

DAGEO'S ECONOMIC MPACTIN EUROPE

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FOREWORD

With over 200 exceptional brands, an unrivalled diversity of people and a global supply across 31 countries, Diageo is the leading premium drinks business in Europe.

Diageo's success is built on a rich European heritage, the region's thriving tourist trade and agricultural industry and our desire to shape the future of celebrations through our brands, including Johnnie Walker, Smirnoff, Tanqueray, Baileys and Guinness.

Europe has grown in recent years to become one of the most critical markets for us globally, where we're building strong partnerships and providing outstanding value to the wider economy.

It's an exciting and dynamic region with an abundance of opportunities for us to discover and unlock. Europe is where our most iconic global brands are created and is also where many global trends are set.

By getting as close as we can to our consumers and customers, we have become a leading hub for innovation, influencing the evolution of luxury spirits across different categories and occasions and bringing no and lower alcohol options to the fore.

The most gender diverse region in Diageo, Europe is the largest home for our employees globally. This means we're a powerful engine for growth. We have an extensive supply footprint that sees us export 41.1 million cases of spirits, 4.2 million cases of cream liqueur and 2.1 million hectolitres of beer products to more than 60 countries outside Europe every year. Our brands, distilleries, breweries and the hospitality industry that we serve are rooted in societies and cultures throughout Europe. We're committed to helping the communities in which we live, work, source and sell to prosper and will continue to push the boundaries for a sustainable longterm future for all, guided by our ESG action plan 'Society 2030: Spirit of Progress'.

This report showcases the true extent of Diageo's significant economic and social impact across Europe and in doing so paints a picture as to what makes Diageo unique. It also serves as a baseline for how we measure future growth.

Always inspired by consumers, customers and our people, we are committed to unleashing our collective power, to continue to grow in the right way and to celebrate life every day in Europe.



John Kennedy President, Diageo Europe

Diageo's *Economic Impact* in EU27+ in 2022





€8.4bn Tax receipts

Total GVA

€1 in every €1,600 of economic output in EU27+^[2] was supported by Diageo.



Total Jobs

Every 1 direct full time equivalent job in 2022 supported a further 21 jobs in the EU27+ economies.

94% share of downstream jobs supported in on-trade industries.



Tax Receipts

Every standard drink stimulates collection of $\notin 0.72$ in total tax.^[3]

Every full time equivalent Diageo employee in the EU27+ generated €284,600 of GVA, over three times the EU27+ economy average of €87,500.





GVA, or Gross Value Added, is the economic activity stimulated. It can also be seen as the contribution to Gross Domestic Product (GDP). Every €1 in direct GVA generated in 2022 supported a further €4.9 in the EU27 economies. This includes the largest alcoholic beverage markets in Europe by volume. This is referred to as the EU27+ and includes EU27, Switzerland, the UK, Turkey, and Norway.

This is based on revenues of €8.4bn and 141m litres pure alcohol according to IWSR volume for Diageo in EU+ in 2022 and standard drink of 12ml ethanol.



EXECUTIVE SUMMARY

Diageo is a global leader in premium drinks. Amongst its more than 200 brands are some of the most recognisable drinks in the world, including Johnnie Walker, Smirnoff, Tanqueray, and Guinness. One in every 20 alcoholic beverages sold globally is a Diageo product.¹

€10.5 bn Diageo's 'grain to gate'

operations supported a

€10.5 billion contribution to EU27+ GDP, 84,500 full time jobs, and €6.1 billion in tax revenue.

Europe is Diageo's historical home, where many of its brands were developed and where Diageo itself was formed in a merger in 1997. The company's presence in the region is significant, with distilleries in Scotland, marketing and supply excellence centres in the Netherlands, production and packaging in Italy, breweries in Ireland, a business hub in Hungary, and the global headquarters in central London. Diageo's European operations contribute to the continent's reputation as a home for premium spirits and quality beer.

This study evaluates the economic impact of Diageo in 31 countries across continental Europe and the British Isles, referred to as EU27+ throughout². Diageo generates impact through its operationsthe people it employs and purchases it makes through its supply chains. It also supports economic and social impact through the sale of its products in retail stores, restaurants, and bars. This study considers the economic footprint of Diageo's operations and sales.

SUMMARY OF KEY ECONOMIC IMPACT FINDINGS

Diageo's total impact in the EU27+ in 2022, including the downstream impacts of the sales of its products, were:

- €13bn in gross value added contribution
- 200,000 full time equivalent jobs
- €8.4bn in tax receipts

Diageo earned €3.7 billion in net sales revenues³ in the EU27+ in 2022. Just under a third (about €1 billion) of Diageo's European revenues were earned in Great Britain, where the global headquarters are located, along with several distilleries, breweries, and manufacturing hubs. Diageo's operations, upstream supply chains and the downstream sales of its products supported a total contribution of \in 13.2 billion to GDP in the EU27+ in 2022. For every \in 1 Diageo received in net sales, it supported a contribution of \in 3.60 to the region's economies.

