Appendix A: Further evidence

Estimated size of the market

A.1 Below we set out our estimate of the size of the market for public road and railway infrastructure in the UK, based on 2023/24 forecast or outturn expenditure by different public authorities. Total annual expenditure across the UK amounted to around £19 billion (excluding High Speed 2 (HS2)), with public road and railway accounting for about 54% and 46% of the share respectively. It is more difficult to gauge the respective share of project types (enhancement, renewals and maintenance), as definitions can vary, but in the case of National Highways and Network Rail, enhancements accounted for around 55% and 27% of annual spend respectively.

Table A.1: Expenditure on public road and railway infrastructure, 2023/24

Market	*Nation*	*Public authority*	*Category*	*£ million*	*Note*
Road	England	National Highways†	Enhancements	1,780	Average across 2020/21 to 2024/25.
			Renewals	990	Average across 2020/21 to 2024/25.
			Maintenance	489	Average across 2020/21 to 2024/25.
		Local authorities‡	Renewals	3,000	
			Maintenance	1,800	
	Scotland	Transport Scotland§	Capital	594	
			Renewals / Maintenance	358	
		Local authorities§	Capital	422	
			Renewals / Maintenance	251	
	Wales	The Welsh Government¶	Enhancements / Renewals	190	Budget forecast
		Local authorities ⅄	Construction	4	
			Structural maintenance	50	
			Routine maintenance	67	
	Northern Ireland	Department for Infrastructure#	Enhancements	74	
			Capital	98	
			Renewals / Maintenance	120	
Total				**10,287**	
Railway	Great Britain	Network Rail~	Enhancements	2,264	
			Renewals	3,940	
			Maintenance	2,282	
	England	HS2*	Enhancements	1,176	Net expenditure - (1,176 Gross Expenditure).
	Wales	The Welsh Government¶		150	Budget forecast
	Northern Ireland	Translink♦		89	
Total				**9,901**	

Source: CMA analysis

† ORR (2025), Annual Assessment of National Highways' performance: End of the second road period April 2020 to March 2025, p36 and p51.

‡ Stewart, I, Benson, M and Wong, H (2025). Research briefing: Potholes and local road maintenance funding, pp29-30.

§ Transport Scotland (2025), Scottish Transport Statistics 2024, p3-6.

¶ Welsh Government (2021), Infrastructure Finance Plan 2022-23 to 2024-25, pp22-25.
⅄ StatsWales, Roads and transport revenue outturn expenditure, by authority (£ thousand), accessed on 30/10/2025.
Northern Ireland Road Network and Condition Statistics 2023-24
~ ORR (2024), Annual efficiency and finance assessment of Network Rail 2024, p68.
* HS2 (2024), Annual Reports and Accounts 2023 – 2024, p77.
♦ Northern Ireland Railways Company Limited (2024), Regulatory Financial Statements, p12.

Supply side analysis

A.2 On the supply side, we would expect the market to work as well as possible when there is effective competition such that businesses (large or small, incumbent or challenger) are free to compete fairly and are able to scale up their business effectively where they have a compelling offer, and so have strong incentives to invest in their offer.

A.3 We have investigated how well the market works so far through calls and RFI responses from public authorities and Tier 1 and 2 firms, including data provided by some public authorities. In this section of the appendix, we set out our analysis of:

(a) operating margins;

(b) barriers to entry, including views from stakeholders on forms of barriers to entry and expansion;

(c) shares of supply;

(d) bidding analysis; and

(e) supply chain structure, including competition between subcontractors, the impact of subcontracting and drivers for the use of subcontracting.

Operating margins

A.4 When considering whether there are competition problems in a market, the presence of high profit levels may be an indicator that this is the case. To understand profitability in this market, we have analysed data provided by Tier 1 and 2 firms on their revenues and operating margins arising from road and rail enhancement and maintenance projects.[1]

A.5 We note that the firms' operating margins may be particularly influenced by three factors:

(a) how revenues and fixed costs have been allocated to road and rail enhancement and maintenance projects;

[1] We asked the firms to provide their operating margins before interest and tax.

(b) costs not being 'matched' (recorded) in the same period as the revenues that they relate to; and

(c) some firms appointing subcontractors to deliver a significant proportion of the project work on their behalf, potentially resulting in the firms' operating margin being smaller than if they had carried out the work themselves.

A.6 We note that operating margin analysis may not provide a good indication of firms' profitability or the returns available from participating in the market. We have mitigated the potential impact of the limitations above on our analysis by:

(d) calculating firms' revenues and operating margins on an annual basis;

(e) placing less weight on comparisons between firms' operating margins than we have on how their revenues have changed over time; and

(f) analysing operating margins for Tier 1 and 2 firms.

A.7 Our analysis of revenues generated by 10 Tier 1 firms over the period from 2021 to 2024[2] shows that in aggregate, the Tier 1 firms had broadly stable revenues and each of the Tier 1 firms' annual operating margins stayed within a range of around 0% to 8%.

A.8 We have also analysed data from five Tier 2 firms, which indicates that they generated annual operating margins of 1% in the period from 2015 to 2024, rising from 0% in 2015 to 2.5% in 2024. For both Tier 1 and Tier 2 firms, these margins are not in a range that we would typically consider to be 'large'. We note that the level of margins is not in and of itself sufficient to be able to conclude on the strength of competition, which we explore further in the sections that follow.

Barriers to entry and expansion

A.9 Barriers are factors that prevent or otherwise impair a firm's entry or expansion in a market. Such barriers can give incumbents and/or larger firms an advantage and reduce competition in a market. It is also possible that they impede the ability and incentive to innovate, and thereby reduce the application of new ideas that improve efficiency or enhance quality.

A.10 In the civil engineering market, there are barriers to entry and expansion that we might characterise as arising as a natural consequence of the nature of the activity, such as the costs of employing staff with the necessary skills, or the

[2] Several firms told us that they were unable to provide financial data for each of the most recent 10 years. Therefore, our analysis of Tier 1 firms data in aggregate is limited to the period from 2021 to 2024 inclusive, which is the longest period with full data coverage.

upfront costs of materials and equipment. Given the upfront investment required, the market is also likely to exhibit economies of scale.

