



Trade Remedies
Authority

Provisional Affirmative Determination and Recommendation of Guarantee

INVESTIGATION No. AD0047

Dumping investigation into Certain Excavators imported into the United
Kingdom from the People's Republic of China

20 December 2024



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Section A: Introduction

1. This provisional affirmative determination (PAD) and recommendation to require a guarantee (Recommendation) is made pursuant to paragraphs 11(3) and 13(3)(a) and 13(8A) of Schedule 4 to the Taxation (Cross-border Trade) Act 2018 (the Act).
2. The PAD has been made based on the evidence before the Trade Remedies Authority (TRA) in accordance with paragraph 11(3) of Schedule 4 to the Act.
3. This report includes:
 - a summary of the facts considered during the investigation to date and an explanation of how the TRA has used the information supplied by interested parties and contributors in reaching its PAD and Recommendation.
 - details of the analysis forming the basis of the PAD and Recommendation.
4. It should be read in conjunction with other public documents available for this case, which are available on the public file at <https://www.trade-remedies.service.gov.uk/public/case/AD0047/>.
5. This investigation covers certain excavators imported into the United Kingdom (UK) from the People's Republic of China (PRC) (the goods concerned). A full description of the goods subject to this PAD and Recommendation can be found in [Section E](#).
6. The period of investigation (POI) is 1 July 2022 to 30 June 2023.
7. To assess injury, the TRA has chosen to examine the period from 1 July 2019 to 30 June 2023 as the injury period.



Section B: Preliminary findings

B1. Preliminary determination

8. Based on the evidence before it, and in accordance with paragraph 11(1) of Schedule 4 to the Act, the TRA has determined, that
 - a) the relevant goods have been or are being dumped in the UK;
 - b) the dumping of the relevant goods has caused or is causing injury to a UK industry in those goods.
9. As a result, the TRA has made a PAD in accordance with paragraph 11(3) of Schedule 4 to the Act.

B2. Recommended guarantee

10. In line with paragraph 13(3) of Schedule 4 to the Act, the TRA recommends to the Secretary of State for Business and Trade (the Secretary of State) that all importers of the relevant goods should be required to give a guarantee in respect of any additional amount of import duty that would have been applicable, or potentially applicable, to the relevant goods if an anti-dumping amount had been applied to the relevant goods based on the PAD (an estimated anti-dumping amount).
11. This means that the importer who would be liable for the duty must provide a guarantee that they are able to pay the estimated anti-dumping amount if it becomes payable.
12. The TRA is satisfied that, in accordance with paragraph 13(4) of Schedule 4 to the Act, the guarantee is necessary to prevent injury being caused during the investigation to a UK industry in the relevant goods (defined in [Section E2](#)).
13. The TRA has determined that the guarantee meets the Economic Interest Test and advises the Secretary of State accordingly.
14. The TRA recommends the estimated anti-dumping amounts stated in Table 1:



Table 1: Estimated anti-dumping amounts

	Dumping margin (%)
Sampled exporter/producer	
Liugong Group	35.32%
Sany Group	56.77%
Co-operating exporter/producer	
XCMG Group	44.33%
Sunward	44.33%
All other overseas exporters/producers	
Residual dumping margin	64.17%

Please see [Section D2.1](#) for a further description of the relevant parties.

15. In accordance with paragraph 14(1) of Schedule 4 to the Act, the TRA recommends the guarantee take the form of either a bank guarantee, a bond or cash. HM Revenue and Customs (HMRC) will administer the guarantee.
16. The TRA recommends that the requirement to give a guarantee ends six months from the day after the date of the publication of the Taxation Notice published under paragraph 15(5) of Schedule 4 to the Act, or when the definitive remedy is implemented, whichever is sooner.



Section C: Next steps

17. The purpose of publishing this report is to explain to interested parties and contributors how the decisions to make a PAD and recommend a guarantee were reached and allow these parties to make submissions in response to the preliminary findings; these include:
 - a) the goods have been or are being dumped in the UK,
 - b) the dumping of the goods has caused or is causing injury to UK industry in the relevant goods,
 - c) how the estimated anti-dumping amounts have been calculated,
 - d) the basis for the TRA's provisional determination of a particular market situation in the exporting country which does not permit a proper comparison between the export price and normal value.
18. Interested parties, contributors and any other person who has supplied information to the TRA are invited to make submissions within 14 calendar days of the publication date of this PAD, i.e., before 23:59 hours (BST) on 3 January 2025.
19. The TRA may consider submissions made after this date, but please note that it is not obliged to do so if it would cause an unnecessary delay in the preparation of the final recommendation. Where the TRA rejects information for any reason, it will publish the reasons for rejection in the final determination.
20. Submissions should be sent via the TRA's [Trade Remedies Service](#). Submissions should be accompanied by a non-confidential summary, which will be made available to other parties on the [public file](#).
21. If the TRA's Recommendation is accepted, the Secretary of State will publish a Taxation Notice, in accordance with paragraph 15(5)(b) of Schedule 4 to the Act. This will give effect to the imposition of the guarantee. Affected importers will be notified that they need to provide the guarantee when importing the relevant goods into the UK.
22. Further information on the guarantee can be found in the Taxation Notice <https://www.gov.uk/government/publications/trade-remedies-notice-provisional-anti-dumping-duty-on-certain-excavators-from-china/00025b7b-1ffc-43fa-a852-bbc697bf51b8>.



Section D: Background

D1. Initiation

23. On 21 September 2023, the TRA received an [application](#) from JCB Heavy Products Ltd (JCB) alleging that goods concerned imported into the UK from the PRC have been or are being dumped and that the dumping has caused or is causing injury to the UK industry in the goods.
24. The TRA was satisfied that the application contained evidence of dumping and of resulting injury that was sufficient to justify the initiation of the investigation.
25. An additional application was received from JCB alleging the same excavators imported into the UK from the PRC were in receipt of countervailable subsidies. Please note these claims are being considered separately under case [AS0046](#).
26. The dumping investigation was initiated by the TRA on 15 November 2023, and the [Notice of Initiation](#) was published on that date.
27. The Secretary of State, the foreign government of the PRC and other interested parties and contributors were notified accordingly and invited to register on the [Trade Remedies Service](#) to participate in the investigation.

D2. Conduct of the investigation

D2.1 Participation in the investigation

28. A full list of all parties who registered to the investigation can be seen in table 36 in [Annex A](#).
29. Due to the number of responses received during the questionnaire period, the TRA limited its examination of overseas exporters and importers. The TRA published a notice of its [sampling approach](#) on 11 June 2024.
30. The names of the overseas exporters and importers selected to be within the sample are:



Sany Group	Sany Heavy Machinery Co., Ltd.	Overseas Exporter
	Sany Heavy Machinery Limited	Overseas Exporter
	Sany Heavy Machinery (UK) Ltd	Importer
Liugong Group	Liugong Changzhou Machinery Co., Ltd.	Overseas Exporter
	Liuzhou Liugong Excavator Co., Ltd.	Overseas Exporter
	Guangxi Liugong Machinery Co., Ltd.	Overseas Exporter
	Liugong Machinery Hongkong Co., Limited	Overseas Exporter
	Liugong Machinery (UK) LIMITED	Importer

31. The following overseas exporters and importers will be considered non-sampled and cooperating:

XCMG Group	XCMG Excavator Machinery Co., Ltd	Overseas Exporter
	XCMG European Sales and Services GmbH	Overseas Exporter
	Xuzhou Construction Machinery Group Imp.&Exp. Co., Ltd.	Overseas Exporter
	XCMG UKSS	Importer
Sunward	Sunward Intelligent Equipment Co., Ltd	Overseas Exporter

32. Other interested parties include:

- Ministry of Commerce, PRC
- China Chamber of Commerce for Import and Export of Machinery and Electronic Products (CCCME)

33. Table 33 in [Annex A](#) contains a summary of information received from interested parties.

D3. Verification of data

34. This PAD and Recommendation is based on information available to the TRA at the time of drafting, and the TRA deems this information sufficient to reach a provisional determination and to make a recommendation.
35. Verification to assess the completeness, relevance, and accuracy of the information provided by the sampled parties is ongoing at the time of drafting this PAD and Recommendation. Any additional relevant information obtained will be considered in the SEF and will be included in the TRA's final determination.



Section E: The goods

E1. Goods concerned

36. The TRA refers to the goods it investigates as the 'goods concerned' as per regulation 2 of the Regulations.
37. The [Notice of Initiation](#) describes the goods concerned as:
- Self-propelled track-laying (i.e. tracked) excavators with a 360° revolving superstructure and with an operating weight of 11,000 kg (i.e., 11 tonnes) or more.
38. The goods concerned are imported into the UK under the following UK Global Tariff commodity code 8429 5210 00. This code is only given for information and includes 'mini' excavators under 11 tonnes.

E2. Relevant goods

39. In accordance with paragraph 13(2) of Schedule 4 to the Act, the goods concerned which are the subject of this PAD and Recommendation are referred as the 'relevant goods'.
40. The relevant goods are:
- Self-propelled track-laying (i.e. tracked) excavators with a 360° revolving superstructure and with an operating weight of 11,000 kg (i.e., 11 tonnes) or more but less than 80,000 kg (80 tonnes).

E3. Goods concerned not included in the PAD or the recommendation

41. The TRA has provisionally identified that excavators with operating weights of equal to or greater than 55 tonnes (PCN categories XXL and XXXL) are not currently being manufactured in the UK. While the TRA is satisfied that an excavator with an operating weight between ≥ 30 tonnes and < 55 tonnes (XL) produced in the UK and an excavator with an operating weight of ≥ 55 tonnes and < 80 tonnes (XXL) imported to the UK from the PRC will share physical and commercial characteristics closely resembling one another there are no goods produced in the UK that are like the excavators with an operating weight of above 80 tonnes (XXXL). Further detail can be found in [Section E6](#). As such, the XXXL category will not be included in the PAD or recommendation to the SoS to require a guarantee. XXXL Excavators will



continue to be investigated and definitive remedies may be recommended at the end of the investigation if required.

E4. Goods produced by the UK industry

42. JCB's [application](#) stated that the goods its produces are the same as those described in the definition of goods concerned in the notice of initiation. JCB asserted that there are no differences in the physical and technical characteristics of the excavators imported from the PRC and those it produces in the UK or in their end use.
43. JCB also claimed that the basic operating weight is the primary differentiator between in-scope excavators, and this is what determines the key models in the market.
44. During verification, the TRA identified that JCB offer a range of different weighted excavators on the UK market. This information was supported by the TRA's review of the sales transactions during the POI. These specifically included the 131X model (13 tonne) as well the JS370 model (36 tonne), which represented the respective lower and upper tier of weights of the models produced by JCB in that period. More recently it was noted that the JS370 had been superseded by the 370X model (35-40 tonne) and that JCB had previously produced a JS500 model (46 tonne).
45. The TRA's initial assessment was that the goods produced in the UK are similar to the goods concerned and are classified under the same UK Global Tariff commodity code.
46. However, the TRA has subsequently received comments from both the [Sany Group](#) and [Liugong Group](#) suggesting that the larger excavators produced in the PRC constituted a distinct category from those produced in the UK. It was suggested that the larger excavators (i.e. those that exceeded the weight of the JS370 – 36 tonnes) were substantially different to smaller excavators produced in the UK in terms of essential characteristics and intended usage. It was also highlighted that there were also electric powered excavators being produced in the PRC and these should not be compared against the UK produced excavators which use an internal combustion engine.
47. JCB [subsequently commented](#) that on the UK market the end use of excavators above 50 tonnes and those between 30 and 50 tonnes is identical. It stated that, "There are very few circumstances on the UK market in which a $\geq 50T$ Excavator is the most appropriate machine, and most – if not all – $\geq 50T$ Excavators sold on the UK market will have an operating weight rather close to $\geq 50T$."



48. JCB also alleged it was undisputed that electric and internal combustion engine excavators have the same basic physical characteristics and end uses. It explained that this meant these excavators would directly compete. It also noted that it appeared that none of the electric powered excavators produced by the sampled exporters were available on the relevant EU/UK websites. JCB was therefore of the view that in lieu of any actual sales in the UK, the claims about concerning electric excavators were, "...hypothetical and moot."