Diageo's direct operations and supply chain supported $\in 10.5$ billion in gross value added across EU27+ countries. This contribution was supported through its direct operations ($\in 2.7$ billion), supported in other industries through its upstream supply chain spending ($\in 4.9$ billion), and induced through the wage payments along these supply chains (\notin 2.9 billion). In addition, sales of Diageo's products supported a \notin 2.7 billion contribution to GDP. In total, therefore, Diageo's operations, upstream supply chain and downstream sales of Diageo products contributed \notin 13.2 billion to GDP in EU27+ economies in 2022, equal to the economic output of Malta.⁴

Diageo's operations and the sales of its products support almost 200,000 full time equivalent jobs along the EU27+ value chain from grain to glass (Fig. 1). Diageo's operations supported the jobs of 84,500 full time equivalent workers in the EU27+. More than half of these jobs (56%) were supported

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⁴European Commission, Malta - ECSO Country factsheet, 2022

¹Diageo, Capital Markets Day 2021

² We use EU27+ to refer to the region covering the most important alcoholic beverage markets in Europe by volume, namely EU27, Switzerland, the UK, Turkey, and Norway

³Net sales are sales less excise duties. Diageo, <u>Annual Report 2022</u>.



by Diageo's extensive supply chain purchases in the EU27+. A further third (34%) of jobs were supported by wage spending along its supply chains. Diageo directly employed 8,750 staff for its own operations. Its employment multiplier is 9.7, meaning that for every person employed directly by Diageo in 2022, a further 8.7 full time jobs were supported by its supply spending. Sales of Diageo's products support the jobs of 114,100 staff in downstream industries, with 6.800 jobs supported in the wholesale and retail sectors. and 107,400 jobs in restaurants and bars.

Diageo's employees are very productive. The average gross value added per full time equivalent worker directly employed by Diageo in EU27+ in 2022 was €311,000. This is 4.1 times higher than the economy-wide average of €75,100 per worker, and 3.1 times higher than the average of €99,000 in the manufacturing sector.⁵

Diageo's operations in Europe support upstream employment across all 31 countries in the EU27+ and in a broad set of industries. Through its direct employment and supply chain, Diageo supports 47,200 jobs in Great Britain (56%). A further 5,400 jobs are supported in the Isle of Ireland, and around 4,000 each in Germany, Italy, and Turkey. The remaining 20.100 (24%) are distributed across the continent. Most of the jobs sustained in Diageo's supply chain (85%) are concentrated in three industries that underpin Diageo's operations: commercial services, manufacturing, and distribution and retail. In addition, a significant share of jobs (6%) is supported in education. health. and other community service industries.

Jobs supported by the sales of Diageo's products are distributed more evenly across countries in the EU27+. Great Britain again has the highest share of downstream jobs supported, at 26% or 29,200 iobs, but this is smaller than the share of supply chain roles. A further 18,500 jobs (17%) are supported in Spain, 12,700 jobs (12%) in Turkey, and 10,800 (9.5%) in the Isle of Ireland, where Diageo has large sales footprints. Around 7% of total downstream jobs are supported in each of Germany and Greece, with the remaining 26.300 distributed across the EU27+.

Nearly 3 in 5 jobs supported in Europe are in bars, restaurants, shops and wholesale.



Fig. 1: Employment supported by Diageo's operations and sales in EU27+ in 2022

Thousand full time equivalent jobs



1. INTRODUCTION

Diageo is a global leader in premium drinks. It has sales in more than 180 countries and employs more than 27,000 staff. Diageo operates over 130 production sites across the world, and retails more than 200 brands of spirits and beer, including some of the best-known drinks in the world such as Johnnie Walker and Smirnoff, two of the four largest international spirits by sales.⁶ Diageo is also meeting growing demand for no- or low-alcohol choices by introducing alcohol-free products such as Seedlip. Gordons 0.0 and Guinness 0.0.

In Europe, Diageo employs staff in 22 countries and owns brands that are household names in the region, including Baileys, Johnnie Walker, Guinness, Captain Morgan, Smirnoff, and Tangueray. Diageo is a global company: 80% of its sales by volume occur outside Europe.¹ However, Europe has historically been an operational stronghold for Diageo: its headquarters are based in London, around a third of its global workforce is employed in Europe, and it has developed extensive supply chains servicing its businesses around the globe.

Oxford Economics has been commissioned by Diageo to assess the economic and social impacts of its global operations on 31 countries in the European region in 2022. Specifically, this report assesses the impacts that Diageo's operations across the globe have in the 27 countries in the European Union, along with Norway, Switzerland, Turkey, and Great Britain.⁷ We refer to this set of countries as the EU27+ throughout this report. Diageo's footprint can be separated into the impacts supported by its direct operations and supply chains, and the impacts supported by the sales of its products in downstream markets. including for wholesale operators, retail vendors, and bars and restaurants. This analysis captures both channels of impact.

Diageo's economic impact is generated by its contributions to gross domestic product (GDP) in the EU27+, as well as the employment and tax revenue that its operations support. This analysis leverages Oxford Economics' Global Sustainability Model, an in-house tool to estimate the economic impact of Diageo's operations and upstream supply chains across countries. Impacts in downstream markets are estimated in a separate process (methodological detail is provided in the annex).

The remainder of this report explores the economic impact of Diageo's global operations and the sales of its products in countries in the EU27+ in 2022. Summary tables of countrylevel results are provided in the annex.

covering Diageo's impacts in England, Scotland, and Wales, and the Isle of Ireland, which captures impacts in the Republic of Ireland and Northern Ireland.

