

SSRO's baseline profit rate, capital servicing rates, and SSRO funding adjustment recommendation: 2020/21 Supporting analysis

January 2020



Contents

This pack sets out details of the SSRO's rates recommendation to the Secretary of State:

- Baseline profit rate
- Capital servicing rates
- SSRO funding adjustment

And sets out further sensitivity and other analysis, including:

- Analysis of the changes to the baseline profit rate since last year
- Changes in the comparator groups since last year
- Defence sector representation in the benchmark
- Geography



Baseline profit rate: introduction

The baseline profit rate is Step 1 of the 6-step process to calculate the contract profit rate of a contract that falls under the Single Source Regulations.

The baseline profit rate is the average of the underlying rates for the last three years. The underlying rate for a single year is based on the financial performance of a group of companies whose activities are comparable to those that contractors might be expected to perform for single source contracts.

Full details on the approach are set out in the SSRO publication Single source baseline profit rate, capital servicing rates and funding adjustment methodology.



Baseline profit rate approach and methodology



Objective

OECD: Transfer Pricing principles

Replicable



Reliable

Actual profit on actual cost

IFRS / GAAP numbers



Predictable

Stable approach

3 year rolling average



Calibrated

Stakeholder feedback (including QA of accounting data)

Completed contracts

Company selection process



Databases: Orbis, Bloomberg, Bank of England



Active companies





Latest year of accounts



Consolidated accounts



Independence



Geographic location



Turnover



Operating Profit



Assets / liabilities



Functions NACE code Text terms



Activities



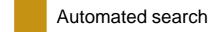
MOD supplier lists

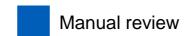


Defence keyword



Average

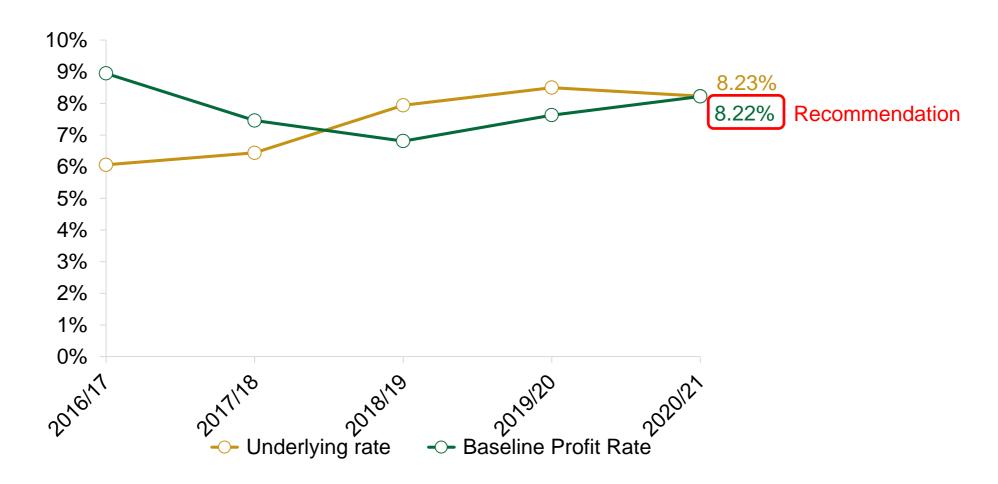






Baseline profit rate

The baseline profit rate is the average of the underlying rate for the last three years. The baseline profit rate has risen as a result of stabilisation in the underlying rate.



Notes: The pre-2016/17 underlying rates used for the three-year average were those calculated using the Review Board's methodology. 2014/15: 10.92%, 2015/16: 9.88%.

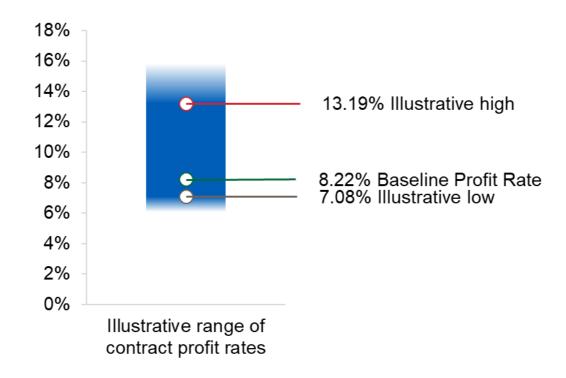
Source: Orbis, Bloomberg and SSRO calculations



Illustrative high and low Contract Profit Rate

The baseline profit rate is combined with the other profit rate steps to arrive at the Contract Profit Rate. There is a range of contract profit rates available depending on the application of the steps.

The solid area is an illustrative low/high CPR, applying the mean average capital servicing adjustment for contracts priced in 2018/19 (0.97 per cent). The gradient areas end at an illustrative minimum and maximum, applying the lowest (0 per cent) and highest (3.6 per cent) capital servicing adjustments agreed during 2018/19.