A.11 In addition, there may be practices in the market which disproportionately affect small or entrant firms more than others, which we discuss elsewhere:

(a) How public authorities undertake procurement could either directly or indirectly favour large firms or those with whom they have existing relationships. We have considered this in procurement section.

(b) Regulatory requirements may be more difficult to navigate for smaller businesses or those less familiar with how the requirements work. We consider this in drivers section.

Forms of barriers to entry and expansion

A.12 In order to explore the main barriers to entry and expansion in the civil engineering market, we gathered information via request for information (RFI) responses from Tier 1 and Tier 2 civil engineering firms. We asked firms to rank different factors according to whether they believe them to be a significant barrier, a moderate barrier or not a barrier at all. We set out in the interim report at high level the key barriers to entry and expansion which these firms identified.

A.13 It is important to note that the responses also indicated that other potential barriers are not impacting on how the market works. For example, with respect to technical advantages and intellectual property rights, most civil engineering firms that responded said this is not a barrier.[3] Skanska told us that it is not a barrier as knowledge is shared across the industry in various ways, including via customer led knowledge sharing.[4] Another Tier 1 firm, Kier, said it is not a barrier as IP tools do not affect the overall project.[5] Our findings are largely consistent with the existing literature on the infrastructure sector, which frequently reference barriers created by procurement processes, capital constraints, economies of scale as well as planning and regulatory processes.[6]

A.14 We now discuss three of the key barriers to entry and expansion that we identified through our analysis: costs to enter the market; economies of scale and scope; and limited access to inputs.

[3] Responses to the CMA's information requests [✂].
[4] Skanska's response to the CMA's information request [✂].
[5] Kier's response to the CMA's information request [✂].
[6] See, for example, BCG (2024), Improving Infrastructure Delivery in the UK.

Costs involved to enter the market

A.15 Firms entering the civil engineering market for public road and rail unavoidably incur costs, including the cost of putting a production process in place. Therefore, we need to consider whether the nature of these costs, including the extent to which they are recoverable (or otherwise 'sunk'), has a strong impact on the ability of suppliers to enter this market.

A.16 11 out of 14 Tier 1 and Tier 2 firms considered costs involved to enter the market as a moderate or significant barrier.[7] Where respondents provided specific examples of activities that incurred high costs, these were accreditation, legal compliance, resources to plan bids and investments in capital.[8] Breedon noted that it can take several years to recover the investment cost in necessary materials or equipment for a job, but the project duration may be shorter and this makes it difficult for new entrants to compete.[9] However, we have also heard evidence that the costs to enter the market are only a moderate barrier, with Network Rail's own analysis indicating that suppliers can avoid exceptional capital investment by renting machinery and equipment.[10]

A.17 Our current view is that there are costs to enter the market, but many of these relate to costs for bidding or meeting regulatory requirements.

Economies of scale and scope

A.18 Economies of scale arise when larger companies achieve a lower cost per unit of output, eg by spreading the fixed costs of specialist plant and equipment over a greater volume of activity. They may form a particular barrier to entry if the size of the civil engineering market for public road and rail infrastructure is small relative to the minimum efficient scale. Similar considerations apply to economies of scope, which arise where producing two (or more) products or services is less costly for a single firm than for two (or more) firms each to produce the products or services separately.

A.19 8 out of 13 Tier 1 and Tier 2 suppliers viewed economies of scale as a moderate or significant barrier to entry.[11] For example, Kier commented that in certain cases larger firms may benefit from lower unit costs and broader service offerings, which means they may be more competitive on price, capability and social value obligations.[12] With respect to both economies of scale and economies of scope, a

[7] Responses to the CMA's information requests [✂].
[8] Responses to the CMA's information requests [✂].
[9] Breedon's response to the CMA's information request [✂].
[10] Network Rail's response to the CMA's information request [✂].
[11] Responses to the CMA's information requests [✂].
[12] Kier response to the CMA's information request [✂].

Tier 1 supplier noted major contracts require multi-region, multi-asset delivery, and this favours larger suppliers that can deliver on a national basis.[13]

A.20 Others mentioned that the lack of opportunity to achieve economies of scale can act as a barrier.[14] For example, Skanska reported that it is more difficult to secure supply chain support if work volumes are low,[15] while Morgan Sindall noted that smaller, fragmented work packages, such as local authority renewals, can be unattractive to larger providers and inaccessible to smaller ones.[16] Amco Giffen, who said this was a significant barrier, reported that economies of scale do not feature heavily within the current rail market for renewal and maintenance projects because of factors including disparate procurement, schemes being deferred into the next control period (CP8) and the pause of enhancement work limiting opportunities to build economies of scale.[17]

A.21 Not all firms viewed economies of scale as a barrier. Amey told us that this is not a barrier because different types of firms (in term of size and financial standing) will deliver different sized projects, and consortiums and joint ventures also exist for smaller firms who lack the necessary financial standing to tender for projects by themselves.[18]

A.22 Our current view is that there are economies of scale in the market, but these do not prevent smaller firms competing for at least some types of work. However, it may be more difficult for firms to achieve the necessary scale to serve larger or more complex projects, although some suppliers indicate there are also currently few such projects being brought forward in any case.