⁶ Diageo, <u>Annual Report 2022</u>

⁷ We have aligned our country reporting to reflect Diageo's corporate structure. We therefore report results for Great Britain.





2. THE ECONOMIC IMPACT OF DIAGEO IN THE EU27+

Diageo generates economic impact across Europe. It directly employs almost 9,000 full time equivalent staff across 22 countries in the EU27+, who work to manufacture and deliver its portfolio of brands across the globe. Economic impact is realised through Diageo's direct activities of manufacturing and selling, as well as through its supply chain and the spending supported by its wage payments and the wages along its supply

chain. Diageo's operations outside Europe also generate economic activity in Europe when the supply chains of non-European entities pass through the EU27+. These impacts are captured in the below analysis.

In this chapter, we explore Diageo's economic impact in the EU27+ across four channels. First, the direct contribution of its operations within the EU27+. Second, the indirect impact arising from its supply chain by understanding the purchases made by Diageo's entities across the world. Third, the induced impact which arises from the wages it pays its employees, and wages paid along its supply chain, that fund consumer spending. Fourth, the impact that the sales of Diageo products support in downstream industries, including wholesale, transport, retail, and restaurants, bars, and hotels.

INTRODUCTION TO ECONOMIC IMPACT ANALYSIS

The core analysis presented in this report assesses the impact of Diageo's operations across three channels (Fig. 2). These are its:

- **Direct impact**, which is the economic activity that Diageo itself generates through its operations in the EU27+.
- Indirect impact, or supply chain impact, which occurs when Diageo buys inputs of goods and services from businesses in the EU27+, and its suppliers (or businesses in its supply chain) buy inputs of goods and services from EU27+ businesses.
- **Induced impact**, or wage-financed spending impact, which is the economic activity stimulated from both Diageo's and Diageo's suppliers' wage payments to employees.

We analyse these channels of impact using three key metrics:

• **Employment**, measured on a full-time equivalent (FTE) basis, defined as an employee who works 40 hours a week.

- Gross value added (GVA) contribution in EU27+ countries. GVA is the value a company generates through its activities and is equal to a company's revenue minus the cost of bought-in goods and services used in production. The sum of GVA across all firms in the economy is a country's Gross Domestic Product (GDP), after minor adjustments for taxes and subsidies.
- **Tax receipts** generated by the EU27+ economic activity and employment supported by Diageo.

Most economic impact studies assess effects based only on spending that occurs within the geography of interest, by considering only the purchases made by Diageo's entities in the EU27+. This report goes further, by assessing the EU27+ impact of purchases across all of Diageo's global entities. Our approach is comprehensive and more suited to companies with a global footprint like Diageo. A detailed methodology discussion is provided in the appendix to this report.



Estimating direct downstream impacts

The economic footprint supported by sales of Diageo products in downstream industries is estimated separately from the impact of its direct operations and supply chain. We use information on Diageo's sales by country, split into estimated shares of sales to offtrade vendors (wholesalers and retailers) and on-trade vendors (restaurants and bars) based on data from IWSR. We then use national multipliers to estimate the GVA, employment and tax impacts supported by sales of Diageo's products in downstream markets. We estimate only direct impacts for downstream markets.

Fig. 2: Illustrating the channels of economic impact





2.1 DIRECT IMPACT

Diageo earned €3.7 billion in net sales in EU27+ countries in 2022, an increase of 26% from 2021.⁸ Around a third of EU27+ net sales occurred in Great Britain, reflecting Diageo's large footprint in the country. A further third of sales were generated in Northern and Southern Europe, with the remainder split across the Isle of Ireland, Eastern Europe, and Turkey.

Contribution to economic growth

Diageo's operations in the EU27+ directly generated a value-added contribution of €2.7 billion to the region's GDP in 2022 (Fig. 3). This is a measurement of the value Diageo created in the economies of the EU27+ countries. A significant proportion of the direct value added originates in its four European hubs: Great Britain, the Isle of Ireland, the Netherlands, and Hungary, but it is reflected in every country in the EU27+. As such, Great Britain accounts for almost a third (32%) of Diageo's direct GVA contributions in the EU27+, while the Netherlands and the Isle of Ireland together contribute 47%. A further 10% arises in Hungary, where Diageo has its Global Business Operations centre. The largest five countries in Diageo's EU27+ footprint constituted 92% of its GVA impact.



Fig. 3: Diageo's direct GVA in the EU27+ in 2022, by country



Contribution to job creation

Diageo employed 8,750 fulltime equivalent staff in the EU27+ on average across 2022. Most of its staff in the region were employed in

GVA per FTE employee (EUR)

Great Britain. Diageo's global headquarters are in London, and the company owns several distilleries, breweries, brand experience centres and other facilities in England and Scotland.

Fig. 4: Productivity of Diageo's labour force compared to national averages in 2022

350,000 300,000 311,002 250.000 200,000 150,000 100,000 98,962 50,000 75,108 0 EU27+ average EU27+ Diageo manufacturing Source: Oxford Economics

Diageo's employees are very productive compared to employment averaged across all industries in the EU27+, and across the manufacturing industry. Diageo's employees generated economic value of approximately €311,000 per FTE job in 2022. Annual GVA per full time worker at Diageo is 4.1 times the EU27+ average across all industries, and 3.1 times the EU27+ average for the manufacturing sector as a whole (Fig. 4).⁹

4.1×

Diageo's workers are 4.1 times more productive than the average EU27+ worker in terms of contribution to GDP.