Notes: The six-step process is set out in the SSRO's publication *Guidance on the baseline profit rate and its adjustment.*

Source: SSRO



Illustrative high and low Contract Profit Rate: detail

| Contract p | ofit rate step | Value/Adjustment |
|------------|---|--------------------------------|
| | Unadjusted rate | 9.63% |
| | Capital servicing adjustment [†] | -1.41pp |
| Step 1 | Baseline profit rate | 8.22% |
| Step 2 | Cost risk adjustment* | -2.06 pp to +2.06pp |
| Step 3 | POCO adjustment | |
| Step 4 | SSRO funding adjustment | - 0.052pp |
| Step 5 | Incentive adjustment** | up to +2.00pp |
| Step 6 | Capital servicing adjustment (CSA) † *** | +0.97pp on average for 2018/19 |
| | Illustrative high CPR | 13.19% |
| | Illustrative low CPR | 7.08% |

| Illustrative maximum CPR, based on +3.60pp CSA | 15.82% |
|--|--------|
| Illustrative minimum CPR, based on +0.00pp CSA | 6.11% |

Notes:

The six-step process is set out in the SSRO's publication *Guidance on the baseline profit rate and its adjustment* †See Q17 of the Q&A document for an explanation of how the two 'capital servicing adjustments' interact.

^{*} An adjustment of up to +/- 25 per cent of Step 1.

^{**} A positive adjustment of up to two percentage points may apply to incentivise the achievement of enhanced performance.

^{***} Estimated using actual values for contracts priced in 2018/19, mean average was 0.97pp and ranged from 0 per cent to 3.6 per cent during that period. The actual adjustment may be higher, lower or negative. Source: *Annual qualifying defence contract statistics*: 2018/19



Summary of activity groups

The baseline profit rate is the average of the three-year rolling averages of the Develop & Make and Provide & Maintain comparator groups. Rates for two other groups, Ancillary Services and Construction, are presented for information, but these are not included in the Composite.

| | Und | erlying pro | fit rate | Baseline profit rate | | | |
|----------------------|---------|-------------|----------|----------------------|-----------|--------|--|
| | Y | early media | ans | 3-year | | | |
| | 2018/19 | 2019/20 | 2020/21 | 2019/20 | 2020/21 | Change | |
| Ancillary services | 4.35% | 5.54% | 3.82% | 4.61% | 4.57% | -0.04% | |
| Construction | 3.49% | 3.50% | 3.07% | 3.53% | 3.35% | -0.18% | |
| Develop and make | 7.67% | 7.86% | 8.69% | 7.43% | 8.07% | +0.64% | |
| Provide and maintain | 8.20% | 9.14% | 7.77% | 7.82% | 8.37% | +0.55% | |
| | | | | | commendat | tion | |
| Composite | 7.94% | 8.50% | 8.23% | 7.63% | 8.22% | +0.59% | |

Previously published figures

https://www.gov.uk/government/publications/2019-contract-profit-rate



Capital servicing rates: introduction

Each year the SSRO calculates the following three capital servicing rates based on averages of bond yields and interest rate data published by Bloomberg and the Bank of England:

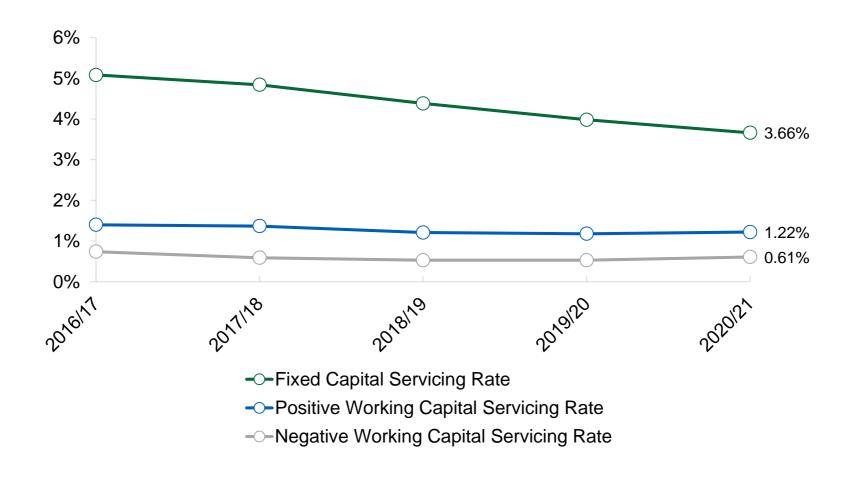
- Fixed capital
- Positive working capital
- Negative working capital

Full details on the approach are set out in the SSRO publication Single source baseline profit rate, capital servicing rates and funding adjustment methodology.