E5. Product control numbers

49. The TRA uses product control numbers (PCNs) to define and group different types of products that fall under the goods description in [Section E1](#) and [Section E2](#).
50. PCNs are created on the basis of the main physical characteristics differentiating the types of products, providing that those characteristics have an impact on price.
51. The TRA completed a further assessment of the PCN structure, which was originally set out in the registration and questionnaire documents. The initial structure had been limited to four weight classes with XL covering all excavators above 30 tonnes. On the [11 July 2024](#), the TRA advised it would revise the PCN structure to allow for better analysis of the goods concerned and domestic sales of excavators in the PRC. The revised PCN structure is as follows:

Table 2: PCN structure

Category	Description	Basic Operating Weight
S	Small Excavators	>= 11 tonnes < 15 tonnes
M	Medium Excavators	>=15 tonnes < 20 tonnes
L	Large Excavators	>= 20 tonnes < 30 tonnes
XL	Extra-Large Excavators	>= 30 tonnes < 55 tonnes
XXL	Extra-Extra-Large Excavators	>= 55 tonnes < 80 tonnes
XXXL	Extra-Extra-Extra-Large Excavators	>= 80 tonnes



E6. Like goods assessment

52. As noted above, based on the evidence before it, and in accordance with paragraph 11(1) of Schedule 4 to the Act, the TRA has determined that the dumping of the relevant goods has caused or is causing injury to a UK industry in those goods. The TRA has carried out a like goods assessment as part of the injury assessment to determine which of the goods concerned are like goods, and are causing injury to the UK industry, and in turn can be referred to as the relevant goods in relation to which this PAD is made.
53. In accordance with paragraph 7 of Schedule 4 to the Act, the TRA refers to 'like goods' as those which are like the goods concerned in all respects, or if there are no such goods, have characteristics which closely resemble them and are produced by the UK industry.
54. In assessing whether the goods produced by the UK industry are like the goods concerned in all respects or with characteristics closely resembling them, the TRA has considered:
- physical likeness, including physical characteristics; and,
 - commercial likeness, including competition and distribution channels.
55. It was identified that during the POI, JCB produced and sold excavators in four PCN categories (S, M, L and XL). All of these excavators were powered by internal combustion engines.
56. The TRA has found that when comparing UK produced like goods to the goods concerned, within the same PCN category, there are no fundamental differences in physical or commercial characteristics. The available evidence would suggest the basic components are the same and the manufacturing processes are similar. This includes whether the excavator is electric powered or powered by internal combustion. It was therefore concluded that the UK produced excavators have characteristics which closely resemble the goods concerned within their respective PCN categories.
57. It was also noted, across the submissions the TRA received, there is some competition in the UK market between excavators in the XL and XXL categories. The Sany Group's questionnaires referenced that excavators around 50 tonnes have similar capacities and specifications. It was also explained there would be varying degrees of efficiency that may be exhibited by different weight classes of excavators, which would suggest some level of direct interchangeability between weight classes.



58. The TRA understands that the efficiency of an excavator is determined by multiple factors including, but not limited to, productivity, fuel consumption and maintenance costs.
59. Based on the submitted evidence, and its own independent review, the TRA is satisfied that a XL excavator produced in the UK and a XXL excavator imported to the UK from the PRC will share physical and commercial characteristics closely resembling one another and could therefore be substitutable or interchangeable for one another.
60. The TRA considered the request to either exclude or further differentiate electric-powered excavators in the investigation. However, it was concluded that this was not required. This would be the case irrespective of whether these excavators were sold in the UK (with it being noted that if no sales occurred during the POI, it is unlikely these excavators would have caused any injury to UK industry).
61. It is accepted that an electric powered excavator may not always be an alternative to an internal combustion excavator in various settings, based on battery life and the need to recharge. For example, where the excavator is operating in an area where the infrastructure to recharge the battery does not exist or is sufficiently distant to make it impractical.
62. The TRA also does not dispute there may be further production and/or manufacturing processes that differ between the two different engine types. However, the available evidence would indicate that the UK produced goods, with an internal combustion engine, still has characteristics closely resembling those of an electric powered excavator from the PRC. These excavators are also alike in all other respects including physical characteristics and end use.
63. Further, the TRA considers the circumstances described for an electric powered excavator not being an alternative option in some settings are sufficiently rare that they are not likely to be a deciding factor in purchasing decisions of downstream users. The available information the TRA obtained about electric powered excavators still suggests these are intended to be direct substitute for those powered by internal combustion. It follows such considerations are not dissimilar to a customer making an ordinary purchase of an excavator based on its physical size, intended end use and the level of efficiency required.
64. The TRA therefore considers that electric excavators should not be treated separately. This also means that it will continue to differentiate excavators by weight alone in accordance with the existing PCN structure.
65. The TRA has determined that the goods produced by the UK industry have characteristics closely resembling the relevant goods for PCN's S through to



XXL (inclusive), and therefore constitute “like goods” for the purposes of paragraph 7 of Schedule 4 to the Act.

66. There are no goods produced in the UK that are like the XXXL category of the goods concerned.

E7. PCN analysis

67. The TRA’s calculations of dumping and injury margins are performed at a PCN level to ensure an accurate comparison of the sub-categories of goods.
68. For dumping margin calculations, the TRA compares the PCNs produced and sold by overseas exporters in their domestic market with the matching PCNs produced and exported by these overseas exporters into the UK. This does mean that the TRA has excluded any sales of the goods concerned in the XXXL categories, as applicable, from its PCN analysis.
69. For injury margin calculations, PCN-by-PCN calculations were possible for PCNs that were both sold in the UK as domestically produced like goods and exported from PRC to the UK as the relevant goods. This included sales across four PCN’s (S, M, L and XL). It was determined that the PCNs included in the calculations were sufficiently representative to proceed with this methodology.



Section F: The UK industry and market

F1. UK industry

70. In accordance with paragraph 6(1) of Schedule 4 of the Act, the UK industry is defined as:
- a) all the producers in the UK of like goods, or
 - b) those of them whose collective output of like goods constitutes a major proportion of the total production of those goods in the UK.
71. Information provided in JCB's application and its questionnaire responses, alongside the TRA's own open-source research, were used to identify all UK producers of excavators to meet the description of the goods in the notice of initiation.
72. The TRA identified two UK producers, JCB and Komatsu UK Limited (Komatsu).
73. When this case was initiated on 15 November 2023, all known UK producers were invited to register to the investigation. However, only JCB subsequently completed and returned a registration document.
74. On further review, it was concluded that JCB's production was sufficiently representative (in terms of production share but also scope) in order to consider it having a major proportion of the total production in the UK.
75. The TRA has considered whether it would be practical to attempt to incorporate open-source information about Komatsu's production and potential injury from the relevant goods. However, it was identified that this approach would not ensure the TRA reached a more robust conclusion. It would remain that the TRA would be reliant on information that cannot be fully substantiated or limited to in-scope, UK produced like goods. In solely defining JCB as UK industry this will allow for a transparent methodology to be applied for the TRA's injury assessments based on verifiable data and one where it can still proceed with in a timely manner.
76. The TRA has determined JCB to be the 'UK industry' as it meets the required definition under paragraph 6(1)(b) of Schedule 4 of the Act. It will therefore be treated accordingly for the purposes of this investigation.

F2. UK market

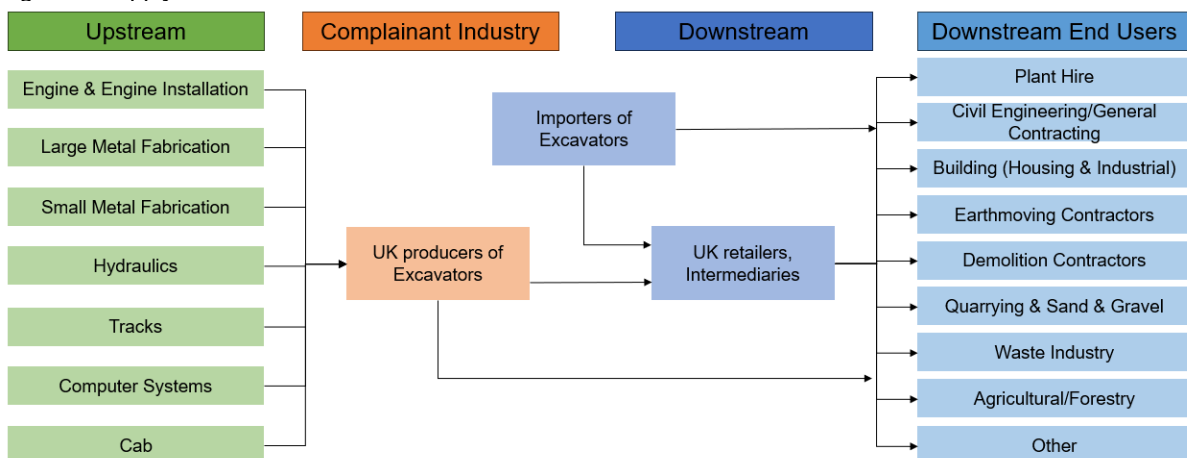
77. The UK market for excavators generally consists of companies active in:



- Housebuilding and groundworks,
- Civil construction and roadbuilding,
- Waste and recycling,
- Demolition,
- Landscaping; or
- Irrigation.

78. Excavator manufacturers typically use a network of dealers to distribute and market their goods to customers.
79. Approximately 181,222 million tons of excavators were sold in the UK during the POI, with UK industry supplying between 15% to 35% of this volume.
80. The TRA considers the market for excavators to be mature, with an established customer base, which is further segmented based on the individual needs (e.g. housebuilding and groundwork versus civil construction). As a mature industry, the TRA would not expect substantial growth in the customer base or the market. However, there are ongoing trends in demand for high quality and new innovations at competitive prices.

Figure 1: Supply chain for excavators in the UK



81. UK industry has explained historically there has been significant competition in the UK market between domestically produced goods and imported excavators, primarily from the EU, Japan and South Korea. It has been indicated that it was in the mid-2010s that PRC excavators slowly started penetrating the UK market.
82. [Section H](#) addresses relevant market trends in detail as part of the TRA's injury assessment.
83. [Section J](#) addresses competition, as well as upstream and downstream industries, in detail as part of the TRA's EIT assessment.



Section G: Provisional findings on dumping

84. In accordance with paragraph 1(1) of Schedule 4 to the Act, goods are 'dumped' in the UK when those goods are imported into the UK and their export price is less than their normal value.
85. The TRA has assessed whether the relevant goods are being dumped in accordance with paragraphs 1(1) and 8(1)(a) of Schedule 4 to the Act.
86. Paragraph 1(2) of Schedule 4 of the Act defines the 'normal value' of goods as:
- the comparable price, in the ordinary course of trade, for like goods when destined for consumption in the exporting foreign country or territory, or
 - such other price or value as may be determined in accordance with provision made by regulations for specified cases where it is not appropriate to use the price in paragraph (a).
87. The dumping margin is the difference between the export price and the normal value of the goods being dumped, described as a percentage of the export price at a level of the cost of insurance and freight (CIF), in accordance with paragraph 2 of Schedule 4 to the Act.
88. The TRA has calculated dumping margins in accordance with paragraph 2 of Schedule 4 to the Act and regulation 6(2) of the Regulations. In the preliminary determination, calculating the dumping margin involved the following stages:
- calculating the normal value of the relevant goods;
 - determining the export price;
 - ensuring a fair comparison between the normal value and the export price;
 - calculating the dumping margins.

G1. Exporting country analysis

89. Based on information provided by interested parties, the TRA established that there were at least eight overseas producers in the PRC of the goods in scope of the investigation during the POI, of which at least four of them had exported the goods concerned into the UK.
90. During the POI, exports of the goods concerned accounted for an estimated export value of £87 million. This represents an export share of 9.7% of the



goods concerned to the UK in comparison with total imports of the goods on the basis of volume. Data sourced from HMRC.