Limited access to inputs

A.23 The construction and maintenance of public road and rail infrastructure by civil engineering firms requires access to key inputs, including specialist labour and raw materials (such as cement, concrete and steel). In rail, there are some significant input-related barriers due to specialist requirements for skilled labour and machinery.[19] A Tier 1 firm told us that major enhancement programmes in the rail market can also create shortages of key resources.[20] Morgan Sindall said that a lack of pipeline visibility in road and rail programmes makes it more difficult to invest in and manage resource and material requirements.[21] BAM Nuttall also said long term visibility, clarity and confidence in future pipeline enable Tier 1

[13] Response to the CMA's information request [✂].
[14] Responses to the CMA's information requests [✂].
[15] Skanska response to the CMA's information request [✂].
[16] Morgan Sindall's response to the CMA's information request [✂].
[17] Amco Giffen's response to the CMA's information request [✂].
[18] Amey's response to the CMA's information request [✂].
[19] Responses to the CMA's information requests [✂].
[20] Response to the CMA's information request [✂].
[21] Morgan Sindall response to the CMA information request [✂].

organisations to flow this information down through the supply chain ecosystem to enable better coordination of resource and material requirements.[22]

A.24 However, multiple Tier 1 and Tier 2 firms do not consider access to sources of supply as a significant barrier, particularly for public road projects.[23] Two Tier 1 firms said suppliers were widely accessible due to a well-established network of suppliers, one referring to the English market and the other to the UK market.[24] There was more consensus around regional variation in road and rail. Multiple Tier 1 and Tier 2 firms consider accessing suppliers as a significant barrier in less accessible regions of the UK.[25]

A.25 Our current view is that there is not generally an issue with access to inputs, although this may be a greater barrier for some types of project such as major rail projects or those taking place in less accessible parts of the UK.

Competition between Tier 1 firms

A.26 The presence of some barriers to entry and particularly expansion make it more important that existing firms compete effectively. In Section 2, we described how clients tend to have a direct commercial relationship with Tier 1 suppliers, who are often larger businesses with a national presence. We consider how well competition appears to be working at this level in the supply chain, before considering the wider supply chain structure.

A.27 We consider two forms of data in assessing competition between Tier 1 firms: shares of supply and bidding data.

Shares of supply

A.28 We have estimated the shares of supply for Tier 1 civil engineering firms using a dataset of road and rail infrastructure contracts sourced from Barbour ABI.[26] For Northern Ireland, we relied on data provided by the Department for Infrastructure (Northern Ireland) in response to our RFI, as the Barbour ANI coverage was more limited for this nation. Tables A.1 - A.5 below present our supply share estimates for public road and rail contracts awarded by major public authorities across the four UK nations. We begin analysis with Network Rail and National Highways before moving on to Transport Scotland, the Welsh Government and the Department for Infrastructure (Northern Ireland). We have not assessed whether

[22] BAM Nuttall's response to the CMA information request [✂].
[23] Responses to the CMA's information requests [✂].
[24] Responses to the CMA's information requests [✂].
[25] Responses to the CMA's information requests [✂].
[26] The Barbour ABI data set includes contract values at the point of award for civil engineering projects in road and rail in the UK in the last ten years. It is an aggregation of data that is available in the public domain and, as such, it may not include all expenditure in the market. For example, some work that is allocated to a supplier under a framework agreement may not be captured by our analysis, and any cost overruns that exceed the initial contract value are not captured.

shares would be different if considering different subsets of contracts, such as those awarded for different regions or different types of work, although we have sought to remove or identify suppliers who are serving very specific niches.

A.29 To calculate the estimated supply shares, we aggregated the total value of contracts awarded to each primary/joint venture civil engineering supplier between 2015 and 2025, using both the Barbour ABI dataset and the dataset included in Northern Ireland's Department for Infrastructure (NI DFI) RFI response. We identified the top 10 suppliers receiving public road and railway infrastructure contracts from public authorities across the UK. To account for the irregular nature of procurement activity, we applied a three-year rolling average to each supplier's contract values. Note that the values of contracts were determined through the respective contract budgets. This average was then divided by the corresponding three-year total contract value for each authority. The results of this analysis presented in the following tables have been provided as ranged percentages.

Table A.2: Estimated shares of supply, based on initial contract values, for Network Rail civil engineering rail infrastructure contracts

	3-year rolling average									*Total*
Supplier	*2015 - 2017*	*2016 - 2018*	*2017 - 2019*	*2018 - 2020*	*2019 - 2021*	*2020 - 2022*	*2021 - 2023*	*2022 - 2024*	*2023 - 2025*	*2015 - 2025*
Murphy	[5-10%]	[5-10%]	[5-10%]	[10-20%]	[10-20%]	[10-20%]	[5-10%]	[5-10%]	[10-20%]	[5-10%]
BAM Nuttall	[0-5%]	[5-10%]	[5-10%]	[10-20%]	[10-20%]	[10-20%]	[5-10%]	[5-10%]	[10-20%]	[5-10%]
Story	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[10-20%]	[10-20%]	[20-30%]	[5-10%]
Siemens†	[10-20%]	[10-20%]	[10-20%]	[5-10%]	[0-5%]	[0-5%]	[0-5%]	[5-10%]	[0-5%]	[5-10%]
Skanska	[10-20%]	[10-20%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[5-10%]
Volker Fitzpatrick	[0-5%]	[5-10%]	[5-10%]	[5-10%]	[10-20%]	[5-10%]	[5-10%]	[0-5%]	[0-5%]	[5-10%]
Kier	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[10-20%]	[10-20%]	[10-20%]	[0-5%]	[5-10%]
Amco Giffen	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[5-10%]	[5-10%]	[0-5%]
EWR2 Alliance	[0-5%]	[0-5%]	[0-5%]	[5-10%]	[10-20%]	[5-10%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]
Costain	[0-5%]	[0-5%]	[0-5%]	[5-10%]	[5-10%]	[5-10%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]
Other	[40-50%]	[40-50%]	[50-60%]	[60-70%]	[30-40%]	[30-40%]	[30-40%]	[30-40%]	[30-40%]	[40-50%]

Source: CMA's calculations based on Barbour ABI data
Note: 'other' includes 87 civil engineering firms
† Siemens tends to compete for more specialised contracts, such as those relating to electrification and signalling, although services in the latter are also offered by Tier 1 civil engineering firms.

A.30 Table 3.1 shows that there have been a large number of firms competing for Network Rail contracts, with no supplier achieving more than a 10% contract value share of supply throughout the last 10 years. The 'Other' category (containing 87 other civil engineering firms/joint ventures) remains significant throughout, accounting for roughly 40–50% of the total. The largest supplier in any given year also tends to vary, consistent with typical competitive dynamics in bidding markets.

A.31 We also note that Story appears to have increased its initially modest share of supply to become one of the largest suppliers in the latter years, indicating it is

possible for firms to expand their presence as a supplier for Network Rail contracts.