Capital servicing rates

| Rate | Description | Recommendation |
|----------------------------|--|----------------|
| Fixed capital servicing | 15 year BBB GBP bond index – 7 year average | 3.66% |
| Working capital (positive) | 1 year BBB GBP bond index – 3 year average | 1.22% |
| Working capital (negative) | Monthly interest on short term deposits – 3 year average | 0.61% |



Source: Bloomberg, Bank of England and SSRO calculations



SSRO funding adjustment: introduction

The SSRO is an executive non-departmental public body sponsored by the Ministry of Defence, who provide a grant-in-aid for the SSRO's running costs. The SSRO's annual report and accounts provide an account of the SSRO and its use of resources.

The SSRO funding adjustment is intended to allow the MOD to recover half of the SSRO's costs through a reduction in the amounts paid on single source contracts, shared across contractors based upon the value of their contracts.

Full details on the approach are set out in the SSRO publication Single source baseline profit rate, capital servicing rates and funding adjustment methodology.



SSRO funding adjustment calculation

The SSRO funding adjustment is calculated with reference to the average annual total Allowable Costs of contracts entered into, therefore the per cent rate each year may be different whilst still delivering a similar reduction in costs to the MOD.

| Recommendation | | 2017/18 | 2018/19 | 2019/20 | 2020/21 |
|--|---|-----------|------------|-----------|-----------|
| SSRO running costs (£ thousand) average of previous 3 years | а | 4,920 | 5,162 | 5,413 | 5,822 |
| Cost of additional tasks requested by SofS (£ thousand) average of previous 3 years | b | - | - | - | - |
| Total Allowable Costs of contracts entered into (£ thousand) average of previous 3 years | С | 9,955,272 | 10,555,829 | 6,499,333 | 5,584,333 |
| SSRO funding adjustment $=\frac{a-b}{c} \times 50\%$ | | 0.025% | 0.024% | 0.042% | 0.052% |

Previously published figures



Understanding the changes in the baseline profit rate

The following slides set out an analysis of the changes in the baseline profit rate since the prior year, including:

- changes to the companies in the comparator groups
- changes to the underlying rate and the baseline profit rate



2020/21 Underlying rate: explaining the change from 2019/20

The change in the underlying rate each year is a product of:

- 1. Underlying performance: changes in the financial performance of the prior year's companies, including the application of the search criteria and the effect of updated capital servicing rates.
- Change in size criteria: the methodology was altered to remove small companies from the analysis.
- 3. Full refresh: companies were added or removed from the comparator groups as a result of the full search and detailed validation process.
- 4. Defence cross-check: a small number of companies were added to the comparator groups through a cross-check against MOD suppliers.

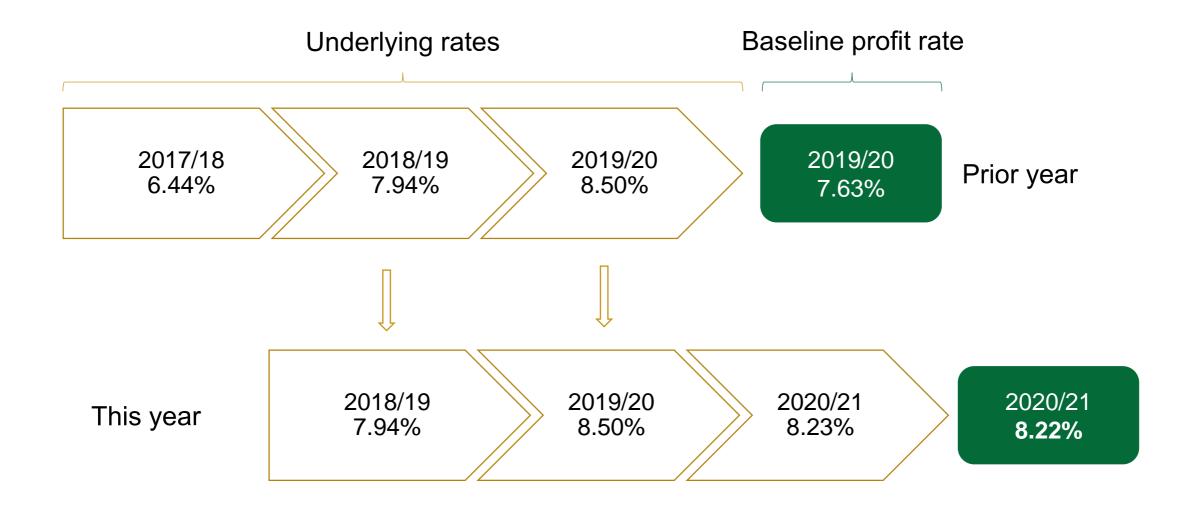






2020/21 Baseline profit rate: explaining the change from 2019/20

The baseline profit rate is the three-year average of the underlying rate. The 2017/18 underlying rate of 6.44% has been replaced by the 2020/21 underlying rate of 8.23%, causing the baseline profit rate to increase.