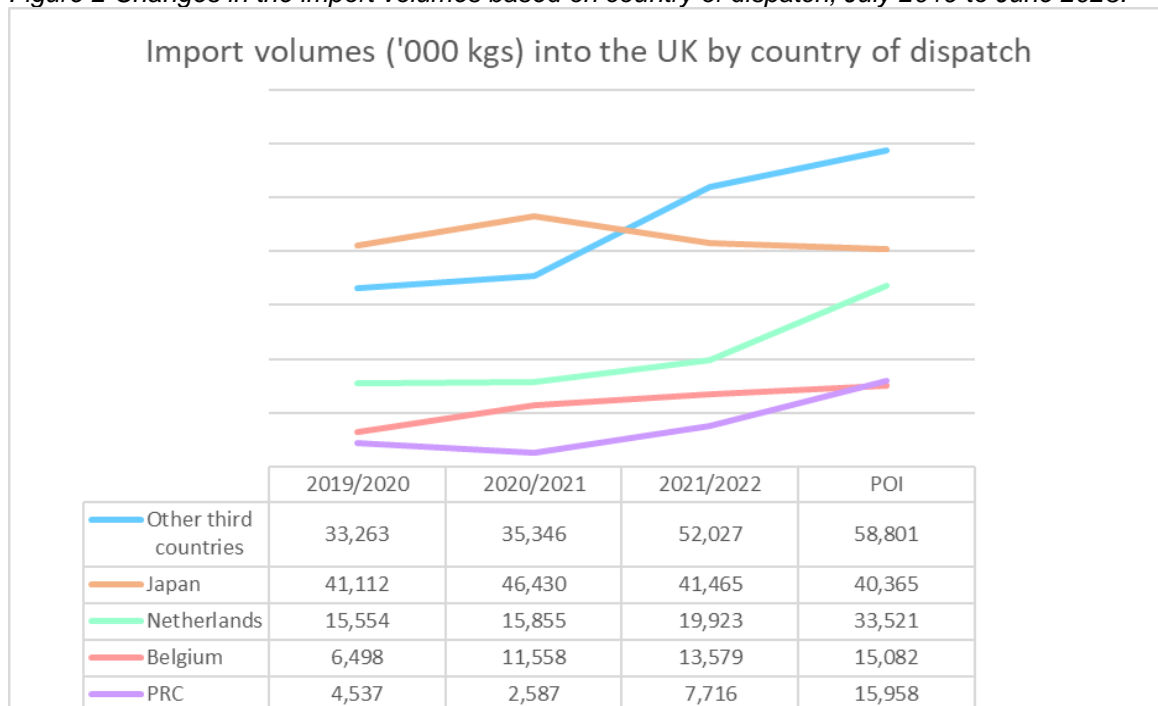
G2. Normal value

91. In accordance with regulation 6(1) of the Regulations, Part 2 of the Regulations applies where the TRA is required to determine whether goods have been or are being dumped into the UK in accordance with paragraph 1 of Schedule 4 to the Act. To make such a determination the TRA must determine the normal value of the goods concerned in accordance with regulation 6(2)(a) of the Regulations.
92. In accordance with regulation 7(1) of the Regulations, the TRA must use the comparable price to determine the normal value unless it is not appropriate to use that price.
93. Regulation 7(2) of the Regulations sets out the circumstances in which it is not appropriate to use the comparable price to determine the normal value of the goods concerned. This includes where, because of a particular market situation or the low volume of sales in the domestic market of the exporting country or territory, such sales do not permit a proper comparison between the like goods destined for consumption in the exporting country or territory and the goods concerned, in accordance with regulation 7(2)(b) of the Regulations.
94. Regulation 7(4) of the Regulations sets out that for the purposes of regulation 7(2)(b) a particular market situation (PMS) includes situations where prices are artificially low, there is significant barter trade, or prices reflect non-commercial factors.
95. JCB made allegations of a PMS in the excavator domestic market in the PRC on the basis that prices reflect non-commercial factors and that costs are distorted and artificially low. The TRA investigated the allegations to determine whether the overseas exporters' prices are artificially low or reflect non-commercial factors and cause a PMS in the domestic excavator market in the PRC, to the extent that they do not permit a proper comparison. The TRA's detailed assessment of each specific allegation can be seen in [Section G2.1](#).
96. Following these assessments, the TRA has provisionally concluded that a PMS exists in the domestic excavator market in the PRC, because prices reflect non-commercial factors as a result of government influence and control. The factors this conclusion has been reached for thus far can be found in [Section G2.1.3](#).



97. To date, the TRA have provisionally determined that prices are artificially low in the steel market and, as steel costs constitute a significant proportion of the costs, have adjusted prices accordingly, as per [Section G2.3](#).
98. The PMS assessment will continue, with further research required to assess the impact of the identified PMS on the costs of production in relation to engine and hydraulic inputs, research and development, land costs, finance costs, corporate income tax, and VAT.
99. The TRA considered whether the PMS identified in the domestic excavator market in the PRC prevents a proper comparison between the like goods in the PRC and the relevant goods (i.e. excavators imported into the UK from the PRC).
100. The TRA determined that the prevailing conditions of competition are different between the UK excavator market (the PRC export market) and the PRC domestic excavator market, because of the PMS which is identified in [Section G2.1.3](#). This prevents a proper comparison due to the domestic prices not being reflective of market conditions, while the export prices are affected by the market conditions within the UK.
101. The TRA compared import and export levels of excavators in each country. In the UK market there is a relatively large amount of competition through imports from third countries, as seen in Figure 2:

Figure 2 Changes in the import volumes based on country of dispatch, July 2019 to June 2023.



Source: HMRC import data



102. The volume of imports from all third countries other than the PRC increased 53% during the injury period. The volume of imports from all third countries taken as a whole was approximately 147,770 tonnes during the POI, which equated to a market share of 81.5%. This indicates that the UK is an open market with a high level of competition coming from imports.
103. According to Global Trade Tracker, when comparing the number of excavators (units) imported with the number of excavators (units) exported, the PRC market exported significantly more than they imported during the POI. This suggests that the PRC is a restricted market with limited competition from imports.
104. Furthermore, the TRA considers that the non-commercial factors identified in [Section G2.1.3](#) are reflected in the cost of steel which has the effect of lowering the PRC producers' costs. This leaves little incentive for companies to import excavators into the PRC as they are unable to compete with these artificially low costs.
105. Competitors within the PRC all benefit from the same level of access to the inputs that reflect non-commercial factors where exporters into the PRC do not benefit from these same inputs. So, although there may be competition between excavator producers in the PRC within their domestic market, the conditions of competition are distorted by the presence of non-commercial factors meaning it is not a level playing field between imported excavators and domestically produced excavators in the PRC. Therefore, the conditions of competition in the PRC and the UK are different.
106. Prices in the PRC are not driven solely by consumer demand, but also by government industrial strategy and economic plans which give different incentives to those operating in the market (as mentioned in [Section G2.1.3](#)).
107. Exporters of excavators from the PRC use their reduced costs to price their exports so as to gain UK market share from competitors who do not benefit from an artificially low-cost base.
108. The following table shows how the imports of excavators have developed throughout the injury period when considering both volume and value. The TRA has compared the imports from all other countries excluding the PRC as well as reviewing the main exporters to the UK.



Table 3: Imports from third countries, July 2019 to June 2023 (excluding PRC)

	2019/2020	2020/2021	2021/2022	POI
Imports from all third countries ('000 kg)	96,427	109,188	126,993	147,770
Imports from all third countries (indexed)	100	113	132	153
Market share of imports from all third countries	85.2%	88.1%	85.1%	81.5%
Market share of imports from all third countries (indexed)	100	103	100	96
Price of imports from all third countries (£/kg)	£4.49	£4.74	£5.25	£5.83
Price of imports from all third countries (indexed)	100	106	117	130
Imports from Japan ('000 kg)	41,112	46,430	41,465	40,365
Imports from Japan (indexed)	100	113	101	98
Market share of imports from Japan	36.3%	37.5%	27.8%	22.3%
Market share of imports from Japan (indexed)	100	103	77	61
Price of imports from Japan (£/kg)	£4.91	£5.09	£5.26	£6.06
Price of imports from Japan (indexed)	100	104	107	124
Imports from Belgium ('000 kg)	6,498	11,558	13,579	15,082
Imports from Belgium (indexed)	100	178	209	232
Market share of imports from Belgium	5.7%	9.3%	9.1%	8.3%
Market share of imports from Belgium (indexed)	100	163	159	145
Price of imports from Belgium (£/kg)	£5.15	£5.17	£5.60	£6.31
Price of imports from Belgium (indexed)	100	100	109	113



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Imports from the Netherlands ('000 kg)	15,554	15,855	19,923	33,521
Imports from the Netherlands (indexed)	100	102	128	216
Market share of imports from the Netherlands	13.7%	12.8%	13.4%	18.5%
Market share of imports from the Netherlands (indexed)	100	93	97	135
Price of imports from the Netherlands (£/kg)	£4.66	£4.67	£5.07	£5.92
Price of imports from the Netherlands (indexed)	100	100	109	117
Imports from other third countries excluding Japan, Belgium and the Netherlands ('000 kg)	33,263	35,346	52,057	58,801
Imports from other third countries excluding Japan, Belgium and the Netherlands (indexed)	100	106	156	177
Market share of imports from other third countries excluding Japan, Belgium and the Netherlands	29.4%	28.5%	34.9%	32.4%
Market share of imports from other third countries excluding Japan, Belgium and the Netherlands (indexed)	100	97	119	110
Price of imports from all other third countries excluding Japan, Belgium and the Netherlands (£/kg)	£3.77	£4.17	£5.21	£5.51
Price of imports from all other third countries excluding Japan, Belgium and the Netherlands (indexed)	100	111	138	146

Source: HMRC import data

109. The table below provides the import volumes (kgs) of all excavators from the PRC throughout the injury period. These import volumes are compared with the total import volumes of excavators into the UK:



Table 4: Import volume ('000 kg) of all excavators from the PRC and total import volumes, July 2019 to June 2023

Imports	2019/2020	2020/2021	2021/2022	POI
Total imports into the UK ('000s kgs)	100,963	111,775	134,709	163,727
Total imports into the UK (indexed)	100	111	133	162
Imports into the UK from PRC ('000 kgs)	4,537	2,587	7,716	15,958
Imports into the UK from PRC (indexed)	100	57	170	352
Imports from PRC as a percentage of total imports	4.5%	2.3%	5.7%	9.7%
Imports from PRC as a percentage of total imports (indexed)	100	52	127	217

Source: HMRC import data

110. Imports of the relevant goods into the UK from the PRC during the Injury Period increased by 252%, however total imports into the UK from all countries (including the PRC) during the same period of time only increased by 62%. Excavators from Japan, the Netherlands and Belgium represented 55% of the total imports of excavators into the UK in 2023 (and historically are the main exporters of excavators into the UK). Imports into the UK during the Injury Period from; Japan decreased by 2%, Belgium increased 132%, and the Netherlands increased 116%. This data indicates that the PRC increased its market share by a greater degree than competing countries.

