



THE ECONOMIC IMPACT OF THE FRAGRANCE INDUSTRY

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EXECUTIVE SUMMARY

£7.1 billion

Contribution to UK GDP



The fragrance industry in the UK manufactures, distributes, and retails fragranced products to customers at home, and exports them abroad. These include perfumes, aftershave and other personal fragrance products, plus a wide range of bath and body products, men's grooming products, room and ambient fragrances, and other household products.

This study quantifies the industry's contribution to the UK economy. It does so by looking at what impact its operational expenditure, its procurement from UK-based suppliers, and the payment of wages has on the overall economy. Together, these contributions make a substantial footprint on the UK economy. Recognising and valuing this contribution is critical if the sector and its impact is to grow.

In 2018, we estimate the fragrance industry made a total contribution to the UK economy worth £7.1 billion. This is 0.3 percent of all the economic output produced in the nation during that year—and slightly more than all the economic output produced in either Oxford or Sunderland.

Some £2.5 billion, or 36 percent, of this contribution to GDP was generated by the industry itself, while its supply chain procurement and the payment of wages stimulated the remaining 64 percent across the rest of the UK economy. We therefore find that the industry has a “GDP multiplier” of 2.8—meaning that, for every £1 million of GDP the fragrance industry creates directly, it supports another £1.8 million of GDP elsewhere in the UK economy.

126,700
jobs

Supported across the UK



The fragrance industry is estimated to have supported 126,700 people in employment in 2018. This means that one worker in every 256 across the UK has a job that is in some way dependent on the fragrance industry—equivalent to the number of people employed in either York or Swansea.

Breaking this down further, the industry directly employed some 56,600 people in 2018 (45 percent of the total). It supported another 38,700 jobs along its UK supply chain, and 31,300 jobs through the payment of wages to staff, who then spend this income in the consumer economy. The fragrance industry is therefore estimated to have an “employment multiplier” of 2.2—for every 100 people employed by the industry itself, a further 120 people are supported in employment along its supply chain, or in the consumer economy as a result of wage-related spending.

£2.1 billion

In tax receipts for the
Exchequer

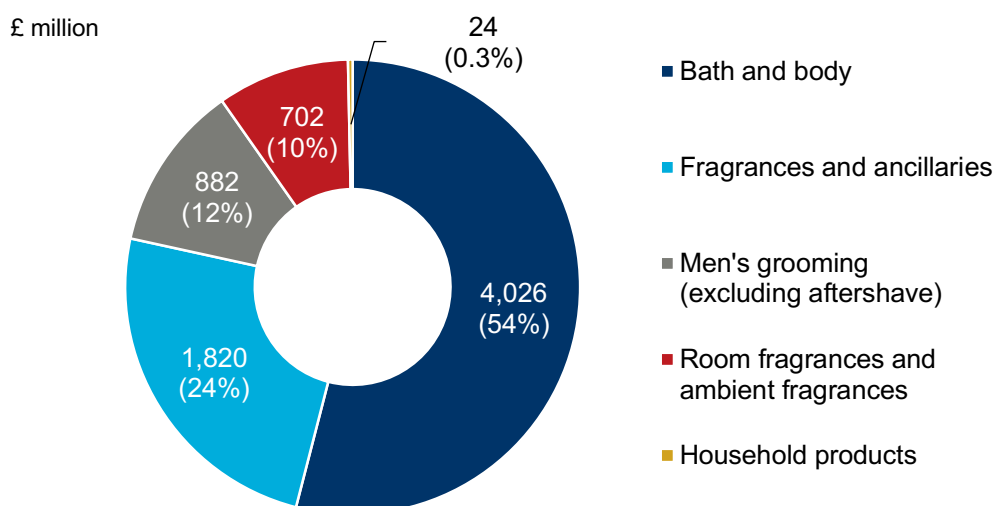


The fragrance industry also stimulated significant revenues for the UK Exchequer in 2018. We estimate that its expenditure supported £2.1 billion in tax revenues—equivalent to 0.4 percent of HMRC's total tax receipts in 2017/18. This would have been sufficient to pay the salaries of 75,800 hospital nurses across the country.

1. INTRODUCTION

Fragrances play an important role in the UK economy. In 2018, UK consumers spent £7.5 billion on fragrance products. Some £4.0 billion, or 54 percent, was spent on bath and body products (see Fig. 1). Another £1.8 billion, or 24 percent, was spent on fragrances and ancillaries, such as perfume, eau de toilette, aftershave, and body mists and sprays. UK businesses purchase fragrances as either intermediate inputs into their own goods and services, or as finished products for use in their operations. The industry also contributes to the UK's balance of payments through the earnings it makes from exports.

Fig. 1. Consumer expenditure on fragranced products by product group in 2018



Source: Oxford Economics

This report provides the first comprehensive assessment of the contribution of the fragrance industry to the UK economy. The industry is defined to include firms involved in the manufacturing, wholesaling and retailing of products that use scent to enhance their identity. It was commissioned by The Fragrance Foundation UK, a not-for-profit educational trust which aims to increase public awareness of the fragrance industry and enhance knowledge within the sector.

To arrive at an independent estimate of the contribution the fragrance industry makes to the UK economy we have undertaken an economic impact assessment. This technique quantifies the employment, contribution to gross domestic product (GDP) and tax receipts the industry's expenditure stimulates in the UK. It looks at the industry's own spending to run its operations, its procurement from its UK supply chain, and its payment of wages to staff which stimulates consumer spending (see Box 1 and the Appendix for our methodology). The results are presented for 2018.

BOX 1: INTRODUCING ECONOMIC IMPACT ANALYSIS

The contribution the fragrance industry makes to the UK economy can be measured using an economic impact assessment. This involves quantifying the impact of three types of expenditure undertaken by the fragrance sector (summarised in Figure 1):

- **Direct impact** relates to the employment, contribution to GDP, and tax generated by the industry's operational expenditure. It occurs at the industry's factories, offices, wholesale, retail and other premises.
- **Indirect impact** is the economic activity and employment stimulated along the fragrance industry's supply chain by its procurement of inputs of goods and services;
- **Induced impact** comprises the wider economic benefits that arise from the payments of wages by firms within the fragrance industry and along their supply chains to their employees, who spend their earnings in retail, leisure and other outlets. It includes the economic activity stimulated in these outlets' supply chains.

The sum of these channels makes up the total impact of the fragrance industry on the UK economy.

The results are presented on a gross basis. They therefore ignore any displacement of activity from other industries. They also do not consider what the resources currently used by the fragrance industry or stimulated by its expenditure could alternatively produce in their second most productive usage.