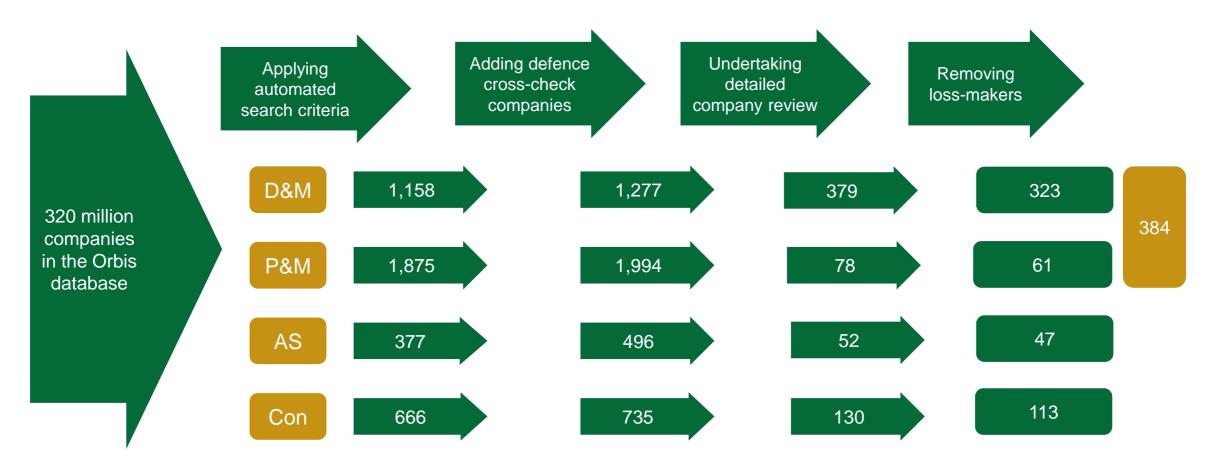




Company search

The SSRO applies customised automated search criteria in the Orbis database to filter the number of companies from more than 300 million to a few thousand.

The SSRO then adds defence cross-check companies to that list; undertakes a detailed company review of each company's Orbis activity description fields, web sites and annual reports to arrive at the final comparator groups. For the calculation, loss makers are excluded.



Source: Table 3a MOD trade, industry and contracts: 2019 (MOD), DefCARS, Orbis, SSRO calculations



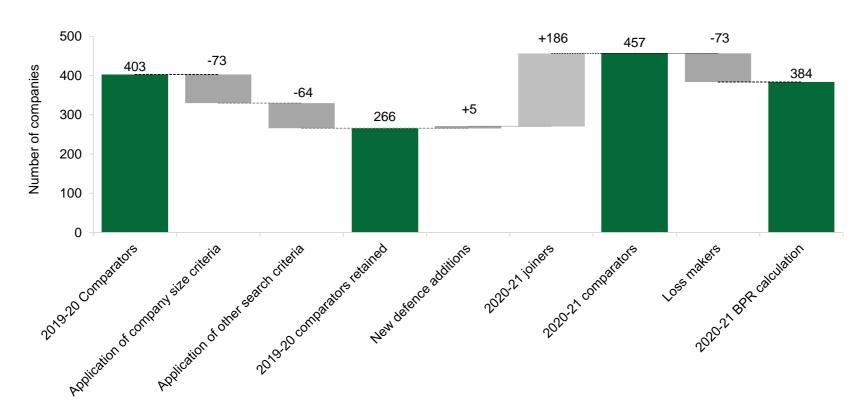
Joiners and leavers to the comparator groups

Maintaining the number of comparator companies ensures the underlying rate is robust.

This year the methodology was altered to remove small companies from the analysis and, as expected, this reduced the number of companies in the comparator group. The number of companies has also reduced due to the usual attrition from the application of the search criteria.

The SSRO's methodology is to fully refresh the comparator groups every three years and a refresh took place this year, adding many new companies to the analysis.

In total, there are 457 companies in the D&M and P&M comparator groups. The data for loss-makers in the current year are not included in the 2020/21 assessment, but will be taken forward for consideration next year.