111. The TRA assessed the changes in the market share by volume (kgs) of the UK industry. The following table and graph show the UK industry's and the PRC's market share:

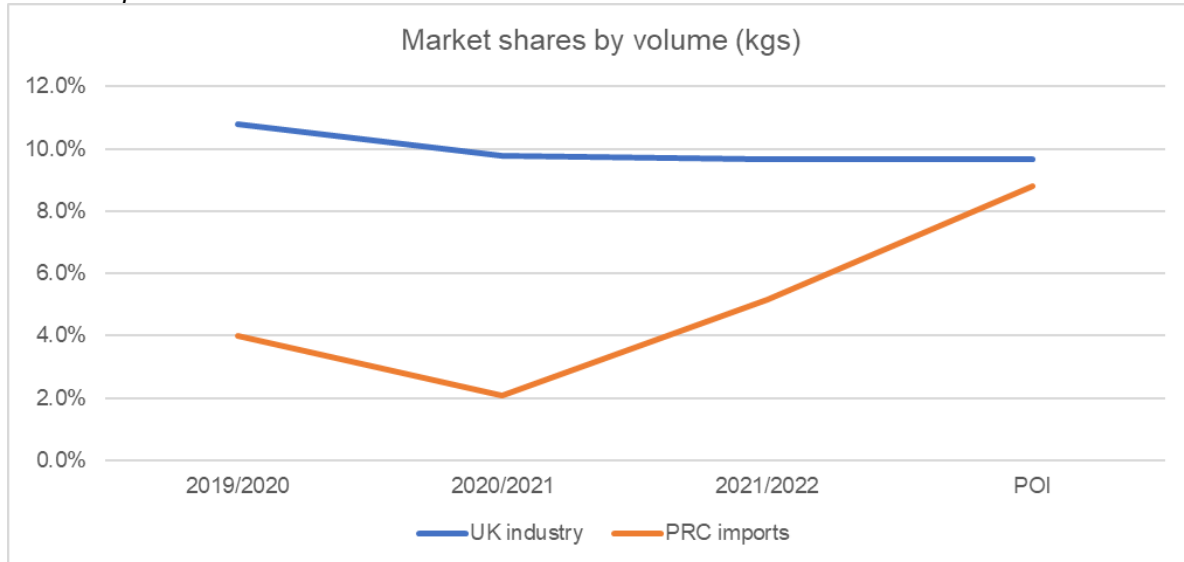
Table 5: Evolution of UK industry's market share, July 2019 to June 2023

Market shares	2019/2020	2020/2021	2021/2022	POI
UK industry domestic market share (kg) (%)	10.8%	9.8%	9.7%	9.7%
UK industry domestic market share (kg) (indexed)	100	91	90	89
Imports from PRC market share in UK (%)	4%	2.1%	5.2%	8.8%
Imports from PRC market share in UK (indexed)	100	52	129	220



Source: Questionnaire response and HMRC

Figure 3: UK industry's market share, July 2019 to June 2023. Source: Questionnaire response and HMRC import data



Source: Questionnaire response and HMRC import data

112. Between 2019 and 2022, the UK industry had an average market share of 10% which peaked at 10.8% in 2019/2020, with an overall decrease over the injury period of 1.1 percentage points. Imports from the PRC had an average share of 5% of the UK market during the injury period which peaked at 8.8% in the POI.
113. The TRA considers that it is unlikely any other country has been able to reduce prices and increase market share in-line with the PRC exporters based on the UK import figures analysed.
114. The TRA concluded that the export price and comparable price are driven by different considerations which means it is not possible to conduct a proper comparison.
115. Where it is not appropriate to use the comparable price the TRA must determine the normal value of the goods in accordance with regulation 8 of the Regulations.
116. The TRA calculated the normal value of the relevant goods by determining the costs of production plus a reasonable amount for administrative selling and general (AS&G) costs and profit in accordance with regulation 8(1)(a) of the Regulations. Full details can be seen in [Section G2.2](#).



G2.1 Particular market situation

G2.1.1 Preliminary PMS assessment

117. The TRA has found no evidence of a trade remedies investigation by any other investigating authority in relation to the like goods.
118. The PRC has been the subject of many trade remedies investigations conducted by other investigating authorities and PMS assessments have been conducted. Recently, the European Commission (EC) published an updated report on [Significant Distortions in the Economy of the PRC for the Purpose of Trade Defence Investigations](#), which documents findings of market distortions in the PRC in multiple areas and is used by the EC when conducting PMS assessments.

G2.1.2 Details of PMS allegation

119. Within the application, JCB has made general points on PMS in the PRC with regard to the following areas:

Table 6: General allegations of PMS made by JCB

General area of alleged distortion	Details of alleged distortion
Policy supervision and guidance from the Chinese Communist Party (CCP)	All aspects of the supply chain is influenced by the Government of China (GoC) and are subject to policy supervision. They allege that this is done through CCP issued guidelines which have an indirect influence over company activities and apply direct intervention in the allocation of resources, for instance through market access controls.
State support affecting manufacturers' costs of production.	The 14th Five-Year Plan for Economic and Social Development (2021-2025) (FYP14) includes market-distorting objectives.

Source: [TRA Investigations - Trade Remedies Service - GOV.UK \(trade-remedies.service.gov.uk\)](https://www.trade-remedies.service.gov.uk)

120. Within the application, JCB also made allegations of a PMS specific to the excavator industry, as seen in Table 7:



Table 7: Allegations of PMS made by JCB

Area of alleged distortion	Details of alleged distortion
The PRC excavator market as a whole	The GoC intervenes heavily in, and thereby distorts, the entire chain of costs and prices in the Chinese excavator market.
Energy cost	JCB states that the GoC sets energy prices, which causes distortions. In addition, state-owned enterprises (SOEs) produce around 50% of all energy in the PRC and 100% of energy transmission. The cost of energy it is therefore argued is distorted in the excavator industry.
Cost of raw materials	The PRC steel industry benefits from export restrictions on key inputs and that there are export taxes on inputs such as pig iron, ferro-alloys, nickel, and scrap of various iron products. This, it is argued, artificially increases domestic supply and reduces prices. In addition, JCB argues that there is evidence of non-commercial factors for key inputs, for example, hydraulics.
Labour cost	JCB suggests that the structure of the labour market in the PRC may affect the bargaining power and rights of employees leading to artificially low wages. JCB also cite the availability of subsidies for employment of those out of work.
Shipping and logistics costs	JCB argues that prices for freight and port services are set by the GoC.
R&D cost	JCB argues that the Ministry of Commerce, People’s Republic of China (MOFCOM) encourages Chinese construction equipment manufacturers to build R&D centres and factories abroad and merge with, or acquire companies in developed markets.
Cost of land or rent	JCB states that all land is owned by the GoC, that land use rights are set by authorities, and that land is allocated at either artificially low prices or free to certain favoured industries.
Finance cost	JCB highlights several advantageous loan and credit lines in their breakdown of subsidies.
Tax and regulatory cost	JCB provides evidence of central tax breaks and tax breaks in relation to land and R&D costs.

Source: [TRA Investigations - Trade Remedies Service - GOV.UK \(trade-remedies.service.gov.uk\)](https://www.trade-remedies.service.gov.uk)



121. The comments in table 6 do not identify distortions specific to excavators but are useful contextual factors in considering the reasonableness of the specific allegations listed in table 7.
122. The aim of this PMS assessment is to assess the validity of the claims made by JCB and determine whether the overseas exporters' prices are artificially low or reflect non-commercial factors and cause a PMS in the domestic market for excavators in the PRC, to the extent that they do not permit a proper comparison.

G2.1.3 Assessing the existence of a PMS

General allegations

123. Each of the general allegations made by JCB will be considered in turn before a conclusion is reached.

Policy supervision and guidance from the Chinese Communist Party

124. JCB alleges that all aspects of the supply chain are influenced by the GoC and are subject to policy supervision. It has suggested that this is done through CCP-issued guidelines which constitutes indirect influence over company activities and apply direct intervention in the allocation of resources, for instance through market access controls.
125. As the sole governing party in the PRC, the CCP [assumes an all-encompassing leadership role](#). The EC found this includes the [ability to exercise control](#) over the PRC's economy via both SOEs and private enterprises.
126. [Article 19 of the Companies Law](#) of the PRC details that in companies, Communist Party organizations will be set up to carry out activities of the Party in accordance with the provisions of the [CCP constitution](#).
127. The Liugong Group, is [entirely state-owned](#) (and, thus, considered to be an SOE). While the Sany Group is not an SOE, the TRA identified that there was at least one leading PRC politician and a senior member of the GoC either holding a director position or being a member of the board.
128. All sampled exporters and the GoC claim that the GoC has no influence or control over organisational decision making.

State support affecting manufacturers' costs of production, in particular through the 14th Five-Year Plan for Economic and Social Development (2021-2025)



129. JCB alleges that the [FYP14](#) includes market-distorting objectives.
130. The aim of FYP14 is to provide general guidance on the development of a wide range of economic policies in 2021-2025. FYP14 includes a [more specific set of guidance](#) for the construction machinery industry.
131. JCB highlighted certain objectives contained within the plan specific to the construction machinery industry such as:
- ‘The process of horizontal and vertical mergers and acquisitions, integration, joint ventures and cooperation will be further accelerated.’
 - ‘Brand building: 1~2 Chinese brand excavator companies have total sales entering the top 5 in the world.’
 - ‘Focus on demand-side incentives’ for construction machinery on the Chinese market.
132. All sampled exporters and the GoC claim that the FYP14 does not create distortions with the costs of production of the relevant goods.

The PRC excavator market as a whole

133. JCB alleges that the GoC intervenes heavily in, and thereby distorts, the entire chain of costs and prices in the excavator market in the PRC.
134. JCB has referenced the [Made in China 2025 \(MIC25\)](#) strategy, a strategy focused on the manufacturing sector, which details objectives to ‘accelerate improvements to product quality’ in the construction machinery sector.
135. It has also been noted that the [FYP14](#) details a plan to, “...implement manufacturing cost and burden reduction actions,” by “...reduce[ing] the production and operating costs of enterprises,” and “...enhance[ing] the rootedness and competitiveness of the manufacturing industry”.
136. The Sany Group and Liugong Group have publicly stated their intentions to work towards the objectives laid out by the GoC.
137. The Sany Group refer to FYP14 and its intentions to, “...unswervingly [implement] the strategies of “digitization, electrification and internationalization,” in its [2021 Corporate Social Responsibility Report](#).
138. The Liugong Group has stated on its website in December 2020 that, “...the company seeks to fully implement its obligations under the 14th Five-Year Plan, its long-term development goals, and its broader vision for the industry”.
139. All sampled exporters and the GoC claim that there are no distortions in the excavator market due to GoC interventions.



General allegations – totality

140. The TRA concluded in a previous investigation; [AD0021 Optical Fibre Cables](#) that a particular market situation exists with regard to government influence and support in the PRC.
141. On balance, the TRA has determined that there is evidence that government influence is present within both SOEs and private organisations, including the sampled exporters. The TRA has found evidence that government influence causes the price of excavators to reflect non-commercial factors. This is evidenced above through; Article 19 of the Companies Law of the PRC, the 14th Five-Year Plan for Economic and Social Development (2021-2025), and the Made in China 2025 (MIC25) strategy. To assess the impact of the GoC influence on costs of production, and determine if adjustments are necessary where these costs are artificially low, specific factors will be discussed in subsequent sections.

Energy cost

142. JCB alleges that there is distortion in the energy market as a result of GoC intervention, which results in distorted energy costs incurred by excavator manufacturers in the PRC.
143. Price controls can take two forms: ‘government-set prices’ or ‘government-guided prices’. Government-set prices are fixed prices set by the competent authorities, while government-guided prices are prices set by business operators within a range of prices set by the competent pricing departments or other related government departments, within which the real price is allowed to fluctuate.
144. The sampled exporters and the GoC submit that there are no government interventions or price distortions present with regard to energy prices.
145. The TRA has reviewed the [Price Law of the PRC](#). Article I of the Price Law states, “This Law is enacted in order to standardize pricing, give play to the role of pricing in rationally allocating resources, stabilize the general level of market price, protect the lawful rights and interests of consumers and managers and promote the sound development of a socialist market economy.”
146. The products and services that are subject to price controls are listed in a [Central Government Pricing Catalogue](#). The list includes “...provincial and above provincial power grid transmission and distribution prices”. The relevant authority is the Department of Pricing, which sits within the National Development and Reform Commission (NDRC).



147. The TRA concluded in previous investigations; [AD0012 Aluminium Extrusions](#) and [AD0021 Optical Fibre Cables](#) that a particular market situation exists in the energy market in the PRC.
148. The TRA has found evidence to suggest that energy price setting exists at a national and local level, which benefits most industries. As such, energy prices reflect non-commercial factors. With regards to the like goods, energy costs tend to represent less than 2% of the key inputs. Therefore, whilst the TRA have concluded that energy prices reflect non-commercial factors, due to the low materiality towards production costs, the TRA will not be investigating this allegation further.

Cost of raw materials

149. JCB has alleged that the steel industry in the PRC, which provides a major input to excavators, and the markets for other key inputs are distorted. It suggests there is evidence of non-commercial factors affecting costs.
150. The allegations relating to the steel industry and the costs of other key inputs will be considered separately.