The fragrance sector's economic contribution is measured using three metrics:

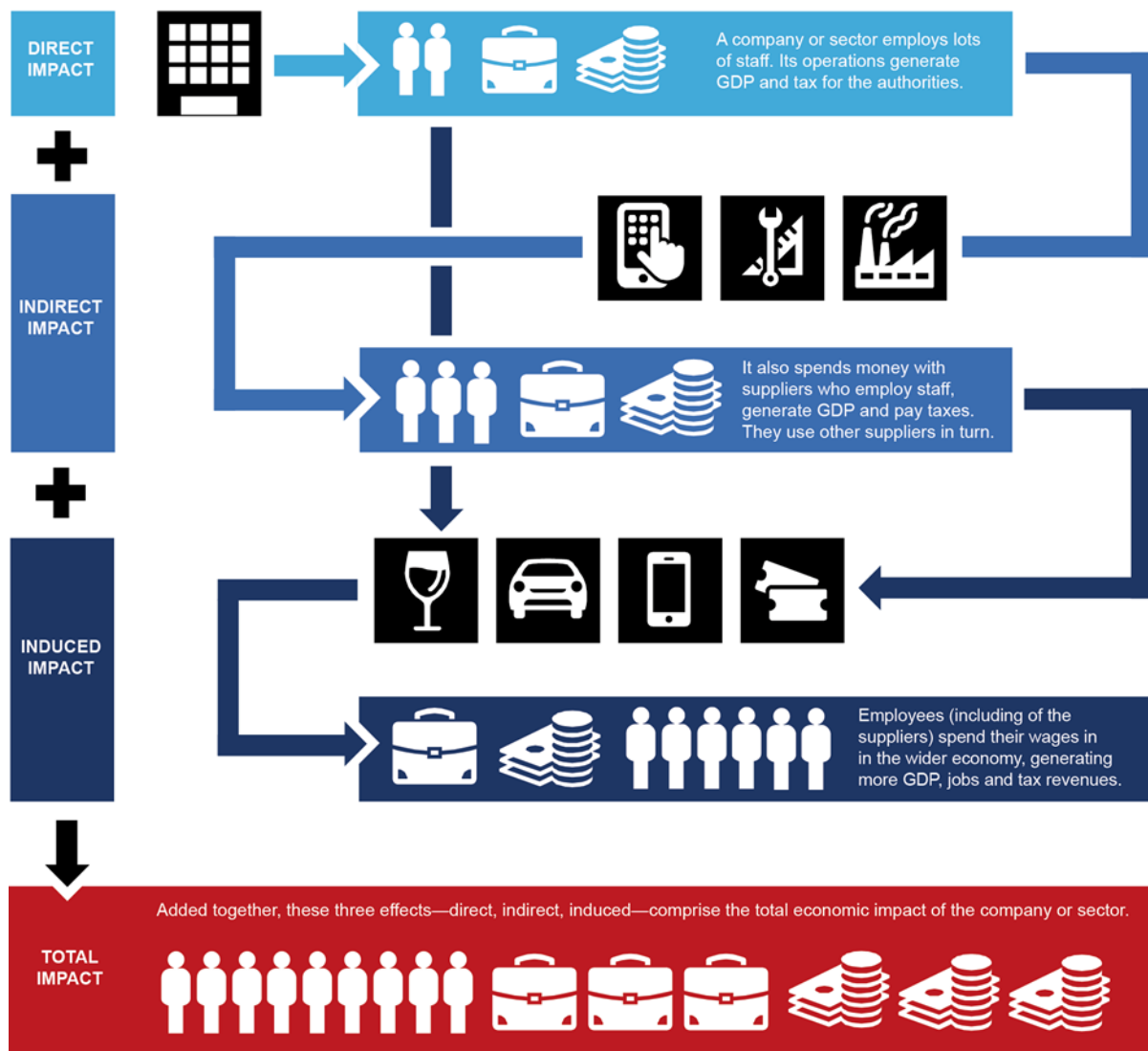
- **GDP**, or more specifically, the *gross value added (GVA)*¹ contribution to GDP;
- **Employment**, measured on a headcount basis (for comparison with Office for National Statistics (ONS) data on employment); and
- **Tax revenue** flowing to the UK government.

The expenditure impact modelling is conducted using an Input-Output (I-O) based model of the UK. This model was constructed by Oxford Economics, using data published by the ONS.² Further detail about the economic impact methodology is included in Appendix A.

¹ The gross value-added contribution to GDP is defined as the value of the output produced minus the expenditure on inputs of bought in goods and services used up in the production of that output. GDP measures the total economic output of the country. It is used to judge the rate of growth of the economy and to define whether it enters a recession. GDP equals the sum of gross value added plus taxes minus subsidies on production.

² ONS, (2018), 'UK input-output analytical tables', 2 March.

Fig. 2. Illustration of the channels of economic impact



2. THE ECONOMIC IMPACT OF THE FRAGRANCE INDUSTRY IN THE UK

2.1 DIRECT IMPACT

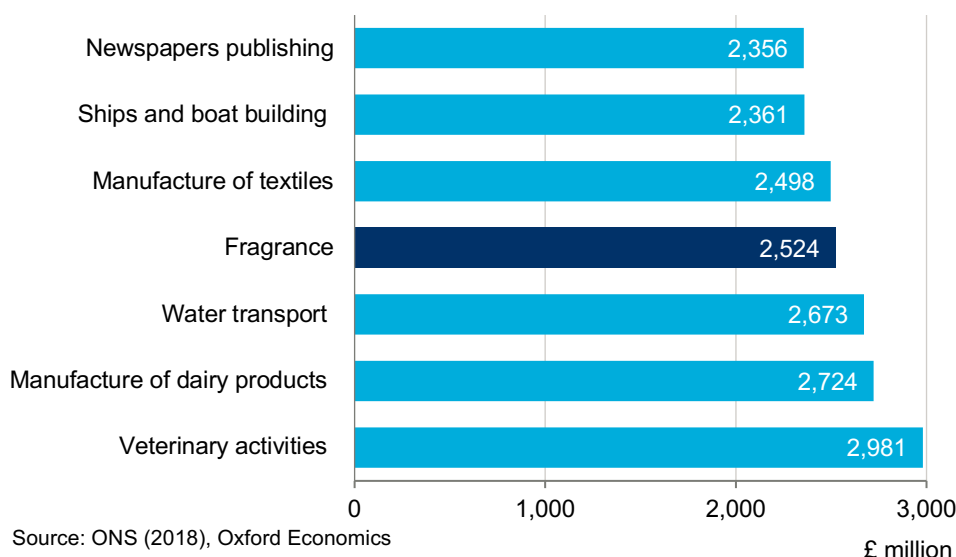
The direct economic impact refers to the economic activity generated by the fragrance industry in its manufacturing plants, offices, retail outlets and other premises across the UK. It is measured using three metrics, namely, the gross value added contribution to GDP, the numbers of people it employs, and the tax receipts it generates for the Exchequer.

The headline figures are broken down into the three segments of the industry; manufacturers of fragrance products, wholesalers and distributors of domestic and imported fragrance products, and retailing of both domestic and imported fragrance products. The analysis also disaggregates the results by the major fragrance product categories.