Table A.3: Estimated shares of supply, based on initial contract values, for National Highways civil engineering public road infrastructure contracts

	3-year rolling average									*Total*
Supplier	*2015 - 2017*	*2016 - 2018*	*2017 - 2019*	*2018 - 2020*	*2019 - 2021*	*2020 - 2022*	*2021 - 2023*	*2022 - 2024*	*2023 - 2025*	*2015 - 2025*
Balfour Beaty	[20-30%]	30-40%]	[30-40%]	[20-30%]	[10-20%]	[10-20%]	[10-20%]	[5-10%]	[0-5%]	[10-20%]
Costain	[10-20%]	[10-20%]	[10-20%]	[20-30%]	[20-30%]	[10-20%]	[5-10%]	[0-5%]	[0-5%]	[10-20%]
Kier	[10-20%]	[10-20%]	[10-20%]	[10-20%]	[5-10%]	[5-10%]	[5-10%]	[10-20%]	[10-20%]	[10-20%]
Skanska	[0-5%]	[0-5%]	[0-5%]	[5-10%]	[5-10%]	[5-10%]	[10-20%]	[20-30%]	[30-40%]	[10-20%]
Morgan Sindall	[0-5%]	[0-5%]	[10-20%]	[5-10%]	[5-10%]	[0-5%]	[5-10%]	[10-20%]	[10-20%]	[5-10%]
Galliford	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[5-10%]	[5-10%]	[5-10%]	[0-5%]	[5-10%]	[5-10%]
Eurovia & Ringway	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[10-20%]	[0-5%]
Colas	[5-10%]	[5-10%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]
Graham	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[5-10%]	[5-10%]	[0-5%]	[0-5%]	[0-5%]
Volker Fitzpatrick	[5-10%]	[5-10%]	[5-10%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]
Other	[20-30%]	[10-20%]	[5-10%]	[10-20%]	[20-30%]	[30-40%]	[20-30%]	[30-40%]	[20-30%]	[20-30%]

Source: CMA's calculations based on Barbour ABI data
Note: 'other' includes 56 civil engineering firms.

A.32 For National Highways contracts, the four largest suppliers accounted for the majority of contract value over the past 10-year period, while smaller firms usually accounted for 5% or less share of supply for any given period. However, there is some evidence to suggest that the share of the largest suppliers has trended downwards in recent years.

Table A.4: Estimated shares of supply, based on initial contract values, for Transport Scotland civil engineering public road and railway infrastructure contracts

	3-year rolling average									*Total*
Supplier	*2015 - 2017*	*2016 - 2018*	*2017 - 2019*	*2018 - 2020*	*2019 - 2021*	*2020 - 2022*	*2021 - 2023*	*2022 - 2024*	*2023 - 2025*	*2015 - 2025*
Balfour Beatty	[5-10%]	[0-5%]	[10-20%]	[10-20%]	[40-50%]	[80-90%]	[90-100%]	[60-70%]	[50-60%]	[30-40%]
Wills Bros	[10-20%]	[0-5%]	[5-10%]	[5-10%]	[10-20%]	[0-5%]	[0-5%]	[0-5%]	[30-40%]	[20-30%]
BAM Nuttall	[0-5%]	[60-70%]	[40-50%]	[50-60%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[10-20%]
Amey	[50-60%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[10-20%]
Farrans	[10-20%]	[10-20%]	[10-20%]	[5-10%]	[10-20%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[5-10%]
Structural Soils	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[30-40%]	[5-10%]	[0-5%]
C Spencer	[0-5%]	[0-5%]	[5-10%]	[5-10%]	[10-20%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]
American Bridge	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]
BEAR Scotland	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[5-10%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]
RJ McLeod	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]

Other	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[5-10%]	[10-20%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]

Source: CMA's calculations based on Barbour ABI data
Note: 'Other' includes 6 civil engineering firms

A.33 For Transport Scotland, there is more volatility in the contract value shares of supply over the period, which in part reflects the lower volume of civil engineering contracts that are being procured compared to National Highways or Network Rail. Contracts are generally won by a mix of established national firms, with occasional large projects won by others. Balfour Beatty holds the largest estimated market share over at over 30%, while three other suppliers each hold around 10-30% of total value over the period, but this is often the result of winning large shares in particular periods rather than sustained shares throughout. Other contract suppliers tend to have relatively low shares of supply, although there are peaks in particular periods, which may reflect the winning of a few particularly large value contracts. The makeup of the largest suppliers also differs considerably, suggesting that the strength of some suppliers' competitive offering may vary across different regions.

Table A.5: Estimated shares of supply, based on initial contract values, for the Welsh Government civil engineering public road and railway infrastructure contracts

	3-year rolling average									*Total*
Supplier	*2015 - 2017*	*2016 - 2018*	*2017 - 2019*	*2018 - 2020*	*2019 - 2021*	*2020 - 2022*	*2021 - 2023*	*2022 - 2024*	*2023 - 2025*	*2015 - 2025*
Future Valleys	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[60-70%]	[70-80%]	[70-80%]	[0-5%]	[0-5%]	[30-40%]
Alun Griffiths	[10-20%]	[20-30%]	[20-30%]	[30-40%]	[20-30%]	[10-20%]	[20-30%]	[0-5%]	[0-5%]	[10-20%]
Costain	[60-70%]	[60-70%]	[20-30%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[10-20%]
Balfour Beatty	[0-5%]	[0-5%]	[40-50%]	[40-50%]	[5-10%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]
Walters	[0-5%]	[5-10%]	[5-10%]	[10-20%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]
D Morgan	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[20-30%]	[0-5%]	[0-5%]
Centregreat	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]
Graham	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[80-90%]	[0-5%]
Amco Giffen	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]
BAM Nuttall	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]
Other	[10-20%]	[0-5%]	[(0-5%]	[5-10%]	[0-5%]	[0-5%]	[0-5%]	[40-50%]	[5-10%]	[0-5%]

Source: CMA's calculations based on Barbour ABI data

A.34 For the Welsh Government, the context and pattern is similar to that for Transport Scotland, with the Future Valleys (a consortium of civil engineering firms and financial investors) picking up major contracts in recent years. There has also been a general slowdown in procurement activity, with no major tenders over the last two years. Overall, the data indicates that major Welsh infrastructure projects have been delivered by a small number of suppliers, although the identity of these suppliers varies in different periods over the 10-year period analysed.