Source: SSRO calculations



Comparisons and benchmarking

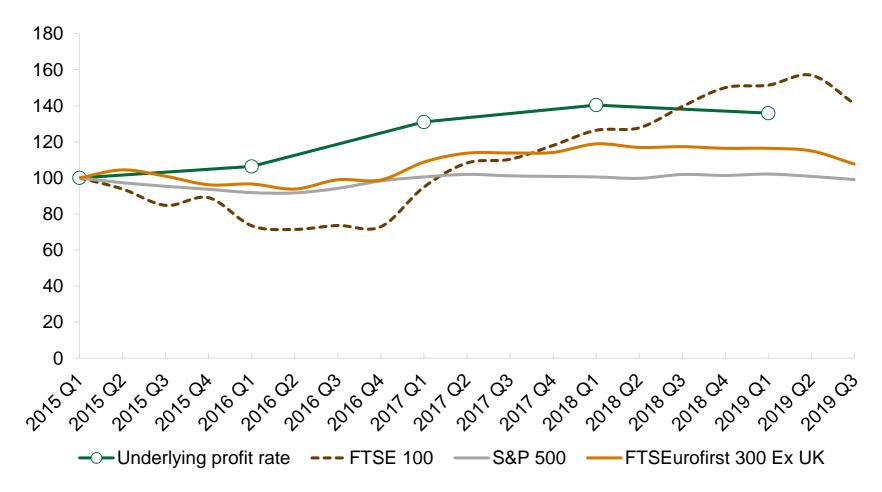
The following compare the trend in the baseline profit rate to the trend in macro-economic indicators and benchmark the range available in the UK regime to those available elsewhere:

- profitability of major UK, US, and European share indices
- ONS data on UK manufacturing rate of return
- Comparison to profit rates achievable in other similar procurement regimes.



Trends in the performance: profits of companies in share indices

This chart compares the trend in the underlying profit rate to the trend in profitability of companies included in major UK, US, and European share indices.



Notes: The baseline profit rate and the operating margin of the companies in the indices are all based to 100 on 31 March 2015.

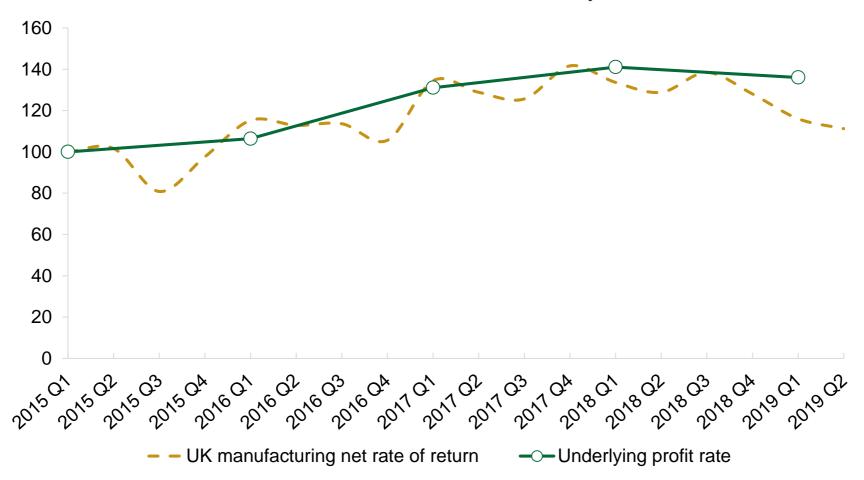
Increases and decreases in those rates are shown over time relative to that starting point. For the avoidance of doubt, this data does not indicate share price performance, it indicates the operating margin reported by the index constituents.

Source: Bloomberg, SSRO calculations



Trends in the performance: UK manufacturing rate of return

ONS reports data on rate of return, which is a measure of return on capital, for UK companies. Profit on cost and return on capital are not directly comparable. However, we can use this data to compare trends in the underlying profit rate assessment to trends in the wider UK economy.



Notes: The underlying profit rate and the ONS measure of profitability (net operating surplus divided by net capital employed) are based to 100 on 31 March 2015. Increases and decreases in those rates are shown over time relative to that starting point.

Source: ONS 22 November 2019 release of *Quarterly net rate of return of manufacturing private non-financial non-UK continental shelf corporations* (series LRYC), SSRO calculations.





Defence sector representation

It is not the SSRO's intention that the comparator groups contain only companies from the defence industry, but we expect them to be represented because we are benchmarking activities that those companies typically perform.