2.1.1 Direct GDP

We estimate that the fragrance industry made a £2.5 billion gross value-added contribution to UK GDP through the wages it paid its employees and the profits it made. To give a sense of scale, this is a similar size contribution as made by the water transport and dairy products manufacturing industries (Fig. 3).³

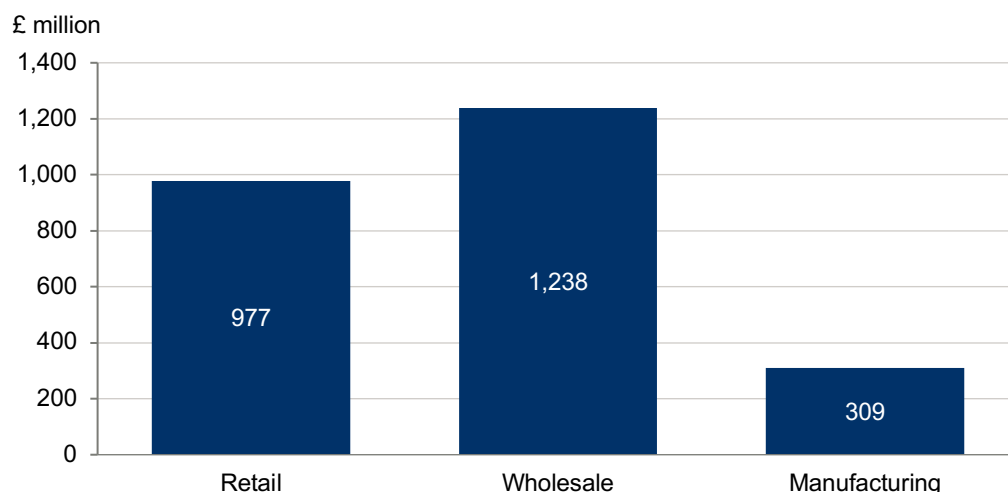
Fig. 3. The fragrance industry's contribution to GDP compared to similar sized sectors, 2018



³ Where water transport (SIC50) includes sea and coastal passenger and freight water transport, and inland passenger and freight water transport. Manufacture of dairy products (SIC 10.5) includes dairies, butter and cheese, and other milk products manufacturing. The other industries data are sourced from ONS, (2018), 'Annual Business Survey - 2017 provisional results', 8 November.

Of the three parts of the industry, the wholesale segment generated the largest contribution to UK GDP. It made £1,238 million in gross value added, or 49 percent of the total (Fig. 4). The retailing of fragrance products ranked second with a £977 million contribution to country's economic output or 39 percent. The manufacturing sector accounted for 12 percent of the total, making a £309 million contribution.

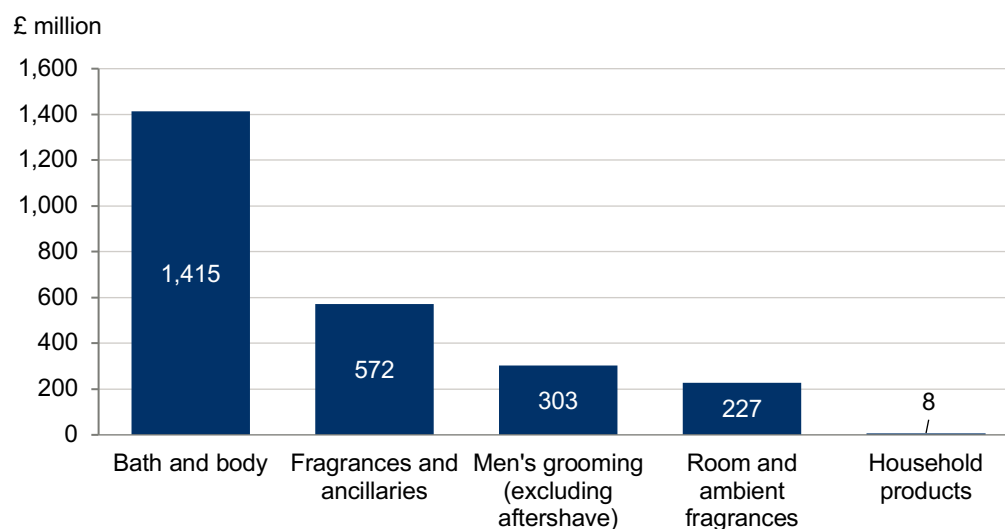
Fig. 4. Fragrance industry's gross value added contribution to GDP by segment, 2018



Source: Oxford Economics

Bath and body products represented the largest share of this contribution generating £1.4 billion in value added or 52 percent of total. With a contribution of £572 million or 22 percent, the fragrances and ancillaries category delivered the second largest contribution. Men's grooming products also generates a significant amount of value added, contributing close to £303 million to UK GDP (Fig. 5).

Fig. 5. Fragrance industry's gross value added contribution to GDP by major product type, 2018

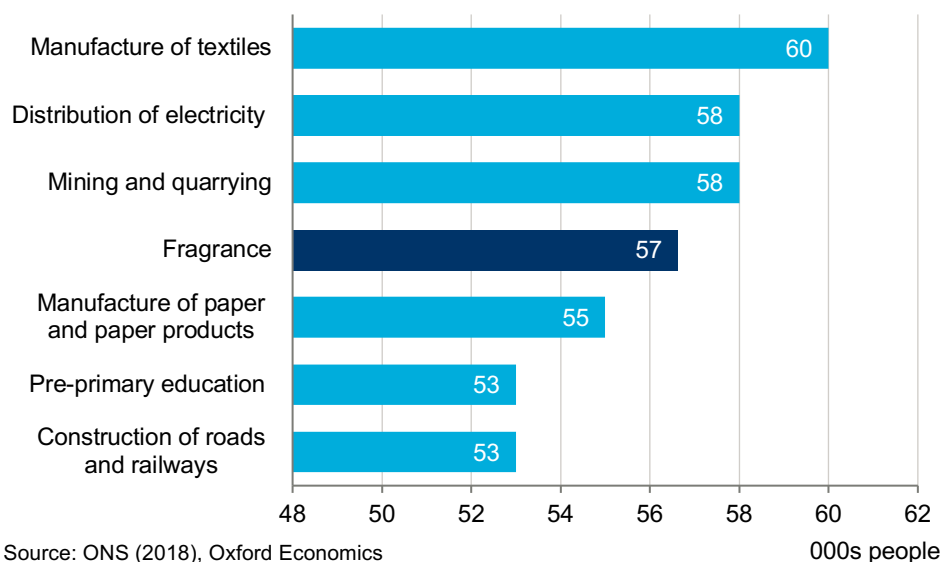


Source: Oxford Economics

2.1.2 Direct employment

In 2018, the fragrance industry is estimated to employ some 56,640 people. To give a sense of scale, this is more than the work manufacturing paper and paper products, in pre-primary education, or constructing roads and railways (Fig. 6).⁴ It is slightly less than work in the mining and quarrying industry.

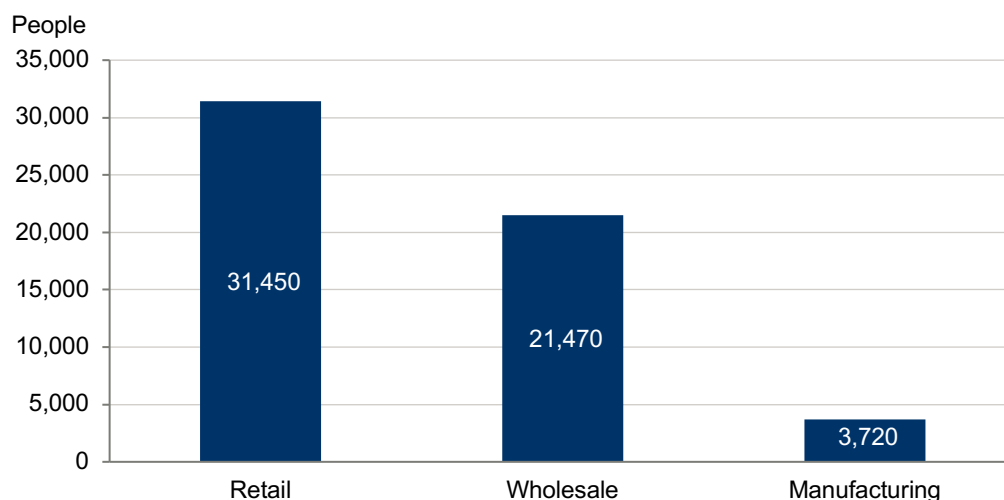
Fig. 6. The fragrance industry's employment compared to similar sized sector, 2018



Most of the employment in the sector was in the labour-intensive retail segment. Some 31,450 people were employed selling fragranced products to customers, or 56 percent of the total (Fig. 7). The wholesaling of domestically produced and imported fragrance products ranked second, employing some 21,470 people, or 38 percent. Some 7 percent of the staff were employed in manufacturing.

