Estimating Amazon's UK corporation tax shortfall

Our approach

Amazon has two main businesses: Retail (its shopping website) and Web Services (mainly renting server space to companies). Retail is generally a low profit business and web services high. Amazon does not disclose the retail/web split for its UK sales so we have taken the global split (which it does disclose), and applied this to UK sales (which it discloses in the USA).

We then looked for data which could tell us what the average profit-margin that most businesses in these sectors made, and applied this to Amazon's sales split discussed previously. Then we applied the UK's current corporation tax rate to this estimated profit to get a figure for what it might have paid had it not been engaged in aggressive tax avoidance.

Obviously this gives a very rough and ready figure. If anyone knows of more information which could allow us to calculate this figure more accurately, or if Amazon could disclose more detail, then we would happily use them to improve this estimate.

According to Prem Sikka, Labour peer and emeritus professor of accounting at the University of Sheffield and University of Essex: "the accounts are legally compliant but opaque and lack the crucial information about intra-group transactions which enable the company to shift profits is not there, therefore it's impossible to know what their true economic profit is."

Calculating the likely split of revenue between retail and web services in the UK

In its latest filing at the US SEC, Amazon reported total UK sales of $31,914m for the 12 months to 31 December 2021. This makes it likely to be among the biggest 20 businesses in the UK.

According to this same filing:

AWS (Amazon Web Services) contribution to total annual global sales in that year was $62,202m. AWS/Net sales = (62,202m/469,822m)X100 = 13.24%

This means that: AWS/Cloud Computing Services comprised 13.24 % and Retail sales comprised 86.76% of global sales at Amazon in 2021

In the previous year (2020) it was stated to be 12%.

We applied these proportions to the UK sales figure for the 12 months to 31 December 2021:

$31,914m x 13.24% = UK cloud computing services sales = $4,225m
$31,914m x 86.76% = UK retail sales = $27,688m

References:
1. AMAZON COM INC, 10-K Annual Report for the financial year ending December 31 2021 filed on 2/4/2022
Understanding average profit margins for retail

We decided to base our calculations on figures provided in a widely quoted ‘The Shape of Retail’ report published in June 2021 by the consulting firm Alvarez and Marsel (A&M) in partnership with Retail Economics.

The report, which bases its figures on a sample of over 250 private and public European retailers that have operations in either the UK, Germany, Italy, Spain, France or Switzerland, said that it expects pre-tax profit margins for UK retailers to fall to 3.2% in 2025 from 5.5% in 2019.

We used these figures to estimate the average profit margin for UK retailers in 2021 with the following calculations:

Average annual change in profit margin = (5.5%-3.2%)/6 years = -0.38%
Change between 2019 and 2021 = 5.5 – (0.38 x 2) = Average profit margin for UK retailers in 2021 = 4.74%

Understanding average profit margins for web services generally

The consultants Technology Business Research (TBR), said in a 2019 report that the average profit margin figure for cloud computing was an eye-wateringly high 65% in 2018. The company based this figure on internal estimates and company data for the “big nine” cloud vendors: ALIBABA, AWS, Google, IBM, Microsoft, Salesforce, SAP, Oracle, and Workday. TBR said that the report was “based on information made available to the public by the vendor and other public sources.”

In order to see whether the figure was likely to have changed much by 2021, we looked at the percentage change in gross profit margin for the three companies in the list that provided this figure in their Q4 earnings reports each year: Microsoft, IBM and SAP.

Microsoft commercial cloud

| FY 21 Q4 | 71% |
| FY18 Q4 figure: 58% |
% points increase FY2018 to FY2021: 71-58= 13%

IBM Software/Cloud & Cognitive Software:

| Q4 2021: 78.8 % (note the company changed its Cloud & Cognitive Software division name to Software in this financial period. The company also offers cloud services under its Global Technology Service division but we decided to base % change on Software as this division includes more services that compete with AWS). |
| Q4 2018: 77.6% |
% points increase FY2018 to FY2021: 78.8-77.6= 1.2%

SAP Cloud:

| Q4 FY 2021: 67.0% (IFRS) |
| Q4 FY 2018: 58.6% (IFRS) |
% points increase FY2018 to FY2021: 67-58.6 = 8.4%

The average proportional increase (%) from FY2018 to FY2021 for these three companies was
Microsoft 13% + IBM: 1.2% + SAP: 8.4% = 22.6. 22.6 divided by three = 7.53%

We applied the average proportional increase (%) from FY2018 to FY2021 of 7.53% to the 65% figure from the original 2018 report to get a likely % points increase for the period = 69.89%.