Contribution to tax receipts

Through its direct activities. Diageo contributed €4.2 billion to direct tax receipts for governments across the EU27+ countries. Most of these tax payments comprised excise duty on Diageo products (65%). A further 10% of Diageo's direct tax payments were employment taxes, including social security and pension payments. Geographically, two thirds of Diageo's tax payments occurred in Great Britain (40%). Turkey received a significant share of taxes (14%) due to relatively high excise payments (Fig. 5).

Fig. 5: Tax receipts arising from Diageo's direct operations in EU27+ countries in 2022





2.2 INDIRECT IMPACT

Diageo has extensive supply chains across the globe. Its purchases range from agricultural inputs to packaging to the business services required to operate a multinational company. This report assesses the impact of Diageo's global operations on the economies of the EU27+ countries. It therefore captures all purchases from suppliers in the EU27+ made by Diageo entities both within the EU27+ and outside the region.

Businesses in the EU27+ supplied important inputs for Diageo's operations. In 2022, the company spent €5.3 billion with businesses in the EU27+ on inputs for its global operations. It purchased goods and services from all 31 countries in the EU27+ group. Most of Diageo's purchases were made in Great Britain and the Isle of Ireland (Fig. 6).

Contribution to economic growth

Diageo's purchases stimulated economic activity across the region, as its spending propagated up the value chain to second and third tier suppliers. We estimate Diageo's supply chains generated a €4.9 billion GVA contribution to the GDP of EU27+ countries in 2022 (Fig. 7). Almost 60% of the GVA to the EU27+ economies supported by Diageo's purchases occurred in Great Britain, followed by the Isle of Ireland (12%) and Germany (5%).

Diageo has complex supply chains in EU27+ countries, and its spending stimulates GVA in several tiers of supply. Half of the economic activity Diageo supports through its supply chain occurs due to its direct purchases (Fig. 8). The remaining half is generated through the purchases of its suppliers, and the suppliers in the third and above tiers. Diageo's extensive upward supply chains in the EU27+ magnify the economic value created by their global operations.

Fig. 6: Share of purchases in the EU27+ made by Diageo's global operations in 2022



Source: Oxford Economics





Fig. 7: Diageo's indirect GVA supported in 2022 in the EU27+, by country

Fig. 8: Share of GVA stimulated by Diageo's EU27+ purchases, by supply tier in 2022





Contribution to job creation

The economic activity stimulated by Diageo's purchases is estimated to support 47,000 FTE jobs with suppliers in the EU27+. Most jobs supported are in Great Britain and the Isle of Ireland, followed by Germany, Italy, and Spain.

The jobs are supported across a range of industries (Fig. 9).

Most of the jobs sustained in Diageo's supply chains (85%) are concentrated in three industries that underpin Diageo's operations: commercial services, manufacturing, and distribution and retail.

However, a significant share of jobs (6%) is supported in education, health, and other community service industries. This reflects Diageo's investment in training and wellbeing for its staff. For every person that Diageo employs directly in the EU27+, its upstream supply chains help to sustain more than 5 other production or service roles. These jobs are also highly productive, with an average of €104,400 in valueadded contribution to GDP for each job; this is 19% (or about €16,900) more than the EU27+ average across all industries.

Contribution to tax receipts

Diageo indirectly supported tax receipts of €1.3 billion in EU27+ countries in 2022. The economic activity stimulated along the supply chain generated profits, sales and wage payments, all of which contribute to tax revenues. In line with Diageo's indirect contributions to economic growth, most of this tax was generated in Great Britain (62%), followed by Germany and the Isle of Ireland (both 8%).

2.3 INDUCED IMPACT

Diageo generates economic impact through the wagefinanced spending of its employees and those employed along its supply chains. Employees make purchases at retail, leisure, and other outlets across the EU27+ and beyond, further stimulating economy activity, supply chains, and wage payments.

Contribution to economic growth

We estimate that Diageo's wage payments supported a €2.9 billion value-added contribution to GDP across EU27+ countries in 2022.

Impacts are concentrated in countries where Diageo has a large direct workforce or generates a significant supply chain footprint (Fig. 10).



Fig. 9: Diageo's indirect employment supported in 2022, by sector





Fig. 10: Diageo's induced GVA contribution in EU27+ in 2022

Contribution to job creation

This economic activity supported 28,400 full-time equivalent jobs, in addition to Diageo's direct staff and the employment in its supply chains. These jobs are concentrated in the wholesale and retail sector (18%) and the education sector (18%).

The induced impact of Diageo's operations contributes to the EU27+ countries' GDP to the tune of \notin 101,600 per job, which is 16% (or about \notin 14,100) more than the EU27+ average GDP per worker.

Contribution to tax receipts

Diageo's induced impacts sustained tax payments of €670 million arising due to its wage payments. This figure excludes Diageo's own employment taxes and is a result of the spending by its employees and the employees along its supply chain. Around half of these tax receipts (51%) occurred in Great Britain, where Diageo's employment is concentrated.