⁴ ONS, (2018), 'Annual Business Survey - 2017 provisional results', 8 November.

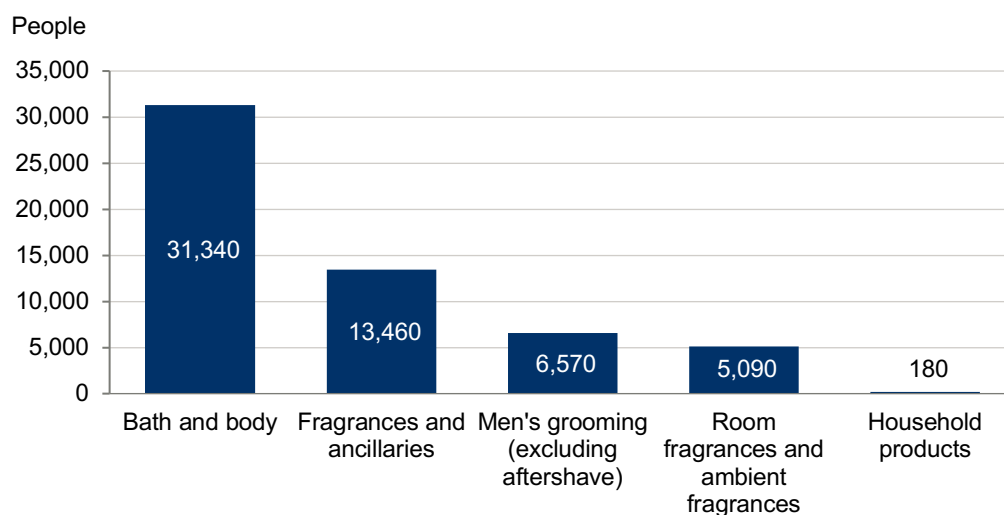
Fig. 7. Fragrance industry's contribution to employment by market segment in 2018



Source: Oxford Economics

As in the case of GDP, most of the jobs were generated by the manufacture, wholesale and retail of bath and body products, at 31,340 people or 55 percent of the total (Fig. 8). Fragrances and ancillaries had the second largest impact on the labour market, employing 13,460 people or 24 percent of total. Men's grooming products employed another 6,570 people.

Fig. 8. Fragrance industry's contribution to employment by product type in 2018



Source: Oxford Economics

2.1.3 Productivity

Labour productivity varies considerably across the sector.⁵ Employees in the manufacturing segment of the sector are very productive (Fig. 9). On average,

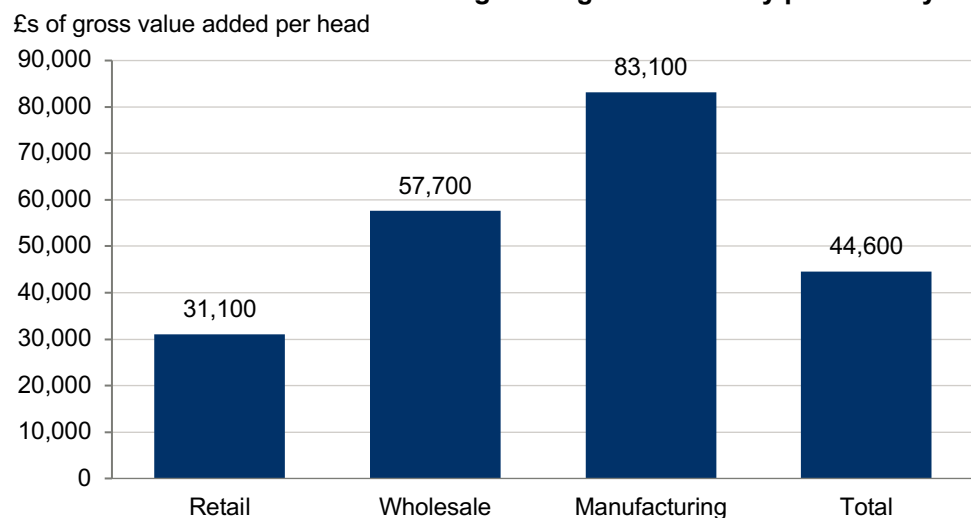
⁵ Where labour productivity is defined as gross value added produced per employee.

they each produce £83,100 in gross value added a year. This is 49 percent greater than the average worker in the economy at £55,700 and 23 percent greater than the average across the manufacturing sector at £67,400. People working in the wholesale segment produce an average of £57,700 in economic output a year, making them 4 percent more productive than the average worker in the economy. Staff working in the retail segment produce an average of £31,100 in gross value added.

High productivity is important as it raises the price competitiveness of UK made fragrance products, potentially boosting export earnings and sales of products that compete against imports in the domestic market. It also offers firms the choice of paying their staff higher wages or making greater profits through lowering the price customers pay or having a high profit margin.

Fig. 9. Fragrance industry productivity

**by market segment
in 2018**



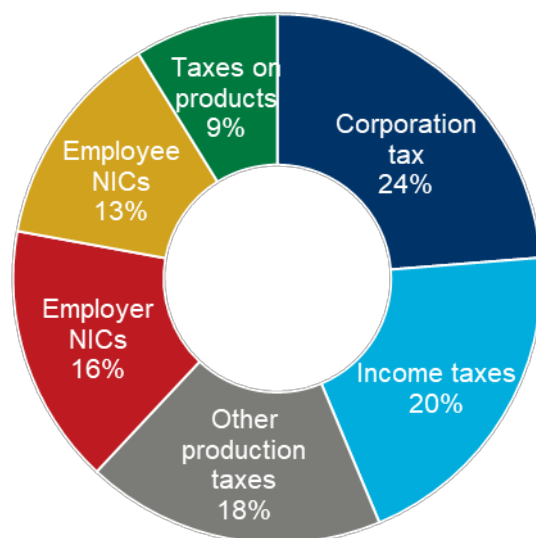
Source: Oxford Economics

2.1.4 Tax impact

The fragrance industry's economic activity generates considerable tax revenues every year. These contributions to the Exchequer are used to finance vital public services.

In 2018, the fragrance industry is estimated to pay £621 million in tax receipts. The firms within the industry pay 67 percent of this amount, while the staff pay 33 percent in income tax and employee National Insurance Contributions (Fig. 10). The largest contribution comes from corporation tax.

