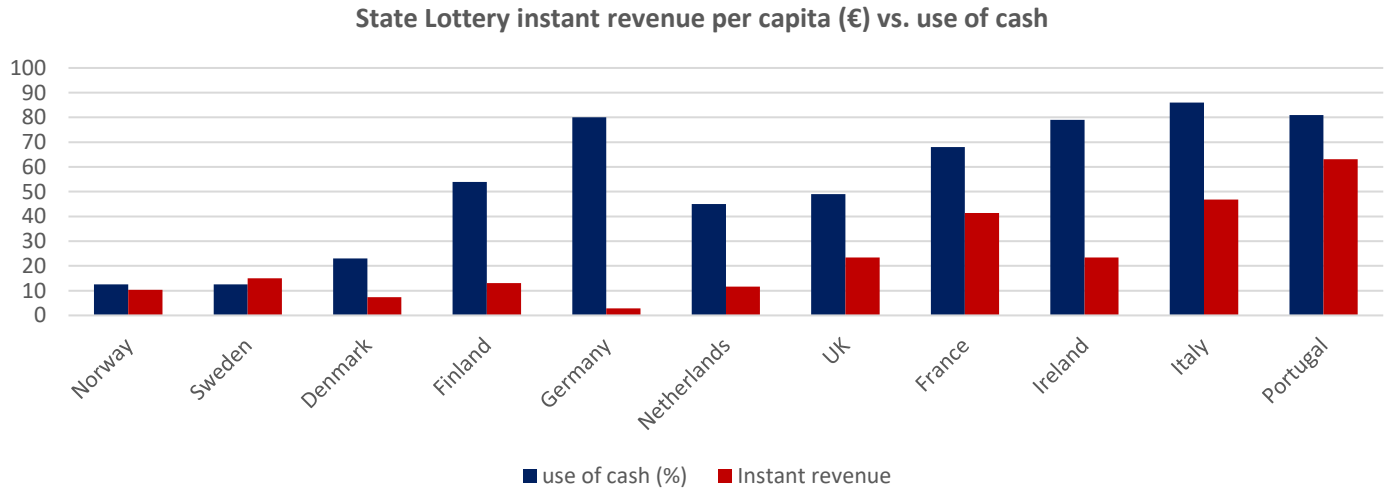
We separate the Nordic countries from others because of their high GDP per capita and low use of cash vs. the wider European basket. It can be seen that there is a clear correlation within Nordic countries between State Monopoly lottery sales per capita and use of cash for all countries except Norway. Norway is an exception for two important reasons. First, Norsk Tipping has an unusually low level of instants revenue as a proportion of total lottery revenue (9.0% in 2019, falling to 8.5% in 2021; it was 12% in 2005), meaning that it is less susceptible to the cash economy than most other lotteries Second, Norsk Tipping also has a digital gambling monopoly which its regulator enforces by blocking the advertising, websites and payments of offshore competitors, generating both digital traffic and strong digital operational capabilities. While Finland's strength can be explained by a regionally high consumer use of cash, Sweden is the stand-out underperformer in the Nordic region. Tellingly, in a market which has the lowest use of cash in Europe, it is its instants sales which are most under threat.



Left hand scale is Lottery revenue in mSEK; right hand scale is cash in circulation in mSEK

Whereas the correlation between cash in circulation and draw-based sales is -0.50 (ie, the reduction in the use of cash has not been a major driver), the correlation for instants sales is 0.71. This high level of correlation has fairly obvious common-sense causation: less cash in circulation means fewer instants are being sold in retail, but the product cannot make up the shortfall online whereas draw-based products can. At the other end of the Nordics scale, Finland has both a relatively high continuing use of cash and a low instants mix (10%), explaining its relative outperformance. Denmark too has a low instants mix (10%), insulating it from an increasingly cashless economy.

Elsewhere in Europe, the link between the use of cash in the retail economy and State Monopoly lottery sales is very clear – the correlation (excluding Germany) is 0.83. Germany is an outlier because it has a very low instants mix (just 6.5% in. 2017). It can be clearly seen that as the use of cash continues to decline, State Monopoly Lotteries may face a revenue crisis, especially if those lotteries are instant-led. For reference, the instants mix also follows use of cash (ex-Germany), suggesting that State Lotteries which have a high dependency on Scratch Cards for net revenue are most at risk from reductions in the amount of cash consumers use.