A.35 For Northern Ireland, we have estimated the shares of supply of public authority civil engineering contracts for civil engineering firms using contract data submitted by the Northern Ireland Executive, Department for Infrastructure. As before, we

have calculated 3-year rolling averages to more clearly identify trends in the data. We note the dataset for Northern Ireland does not include rail contract values.

Table A.6: Estimated shares of supply, based on £m initial contract values/budgets, for the Northern Ireland Executive, Department for Infrastructure civil engineering public road infrastructure contracts

	3-year rolling average									*Total*
Supplier	*2015 - 2017*	*2016 - 2018*	*2017 - 2019*	*2018 - 2020*	*2019 - 2021*	*2020 - 2022*	*2021 - 2023*	*2022 - 2024*	*2023 - 2025*	*2015 - 2025*
John McQuillan	[70-80%]	[50-60%]	[50-60%]	[0-5%]	[0-5%]	[5-10%]	[5-10%]	[10-20%]	[40-50%]	[30-40%]
FP McCann	[0-5%]	[0-5%]	[0-5%]	[10-20%]	[0-5%]	[50-60%]	[40-50%]	[30-40%]	[0-5%]	[20-30%]
White-mountain Quarries	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[20-30%]	[20-30%]	[30-40%]	[30-40%]	[10-20%]
Graham	[0-5%]	[20-30%]	[20-30%]	[50-60%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[5-10%]
Gibsons	[20-30%]	[10-20%]	[10-20%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[5-10%]
Patrick Keenan	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[10-20%]	[10-20%]	[5-10%]	[0-5%]	[0-5%]
Northstone	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[10-20%]	[5-10%]	[5-10%]	[0-5%]	[0-5%]
Charles Brand	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[10-20%]	[0-5%]
Highway Barrier Solutions	[0-5%]	[0-5%]	[0-5%]	[5-10%]	[20-30%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]
Other	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]	[0-5%]

Source: CMA's calculations based on public authority's contract data
Note: 'other' includes 4 civil engineering firms including Joint Ventures.

A.36 Northern Ireland has the traits of a distinct geographical market, with many local suppliers that are less active in other regions of the UK. There have been approximately four large suppliers, who have delivered the majority of contracts over the 10-year period analysed for Northern Ireland road projects, with reasonable year on year churn between them in line with the outcomes of tenders.

Bidding analysis

A.37 Studies suggest that procurement processes that promote competition between multiple bidders can lead to better outcomes, with on average each additional bidder for a public contract lowering the cost of that contract by 2.5%.[27] We have therefore sought to understand the level of bidding which occurs for different types of contracts across public authorities.

A.38 We note that bidding data can only provide an indication of whether there is competition for different contracts, rather than allowing us to interrogate the competitive dynamics in play for the different awards. For example, we note that construction markets can be prone to anti-competitive behaviour, with a number of CMA cases taking action against market sharing or bid rigging over the last few

[27] Angeles L and Milne RG, (2016), Competitive provision of public services: cost savings over successive rounds of tendering, Applied Economic Letters, vol. 23, no. 9, pp627–32; Milne RG and Wright RE (2004), Competition and costs: evidence from competitive tendering in the Scottish National Health Service, Scottish Journal of Political Economy, vol. 51, no. 1, pp1–23.

years (although not all in relation to civil engineering specifically).[28] We have not interrogated the underlying bids or firm strategies for any of the contracts awarded in the bidding data, and so we do not have evidence that there was anti-competitive behaviour in any of these awards, or conversely whether there was strong competition between the bidders. Having a sufficient number of bidders is a necessary but not sufficient condition to drive competition, and it is this which the bidding data allows us to understand.

A.39 Some public authorities have expressed concerns about invitations to tender attracting only a small number of bidders, ie low 'bid rates'.[29]

(a) National Highways told us that they often experience low bid rates, particularly for large-scale complex contracts and bundled contracts.[30]

(b) Transport Scotland told us there is less competition in rail due to work being of an inherently higher risk level.[31]

(c) Network Rail told us there is a limited pool of suppliers in niche product markets, such as electrification and geotechnical engineering.[32] It also told us less well-connected regions in Scotland and North Wales attract less bidding interest due to less flexibility and mobility in the supply chain. Network Rail uses broader regional frameworks which cover work in remote areas to incentivise suppliers.[33]

A.40 However, the Northern Ireland Department for Infrastructure told us that within the road market it now experiences healthy bid participation rates.[34] It noted it tends to contract directly with suppliers who might be considered as Tier 2 civil engineering firms in Great Britain.[35] The Welsh Government also told us, on a recent tender, they had a positive response from the market – receiving 9 bids from a mix of local, national and international firms.[36]

A.41 In the below tables (Tables A.6 - a.8), we set out our bidding analysis for public road and railway contracts utilising data submitted by public authorities that responded to our RFI. The analysis covers major contracts that public authorities procured for the financial years from 2015 through to 2025. Bids submitted under a joint venture or partnership model were treated as a single bidder.

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[28] See for example Supply of construction services - GOV.UK, Supply of precast concrete drainage products: civil investigation - GOV.UK and Supply of groundworks products to the construction industry - GOV.UK.
[29] Responses to the CMA's information requests [✂].
[30] National Highways' response to the CMA's information request [✂].
[31] Transport Scotland's response to the CMA's information request [✂].
[32] Network Rail's response to the CMA's information request [✂].
[33] Network Rail Scotland's submission to the CMA [✂].
[34] The Northern Ireland Executive's response to the CMA's information request [✂].
[35] The Northern Ireland Executive's response to the CMA's information request [✂].
[36] Note of meeting with the Welsh Government [✂].