Cost of raw materials – steel

151. JCB states in its allegation that steel is the main input used in the production of the goods concerned and that the steel industry in the PRC is distorted due to four factors:
- the steel industry is a key part of state interventions outlined in the [Iron and Steel Industry Development Policy](#) and the FYP14;
 - the steel industry is largely owned by the state and key personnel within steel manufacturers in the PRC also hold positions within the CCP;
 - key inputs to the steel industry are provided and controlled by the state given that the China Mineral Resources Group (CMRG), a group buyer of raw materials for the steel industry, is an SOE; and,
 - there are export restrictions in place for the key inputs into the steel industry which artificially influence supply and pricing by increasing domestic supply and reducing domestic pricing.
152. When considering state interventions, it has already been identified that there are various GoC plans and industrial strategies that provide the political basis for programs which support industry in the PRC. Although these support programs are generally phrased in terms of aims and ambitions for the GoC rather than explicit actions, they form the basis for government support in the PRC.



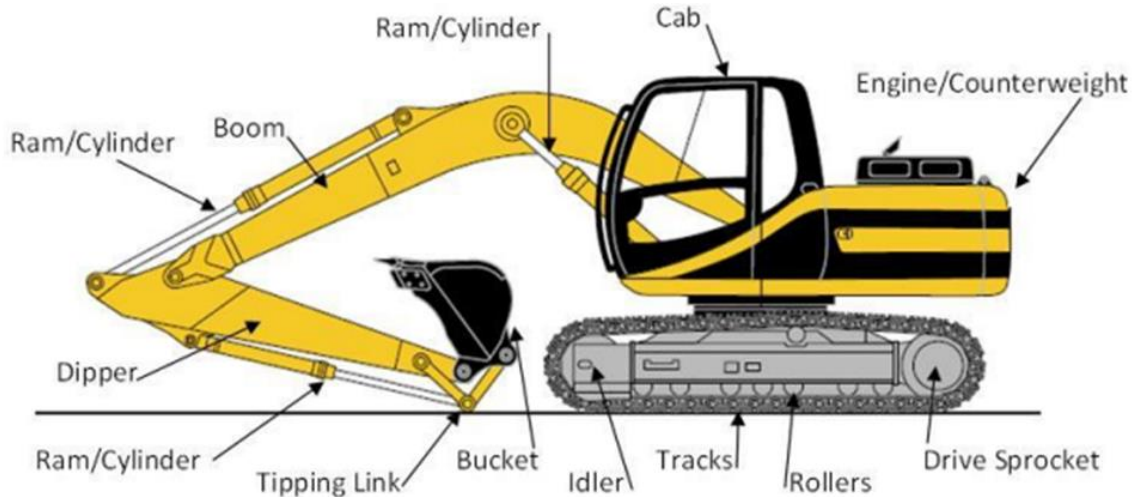
153. Furthermore, and linked to these support programs, there is a [consensus internationally](#) that the steel industry in the PRC is [heavily subsidised](#), though the scale and number of these subsidies is difficult to determine as many of the subsidies may be received at [local government level](#).
154. In terms of ownership, there is evidence that the steel industry in the PRC, and the industries providing steel inputs, is [dominated by SOEs](#).
155. As part of the allegations, JCB points to a previous TRA finding that the 13th Five-Year Plan saw the GoC look to increase SOEs in the steel industry and provide incentives and subsidies to support the industry.
156. A study conducted by [The Research Institute of Economy, Trade and Industry](#) published in 2020, found that "...preferential treatment [subsidies] of these specific SOEs [in the PRC's steel industry] induced them to engage in price cutting behaviour, harming competitiveness in the market".
157. When looking at inputs into the steel industry, there is evidence to suggest that a key reason for establishing the CMRG is to [control prices of key steel inputs](#).
158. The TRA has also found evidence that the GoC tactfully puts measures in place or removes measures to control the steel production. For example, adjusting export tariffs for steel inputs such as pig iron and/or the adjustment of VAT rebates for exports of certain steel products.
159. Overall, in relation to steel, the TRA has determined that there is evidence that steel companies within the PRC receive substantial state support and that prices reflect non-commercial factors. To establish the effect this had on the costs of production, the TRA conducted a price comparison of steel input parts against an international benchmark and concluded that prices were also artificially low. Please see [Section G2.1.4](#).

Cost of raw materials – other key inputs

160. JCB has explained that other inputs to the production of excavators are hydraulics, the cab, the undercarriage, the engine, the tracks, the counterweight, the boom, the dipper and fasteners. These parts are either manufactured by the excavator producer or purchased.
161. The image below (Figure 4) shows where the main components of an excavator are located:



Figure 4: Main components of an excavator



Source: <https://www.lamanvatraining.co.uk/PDF/360%20excavator%20training%20manual.pdf>

162. Further to figure 4, the hydraulics system is located in the rear (near the engine and counterweight), the undercarriage is the collective term for the section underneath the cab/engine/counterweight (consisting of the tracks, rollers, etc), and the fasteners are the nuts and bolts which attach the various individual components together.
163. According to the submissions made by JCB and the sampled exporters, the average percentage of the cost to make for each specific input for the relevant goods varies between 0.34% to 15.7%. The TRA's assessment of the other key inputs is discussed in turn below.

Cost of raw materials – engine

164. Research published by [Nomura](#) in 2010 stated that, "...for hydraulic equipment and engines, most components are sourced from Japanese, European, or US companies". This suggests that engine manufacturers in the PRC were not key to the global market at the time.
165. However, a press release by [the Office of the United States Trade Representative](#) in 2012 stated that "China's subsidies distort trade conditions for auto and auto parts manufacturers in the United States by providing an unfair advantage to China's auto and auto-parts industries". This suggests that the Chinese auto and auto-parts industry, which includes engines, is not determined by free market supply and demand and that prices reflect non-commercial factors.
166. Due to the limited evidence currently available, which itself is also contradictory and not contemporaneous, the TRA is not able to draw any



conclusions regarding potential distortions in the engine market for excavators. It will therefore continue to investigate this claim.

Cost of raw materials – hydraulics

167. As above, research published by Nomura in 2010 stated that, “...for hydraulic equipment and engines, most components are sourced from Japanese, European, or US companies”. This suggests that hydraulics manufacturers in the PRC were not key to the global market at the time.
168. Furthermore, a report by [Research In China](#) states that the PRC is largely dependent on imports for hydraulic components due to a lag in R&D and innovation capabilities compared to global companies such as Bosch Rexroth and Kawasaki Heavy Industries.
169. Due to the limited evidence currently available, which itself is also contradictory and not contemporaneous, the TRA is not able to draw any conclusions regarding potential distortions in the hydraulics market for excavators. It will therefore continue to investigate this claim.

Cost of raw materials – other key inputs

170. Open-source research into the PRC markets for the excavator parts (listed above, other than engines and hydraulics systems) pointed to by JCB in their allegations proved inconclusive due to the lack of available information. However, of these parts, open-source information indicates that the following contain a proportion of steel:
- Undercarriage
 - Reducer
 - Cab
 - Tracks
 - Counterweight
 - Fasteners
 - Boom
 - Dipper
171. As they all contain a proportion of steel as a raw material the TRA therefore consider that the cost of these parts may also be affected by the distortions in the steel market in the PRC.
172. Further analysis will be conducted to determine the origin of these parts and establish the presence or absence of steel produced in the PRC. The findings of this analysis will be included in the SEF.



Cost of raw materials – totality

173. All sampled exporters and the GoC claim that there are no distortions in the cost of raw materials.
174. There is evidence to suggest that the price of steel in the PRC domestic market reflects non-commercial factors. The TRA has compared the price of steel input parts to an international benchmark and concluded that prices were also artificially low. See [Section G2.1.4](#).
175. Evidence around the costs of other major inputs is limited, with the evidence for the engines and hydraulics suggesting that the PRC market for these inputs is partially reliant on imports. Given the evidence that the cab, the undercarriage, the tracks, the counterweight, the boom, the dipper and fasteners contain a proportion of steel as a raw material the TRA therefore consider that the cost of these parts will also be affected by the distortions in the steel market in the PRC. Further research in this area will be completed as part of the SEF.

Labour costs

176. JCB alleges that the structure of the labour market in the PRC may affect the bargaining power and rights of employees leading to artificially low wages. JCB has also cited the availability of subsidies for employment of those out of work. The specifics of these allegations will be considered in turn.

Labour cost – trade unions

177. JCB has stated that workers in the PRC have no possibility to freely choose or establish a trade union in which they want to organise themselves. It says this is because there is only one legally recognized trade union, the ACFTU.
178. The [Trade Union Law](#) of the PRC governs establishment and operation of labour unions. Under the Article 3 of the Trade Union Law it is clear that all workers have the right to organise or join trade unions according to law, and that no organisations or individuals should obstruct or restrict them.
179. However, [Article 33 of the CCP constitution](#) states that unions within non-public sector entities shall be controlled by CCP organisations in order to implement government policy. The constitution itself states that labour unions are to be overseen by CCP organisations, and so would not be independent. There is also no longer an official recognition of the right to strike, which was removed in 1982, according to the ITUC Global Rights Index, which removes a key element of workers collective bargaining power on wages.

Labour cost – hukou system



180. JCB has suggested that the workforce in the PRC is negatively impacted by the hukou household registration system by creating a pool of labour with artificially low wages.
181. The [hukou system](#) is a legal document that records the household population's basic information and is split into rural hukou for those living in towns and villages; and urban hukou for those who live in larger cities. There have been a number of reforms over recent years to the hukou system.
182. The [Centre for Strategic & International Studies](#) states that, "...centrally directed hukou reforms have largely been watered down by local governments and offset by more migration, suggesting that recently announced hukou reforms will have little effect on the millions of rural migrants in major cities."
183. [China Briefing](#) reported in January 2019 on the impact of hukou on the PRC's economy, and noted that, "...since hukou restricts the free mobility of Chinese workers, it strains overall economic growth. These effects are exacerbated because the PRC has a shrinking workforce that peaked in 2011 and has decreased every year since then, leading to double-digit growth in labour costs."

Labour costs – migrant workers

184. JCB argues that employers in the PRC do not have to pay social protection insurance for migrant workers who have no contract of employment. It has explained this would therefore confer a financial advantage to the employer.
185. The TRA identified a [report](#) that in 2017 just over one third of migrant workers in the PRC had a signed labour contract with their employer. However, more [recent research](#) from 2022 indicates this number has increased to just under 50%.
186. The TRA did not identify any evidence that the sampled exporters employ migrant workers without a contract of employment (though, by their nature, workers without employment contracts may be difficult to identify). Further analysis is required to establish if this allegation is relevant to the excavator market in the PRC.

Labour costs – Employment Subsidies

187. JCB alleges that the GoC subsidises employment through schemes to encourage job creation for the purposes of hiring college graduates and young people registered as unemployed.

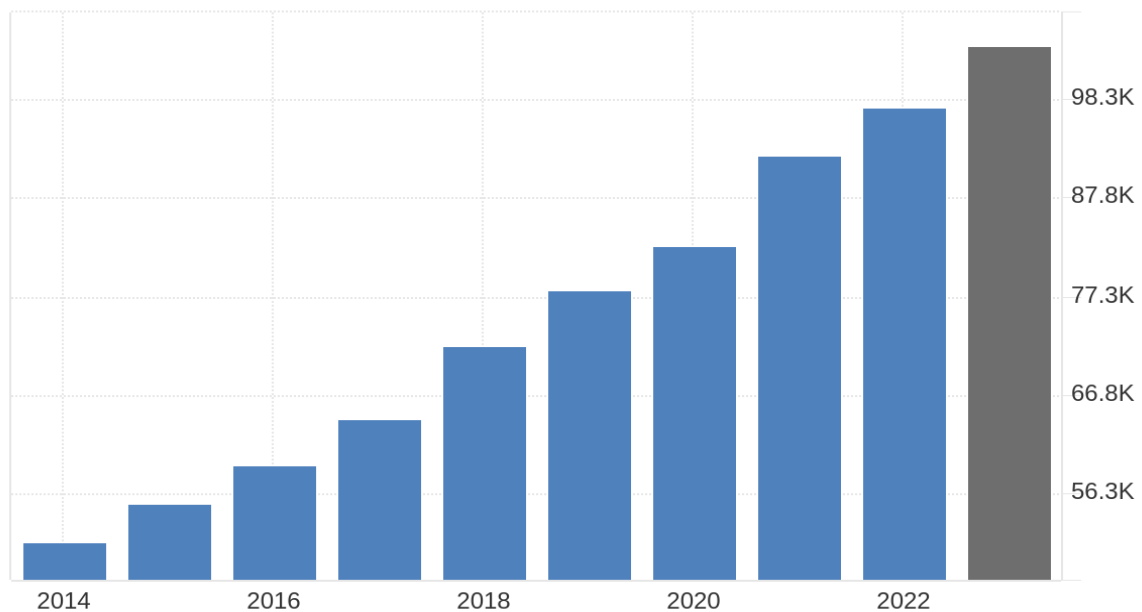


188. [Open-source research](#) indicates that the GoC does offer subsidies to enterprises based on employment, though there is no evidence that these subsidies are specific to the manufacturing sector or the excavator industry.
189. Further analysis is required to establish if this allegation is relevant to the excavator market in the PRC.