By contrast, the draw-based product lottery is broadly resilient to economies reducing cash, as demonstrated by Sweden. This dynamic largely explains why the draw-based led Charity Lottery sector has done especially well in economies that have seen material reductions in the use of cash over the last decade: Sweden, Netherlands and UK. The importance of the retail use of cash to lottery consumption also partly explains why Charity Lotteries, which tend to operate on a subscription model, have been more muted in Germany, which remains a highly cash-driven retail economy.

In summary for Section Three, policymakers considering the impact of the reducing consumer use of cash in all economies should be factoring in softer lottery instants sales as a consequence, therefore; a trend that has been materially accelerated by Covid-19 policy responses. Critically, as can be seen from Sweden, it is very difficult, if not impossible, for these instant lottery sales to be made up by switching consumers to digital instants. Conversely, the Charity Lottery sector is:

1. **largely draw-based in its product mix**
2. **largely non-cash as a consumer transaction**
3. **entirely incremental in lottery revenue (whether digital and draw-based or not)**

Given that Charity Lotteries also provide consumer choice, which is an important digital factor, we believe that a vibrant Charity Lottery sector can make a vital contribution to preventing overall lottery sales decline and therefore support otherwise vulnerable distributions to Good Causes.

Summary of conclusions

Section One analysed the performance of State Monopolies by whether or not they operated alongside a regulated Charity Lottery sector. This Section demonstrated that:

- **there is no evidence to suggest that the presence of Charity Lotteries adversely impacts the draw-based sales of State Monopoly Lotteries**
- **there is clear evidence to suggest that the growth of the monopolies' own instant ticket sales is the main cause of draw-based sales declines (along with specific management decisions in the UK)**
- **the underlying overall sales outperformance of State Monopoly Lotteries without a charity lottery presence is very small vs. those which do operate with a charity lottery presence (0.3ppts per annum) and this can be explained by the growth in instants**

however, the 0.3ppts annual performance gap provides the benchmark to assess whether charity lotteries are additive to the overall lottery ecosystem and therefore contribute additional revenue to good causes; ie, whether the revenue generated by charity lotteries outweighs this potential 0.3ppts annual performance impact

Section One Two analysed the performance of four key European markets where State Lotteries co-exist with material nationally regulated Charity Lottery sectors. The analysis found that:

- **Charity Lotteries add significant additional lottery revenue to state lottery systems, far exceeding the 0.3% threshold impact identified in Section One**
- **Charity Lotteries typically exhibit stronger growth characteristics than State Lotteries, for reasons which we explore in Section Three**
- **Many markets across Europe have the potential for material further overall lottery revenue growth, which the higher-growth Charity Lottery sector can be key to unlocking**

Section Three analysed the potential underlying reasons why State Monopolies are often ex-growth or in decline, while Charity Lotteries have typically demonstrated higher levels of growth. We believe that consumer engagement with digital choice vs. retail use of cash is key to understanding this divergence in performance, which significantly favours Charity Lotteries. Therefore, policymakers considering the impact of the reducing consumer use of cash in all economies should be factoring in weaker lottery scratch card sales as a consequence, therefore; a trend that has been materially accelerated by Covid-19 policy responses. Conversely, the Charity Lottery sector is:

- **largely draw-based (and so clearly differentiated from online gaming)**
- **largely non-cash (and so insulated from overall declines in the use of cash)**
- **entirely incremental in lottery revenue, whether digital and draw-based or not (and so represents an overall lottery growth opportunity which extends Good Cause income without impacting State Lottery revenue)**

Given that Charity Lotteries also provide consumer choice, which is an important digital factor, we believe that a vibrant Charity Lottery sector can make a vital contribution to preventing overall lottery sales decline and therefore support otherwise vulnerable distributions to Good Causes.