Fig. 10. Percentage share of tax receipts paid by the fragrance industry in 2018, by type



Source: Oxford Economics

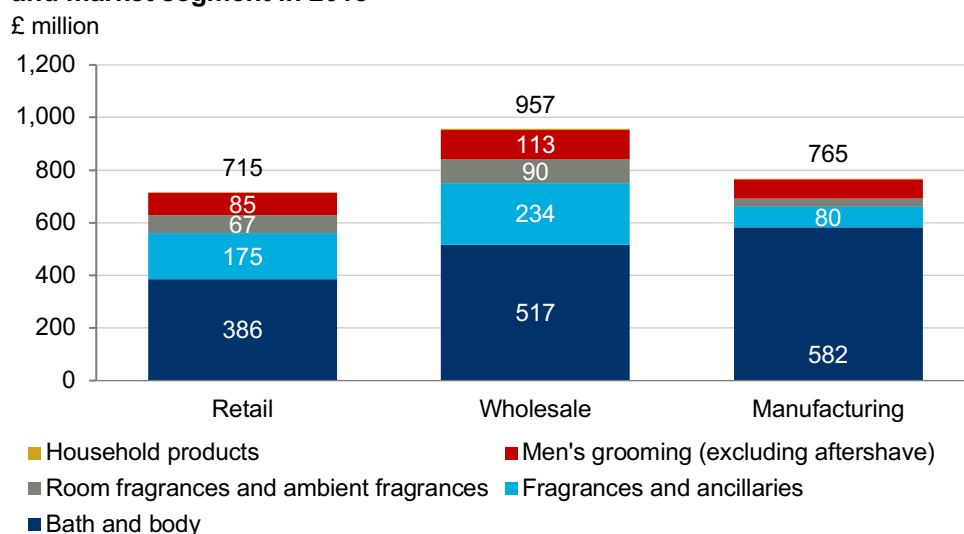
2.2 INDIRECT (OR SUPPLY CHAIN) IMPACTS

Manufacturers, wholesalers and retailers within the fragrance sector purchase inputs of goods and services from other UK based firms. This expenditure stimulates economic activity along the sector's UK supply chain. This is known as its indirect economic impact.

2.2.1 Indirect Impacts

In 2018, the fragrance sector's procurement stimulated a £2.4 billion gross value added contribution to UK GDP along its supply chain. The wholesale segment's expenditure on inputs of goods and services supported the largest contribution, at £957 million or 39 percent of the total (Fig. 11). This was followed by the manufacturing and retail segments, which supported a £765 million and £715 million contribution, respectively. Split by product category, one sector is more dominant. Procurement to manufacture, wholesale and retail bath and body products supports some £1,485 million or 61 percent of the value added created along the industry's supply chain. Spending on inputs for fragrances and ancillaries supported a £488 million contribution or 20 percent of total.

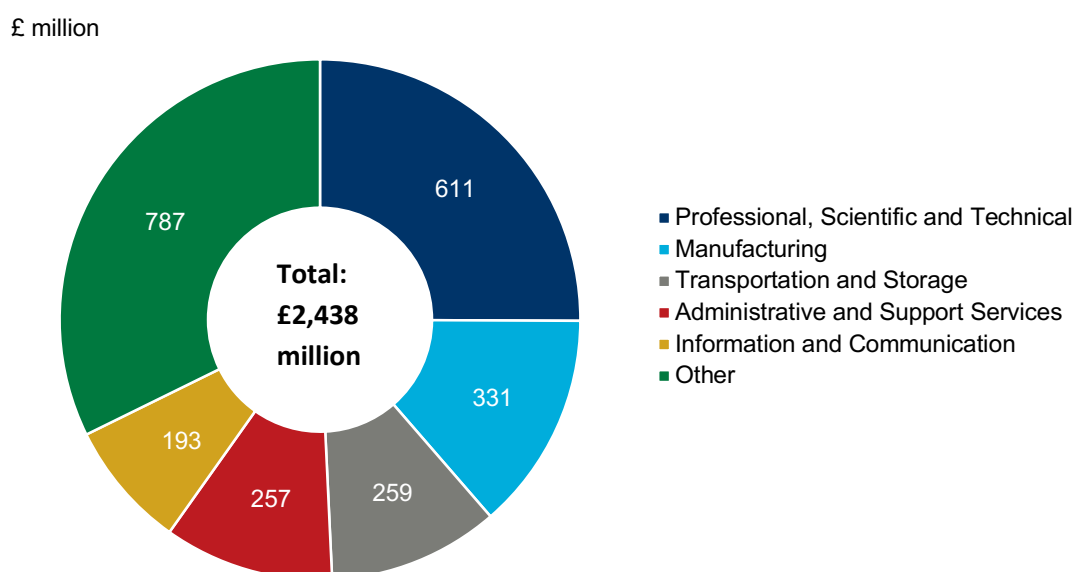
Fig. 11. The fragrance industry's indirect contribution to GDP by product and market segment in 2018



Source: Oxford Economics

The fragrance industry's expenditure on inputs of goods and service stimulated economic activity across many industrial sectors. The industry that benefitted the most was the professional, scientific and technical sector, which includes advertising, marketing, public relations (PR), accounting and legal services. Its gross value added expanded by £611 million or 25 percent of the total indirect impact to satisfy the fragrance industry's demands in 2018 (Fig. 12). Manufacturing, and the transportation and storage sector also increased their economic output significantly to meet the fragrance sector's needs for inputs.

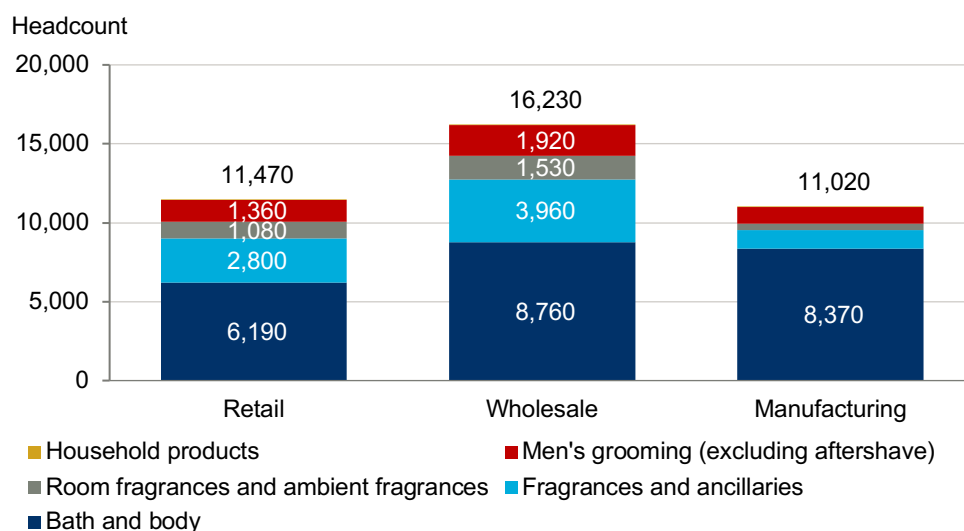
Fig. 12. The GDP stimulated in different industrial sectors by the fragrance industry's procurement in 2018



Source: Oxford Economics

The industry's procurement supported 38,710 jobs along its UK supply chain. Some 16,230 of these jobs were stimulated by the wholesale segment's expenditure, followed by 11,470 and 11,020 jobs estimated to be supported by the spend by the retailing and manufacturing segments (Fig. 13). Analysed by product category, the procurement for bath and body products stimulates 23,330 jobs or some 60 percent of total. It was followed by 7,910 jobs stimulated by the procurement for fragrances and ancillaries.