Labour costs – combined impact on wages

190. [Recent studies](#) have indicated that average salaries in the PRC are rising with the [Reshoring Institute](#) concluding that the PRC is no longer the low-cost country it once was due to increasing labour rates.
191. These statements are further supported by [reports](#) specifically related to the manufacturing sector in the PRC. These report of the upward trends in wages, as shown in Figure 5, below:

Figure 5: Wages in manufacturing (CNY/Year).



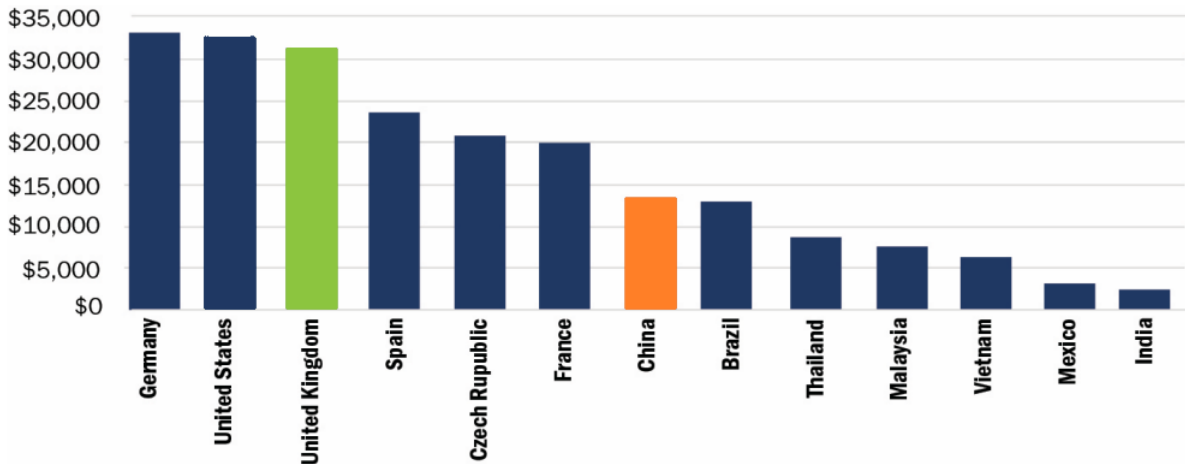
Source: tradingeconomics.com | National Bureau of Statistics of China

192. However, when comparing global labour rates in the year 2022, the salaries of workers in the manufacturing sector in the PRC remain lower than those of many other countries, including the UK. This difference is illustrated in figure 6 below:

Figure 6: Average salaries of production workers / machine operators.



Trade Remedies Authority



Source: Reshoring Institute | Indeed.com, Glassdoor.com, Salaryexplorer.com, Salary.com, Payscale.com

193. The sampled exporters and the GoC submitted that there are no government interventions or price distortions present with regard to labour costs.
194. The TRA concluded in a previous investigation; [AD0021 Optical Fibre Cables](#) that a particular market situation exists in the labour market in the PRC.
195. However, taking all of above elements in combination, the TRA considers that there is sufficient evidence of GoC influence in the labour market, suggesting that prices reflect non-commercial factors and, as a result, labour costs may be artificially low. In addition, the TRA previously concluded in AD0021 – Optical Fibre Cables, that a PMS exists in the labour market due to the Hukou system and its impact on low wages, and laws on trade unions. However, labour costs tend to represent <4% of the overall cost to make for the goods concerned. Therefore, whilst the TRA have concluded that labour costs reflect non-commercial factors, due to the low materiality towards production costs the TRA will not be investigating this allegation further.

Shipping and logistics costs

196. JCB alleges that prices for freight, and port services are set by the GoC.
197. The products and services that are subject to price controls are listed in a [Central Government Pricing Catalogue](#). The list includes “port services” which covers the pricing of “services such as ship entry and exit, berthing and port security”.
198. The TRA has identified [reports](#) that shipping companies from the PRC are in receipt of substantial subsidies from the GoC, with many of these subsidies being difficult to identify and/or quantify.

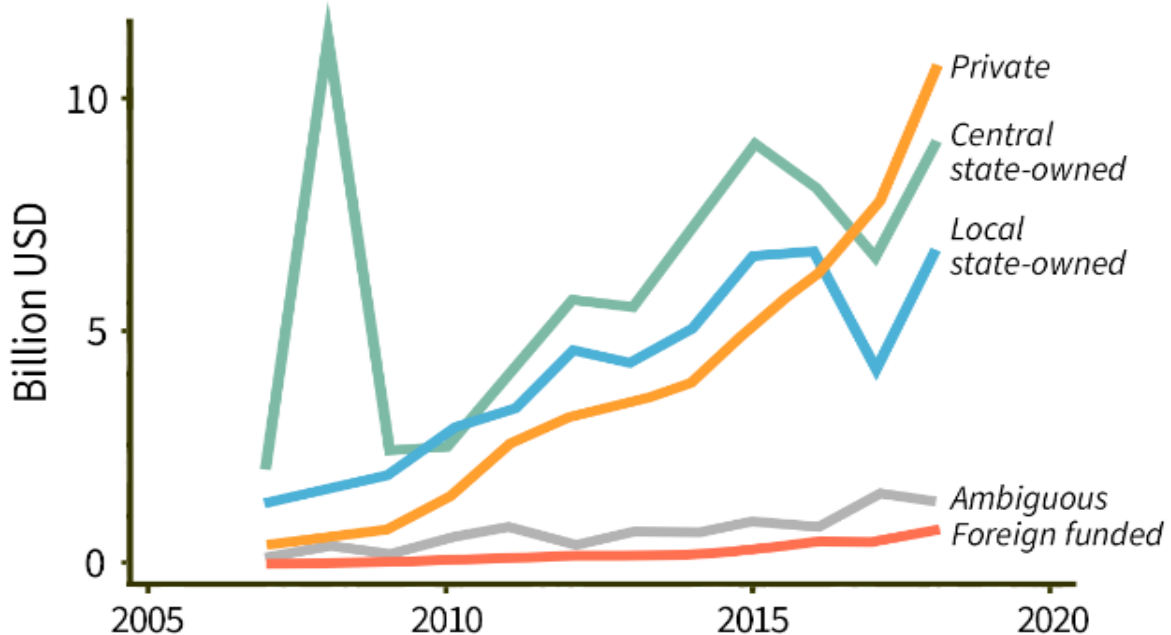


199. The available information would indicate that state support for the shipping industry in the PRC is [multi-faceted](#). [Examples of the benefits](#) provided by the GoC to the shipping industry include, “...financing from state banks, direct subsidies, indirect subsidies, state-backed fundraising, preferential borrowing rates, and other nonmarket advantages from the PRC’s state capitalist system”.
200. The sampled exporters and the GoC have submitted that there are no government interventions or price distortions present with regard to shipping and logistics costs.
201. The TRA has found evidence to suggest that the costs of shipping and logistics reflect non-commercial factors. However, given that shipping and logistics costs will be removed as part of fair comparison adjustments, no further investigation will be required in this area.

Research and development cost

202. JCB alleges that excavator producers in the PRC can benefit from direct funding from MOFCOM in relation to R&D costs.
203. Research conducted by the [Stanford Center](#) on the PRC’s Economy and Institutions suggests that both state-owned and private enterprises benefit from billions of US dollars’ worth of subsidies including those intended for ‘R&D and innovation’. This is further illustrated in Figure 7, below:

Figure 7: GoC subsidy distribution by firm ownership over time.





Source: *Stanford Center on China's Economy and Institutions*

204. In the PRC, listed enterprises are required to indicate the level of subsidisation directly received from the GoC via financial reports.
205. The [2022 annual report](#) for Sany Heavy Equipment International Holdings Company Limited confirmed that certain parts of the Sany Group receive, "...certain [PRC] government incentives relating to the development of our products". These incentives are described as being, "...preferential treatment, incentives and favourable support". This report also refers to "...‘super-deduction of research and development costs’ with regards to income tax and mentions that, "...government grants have been received for the purchase of certain items of property, plant and equipment or finance of research and development projects".
206. JCB has referred to the numerous R&D developments made by the Sany Group and Liugong Group. The TRA was able to identify evidence from open-source research to confirm this is the case, with the Sany Group and Liugong Group opening global R&D centres in [2015](#) and [2022](#) respectively. Both the sampled exporters and JCB report that R&D costs account for between 20-60% of the total AS&G costs.
207. The sampled exporters and the GoC have submitted that there are no government interventions or price distortions present with regard to R&D costs.
208. However, the TRA is satisfied there is sufficient evidence to suggest that GoC influence in R&D results in prices which reflect non-commercial factors. Further analysis is still required to assess the impact on the production costs of excavators.
209. It should be noted that JCB also made an allegation that excavator producers in the PRC may benefit from tax breaks and exemptions due to R&D activities. Some aspects of this mentioned above, for example ‘super deduction rules’ with regards to R&D expenses, will be assessed further in the tax and regulatory cost section, below.

Cost of land or rent

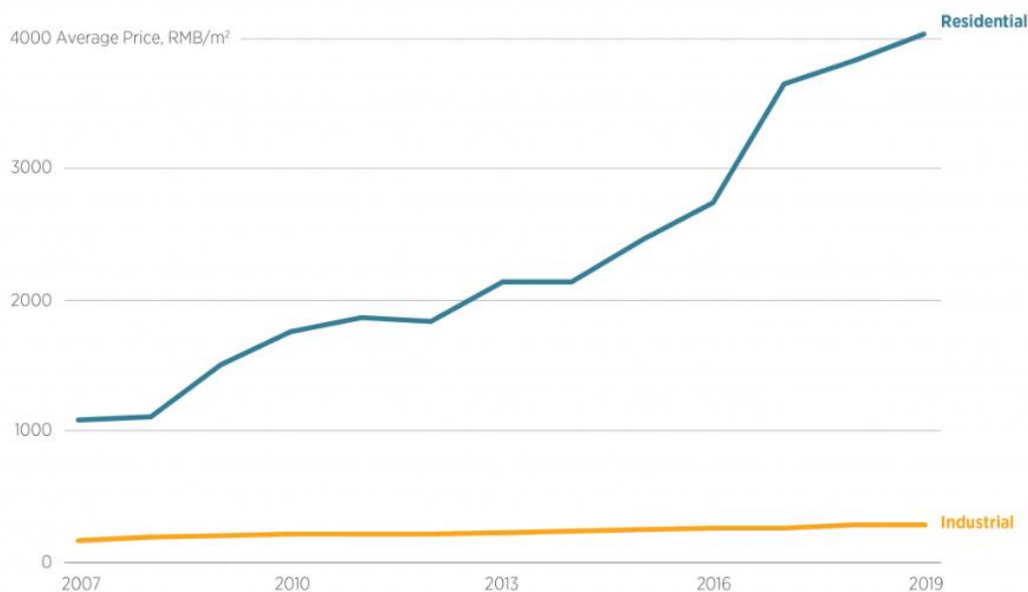
210. JCB has alleged that all land is owned by the GoC, that land use rights are set by authorities, and that land is allocated at either artificially low prices or free to certain favoured industries.
211. Article 10 of the [Constitution of the PRC](#) states that ownership of land in cities is owned by the state. Land in the rural and suburban areas is owned by collectives except for those portions which belong to the state in accordance



with the law; house sites and privately farmed plots of cropland and hilly land are also owned by collectives.