The following slides set out analysis of defence sector representation within the comparator groups and their influence on the result, including:

- an explanation for the presence, or otherwise, of the MOD's largest private sector suppliers
- an explanation of the cross-check against MOD supplier lists to ensure that MOD's actual suppliers are represented in the comparator groups; and
- the proportion of defence keyword companies in the analysis and their results compared to non-defence keyword companies





Presence of MOD suppliers in the comparator groups

| Company name | Activity Type |
|---------------------------------|--------------------|
| BAE Systems PLC | Develop & Make |
| Babcock International Group PLC | Provide & Maintain |
| Rolls Royce Holdings PLC | Develop & Make |
| Airbus Group SE | Develop & Make |
| Lockheed Martin Corporation | Develop & Make |
| General Dynamics Corporation | Develop & Make |
| Leonardo SpA | Develop & Make |
| Ferrovial S.A. | Not included |
| QinetiQ Group | Develop & Make |

| Company name | Activity Type |
|-------------------------------|--------------------|
| DXC Technology Company | Not included |
| Boeing Company (The) | Develop & Make |
| Leidos Holdings, Inc. | Provide & Maintain |
| Thales Group | Develop & Make |
| KBR, Inc. | Provide & Maintain |
| Innisfree Group Ltd | Not included |
| Serco Group PLC | Ancillary Services |
| Jacobs Engineering Group Inc. | Provide & Maintain |
| BT Group PLC | Not included |

Explanation for companies not included:

- Ferrovial: Fails some data requirements and the main activities of the company, the operation of transportation infrastructure, are not one of our comparable activities.
- DXC: Founded in 2017 so does not meet the requirement to have 5 years of data.
- Innisfree: The main activities of the company, fund management services, are not one of our comparable activities.
- **BT**: The main activities of the company, the provision of fixed-line, mobile, broadband and subscription TV services, are not one of our comparable activities.

Notes: Source of companies are MOD statistics of private sector holding companies paid £250 million or more in 2018/19, *Table 4 Annex MOD trade, industry and contracts: 2019* (MOD). The table is ordered by value of spend.



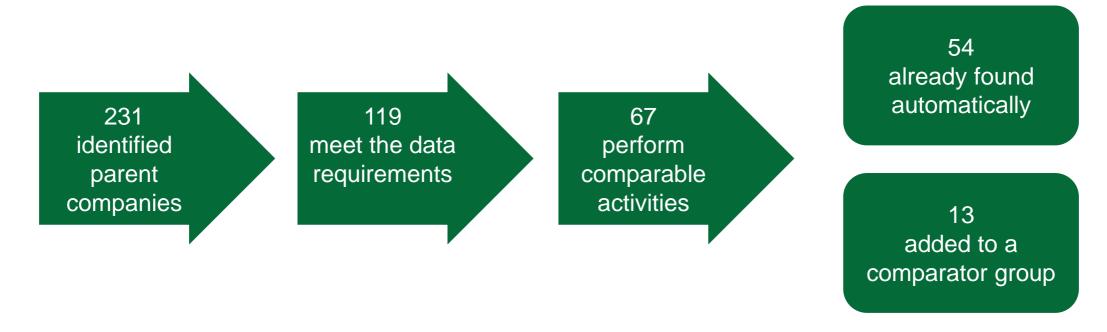


Defence cross-check

The SSRO inspects statistics of organisations paid more than £5 million by the MOD and uses DefCARS data to identify any additional comparators that were not found through the search process.

13 additional companies are included in the comparator groups as a result of the defence cross check process.

This represents 2% of the comparator groups, demonstrating that our methodology is already effective in identifying MOD suppliers through the search process.



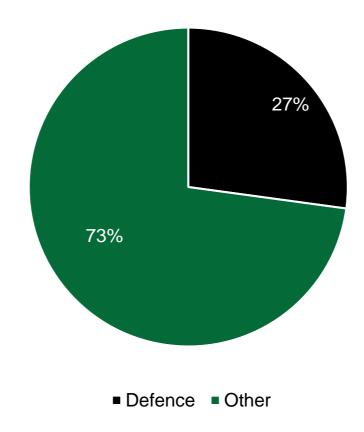
Source: DefCARS, Table 3a MOD trade, industry and contracts: 2019 (MOD), DefCARS, Orbis, SSRO calculations





Proportion of 'defence keyword' companies in the BPR calculation

Companies that either have the word 'defence', 'defense' or 'militar*' included in their Orbis text description account for approximately 27% of the baseline profit rate comparator group



Notes: A company is considered to be a 'defence keyword' company if either the word 'defence', 'defense' or 'militar*' is included in

their Orbis text descriptions. The '*' indicates that all words starting with those letters, for example 'military' and 'militarised',

are included.