Table A.7: Transport Scotland public road contract overview, 2015-2025

	Project Type				
	Enhancement	Improvement	Maintenance	Renewal	All Contracts
Number of Contracts	10	1	4	5	20
Avg. no. of Bidders	3.3	6.0	2.0	3.0	3.1
Bidding Process: Open	10	0	0	5	15
Bidding Process: Restricted	0	1	4	0	5
Avg. Contract duration (years)	4.7	4.0	4.0	9.6	5.8

Source: CMA's calculations based on public authority's contract data.

Table A.8: Northern Ireland, Department for Infrastructure public road contracts overview, 2015-2025

	Type of Project				
	Enhancement	*Improvement*	*Maintenance*	*New Work*	*All Contracts*
Number of Contracts	7	22	53	10	92
Of which the Bidding Process was Open:	7	22	53	10	92
Avg. no. of bidders	6.6	5.5	5.4	6.7	5.6
Avg. Contract duration (years)	4.3	3.3	3.4	2.4	3.4

Source: CMA's calculations based on public authority contract data.

Table A.9: The Welsh Government public road contract overview, 2017-2025

	Project Type		
	Enhancement	Renewal Work	All Contracts
Number of Contracts	6	1	7
Avg. no. of Bidders	3.8	-	3.8
Bidding Process: Two Stage Tender	5	1	6
Bidding Process: Competitive Dialogue	1	0	1
Avg. Contract duration (years)	2.9	3.0	2.9

Source: CMA's calculations based on public authority contract data.

A.42 We did not receive data from National Highways and Network Rail in sufficient time to incorporate into our assessment at this stage. Given the absence of data from National Highways and Network Rail, we are not yet able to form firm conclusions based on the analysis to date. However, the above analysis provides us with some more insight on bidding rates and competition:

(a) The average number of bidders the different public authorities receive is generally between three and five.

(b) In terms of the type of project, we note Transport Scotland's enhancement schemes typically received the least number of bids. This could reflect the more complex nature of such projects, and the smaller set of eligible

bidders.[37] However, we would expect there is more opportunity for suppliers to differentiate their offer, in terms of price and quality, for these more bespoke projects, so lower bid rates could be having an impact on subsequent outcomes.

(c) We have yet to identify any clear correlation between the number of bidders and contract value / contract duration. On the one hand, lower value and/or shorter contracts could reduce barriers to bidding (eg as firms bear less risk), but on the other hand they could weaken the incentive to bid as the lower expected returns are increasingly outweighed by the cost of bidding.

A.43 Our analysis of bidding rates, whilst limited to a subset of the market, also indicates there may be scope to increase supplier participation in tenders in certain areas. This is consistent with other evidence we have seen that suggests Tier 1 suppliers are often in a position to choose which contracts they compete for, considering whether an opportunity aligns with their business strategy and whether they possess the appropriate expertise, resources and capacity.

Supply chain structure

A.44 One factor which is cited by some observers as a driver of poor outcomes in the civil engineering market for road and rail projects is the supply chain structure we see in the UK.[38]

A.45 We have explored two mechanisms through which poor outcomes may be driven:

(a) There is insufficient competition between sub-contractors, or competition does not focus on the right parameters, so there is not enough focus on innovation and quality in the supply chain.

(b) Subcontracting in itself drives inefficiencies by introducing a range of additional costs and risk, reducing the ability and incentive for firms to bear the costs of investment, and dividing responsibility for cost and quality control, risk management and other factors, which undermines the ability for suppliers to deliver effectively and efficiently.

[37] CMA analysis of Transport Scotland's response to the CMA's information request [✂].
[38] This proposition is often put forward citing international comparisons with countries with less fragmented structures. However, we are cautious about relying on such comparisons to suggest the UK is an outlier in its fragmentation or that this is the ultimate cause of poorer outcomes. CMA analysis of ONS and Eurostat data of the UK against eight large EU economies suggests that the UK is about average when it comes to the proportion of large firms operating in the market but has an above average proportion of micro sized firms. Moreover, previous studies have found some other countries outperform the UK in terms of some outcomes but this is not always the case, and international peers also face challenges in the efficient delivery of infrastructure costs – which suggests less fragmentation in and of itself is unlikely to be a panacea. We therefore do not place much weight on international comparisons in indicating what the best structure for the UK market may be.

A.46 NIC has highlighted numerous challenges for delivery of projects which arise from the current supply chain structure.[39] In a market that works well we would expect individual firms to arrange their supply chain structures to optimise delivery, which will impact the extent to which they sub-contract, have close collaborations with partner organisations, or self-deliver, depending on relative costs and benefits of different models for different projects or types of work. However, firms respond to signals and actions from public authorities – such as the history of stop-start public investment in the UK, which raises the perceived risk of investing in internal delivery capacity – which can make the degree of subcontracting that is optimal for firms higher than that which would be optimal from the perspective of the market as a whole.

How subcontracting affects the market

Competition between subcontractors

A.47 The CMA has sought to understand how well competition is working amongst subcontractors in this market by gathering views from Tier 1 and Tier 2 firms. We have also procured qualitative market research to gather views from additional Tier 2 and Tier 3 firms to strengthen our findings, which will be reflected in our final report.

A.48 The CMA asked Tier 2 firms to identify the key parameters on which they compete and the strength of competition which they face. The majority of Tier 2 firms we contacted identified price as a key parameter of competition although several other factors were also mentioned including quality, reputation, social value and sustainability credentials. All Tier 2 firms we contacted said they had at least one strong competitor in the market.