212. Research published in August 2023 in the [Cities journal](#) suggests that land may be allocated to certain industries based on government policies.
213. With regards to the buying and selling of land, Article 10 of the Constitution of the PRC states that, "...the State may, in the public interest and in accordance with the provisions of law, expropriate or requisition land for its use and shall make compensation for the land expropriated or requisitioned. No organization or individual may appropriate, buy, sell or unlawfully transfer land in other ways. The right to the use of the land may be transferred in accordance with the law."
214. The TRA considers that Article 10 reasonably indicates that land is not bought and sold at prices determined by free market supply and demand. This conclusion is supported by research conducted by [CEPR](#) and the [Becker Friedman Institute for Economics](#), the latter noting that, "...land zoned for residential use selling at roughly a ten-fold higher price than land zoned as industrial".
215. Average land prices by land use in the PRC from 2007 to 2019 are shown in Figure 8, below:

Figure 8: Average land prices over time by land use: industrial vs. residential



Note: This figure reports the average price of residential and industrial land weighted by land size that are sold through auctions for each year during 2007-2019.



Source: *Becker Friedman Institute for Economics*

216. The Becker Friedman Institute for Economics also note that this pricing structure does not necessarily constitute an industry subsidy given the tax revenue received from industrial land users over time where residential land users pay a larger upfront cost but no/lower ongoing costs.
217. All sampled exporters and the GoC state that there was no government intervention or preferential treatment in the allocation or sale of land that was used in the production of the like goods.
218. The TRA concluded in a previous investigation; [AD0021 Optical Fibre Cables](#) that a particular market situation exists in the land market in the PRC.
219. However, the TRA is satisfied there is sufficient evidence to suggest that there is evidence that GoC influence in land results in prices which reflect non-commercial factors. Further analysis is required to assess the impact on the production costs of excavators
220. JCB also made an allegation that excavator manufacturers may benefit from exemptions from land use tax. This will be assessed further in the tax and regulatory cost section, below.

Finance cost

221. JCB has alleged that excavator producers in the PRC benefit from a number of advantageous loan and credit lines.
222. The TRA has identified reports that suggested that in the PRC the banking system is [largely controlled by the Chinese government](#) with [preferential treatment given to SOEs](#).
223. Research conducted by the [Sakura Institute of Research, Inc.](#) states that, “The PRC's main financial institutions are state-owned banks. Under the controlled economy, state-owned banks tended to see lending to state-owned enterprises as a mechanism for distributing fiscal funds.”
224. The [World Economic Forum](#) wrote in May 2019 that, “SOEs are often criticised for abusing their preferential access to loans, and for lobbying for regulations which drive out competitive private companies” but that, “,,the PRC's private sector - which has been revving up since the global financial crisis - is now serving as the main driver of the PRC's economic growth....Private wealth is also responsible for 70% of investment and 90% of exports”.



225. Further, an article by [Euromoney](#) in March 2024 states that state-owned banks, "...are mandated to support the government's economic agenda".
226. Research published in the [Economic Inquiry](#) in August 2023 considers that there are 'two forms of SOE preferential arrangements—investment subsidies (a fiscal support) and privileged access to credits (a credit support)'.
227. The above evidence suggests that the Liugong Group, as an SOE, may benefit from preferential financial arrangements such as fiscal and credit support.
228. The Sany Group is not an SOE but is part of a group consisting of a commercial bank, [Sanxiang Bank](#). This may indicate that the Sany Group has access to preferential financial arrangements.
229. All sampled exporters and the GoC have claimed that there are no distortions in the excavator market as a result of preferential financial arrangements.
230. The TRA concluded in a previous investigation; [AD0021 Optical Fibre Cables](#) that a particular market situation exists in the financing market, in the PRC, via loans provided by state owned banks.
231. Based on the available information, the TRA considers there is evidence that GoC influence in the finance market results in prices which reflect non-commercial factors. However, further analysis is required to assess the impact on the production costs of excavators.

Tax and regulatory cost

232. JCB alleges that excavator producers in the PRC receive central tax breaks as well as tax breaks in relation to R&D and land use.
233. In relation to reducing manufacturing costs and burdens, [FYP14](#) states that the GoC will, '...consolidate and expand the achievements of tax reduction and fee reduction.' JCB has argued this artificially reduces tax and regulatory costs for excavator producers in the PRC.
234. The TRA has identified that the PRC has a range of tax incentives in place for the [manufacturing industry](#). The specific taxes pointed to by JCB will be considered in turn.

Tax and regulatory cost – corporate income tax

235. The standard rate for corporate tax in the [PRC is 25%](#) though this rate may be [reduced to 15%](#) for enterprises 'encouraged' by the PRC's government. Such enterprises are classed as [High and New Technology Enterprises \(HNTE\)](#).



236. The Sany Group stated in its [2023 interim report](#) that a number of the companies in the group were classed as HNTEs in 2023 and therefore subject to a 15% corporate income tax rate. Further investigation is required to determine whether any of the sampled exporters were classed as HNTEs during the POI.
237. Further, in the [2022 annual report](#) for Sany Heavy Equipment International Holdings Company Limited, under income tax it was reported that ‘entities subject to lower statutory income tax rates’ were subject to a rate of 9% for income tax in 2022.
238. Given [FYP14](#) states that the GoC will ‘consolidate and expand the achievements of tax reduction and fee reduction’ for the manufacturing industry, it would appear likely this may result in a corporate tax reduction for excavator producers in the PRC.
239. The TRA has found evidence to suggest that GoC intervention may be reflected in corporate income tax for the excavator industry in the PRC.

Tax and regulatory cost – R&D costs

240. Evidence of [incentives in relation to R&D](#) in the PRC are available on [open-sources](#). By way of example, [KPMG](#) detailed in May 2021 ‘super deduction rules’ with regards to R&D expenses and [OECD](#) has subsequently reported on two incentives related to R&D (namely, tax allowance and accelerated depreciation for R&D capital assets).
241. As described in the section above on research and development costs, there is evidence of enterprises in the excavator industry receiving tax breaks in relation to R&D costs. These incentives may result in a reduction of R&D costs for excavator manufacturers in the PRC.

Tax and regulatory cost – land use tax

242. Certain enterprises are [exempt from paying urban land use tax](#) in the PRC, for example, certain heating companies and drinking water projects.
243. The allegation made by JCB in relation to the Sany Group being exempt from paying urban land use tax appears to apply solely to subsidiary Zhejiang Sany Equipment Co., Ltd. which is not part of the current investigation.
244. No further evidence connecting land use tax exemptions and the relevant goods could be located. As such, no further action will be taken in relation to the allegation regarding urban land use tax.



Tax and regulatory cost – VAT

245. The standard rate for value-added tax (VAT) in the [PRC is 17%](#) though this rate may be reduced to 13% for ‘certain necessities’.
246. Certain industries, including the manufacturing industry, are eligible for [VAT rebates in the PRC](#).
247. In the [2020 Annual Report](#) for Sany Heavy Industry Co., Ltd., JCB points to ‘immediate VAT refunds’ which is listed under ‘other income’.
248. The Liugong Group states that “The preferential policy on taxation is neither new in the world, nor unique to the PRC. As far as the Company knows, the UK government also provides favourable tax treatment in the UK. It is not a standard to evaluate whether a market or industry is distorted’. While the Sany Group has claimed that the GoC has not impacted any aspect of taxes and regulatory costs.
249. There is some evidence that these incentives may result in a reduction of VAT costs for excavator producers in the PRC.

Tax and regulatory cost – totality

250. The TRA has found evidence to suggest that GoC interventions provide preferential tax breaks for many industries, including manufacturing, in the PRC. This includes enterprises manufacturing the goods concerned.
251. There is evidence that GoC influence in tax and regulatory costs results in prices which reflect non-commercial factors. However, further analysis is required to assess the impact on the production costs of excavators.

G2.1.4 Assessing against comparator values

252. Following its assessment of initial claims regarding the presence of a PMS and the receipt of questionnaire responses from interested parties and contributors, the TRA considered an appropriate benchmark country that could be used if it was determined that a PMS existed in the PRC that prevented a comparison between the domestic and export prices of the goods.
253. A note was published on the [public file](#) indicating that the TRA was considering Brazil as a potentially appropriate benchmark country.
254. Brazil was identified as potentially suitable owing to:
 - The availability of reliable information;



- Brazil was found to be suitably comparable to the PRC based on a similar level of economic development; and
- Brazil has significant exports of excavators.

255. Interested parties were given a period of 10 calendar days to provide comments on the proposed selection of benchmark country.
256. Comments were received from the Sany Group on 1 March 2024 stating that they believe the TRA should determine a positive finding of PMS prior to selecting a benchmark country. The Sany Group also requested that the TRA does not limit itself to using Brazil and instead consider using price or cost data from alternative third countries with a similar economic development status to the PRC should a positive finding of PMS be made.
257. Following the window for interested parties to comment on the proposed benchmark country selection, and having reviewed the one submission received, the TRA determined that Brazil would be used as a benchmark country.
258. The TRA invited producers from Brazil, via a note to the public file, to register to the case and to participate as a 'third country producer'. One producer from Brazil registered to the case and submitted a third country producer questionnaire. This company is:
- JCB do Brasil (JCB Brasil)
259. To determine whether the input costs are artificially low, the TRA assessed comparator values from the selected benchmarking country, Brazil.

Steel

260. The TRA were provided with steel purchase transactions by the Sany Group. No equivalent data was provided by the Liugong Group as part of their raw material transaction data. The selected benchmarking producer in Brazil, JCB Brasil, reported that they purchase excavator parts and, as such, do not purchase steel for the purposes of constructing excavators. At the TRA's request, JCB Brasil provided transaction level data for steel they purchase for the production of other goods.
261. However, the steel purchased by the Sany Group is steel plate whereas JCB Brasil purchase structural steel alloy. Due to the difference in the type of steel purchased, a reasonable comparison cannot be conducted with these datasets.
262. Platts Connect (part of S&P Global Inc.) was consulted to try and obtain Brazilian steel plate prices however no data was available.



263. In the absence of more granular data, the total direct costs (including all parts and direct labour) were compared between the sampled PRC exporters and JCB Brasil. The percentage difference was determined for PCNs S and L (as JCB Brasil do not produce any other PCN categories) and an average of the two was taken.
264. This analysis showed that the average direct costs paid by JCB Brasil are significantly higher than the average costs paid by the sampled exporters. The TRA recognise that a limitation with this analysis is the inclusion of costs that are not related to steel. The TRA recognise the limitations attached to this approach but believe it to be a reasonable approach for the purposes of the PAD because, in a dynamic data landscape, it reflects the best facts available at the point the analysis was conducted.

Further work to assess steel against comparator values

265. Further work will be conducted ahead of the SEF in terms of the adjustment made in relation steel. This work may include, and is not limited to, the following:
- Removal of the aspects of direct costs that are not related to steel (e.g. direct labour).
 - Establishing what percentage of steel is contained within the relevant goods, or within each key input.
 - Obtaining a better understanding of the origin of the steel within the relevant goods, or within each key input.
 - Utilising the more granular data provided by some of the sampled exporters to complete a more accurate comparison of steel costs to the benchmark provided by JCB Brasil.
 - Identifying available steel pricing data from alternative benchmark countries (as listed in the TRA's [benchmark consultation notice](#))

Further work to assess other costs against comparator values

266. The TRA has provisionally determined that GoC intervention may be reflected in the following costs of the relevant goods:
- Engine.
 - Hydraulics.
 - Research and development costs.
 - Land or rent costs.
 - Cost of finance.
 - Corporate income tax.
 - VAT.



267. The TRA will undertake further work to identify appropriate comparator values to determine what effect the existence of non-commercial factors has on the excavator industry in the PRC. The TRA will incorporate the findings into the SEF.