Appendix: Glossary of Key Terms

CAGR: Compound Annual Growth Rate, which is the average annual rate of growth (or decline) between two periods expressed as a percentage; the figure expresses the trend between two points without factoring in any divergent changes that may occur in between (ie, if revenue goes up then down to end up at a point below the original revenue figure, the CAGR will simply be negative)

Charity Lottery: we use this as a short hand for regulated charity lotteries that are nationally available; we do not include small, local or unregulated charity lotteries (such as Church raffles); all Charity Lotteries are included in our analysis, not just members of ACLEU; the Charity Lotteries captured are summarized by country for clarity:

- Denmark: no national regulated charity lottery sector
- Finland: no national regulated charity lottery sector
- France: no national regulated charity lottery sector
- Germany: national regulated charity lottery licensees report separately, we have included Action Mensch, Fernsehlotterie, and the Postcode Lottery
- Ireland: no national regulated charity lottery sector
- Italy: no national regulated charity lottery sector
- Netherlands: total national regulated Charity Lottery sales and net revenue data provided publicly by the regulator KSA (NB, data is reported 'real' and must be adjusted for inflation)
- Norway: limited national regulated charity lottery sector (see report)
- Portugal: no national regulated charity lottery sector
- Spain: no national regulated charity lottery sector; ONCE reports results publicly annually as the regulator DGOJ
- Sweden: total national regulated Charity Lottery net revenue figures reported annually by regulator, Spelinspektion
- UK: total national regulated Charity Lottery sales and net revenue data publicly provided by the Gambling Commission in bi-annual Industry Statistics

Correlation: is a statistical analysis of how closely connected two independent sets of data are, expressed as a figure between +1 (which means they exhibit an identical pattern) to -1 (which means they exhibit a precisely opposite pattern; a correlation of 0 therefore means that there is no similarity between the two data sets. It is important to stress that correlation does not automatically imply causation, but it does provide the basis for further investigation as to why two sets of data might be very similar, very different or totally independently of each other

Draw Based Lottery: lottery products which are the result of an organized draw, however frequently this might occur

Instants / scratch cards: lottery products which are based upon a predetermined internal chance of winning which can be immediately revealed by the customer (in the case of scratch cards) or by a computerized Random Number Generator, which establishes whether or not a customer wins a prize (in the case of online instants); whereas a customer must wait for the draw to take place to finish playing a draw-based lottery product, instant / scratch card products immediately reveal the result and so can be played much more frequently

Net revenue: refers to total customer sales (see below) less prizes paid out to customers. Where a sales tax such as VAT or a specific lottery tax applies, this is calculated within net revenue; the figure therefore represents net customer expenditure rather than the net revenue kept by the state or licensee (which often deducts tax)

Sales: refers to total customer sales from tickets, scratch cards and instant games, before the deduction of prizes, taxes or any other items

State Monopoly Lottery / State Commercial Lottery / State Lottery: we use these short-hands to describe lotteries which are monopolies but which are not charity lotteries; some are operated directly by the state and some by third parties under licence; state lotteries are increasingly run by private consortia or have private sector involvement (in italics):

- Denmark: Danske Spil, a state-owned operator
- Finland: Veikkaus, a state-owned operator
- *France: Française des Jeux, a part-privatised and publicly traded state-owned operator*
- Germany: Deutsche Lotto und TOTO Block (DLTB), a confederation of state-owned operators by individual German state
- *Ireland: National Lottery, a state-licensed operator owned by Private Equity*
- *Italy: state-licensed commercial operators*
- Netherlands: Nederlandse Loterij a state-owned operator (formed by the merger of the Staatsloterij and De Lotto in 2016)
- Norway: Norsk Tipping, a state-owned operator
- Portugal: Santa Casa, a charity with a state monopoly licence for lottery
- Spain: Selae, a state-owned operator
- Sweden: Svenska Spel, a state-owned operator
- *UK: a commercial consortium which bids to operate a monopoly licence for a period of time*

Disclaimer

While every effort has been made to ensure the accuracy of the data presented, the opaque and disjointed nature of some sources means that some assumptions have been made and some errors may be present. The information provided represents the opinions of the authors. Any assessment of trends or change is necessarily subjective. The information and opinions provided are not intended to provide legal, accounting, or investment advice, nor should they be used as a forecast. While the Report was commissioned by ACLEU and representatives of ACLEU were given opportunity to comment on a draft, all analysis and conclusions presented are solely those of Regulus Partners. Regulus Partners may act, or has acted, for any of the companies and other stakeholders mentioned in this report

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