A.49 Multiple Tier 1 firms and one Tier 2 firm stated that they typically evaluate three tenders when they subcontract for a project, although most firms were able to identify circumstances where choice of supplier can be more constrained. The most cited reasons for constrained choice were (a) cases where the client mandates the use of a particular subcontractor or has a preferred supply chain and (b) where there are specialist requirements, for example, in terms of skills or equipment.[40] This latter point was cited more frequently in relation to rail than road. Regarding client mandates or preferences, differing reasons were given for why this might occur. Two Tier 1 firms, Murphy and Amey, said a client might mandate the use of a particular subcontractor or have a preferred supply chain due to the nature of the client's product specifications.[41] One Tier 1 firm, Kier, told

[39] NIC (2004) Cost drivers of major infrastructure projects in the UK, p36.
[40] Responses to the CMA's information requests [✂].
[41] Murphy's response to the CMA's information request [✂]; Amey's response to the CMA's information request [✂].

us that in certain circumstances a client might mandate it due to having a pre-selected list of suppliers for certain types of services.[42]

A.50 When selecting subcontractors, most Tier 1 firms we contacted and two Tier 2 firms we contacted, Tarmac and Holcim, said they operate a two-stage selection process that consists of a prequalification or screening stage and a project selection stage.[43] Prequalification is usually determined using standard criteria including accreditations, financial stability, safety, and environmental performance.[44] HIVE told us that this pre-qualification process can create big overheads for SMEs before they subsequently compete for the work.[45]

A.51 At selection stage, most Tier 1 firms we contacted said they make use of competitive selection processes when choosing subcontractors. This was cited as the most common or default selection option by multiple firms with the most stated benefits being cost efficiency.[46] For more complex, high risk or high value contracts, multiple Tier 1 firms said they also use collaborative approaches or alliance arrangements which Skanska said allow for early engagement and innovation, and Kier said may allow for the sharing of specialist skills.[47] We also heard from a sector panel member that these collaborative arrangements help SMEs engage with larger clients and get familiar with their values, expectations and processes.[48] Amey told us that although their standard approach is to use a competitive process to appoint suppliers, they may also directly award a contract to a specific supplier in certain limited circumstances. Murphy also said they may directly award a contract to a specific supplier in certain circumstances.[49]

A.52 There is some evidence that previous relationships play a part in the selection process. A Tier 1 firm stated that they use focused, long-term relationships with a smaller number of trusted delivery partners to best achieve value, safety and programme certainty. Multiple Tier 2 firms mentioned the importance of developing long-term relationships with their subcontractors. Breedon said it generally selects subcontractors from a trusted pool that it has worked with for several years while A E Yates noted it has trusted trading relationships with key suppliers and will select suppliers to tender, in part, based on existing trading relationships.[50]

A.53 Our initial view is that those seeking to procure subcontractors' services have not raised concerns with the level of competition among subcontractors. However, there are some constraints on choice of supplier at times, and as with competition

[42] Kier's response to the CMA's information request [✂].
[43] Tarmac specified that the project selection phase took place by way of tendering. Responses to the CMA's information requests [✂].
[44] Responses to the CMA's information requests [✂].
[45] Note of meeting with HIVE [✂].
[46] Responses to the CMA's information requests [✂].
[47] Skanska response to the CMA's information request [✂]; Kier's response to the CMA's information request [✂].
[48] Note of meeting with the sector panel [✂].
[49] Amey's response to the CMA's information request [✂]; Murphy's response to the CMA's information request [✂].
[50] Responses to the CMA's information requests [✂].

at Tier 1 level, we have not interrogated the strength of competition for any given contract. There is also some evidence that incumbents may be favoured.

The impact of subcontracting on project outcomes

A.54 Drawing on the relevant literature and our initial stakeholder engagement, we have identified several ways that structure of the supply chain in this market could inhibit good market outcomes. These include:

(a) Challenges in coordinating inputs across multiple tiers / subcontractors, and assuring the work, leading to longer delivery timelines and higher costs / prices.

(b) The application of margins by each individual firm at different tiers of the supply chain contributing to higher costs / prices.

(c) Lower economies of scale and scope, as businesses fail to expand, resulting in higher costs / prices.

(d) Difficulties in implementing uniform standards across multiple subcontractors leading to inconsistent quality standards.

A.55 There is some evidence to suggest that additional costs due to subcontracting could be high. Analysis of construction projects by the Institution of Civil Engineers (ICE) found that management costs, overheads and transaction costs could amount to 50% of the final price paid by the client, and that a significant proportion of these are transaction costs incurred at all levels in the supply chain.[51] It stated that these costs could be significantly reduced by streamlining design and project management and through long-term relationships with suppliers that enable them to reduce their overheads. It further stated more efficient management of programmes could reduce overall costs by as much as 20%.[52]

A.56 The majority of national public authorities, as well as Tier 1 and Tier 2 firms, that we have engaged with said that the structure of the supply chain leads to inefficiencies.

A.57 National public authorities listed a range of disadvantages to subcontracting. Network Rail told us including that it creates multiple layers of overheads and profits.[53] The Welsh Government told us it can make it difficult for procuring authorities to get access to Tier 2 and Tier 3 firms, for example to discuss problem solving or innovative solutions.[54] Transport Scotland said the desire for a public authority to work with a single point of contact can create barriers for SMEs

[51] Institution of Civil Engineers, (2017), From Transactions to Enterprises, p14.
[52] Institution of Civil Engineers, (2017), From Transactions to Enterprises, p12.
[53] Network Rail's response to the CMA's information request [✂].
[54] The Welsh Government's response to the CMA's information request [✂].

(including specialist firms) to compete on major contracts.[55] Two public authorities, Network Rail and National Highways, said it can create challenges around coordination across multiple contractors.[56] National Highways said it can create inconsistent standards.[57] National Highways also said that the current fragmentation inhibits investment and larger more integrated players may deliver better outcomes.[58]

A.58 The most common disadvantages of subcontracting cited by Tier 1 and Tier 2 firms were:

(a) Cost increases due to the duplication of overheads[59]

(b) Cost increases due to the application of margins at multiple rather than single points in the supply chain.[60]

(c) Coordination challenges when dealing with multiple layers in the supply chain.[61]

(d) The dilution or misalignment of standards.[62]

A.59 Multiple firms stated a preference to self-deliver where possible, although only two Tier 1 firms, Laing O'Rourke and Murphy, said they self-deliver the majority of their work. [63] Murphy said that self-delivery allows them to keep full control of the programme, delivery and costs.[64] Laing O'Rourke said they deliver 50-70% through their own in-house businesses to ensure programme certainty, mitigation of interface risks and optimised value.[65]