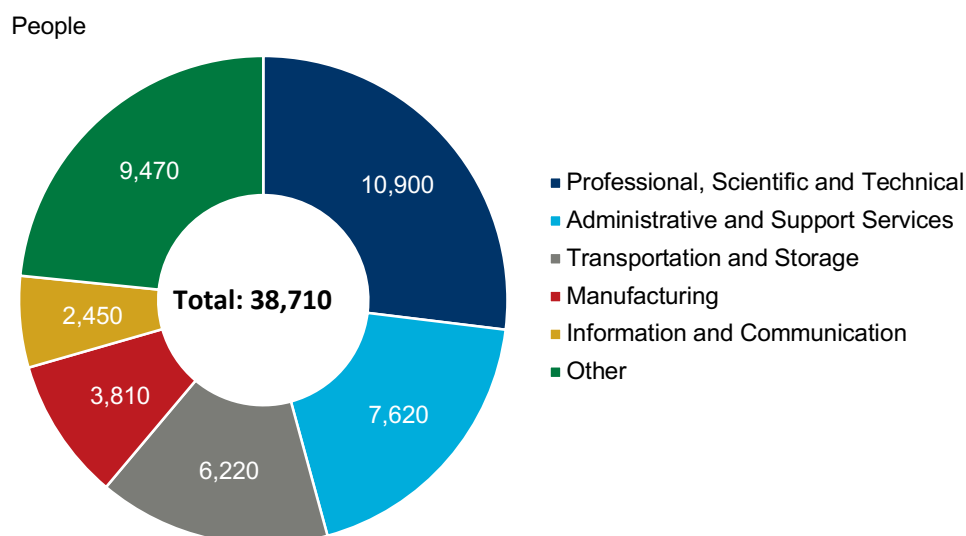
Fig. 13. The fragrance industry's indirect contribution to employment by product and market segment in 2018



Source: Oxford Economics

The industrial sector that gained the largest boost to jobs from the fragrance industry's procurement was the professional, scientific and technical sector. Some 10,900 people or 25 percent of the total indirect impact were employed in advertising, marketing, PR, and other industries within the sector to meet the fragrance industry's needs. A further 7,620 jobs were supported in the administrative and support services sector, which includes outsourced cleaning, security, travel, and rental services.

Fig. 14. The employment stimulated in different industrial sectors by the fragrance industry's procurement in 2018



Source: Oxford Economics

The economic activity and employment stimulated by the fragrance industry procurement from domestic suppliers also generates additional tax receipts. Some £0.5 billion in tax was estimated to be paid to the Exchequer as a result.

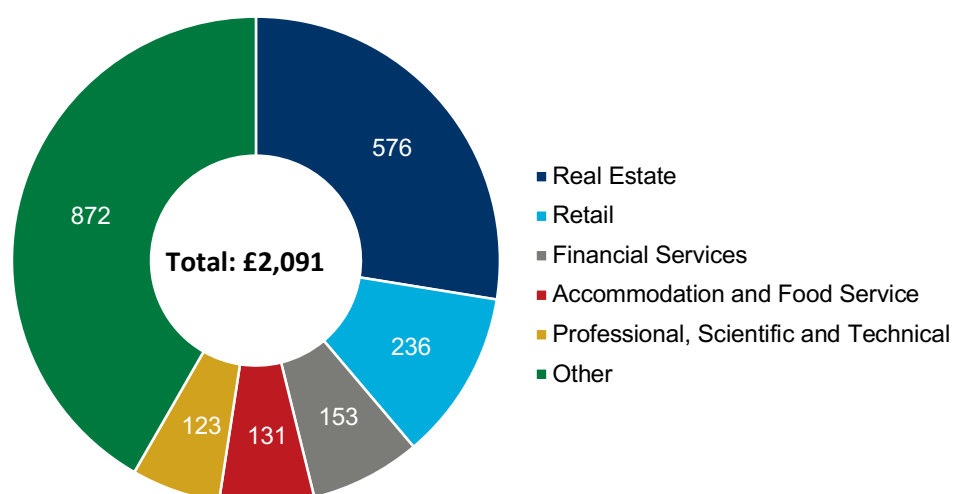
2.3 INDUCED (OR WAGE CONSUMPTION) IMPACTS

The final channel of economic impact considered in this study is the induced impact of the fragrance industry. This channel captures the GDP, jobs, and taxes supported by the wage-financed consumption of employees within the fragrance industry, and also those employed by firms in the industry's supply chain.

The 95,300 people that work for the fragrance industry and in its direct supply chain in 2018 spent a proportion of their wages at retail, leisure and other outlets around the UK. We calculate that their wage-financed spending stimulated a gross value added contribution to GDP of £2.1 billion in 2018. We also find that this economic activity sustained some 31,350 jobs across the UK and generated £1.0 billion in tax receipts. The sectors benefitting from the largest boost to economic output through this impact channel were real estate for the rent and purchase of housing, retail for the purchase of food, clothing and other household goods, and financial services (Fig. 15).

Fig. 15. The fragrance industry's induced GDP impact by sector in 2018

£ million



Source: Oxford Economics

2.4 TOTAL EXPENDITURE IMPACTS

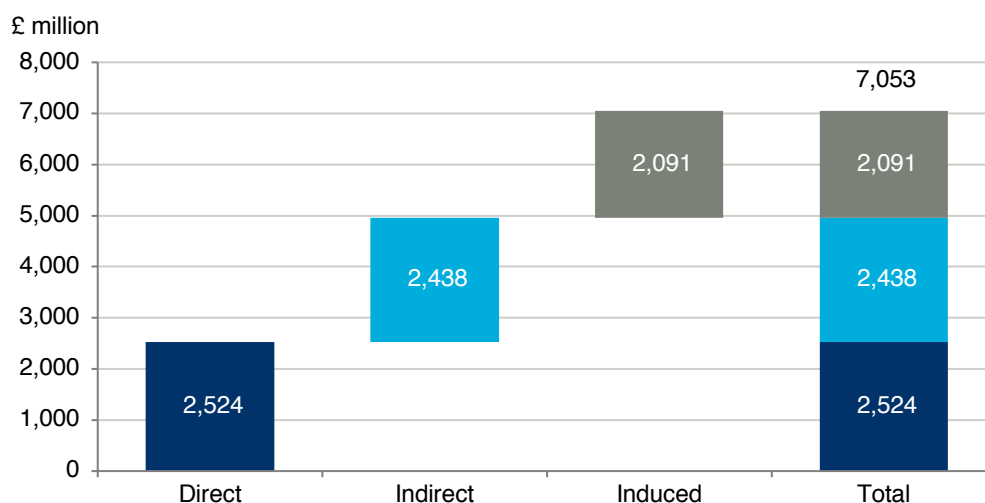
Oxford Economics estimates that the fragrance sector supported a £7.1 billion contribution to UK GDP in 2018 (Fig. 16). This is 0.3 percent of all the economic activity generated in the UK in the same year.⁶ Alternatively, it is more than all the economic output created in either the cities of Oxford or Sunderland.

Of the total impact, £2.5 billion or 36 percent was generated by the fragrance sector itself. A further £2.4 billion was supported along its UK supply chain as a result of its procurement of goods and services from domestic suppliers. The payment of wages to staff both by the sector and its suppliers, supported a further £2.1 billion in the consumer economy.

The fragrance sector can be said to have a GDP multiplier of 2.8 in UK. So, for every £1 million of economic output the sector itself generates, it supports another £1.8 million of economic output elsewhere in UK.

⁶ ONS, (2019), 'First Quarterly Estimate of GDP, Q4 (Oct to Dec) 2018', 11 March.