2.4 TOTAL IMPACT OF DIAGEO'S OPERATIONS AND UPSTREAM SUPPLY CHAINS

The total impact of Diageo's operations in the EU27+ extends far beyond its own facilities. The indirect impact through its supply chain and the impact induced by its wages contribute to Diageo's economic impact in the 31 countries we have examined.

€10.5 bn

Diageo's economic activity supported a €10.5 billion contribution to EU27+ GDP, 84,000 full time jobs, and €6.1 billion in tax revenue.

Contribution to economic growth

We estimate that Diageo's operations and upstream supply chains sustained a total contribution of €10.5 billion to EU27+ GDP in 2022 (Fig. 11). Its GVA multiplier is 3.9, meaning that for every €1 in GVA generated by Diageo itself, an additional €2.90 was generated along its supply chain and through its wage payments.

Diageo's total economic impact in the EU27+ was distributed across all countries in the region. Its economic footprint was largest in Great Britain, where its impact was €5.4 billion in 2022, more than half of Diageo's total for the EU27+ (Fig. 12). This share is disproportionately higher than Great Britain's share of Diageo's direct impact (32%)—an indication of the company's extensive British supply chains. The Isle of Ireland and the Netherlands contributed a further 23% of Diageo's total impact in the EU27+, largely driven by incountry direct impact.

Almost half (47%) of Diageo's total contribution to GVA in the EU27+ was generated through its supply chain in the indirect channel. The induced impact of Diageo's wage payments supported 27% of its GVA contributions, with the remaining 26% generated by its direct activities. The distribution across the three impact channels varied significantly across the countries of the EU27+. In Hungary, for example, the vast majority (80%) of Diageo's economic impact was stimulated through the direct channel due to its Business Operations Centre in Budapest. By contrast, more than half (54%) of Diageo's large footprint in Great Britain is stimulated along its supply chain, driven by the domestic purchases made by its commercial hub in London, and its brewing and manufacturing centres in Scotland. Several EU27+ countries, mostly captured in Others in Fig. 12, saw impact only through indirect and induced activity-Diageo did not make any sales or employ staff in these countries in 2022, but nonetheless had an economic footprint through its supply chain.



Fig. 11: Diageo's GVA contribution to GDP in the EU27+ in 2022 EUR billions



Fig. 12: Diageo's total GVA contribution in EU27+ by country, 2022

Contribution to job creation

Diageo's global business supported 84,500 FTE jobs in the EU27+ through its own operations, its supply chains, and the wage-induced spending it supported (Fig. 13). Diageo's extensive supply chains mean that most of these jobs (56%) occurred in the indirect channel, supported by Diageo's purchases. A further third (34%) were stimulated by wage-induced spending. Diageo's employment multiplier is therefore very high at 9.7, meaning that for every person Diageo employed in 2022, a further 8.7 jobs were supported by its economic activity.

Fig. 13: Diageo's contribution to employment in the EU27+ in 2022





OXFORD ECONOMICS



More than half of the jobs supported by Diageo's operations and supply chain occurred in Great Britain. A significant share of jobs was also supported in the Isle of Ireland, Germany, Italy, and Spain, although the countries' impact varied across direct, indirect, and induced channels.

Contribution to tax receipts

In addition to value added and employment, Diageo's activity and employment generates significant tax revenue for the governments of the EU27+. We estimate that Diageo operations sustained tax revenues of €6.1 billion in 2022. A significant share of this was generated by Diageo's direct operations, with the remainder supported by its supply chain and wage spending (Fig. 14).

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2.5 DOWNSTREAM IMPACT OF SALES OF DIAGEO PRODUCTS

Diageo's economic impacts flow into downstream markets through the distribution and sale of their products in shops, bars, restaurants, and hotels. Downstream impacts therefore give an indication of the total economic activity supported by the sales of Diageo's products. However, this activity is also supported by the contribution of other, non-Diageo products. For example, a cocktail sold in a bar also contains mixers and other ingredients which are essential to the value and employment that its sale supports. More broadly, customers in bars and restaurants generally come for more than only Diageo's products—for food, ambiance, music, other drinks, and amenities. It is therefore difficult to disentangle the value and employment attributable to Diageo's sales from all other factors.

These results should therefore be interpreted with that in mind. Moreover, downstream impacts are calculated only for direct channels, so do not capture the indirect and induced impacts associated with the supply chains of restaurants, bars, wholesalers, and retailers.

Diageo's total sales were €3.2 billion in the EU27+ in 2022, €2.1 billion of which were sold in retail shops. The remaining €1.1 billion were sold to customers in restaurants, bars, and hotels. These sales supported output of €5.8 billion in bars, restaurants, and hotels, €1.1 billion in the wholesale industry, and €1.0 billion in the retail industry.

The economic activity supported by sales of Diageo's products in bars. restaurants and hotels is significantly higher than in wholesale and retail for two reasons. First, alcoholic beverages. like food, include higher value-added inputs when offered in restaurants and bars than when sold for "at home" consumption, such as more sophisticated products, ambience, and service. This is reflected in customers' different willingness to pay: alcohol is sold at a markup of around 350% from "at the gate" prices in restaurants and bars,¹⁰ compared to a much smaller markup of around 65% in retail shops.¹¹





¹⁰ The 350% assumption is an industry-wide 'rule of thumb' for retail markups. Please see methodology for more detail.
¹⁰ Note that both markups include wholesale margins arising from distribution.