Calculating the likely UK profits for Amazon in 2021

(a) For retail
If an average retail profit margin in 2021 was 4.74%, and Amazon's likely UK retail sales were $27,688m, then a likely profit on this might be: $27,688m x 4.74% = $1,312m.
(b) For web services
If the average profit margin on web services in 2021 was 69.89%, and Amazon's likely UK web services sales were $4,225m, then a likely profit on this might be: $4,225m x 69.89% = $2,952m
(c) Combining the two figures
$1,312m + $2,952m = $4,264m of likely UK profit in 2021.

Calculating the likely tax due from this profit

If we multiply this by the 19% current corporation tax rate we get: $4,264m x 19% = $810m. Converting this to sterling at the current rate we get £656m.

Factoring in actual UK corporation tax paid by Amazon

Unhelpfully, Amazon's UK filings appear around 9 months later than their US ones. It is tricky to estimate actual UK tax paid (rather than owing) by the ten Amazon companies listed at Companies House in the UK, but we make it to be £15.53m in 2020 (the previous year to the UK sales figures we have been using for our calculations above). This figure is widely reported elsewhere to be £18.3m. To be charitable to Amazon (!) we will take this higher figure.

In order to estimate what Amazon are likely to pay in UK tax in 2021 we have applied the percentage sales growth observed between 2020 and 2021 to this £18.3m figure.

Total UK revenue for 2020/ Total UK revenue for 2021 = $31,914m/$26,483m = 1.2
Multiply the estimated figure for Amazon’s total UK corporation tax payment in 2020 (£18.3m) by the factor of difference between its total UK revenues for 2020 and 2021 (1.2) = £21.95m

Sense checking this with another approach

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3 This figure is taken from elsewhere in the accounts of just one of Amazon's UK subsidiaries, Amazon UK Services.
In 2019, the campaign group Tax Watch UK published some research looking into tax avoidance amongst global tech companies and, in order to calculate a similar figure, used Amazon’s own global average of profit across all its businesses from its annual filings.

Amazon says in its 2021 SEC filing: "Operating income was $22.9 billion and $24.9 billion for 2020 and 2021. We believe that operating income (loss) is a more meaningful measure than gross profit and gross margin due to the diversity of our product categories and services."

Although it’s hard to take Amazon’s word for all this, $24 billion operating income in 2021 from $469 billion sales = 5.11% average profit.
If UK sales = $31.914bn, expected profit = $1.630bn
19% of 1.63 = $309m
Converting this to sterling at the current rate we get £250m
This is a much lower figure, but considerably larger than the £0.018bn (or £0.022) actually paid.

Conclusions

Our calculations of a reasonable estimate of UK corporation tax avoidance at Amazon for 2021 show that they are likely to occur in a range between: £228m and £634m.

The range is large, because of the lack of publicly available data to base conclusions on. It is however many orders of magnitude larger than estimates of actual corporation tax paid by the company which range from £15.4m to £22m.

In Amazon’s communications, it makes much of how its losses are partly attributable to its huge capital investments in technology and infrastructure such as warehouses. Three questions however remain unanswered:

1. Although this may be true, whilst the bulk of its UK sales continue to be routed through its Luxembourg subsidiaries, it is difficult to avoid the conclusion that something fishy is up. Why not just declare them all in the UK?

2. If its UK (and other international) business are so unprofitable as to lead to minimal corporation tax being paid everywhere, why would any company want to invest so much capital in such an unprofitable business?

3. If it is true, why not publish full country by country reporting of its sales, capital investments and tax paid? There are now some excellent organisations to help with this including the GRI and a gold standard at the Fair Tax Foundation.

It is pleasing to see that a group of ethical investors have tabled a motion at Amazon’s 2022 AGM on May 25th to make much better tax disclosures using these frameworks.

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