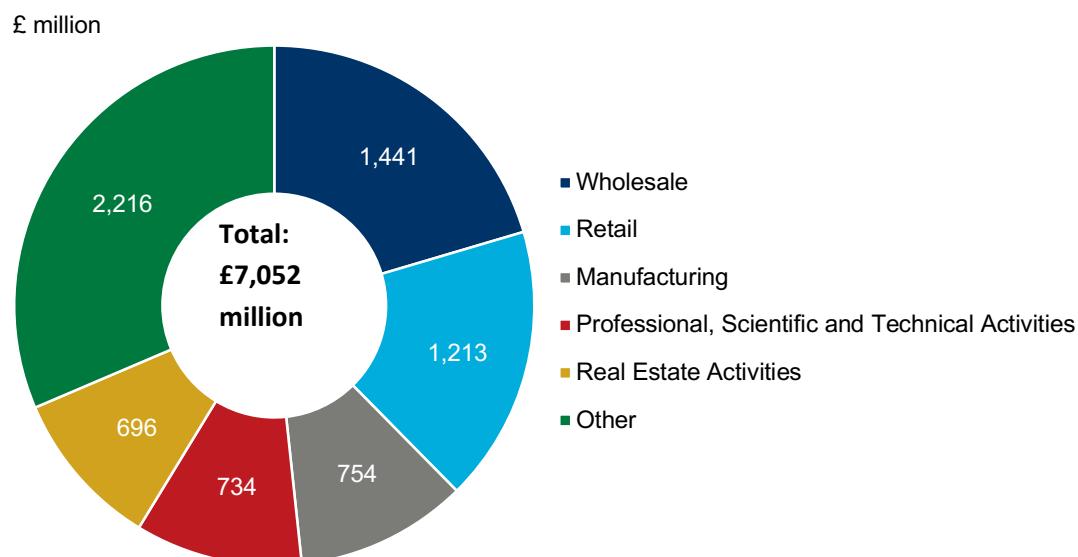
Fig. 16. The fragrance industry's total contribution to UK GDP in 2018



Source: Oxford Economics

Most of the economic activity stimulated by the fragrance sector's expenditure occurred in the wholesale sector. Some £1,441 million of gross value added was supported in this industry or 20 percent of the total (Fig. 17). The retail sector accounted for the second largest share at 17 percent and the manufacturing sector third with 11 percent of the total impact.

Fig. 17. Total GDP impact of the fragrance sector's expenditure by industrial sector in 2018



Source: Oxford Economics

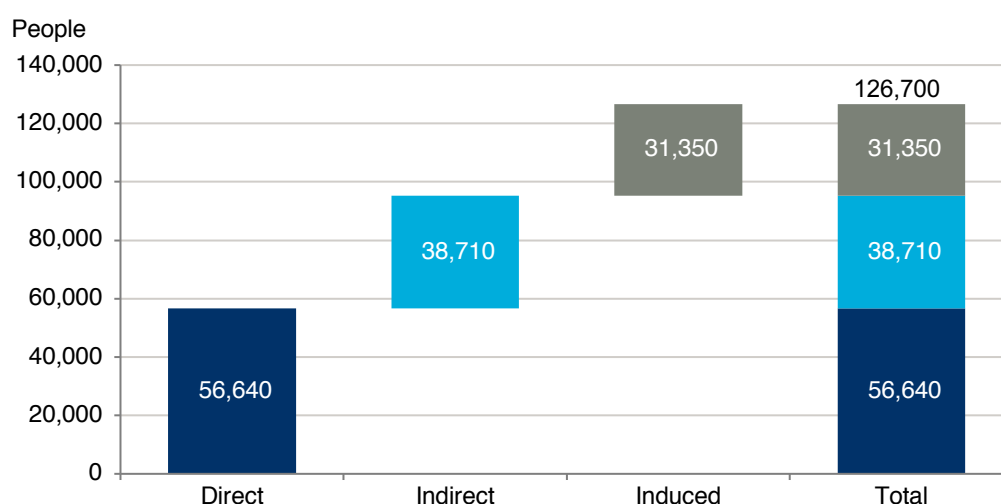
We estimate the fragrance sector's expenditure supported 126,700 jobs in the UK in 2018. This is more than were employed in York (at 121,600) or Swansea (at 119,900) that year. Alternatively, 1 in every 256 persons' job in the UK is dependent on the fragrance industry.

Of the 126,700 jobs supported by the fragrance industry in UK, some 56,640 or 45 percent were with the sector itself (Fig. 18). Another 38,710 or 31 percent

were stimulated by its procurement from UK suppliers. The remaining 31,350 jobs were supported by the sector and its suppliers' payment of wages to staff.

The fragrance sector has a jobs multiplier of 2.2 in UK. Therefore, for every 10 workers employed within the sector, another 12 jobs were supported elsewhere in the UK economy.

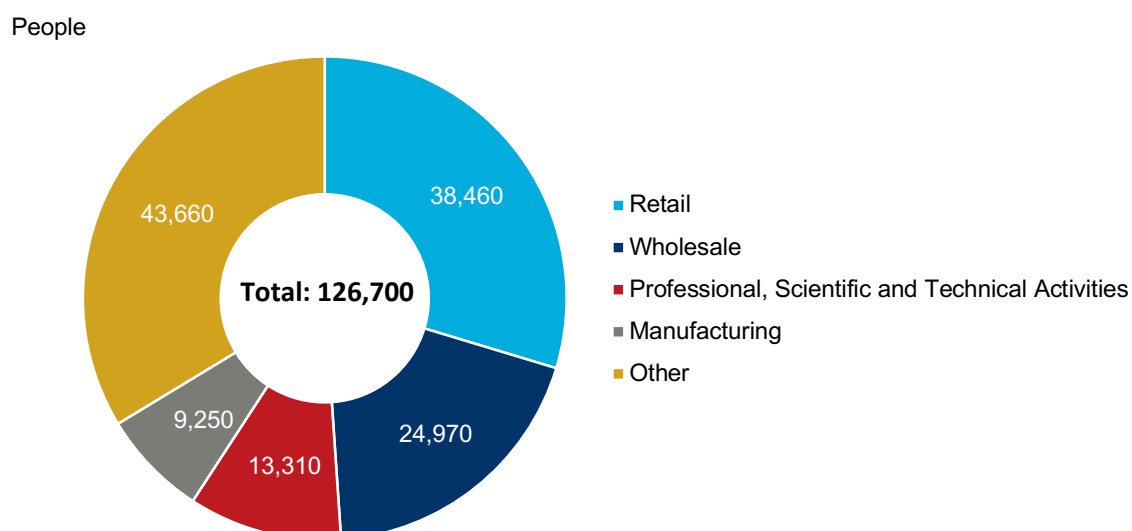
Fig. 18. The fragrance industry's total contribution to employment in 2018



Source: Oxford Economics

The industry which benefitted the most from the employment the fragrance sector sustained was retailing (Fig. 19). Some 38,460 jobs were supported in this sector by the fragrance industry's expenditure, or 30 percent of the total. A further 24,970 jobs or 20 percent were supported in wholesaling and 13,310 or 11 percent in professional, scientific and technical activities.