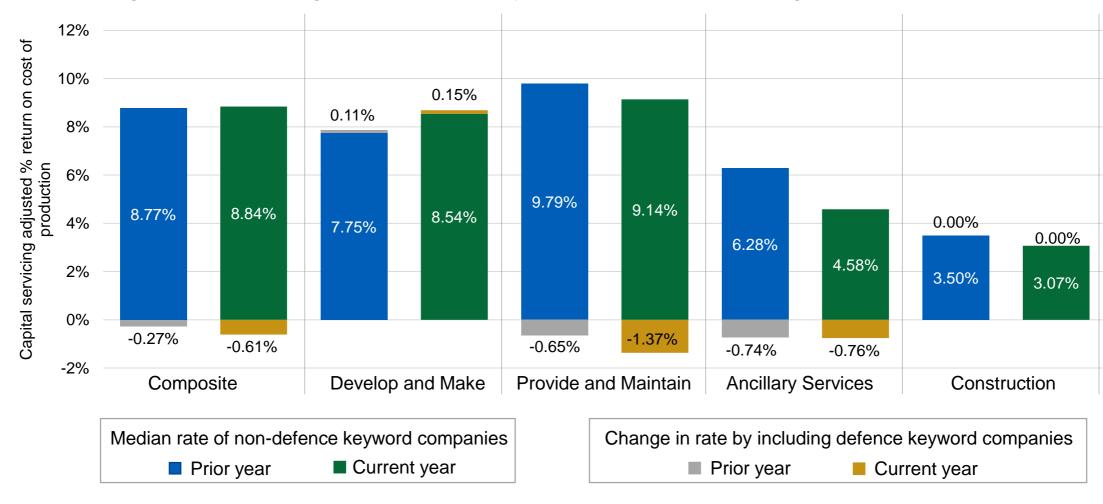
Source: Orbis and SSRO calculations





Impact of 'defence keyword' companies on the result

The chart shows the profit rate of each comparator group excluding defence keyword companies and the corresponding impact of adding those defence keyword companies back to get to the final result.



Notes: A company is a 'defence keyword' company if the word 'defence', 'defense' or 'militar*' is included in their Orbis text description.

'Current year' is the current year comparator group. 'Prior year' is the prior year comparator group and definition, which did not

include 'militar*' as a keyword.

Source: Orbis and SSRO calculations





Geography

Only companies located in Western European and North America are included in the comparator groups.

The following slides set out analysis of the geographical characteristics of the comparator groups, including:

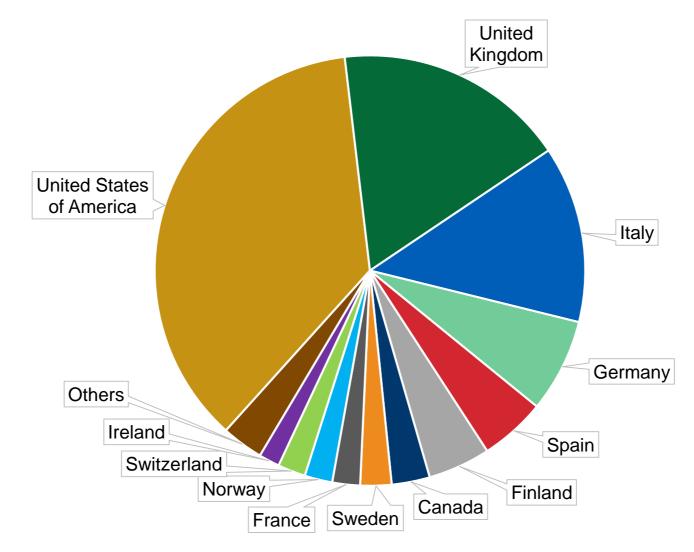
- the proportion of companies in the comparator groups from each country.
- the profitability of companies from each a selection of countries; and
- the impact of those countries on the baseline profit rate analysis





Geographical distribution of the composite comparator group

There is wide representation across Western Europe and North America



Notes: Countries with < 5 number of companies are merged in to 'Others'.