This means that the same product is significantly more economically valuable in on-trade industries than in 'at home' trade channels. Second, national accounting practices mean that the value a distributor or retailer pays for Diageo's products is not included in their output. Unlike in restaurant sales, the output for these industries consists of the services of transporting, storing, shelving, and sellingnot the value of the goods themselves—so the economic activity attributed to Diageo's sales is lower in these sectors.

Contribution to economic growth

We estimate that the economic activity supported by sales of Diageo's products contributed €2.7 billion in GVA across wholesale, retail, and bars and restaurants in the EU27+ (Fig. 15). Most of this value (87%) was generated by sales in restaurants, bars, and hotels, where alcohol sees a significantly higher markup and the GVA share of output is higher. These industries are also more labour-intensive than retail and wholesale.

Fig. 15: GVA in downstream markets that is supported by sales of Diageo products in the EU27+ in 2022





Contribution to job creation

Sales of Diageo's products contributed to the jobs of 114,100 full time workers in downstream markets (Fig. 16).

Most of these jobs were supported in restaurants and bars (107,400), with a further 1,600 in wholesale and 5,100 in retail. Employment in downstream industries was geographically concentrated in Great Britain, Spain, Turkey, and the Isle of Ireland, which together contributed 63% of Diageo's downstream employment impacts.

Some countries, such as Bulgaria and Romania, see employment impacts which are disproportionately higher than their GVA contributions. This arises when a country or industry has lower labour costs and is particularly labourintensive. For example, €1 million of output in restaurants and bars supports 45 jobs in Bulgaria, compared to an EU27+ average of 21 jobs.

Contribution to tax receipts

The sale of Diageo's produces supported €2.3 billion in tax receipts collected from downstream industries. Tax revenues were generated through the profits earned in downstream companies (corporate tax), the wage payments made to downstream workers (employment tax), and the sale of alcoholic beverages (excise duty and value-added tax, or VAT).

Fig. 16: Downstream employment supported by sales of Diageo products in the EU27+ in 2022





Fig. 17: Downstream tax receipts supported by sale of Diageo products by tax type in EU27+ in 2022



Source: Oxford Economics

Most of the downstream taxes sustained by Diageo's products were excise duty (54%), followed by VAT and employment taxes (Fig. 17). The excise duty paid by downstream industries is only a portion of the duties generated by Diageo's sales in EU27+ countries, because Diageo itself pays excise duties on some products as the manufacturer.

Most taxes generated by Diageo's downstream sales were collected in the Great Britain, where a large share of Diageo's European sales, employment and profits occur. Turkey received an outsize share of Diageo's downstream tax receipts due to significant sales alongside the country's relatively high excise duties on alcohol.

2.6 TOTAL IMPACT OF DIAGEO'S OPERATIONS AND SALES

The 'grain to glass' impacts of Diageo's activities in the EU27+ on gross value added, employment and tax revenues are summarised in Fig. 18. Breakdowns of direct, indirect, and induced impacts by country are provided in the annex.

Fig. 18: Total GVA and employment impacts supported by Diageo's operations and sale of its products in EU27+ in 2022

Impact channel	Gross value added (€ billion)	Employment (full-time equivalent jobs)	Tax revenues (€ billion)
Direct	2.72	8,750	4.15
Indirect	4.94	47,300	1.28
Induced	2.89	28,400	0.67
Total impact from Diageo's operations	10.5	84,500	6.1
Impact supported by downstream sales of Diageo products	2.7	114,100	2.3
Total impact from Diageo's operations and downstream sales of its products	13.2	198,600	8.4



Total contribution to economic growth

Diageo's operations and sales supported a total value-added contribution of €13.2 billion in the EU27+ (Fig. 19). Most of Diageo's value-added impact (80%) arises from its direct operations and the economic activity supported by its supply chains. The remaining 20% is supported by sales of its products in restaurants, bars, and retail vendors, along with the associated wholesale activities.¹²

20%

Diageo's share of employment supported by the European spirits industry.

Total contribution to job creation

Overall, Diageo's operations and the downstream sale of its products supported 198,600 jobs in the EU27+ (Fig. 20).

In contrast to its contribution to GDP, more than half (57%) of Diageo's total employment impact arises in downstream industries. This can be attributed to two factors. First, downstream industries restaurants and bars in particular—are relatively labour-intensive, meaning that Diageo's contribution to output is associated with more jobs. Second, Diageo manufactures premium products. Its operations therefore have a very high value-added share of output, and its workers are highly productive, meaning that the

GVA contribution of its direct activities and supply chain will be disproportionately higher than its employment contribution, compared to downstream industries.

Overall, Diageo's operations and sales supported 20% of total employment by the European spirits industry in the production and direct downstream sectors¹³ (this estimate excludes Turkey, and indirect downstream impacts and those supported by spirits-related tourism).

Fig. 19: Total GVA contribution supported by Diageo's operations and sales of its products in the EU27+ in 2022



¹² As discussed in Section 2.5, this value is supported by Diageo's sales but is not entirely attributable to its activities.

24 ¹³ IHS and SpiritsEUROPE, The economic and ecological footprint of the sprits sector in the EU, the UK, Norway and Switzerland.