Fig. 19. Employment stimulated by the fragrance sector in UK by industrial sector in 2017

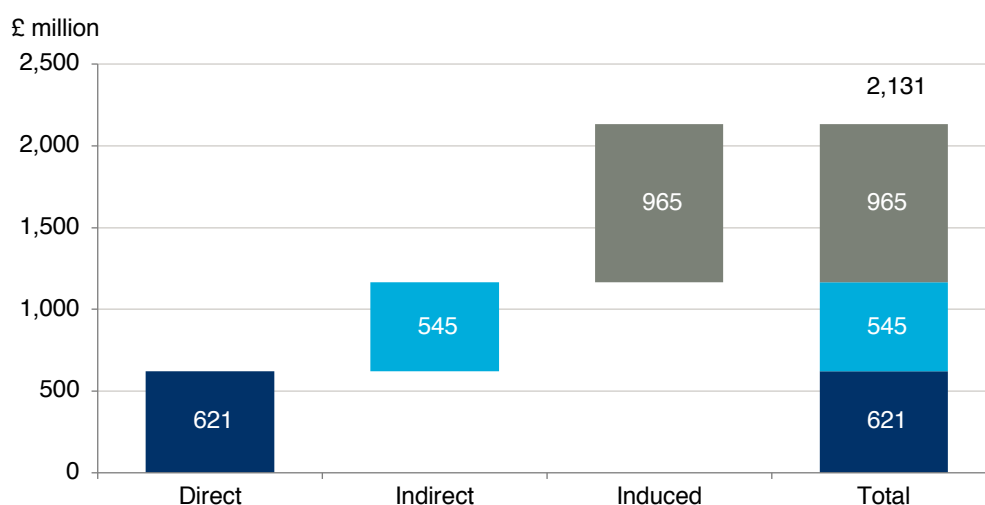


Source: Oxford Economics

In 2018, the industry supported £2.1 billion in tax revenues—equivalent to 0.4 percent of HMRC's total tax receipts in 2017/18.⁷ This would be sufficient to pay the salaries of over 75,800 nurses at hospitals across the country.⁸

The industry itself generated £621 million in tax receipts, or 29 percent of the total it supported (Fig. 20). The activity it stimulated along its supply chain accounted for another £545 million or 26 percent and the consumer spending financed by its payment of wages the largest amount at £965 million or 45 percent.

Fig. 20. The fragrance industry's total contribution to tax receipts in 2018



Source: Oxford Economics

⁷ HMRC, (2018), 'HM Revenue and Customs receipts amounts'.

⁸ The median annual wage for a nurse in 2018 was £28,109. ONS, (2018), 'Earnings and hours worked, occupation by four-digit SOC: ASHE Table 14', 25 October.

3. CONCLUSION

The fragrance industry made a sizable contribution to the UK economy in 2018. Its manufacturing, wholesale and retail operations contribute directly to the UK's economy, but its economic impacts reach far beyond. Its procurement from UK suppliers and payment of wages stimulates economic activity and employment across all parts of the economy.

In total, we estimate the fragrance industry generated a total gross value added contribution to GDP worth £7.1 billion in 2018. From this activity it supported the employment of 126,700 people and was responsible for raising £2.1 billion in tax receipts.

This impact is centred around the wholesale and retail of fragrance products. However, there is also a notable manufacturing footprint, with additional impacts in sectors across the economy driven by the supply chain spending and consumer activity that the industry's payment of wages creates.

Altogether this means that the fragrance industry has a large positive economic footprint in the UK. As such, the sector must also be recognised as a valuable asset for the UK economy.

4. APPENDIX

The Fragrance Foundation gave Oxford Economics a list of products for which they believed fragrance was critical to their sale. For tractability, we have grouped these into the five major product categories (using the United Nations (UN) Classification of individual consumption by purpose (COICOP) definitions). Fig. 21 shows the products in each of the major product categories we have used throughout the report.

Fig. 21. What is included in each major product category

Major product category	Individual products
Fragrances and ancillaries	Perfume; eau de toilette; body mists; body sprays; aftershave.
Bath and body	Aromatherapy oils; bath balls/salts/bombs; essential oils; bubble bath; hand creams; moisturisers; soaps; shower gels; deodorants; hand wash;
Men's grooming	Shaving gels, shaving creams; shaving soaps.
Household products	Fabric softeners; clothing fragrance boosters.
Room fragrances and ambient fragrances	Scented candles; room fragrances; oil burners; plug-in air fresheners; air fresheners; reed diffusers; car fresheners.

Source: Oxford Economics

4.1 ESTIMATING THE VALUE OF CONSUMER SPENDING ON FRAGRANCE PRODUCTS IN THE UK

The ONS collects information on household spending patterns and the cost of living using the Living Costs and Food Survey (LCF). The survey is conducted throughout the year, across the whole of the UK, and is the most significant survey on household spending in the UK.

We accessed the LCF data on the amount of consumer expenditure on the detailed list of fragrance products given to us by the Fragrance Foundation via the ONS' Secure Research Service. These value of consumer expenditure on fragrance products was then allocated to the broader COICOP product classification groups. All fell into either category 5, "Furnishings, equipment and routine maintenance of the house" or 12 "Miscellaneous goods and services"). These COICOP group shares are then scaled up to the broad group based on the consumption values identified in the ONS' publication Consumer Trends, utilising ONS' Components of Household Expenditure data.⁹

4.2 ANALYSING THE SCALE OF THE FRAGRANCE INDUSTRY

The consumer spending was aligned to the parts of the retail sector that sell fragrance products. Its share of the retail industry's employment, gross value added, and tax payments was calculated using the ONS' Annual Business Survey Standard Extracts.¹⁰ This provides summary information on different industries' sales, purchases, employee compensation and profits, as well as their employment. In the case of retail and wholesale it also identifies the value of the goods that they buy for resale. The latter was used to strip out the intra

⁹ ONS, (2018), 'Consumer Trends, UK: July to September 2018', 21 December.

¹⁰ ONS, (2018), 'Annual Business Survey - 2017 Provisional Results', 8 November.

fragrance industry purchases to generate a model of the value chain from retail to wholesale to manufacturing.

Data on the manufacturing of fragrance products was gathered from two sources. We collected data on UK manufacturers' sales of individual fragrance products using the ONS Prodcorn dataset.¹¹ This was combined with export data from HMRC to see the sales heading abroad. Again, both were aligned with Annual Business Survey data for the relevant manufacturing industries to produce employment and gross value added estimates.

Finally, the tax contribution was analysed based on the effective tax rate that applies to income tax, payroll tax, corporation tax, taxes on production and taxes on products. There were all modelled based on ONS data and used to produce estimates of the tax contributions in the retail, wholesale and manufacturing components of the direct industry.

4.3 MODELLING THE FRAGRANCE INDUSTRY'S INDIRECT AND INDUCED CONTRIBUTIONS

The indirect and induced contributions were analysed based on Oxford Economics' in-house UK economic impact model. This builds on an ONS input-output table for the UK to analyse the interactions between different sectors of the UK economy, as well as the structure of household consumption.¹² The fragrance industry's procurement from businesses outside of the sector is used as the first tier of spending.

The gross value added and employment estimates in each industry in the supply chain are derived using gross output to gross value added ratios and estimates of labour productivity sourced from the Annual Business Survey. This model contains a tax analysis, utilising the same approach as was used in the direct analysis.

To calculate the induced impacts, the numbers employed in the fragrance industry and each sector of its supply chain are multiplied by the distribution of wages in that industrial sector using the ONS' Annual Survey of Hours and Earnings.¹³ The input-output tables allows for leakage through imports and savings.

¹¹ ONS, (2018), 'UK Manufacturers' Sales by Product Survey (Prodcorn); Revised Estimates 2017', 19 November.

¹² ONS, (2018), 'United Kingdom Input-Output Analytical Tables, 2014', 2 March.

¹³ ONS, (2018), 'Earnings and hours worked, industry by four-digit SIC: ASHE Table 16', 25 October.

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