Source: Orbis





Geographical distribution of the comparator groups

United States of America

United Kingdom

Germany

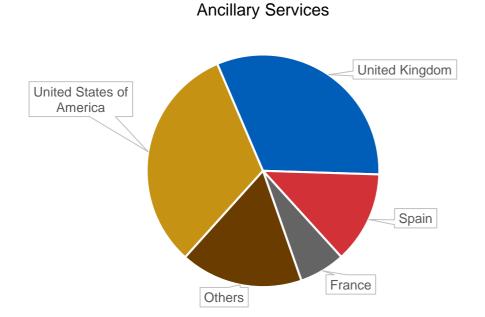
Spain

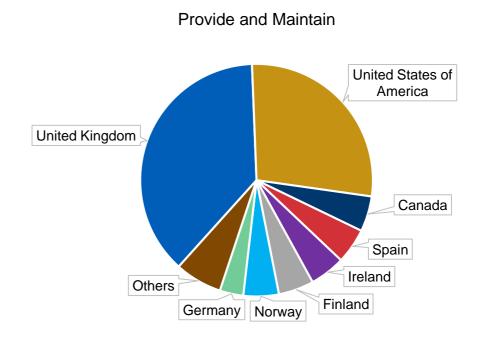
Switzerland

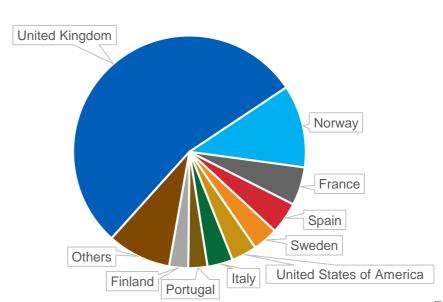
France Canada

Sweden

Finland







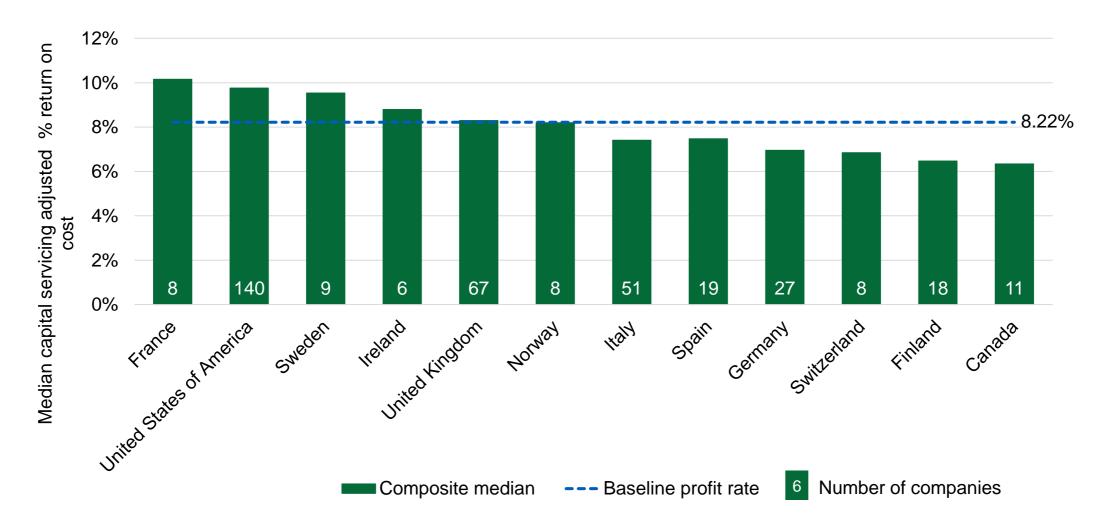
Construction





Profitability by country

This chart shows the 2020/21 composite underlying rate for each country individually compared to the baseline profit rate. The number of companies is shown at the bottom of each bar.



Notes: The rates are the composite of the Develop & Make and Provide & Maintain activity groups.

Only countries with > 5 number of companies are shown.

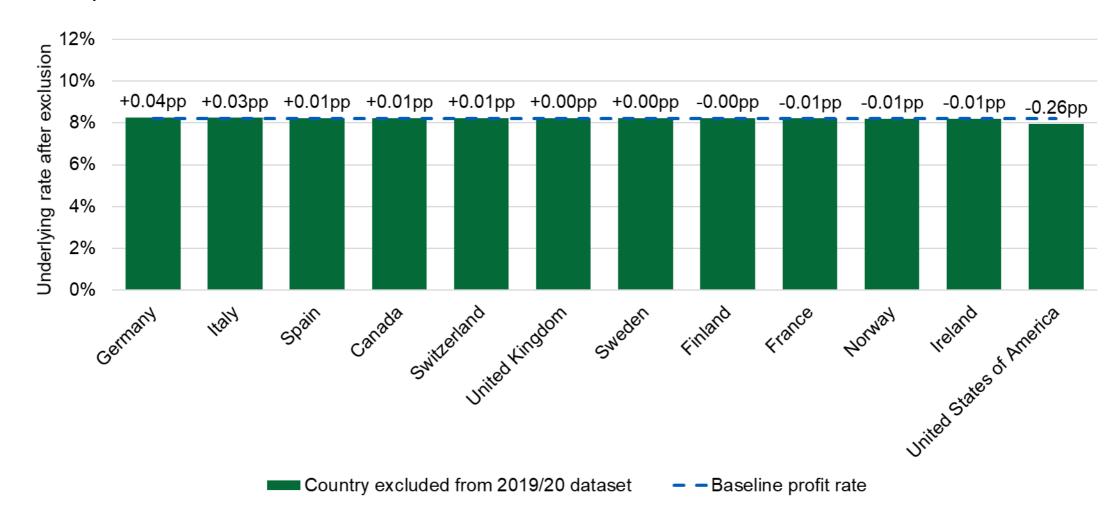
Source: Orbis, SSRO calculations





Sensitivity to the exclusion of a particular country

This chart shows what the baseline profit rate calculation would have been had a particular country been excluded from the analysis of the 2020/21 underlying rate. The figures shown are the differences to the actual baseline profit rate recommendation.



Notes: Only countries with > 5 number of companies are shown.

Source: Orbis, SSRO calculations