Fig. 20: Total employment supported by Diageo's operations and sales in EU27+ in 2022 Thouand full time equivalent jobs

Total contribution to tax receipts

Diageo's total contribution to tax revenues in the EU27+ was $\in 8.4$ billion in 2022 (Fig. 21).

The largest portion of tax revenue was generated through excise payments, which contributed 47% of Diageo's total tax impact. Most excise duties were paid by Diageo itself, around 68% of total excise duties paid on Diageo's products in the EU27+. Geographically, tax receipts were concentrated in countries where Diageo has the largest footprint, including Great Britain, Germany, Turkey, and the Isle of Ireland.











3. METHODOLOGY

METHODOLOGY FOR CAPTURING DIRECT IMPACTS

Data on the direct impact of Diageo—including its contribution to GDP, jobs created, and taxes paid by the business and its employees were provided directly by the company. Direct GVA is taken to be the sum of total employee compensation, earnings before tax, interest, depreciation, and amortisation ("EBITDA"), and taxes on production paid by the company.

METHODOLOGY FOR CAPTURING THE INDIRECT AND INDUCED IMPACTS

To quantify Diageo's indirect (supply chain) and induced (wage expenditure) impacts on the economies of the EU27+. Oxford Economics used a technique called input-output modelling. This method was first developed by the academic Wassily Leontief, who won a Nobel prize for his work. The technique uses national accounts data that specify how much each industry buys from each other industry and from other countries in a given year. Through a series of matrix algebra techniques, it is possible to estimate the additional economic activity that is stimulated from a given amount

of final demand. In this case, final demand is the purchases Diageo makes from its suppliers or Diageo's employees make from consumer goods and services outlets.

Oxford Economics' Global Sustainability Model captures supply chain spending across almost 100 countries to estimate the impact Diageo's global operations on economic activity in the EU27+. A crucial weakness of using an inputoutput model for a single country (or region, such as the EU27+) is that any imports are treated as leakage and lost from the model. This can understate the economic impact of an entity. A single country input-output model omits the interactions of supply

Fig. 22: The Oxford Economics Global Sustainability Model





chains across many countries, which may enter a country multiple times. For example, Diageo in Great Britain may use a supplier located in Japan. In turn, the Japanese company may purchase computer programs written in the Great Britain. In a single region inputoutput model, in this example, the economic impact of the expenditure on the import from Japan is reported as a leakage. The subsequent supply chain will not be considered for the model, even though part of the expenditure re-enters the Great Britain at a later stage. Consequently, the impact assessment fails to attribute the activity in the British computer programming industry to Diageo's initial spend.

To avoid understating Diageo's impact in the EU27+, this study employs a global inputoutput model that enables supply chains to be traced across countries. This is done using economic and trade data developed by the OECD as its foundation. The concept is illustrated in Fig. 22.

METHODOLOGY FOR CAPTURING DOWNSTREAM IMPACTS

The modelling of downstream impacts was driven by the value of Diageo's sales (provided by Diageo) in each of the 31 countries in the EU27+. The share of products sold for on-premises consumption (at bars and full-service restaurants) vs. that sold for off-premises consumption (at retailers such as liquor stores or grocery stores) was based on 2021 data from IWSR Drinks Market Analysis.

Wholesale and retail impacts

Wholesale and retail of Diageo's products are collectively referred to as off-trade sales. Trade and transport markups for the wholesale and retail distribution of beer and spirits were sourced from Eurostat, which provides information on cost of goods sold and gross margins. These data are available for the beverages industry as a whole, so we consider these conservative for the spirits sector in particular. The data are available for 2020, split into wholesale and retail markets and for 21 countries in the EU27+ (we use the Europe average for the remaining 10 countries).

Wholesale and retail markups can be thought of as the difference between the factory-gate prices of beer or spirits, and the value accruing to distributors or retailers as they transport and sell them. In the wholesale and retail industries, the value that the distributor or the retail store pays for the alcohol is not included in their output. The output for these industries consists of the services of transporting, storing, shelving, and selling-not the value of the goods themselves. This is in contrast to restaurants and bars, where alcohol is considered an input (see below). For wholesale and retail industries, the output accruing to the industry supported by Diageo's products is therefore:

Wholesale output (€) = Diageo sales (€) * Wholesale markup (%) *

Retail output (€) = Diageo sales (€) * (1+ Wholesale markup (%)) * Retail markup (%)

Wholesale margins are applied to both on- and off-premises sales, while retail margins are applied only to off-premises sales.



Restaurant and bar impacts

On-trade sales of Diageo's products occur when they are sold to customers in restaurants or bars. The output impact from the sale of Diageo products at bars and restaurants was based on a common restaurant industry rule-of-thumb that alcohol products are sold at a 300% markup (i.e., four times the initial price) over what the restaurant pays for the products (including wholesale margins). The 300% markup assumption can be thought of as an industry standard, and possibly conservative.

It should be noted that the dollar value impact of Diageo alcohol sales on bar and restaurant output is calculated differently from that for wholesalers and retailers described above. Alcohol purchased by bars and restaurants is considered part of their supply chains. Therefore, the price which the bar or restaurant pays its distributor for the alcoholincluding the distributor's markup—is included in the value of the restaurant's final output:

On-trade output (€) = Diageo sales (€) * (1+Wholesale markup (%)) * (1+On-trade markup (%))

Employment and GVA impacts and national totals

To calculate employment and GVA impacts from the output impacts for wholesalers, retailers, and bars and restaurants, we used 2020 data on industry productivity (i.e., industry output divided by industry employment) sourced from Eurostat.