A.60 Multiple Tier 1 firms went on to tell us that they have measures in place to mitigate subcontracting inefficiencies.[66] One Tier 1 firm, Morgan Sindall, told us these include transparent tendering and benchmarking to keep overhead and profit margins within industry norms, target cost contracts with pain/gain mechanisms and detailed cost breakdown requirements.[67] Amco Giffen and Laing O'Rourke told us these include careful selection processes, and Amco Giffen told us these

[55] Transport Scotland's response to the CMA's information request [✂].
[56] Responses to the CMA's information requests [✂].
[57] National Highways' response to the CMA's information request [✂].
[58] National Highways' response to the CMA's information request [✂].
[59] Responses to the CMA's information requests [✂].
[60] Responses to the CMA's information requests [✂].
[61] Responses to the CMA's information requests [✂]; Balfour Beatty's response to the CMA's invitation to comment, question 6.
[62] Responses to the CMA's information requests [✂]; Murphy's response to the CMA's invitation to comment, question 6.
[63] Laing O'Rourke response to the CMA's information request [✂]; Note of meeting with Murphy [✂]; responses to the CMA's information requests [✂].
[64] Murphy's response to the CMA's information request [✂].
[65] Laing O'Rourke's response to the CMA's information request [✂].
[66] Responses to the CMA's information requests [✂].
[67] Morgan Sindall's response to the CMA's information request [✂].

include using repeated delivery models. [68] Another Tier 1 firm told us it includes continuous engagement on site.[69]

A.61 However, it is important to note there are also a number of benefits to subcontracting. National public authorities identified a number of advantages to subcontracting including helping to transfer more risk away from the client and allowing access to skills and resources.[70] They also said it provides opportunities to SMEs and local suppliers and can increase competition amongst subcontractors.[71] Transport Scotland told us it can be efficient for the client to have a single Tier 1 point of contact and National Highways told us that subcontracting is essential to its delivery model.[72]

A.62 Most Tier 1 and Tier 2 firms we contacted told us that there are some advantages to subcontracting. The most commonly cited reasons were:

(a) It allows access to specialist skills, local knowledge or assets that the firm may not have had available in-house.[73]

(b) It allows firms to more flexibly allocate resource to contracts.[74]

(c) It supports competition amongst the subcontracting firms.[75]

A.63 Given there are advantages and disadvantages in subcontracting, and the relative costs and benefits are likely to differ between different projects, we might expect to see more variation than we do in the extent to which subcontracting is used. We therefore need to consider if there are factors which lead to public authorities and firms over-relying on subcontracting rather than choosing the most efficient supply chain structure for their circumstances.

Drivers for the use of subcontracting

A.64 To understand how the current market structure has evolved, the CMA sought views from Tier 1 and Tier 2 firms through RFIs and calls on how they decide between in-house and subcontracted delivery. Reasons to subcontract were closely related to the advantages listed above, as well as reducing or sharing risk and reducing time.[76]

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[68] Laing O'Rourke response to the CMA's information request [✂]; Amco Giffen's response to the CMA's information request [✂].
[69] Response to the CMA's information request [✂].
[70] Responses to the CMA's information requests [✂].
[71] Responses to the CMA's information requests [✂].
[72] Transport Scotland's response to the CMA's information request [✂]; National Highways' response to the CMA's information request [✂].
[73] Note of meeting with the sector panel [✂]; Responses to the CMA's information requests [✂].
[74] Responses to the CMA's information requests [✂]; Note of meeting with [✂]; Mott MacDonald's response to the CMA's invitation to comment, question 6.
[75] Responses to the CMA's information requests [✂]; Notes of meetings with [✂].
[76] Responses to the CMA's information requests [✂].

A.65 Multiple parties have pointed to pipeline visibility as an influence on the level of subcontracting in the market:

(a) Morgan Sindall told us that poor pipeline visibility is part of the reason it uses subcontractors to deliver contracts for railway and public road infrastructure, as engaging the supply chain creates a more flexible and responsive workforce.[77]

(b) Some panel members said that greater certainty of work would encourage more consolidation and in-housing of labour by Tier 1 firms, while another said it would enable a positive business case to be made for greater in-sourcing of labour by Tier 1s.[78]

(c) Another sector panel member also said that more granular pipeline visibility provides valuable time for SMEs to prepare. This is vital in disaggregated procurement to remove barriers and open up opportunities for SMEs.[79]

A.66 The NIC has also reported that the uncertain investment environment without a clear pipeline of contracts has contributed to the current fragmentation.[80] From a series of case studies, BCG identified fragmentation as one of 12 key drivers leading to poorer delivery and efficiency of projects. However, its example of good practice in developing cohesive supply chains focused on building a solid pipeline of future work to enable investment and development of skills in the supply chain with the confidence there would be future long-term work to use them. This indicates that the current supply chain structure may be a symptom of wider issues, rather than the ultimate cause.[81]

A.67 While our evidence base is still incomplete, the above evidence is consistent with the hypothesis that, where the market is overly reliant on subcontracting and fragmentation, this is a reaction by firms to the need to manage the uncertainty over future work banks and potential fallow periods, including those which may arise unexpectedly or at short notice. Greater certainty over future pipelines, and assurance that work will proceed, would encourage firms to invest in capital and skills development to be ready to meet these demands with confidence this investment will pay off.

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[77] Morgan Sindall's response to the CMA's information request [✂].
[78] Note of meeting with the sector panel [✂].
[79] Note of meeting with the sector panel [✂].
[80] National Infrastructure Commission, (2024), Cost Drivers of Major Infrastructure Contracts in the UK (p36)
[81] More specifically, BCG drew on South Korea's nuclear programme, which builds 'fleets' of reactors rather than individual ones. This enables a solid supply chain, development of skills and expertise and private construction firms to invest in capital and skills, knowing there will be long-term work available. Its proposals for improving infrastructure delivery in the UK focused less on supply chain structure in itself and more on collaboration, better client behaviours to reduce risk and setting a bold long-term agenda to improve certainty and consistency. Improving Infrastructure Delivery in the UK | BCG UK.