The employment impacts are calculated as:

Employment (FTE) = Output (€) / Industry productivity (€ per FTE worker)

The value-added impacts are similarly calculated as:

Gross value added (€) = Output (€) / Value added ratio (€ output per € GVA)

Downstream taxes

We calculate tax receipts collected in downstream industries in four categories: corporate taxes, labour taxes, excise duties and value-added (sales) tax (VAT).

The method for calculating corporate taxes and labour taxes draws on Oxford Economics' database of macroeconomic data, which uses historical data from countries and industries to provide the following ratios:

Corporate tax ratio = Corporate tax per unit GVA by country and industry

Labour tax ratio = Labour tax per unit GVA by country and industry

Particularly for labour taxes, this varies between on- and off-trade industries due to the different composition of highand low-income earners. Corporate tax (€) = GVA (€) × Corporate tax ratio

Labour tax (€) = GVA (€) × Labour tax ratio

Excise duties are based on the volume of spirits and beer sold in hectoliters (hl), and each countries' excise rate. Rates vary by the type of alcohol (beer or spirits) and the % pure alcohol by volume. We assume that all spirits sold by Diageo are 40% alcohol by volume, and all beer is 4% alcohol by volume.¹⁴ Excise duties are collected from the European Commission's Directorate-General Taxation and Customs Union for EU members, and from relevant national authorities for non-EU members.

Excise duty (€) = [volume spirits (hl) x excise rate (€/hl)] + [volume beer (hl) x excise rate (€/hl)]

VAT, or sales tax, is calculated based on each country's rate and the value added generated in each downstream industry. VAT is not calculated based on the entire sales price (which includes the cost of goods sold), because VAT has already been collected for the portion of value-add which occurred in the upstream and manufacture of the beverage. Like excise duty rates, VAT rates are collected from the European Commission and relevant national authorities.

VAT (€) = GVA (€) × VAT rate (%)





4. COUNTRY-LEVEL ECONOMIC IMPACTS

Fig. 23: Gross value added supported by Diageo's operation and upstream supply chain by country in EU27+

Country	Direct (€ million)	Indirect (€ million)	Induced (€ million)	Total (€ million)
Austria	1.9	13.8	16.7	32.4
Belgium	18.2	65.3	43.1	126.6
Bulgaria	0.2	2.9	3.1	6.2
Croatia	1.0	1.2	1.9	4.1
Cyprus	-	0.9	1.1	1.9
Czech Rep	0.3	8.7	11.9	20.9
Denmark	5.8	22.6	22.3	50.8
Estonia	-	1.5	1.3	2.8
Finland	-	14.8	11.4	26.2
France	29.1	166.3	139.2	334.6
Germany	27.7	260.5	215.6	503.8
Greece	7.5	11.6	9.2	28.2
Hungary	264.8	30.8	35.3	330.9
Isle of Ireland	580.2	607.7	211.1	1,399.0
Italy	45.8	186.8	113.6	346.2
Latvia	-	2.3	1.7	4.0
Lithuania	-	6.5	3.9	10.4
Luxembourg	-	10.4	7.4	17.9
Malta	-	1.1	1.9	3.0
Netherlands	706.3	211.6	114.2	1,032.1
Norway	1.4	36.7	28.5	66.6
Poland	6.9	64.7	38.2	109.9
Portugal	4.4	13.7	13.7	31.9
Romania	0.6	6.0	10.2	16.8
Slovakia	-	2.8	4.7	7.4
Slovenia	-	1.4	2.1	3.5
Spain	43.3	121.3	98.8	263.4
Sweden	2.6	36.0	27.9	66.4
Switzerland	9.7	61.5	49.8	121.0
Great Britain	878.5	2,943.9	1,611.1	5,433.5
Turkey	84.0	23.3	35.6	142.9
Total (€)	2,720	4,939	2,886	10,545



Fig. 24: Full time equivalent (FTE) jobs supported by Diageo's operation and upstream supply chain by country in EU27+

Country	Direct & indirect (FTE jobs)	Induced (FTE jobs)	Total (FTE jobs)
Austria	131	145	276
Belgium	541	334	875
Bulgaria	127	130	257
Croatia	42	50	92
Cyprus	12	16	28
Czech Rep	167	219	386
Denmark	186	156	342
Estonia	27	25	52
Finland	131	96	227
France	1,700	1,189	2,889
Germany	2,515	1,890	4,405
Greece	301	168	469
Hungary	1,986	995	2,981
Isle of Ireland	4,045	1,362	5,407
Italy	2,546	1,182	3,728
Latvia	56	39	96
Lithuania	121	83	204
Luxembourg	28	19	47
Malta	16	30	46
Netherlands	1,563	776	2,339
Norway	88	94	182
Poland	1,682	988	2,670
Portugal	324	287	612
Romania	168	322	490
Slovakia	58	98	156
Slovenia	25	38	63
Spain	1,931	1,252	3,183
Sweden	293	213	507
Switzerland	388	285	674
Great Britain	32,925	14,263	47,188
Turkey	1,934	1,662	3,597
Total (FTE jobs)	56,060	28,407	84,467



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