G2.1.5 Causation

268. When considering differences in costs and prices between exporters and comparators, the TRA should consider whether there is any other legitimate reason which may break the causal link between any potential distortions identified and low costs or prices.
269. One factor to consider is economies of scale. The production levels of the sampled exporters are higher than those of JCB Brasil. Therefore, steel costs may be lower due to bulk purchasing by the PRC exporters.
270. Compared to the sampled exporters, JCB Brasil produced between 5 – 45% of the number of excavators during the POI.
271. JCB Brasil is still considered to be producing a significant number of excavators, despite this being a relatively low number when compared to the sampled exporters.
272. JCB Brasil is expected to benefit from economies of scale but potentially not to the same extent as the sampled PRC exporters. However, despite it being likely that the sampled exporters will benefit from greater economies of scale, given their significantly bigger volumes of production, the TRA do not consider that such economies will be so large that they would account for the entirety of the difference between the sampled exporter's actual costs and the benchmark costs. Therefore, the TRA do not believe this factor breaks the chain of causation between the PMS identified and prices being low.

G2.1.6. Conclusion on existence of a PMS

273. The TRA has concluded that a PMS exists in the domestic excavator market in the PRC which prevents a proper comparison between the like goods in the PRC and the relevant goods (i.e., excavators imported into the UK from the PRC).
274. The TRA have determined that the PMS in the PRC is, in part, driven by GoC influence, which is present in both the private sector and SOEs, including the sampled exporters.
275. To date, the TRA have determined that a PMS is reflected in the excavator market and that this prevents a proper comparison due to the domestic prices



not being reflective of market conditions, while the export prices are affected by the market conditions within the UK.

276. To establish the effect that the determined PMS in the steel industry in the PRC had on excavator costs, the TRA conducted a price comparison against an international benchmark. The TRA concluded that costs were lower in the PRC when compared to the international benchmark. For further detail please see [Section G2.3](#).
277. Further analysis and research are required in relation to engine and hydraulic inputs, research and development, land costs, finance costs, corporate income tax, costs and VAT to determine whether the identified PMS impacts the costs of production in respect of the JCBs' allegations into these areas. The findings from this continued work will be incorporated into the SEF.
278. The allegations of PMS in terms of energy costs and labour costs will not be investigated further due to low materiality. Further, the allegation regarding shipping and logistics will also not be investigated further as costs related to this allegation are removed as part of fair comparison.

G2.2 Constructed normal value

279. As noted in [Section G2](#), the TRA has determined, in accordance with regulation 7(2) of the Regulations, that it is not appropriate to use the comparable price of the like goods in the PRC to calculate the normal value. Consequently, the TRA has used an alternative method to calculate the normal value.
280. The TRA has constructed the normal value of the goods in accordance with regulation 8(1)(a) of the Regulations, which sets out that the TRA must determine the costs of production plus a reasonable amount for administrative, selling and general costs and for profits, in accordance regulations 11 and 12 of the Regulations.
281. JCB stated that the TRA should construct normal value in accordance with Regulation 14(1)(b).
282. Regulation 8 of the Regulations provides a set of methodologies that the TRA may use to determine normal value. Regulation 8(1)(c) permits the TRA to construct normal value using Regulation 14 in certain circumstances. However, the TRA does not consider that those circumstances exist in this case, and it is more appropriate to construct using Regulation 8(1)(a). The TRA will therefore determine the normal value for the sampled PRC exporters based on the facts of the case before it and in accordance with regulations 7 – 13 of the Regulations.



283. Where exporters' recorded costs of production, administrative, selling and general costs and profit are unrepresentative because they do not reasonably reflect the overseas exporters' production, administrative, selling or general costs or profits in a market if those costs and profits were substantially determined by market forces, the TRA will make adjustments to those costs and profits in accordance with Regulations 13.
284. Therefore, the alternative method utilised by the TRA for the purposes of the PAD was to construct normal value based on the sampled exporters costs of production, adjusted to account for artificially low steel costs, plus the sampled exporters administrative, selling and general costs plus a reasonable level of profit.

G2.2.1 Costs of production

285. Where the TRA determines the costs of production for the purposes of regulation 8(1)(a) of the Regulations, it will do so in accordance with regulation 11 of the Regulations.
286. Where, in accordance with regulation 11(3) of the Regulations, the records of the overseas exporter are in accordance with Generally Accepted Accounting Principles (GAAP) in the PRC and reasonably reflect the costs associated with the production and sale of the like goods in the PRC, the TRA will, in accordance with regulation 11(2) of the Regulations, normally calculate the costs of production of the like goods on the basis of records kept by the overseas exporter.
287. Verification to assess the completeness, relevance, and accuracy of the information provided by the sampled parties is ongoing at the time of drafting this PAD and Recommendation. Any additional relevant information obtained will be considered in the SEF and will be included in the TRA's final determination.
288. The TRA has determined that the records of the sampled overseas exporter of the relevant goods are in accordance with generally accepted accounting principles of the exporting country or territory and reasonably reflect the costs associated with the production and sale of the like goods in the exporting country or territory.
289. However, the TRA have assessed that the price of steel reflects non-commercial factors, which is reflected in a PMS in the excavator market. As these are not considered normal circumstances, the exporter's costs of production of the like goods in relation to steel have not been calculated on the basis of records kept by the overseas exporter as described in regulation 11(2) of the Regulations. Instead, they have been adjusted in accordance with regulation and 11(6) and 13 of the Regulations, as they have been found to



reflect non-commercial factors, and are artificially low in comparison to the benchmark. In the absence of more granular data, the TRA was not able to identify at this stage, or extrapolate, the specific steel costs from the total direct costs. Therefore, an adjustment was made to all items within the sampled exporters total direct costs (including all input and direct labour). All other costs of production were used as reported by the sampled exporters.

290. As set out in regulation 11(6) of the Regulations the TRA has powers to make adjustments in accordance with regulation 13 of the Regulations in certain circumstances. On the basis that the TRA has determined that a PMS exists in the excavator market in the PRC which results in prices that reflect non-commercial factors, the TRA has used the sampled exporter's cost of production data and made an adjustment to cost of steel inputs as set out in [Section G2.3](#).

G2.2.2 Administrative, selling, and general costs

291. Where the TRA determines a reasonable amount for administrative, selling, and general (AS&G) costs for the purposes of regulation 8(1)(a) of the Regulations, it will do so in accordance with regulation 12 of the Regulations.
292. Regulation 12(2) of the Regulations sets out that, subject to regulation 12(3) of the Regulations, the TRA must determine reasonable amounts for the AS&G costs on the basis of the actual data pertaining to the production and sales by the overseas exporter of the like goods, in the ordinary course of trade, in the domestic market of the exporting country or territory.
293. For the purposes of the PAD, the TRA has determined the AS&G costs using the sampled exporters' submitted actual AS&G data in accordance with regulation 12(2).
294. Verification to assess the completeness, relevance, and accuracy of the information provided by the sampled parties is ongoing at the time of drafting this PAD and Recommendation. Any additional relevant information obtained will be considered in the SEF and will be included in the TRA's final determination.

G2.2.3 Reasonable level of profits

295. Where the TRA determines a reasonable amount for profits for the purposes of regulation 8(1)(a) of the Regulations, it will do so in accordance with regulation 12 of the Regulations.
296. Regulation 12(2) of the Regulations sets out that, subject to regulation 12(3) of the Regulations, the TRA must determine a reasonable amount for profits on the basis of the actual data pertaining to the production and sales by the



overseas exporter of the like goods, in the ordinary course of trade, in the domestic market of the exporting country or territory.

297. Verification to assess the completeness, relevance, and accuracy of the information provided by the sampled parties is ongoing at the time of drafting this PAD and Recommendation. Any additional relevant information obtained will be considered in the SEF and will be included in the TRA's final determination.
298. The TRA conducted the ordinary course of trade tests on the sampled exporter's domestic sales data in accordance with regulation 9 of the Regulations. In considering whether the sales were made in the ordinary course of trade, total domestic sales were considered over the POI.
299. The TRA determined that, for some PCNs, the total percentage of unprofitable sales were equal to or greater than 20% of the volume sold.
300. The TRA determined a reasonable level of profit for the sampled exporters using the method set out below, in accordance with regulation 12(3)(a) of the Regulations.
301. The TRA calculated a reasonable level of profit using the weighted average profit made on the profitable domestic sales to non-associated customers in the OCOT during the POI. This was calculated for each sampled exporter separately. The weighted average profit was used to construct the normal value together with the appropriate cost of production and AS&G costs to give a more representative figure.

G2.3 PMS adjustments

302. Following its assessment of initial claims regarding the presence of a PMS and the receipt of questionnaire responses from interested parties and contributors, the TRA considered an appropriate benchmark country that could be used if it was determined that a PMS existed in the PRC that prevented a comparison between the domestic and export prices of the goods. This process is detailed in [section G2.1.4 Assessing against comparator values](#).
303. In accordance with regulations 11(6) and 12(4) of the Regulations, the TRA may make adjustments to costs of production or administrative, selling, and general (AS&G) costs in accordance with regulation 13 of the Regulations.
304. The TRA may make adjustments where paragraph 13(3) of the Regulation applies, and for the purpose of paragraph 13(2) of the Regulations. As identified above, the following costs in respect of the production and sale of



the like goods in the PRC required adjustment to determine the normal value for the like goods in the PRC:

- Steel

305. Further research and analysis to further assess the impact on costs of production will be conducted post-PAD with relation to:

- Engines
- Hydraulics
- Land or rent costs
- Finance costs
- Corporate income tax
- Research and development costs
- VAT

Steel

306. The direct costs (including all raw materials and direct labour) for each sampled exporter were compared with the direct costs (including all raw materials and direct labour) provided by JCB Brasil. The percentage difference was determined for PCNs S and L (as JCB Brasil do not produce any other PCN categories) and an average of the two was taken.

307. The average percentage difference was used to increase the sampled exporter's costs for selected raw materials (based on which materials contain a proportion of steel) disclosed in their questionnaire responses. Inputs that are considered to be made of steel or include steel have been identified through open-source research. These adjustments were made to reasonably reflect the costs and profits in a market determined by market forces.

308. As referenced in [Section G2.1.3](#), the TRA determined that the following excavator parts contain a proportion of steel:

- Undercarriage
- Reducer
- Cab
- Tracks
- Counterweight
- Fasteners
- Boom
- Dipper

309. As these parts all contain a proportion of steel as a raw material, the TRA therefore consider that the cost of these parts may also be affected by the



distortions in the steel market in the PRC. The TRA have therefore increased the cost of these parts by between 90% and 120% for both the Sany Group and Liugong Group.

310. The TRA recognise that this approach has limitations given the lack of available information in relation to the steel content contained within an excavator as a whole, or its component parts. An attempt to obtain more granular detail regarding the composition of an excavator was undertaken though the TRA now appreciate that the data received in response does not offer enough information on the steel proportion nor the origin of the parts. Further work is ongoing in this respect and will be reported in the SEF.
311. For the purposes of the PAD, no suitable adjustments have been identified to ensure that the data provided by JCB Brasil adequately reflects the conditions in the exporter's market. The TRA will continue to consider this and any findings will be reported in the SEF.

G3. Export price

312. In accordance with regulation 15(1) of the Regulations, the export price is the price the goods concerned are sold for, or the agreed price at which they are to be sold, to either an importer in the UK or a third party outside of the UK for export to the UK.
313. The TRA determined that the export price is unreliable because of an association between both the groups of overseas exporters and the importers of the relevant goods in the UK, in accordance with regulation 15(2) of the Regulations. Subparagraph (3) of regulation 15 bridges subparagraphs (2) and (4), stating where subparagraph (2) applies, the TRA may construct the export price in accordance with subparagraph (4).
314. For both sampled exporters, the TRA has constructed the export price on the basis of the price at which the relevant goods are first sold to an independent buyer in the UK, in accordance with regulations 15(2), 15(3) and 15(4)(a) of the Regulations.
315. Both sampled exporters have an associated UK importer. The sales transactions provided by these importers were used to identify the first sale to an independent buyer in the UK.
316. The TRA determined that adjustments to the export price were necessary to bring the export prices to an ex-factory level. The following adjustments were therefore deducted from the export price:

- AS&G Overheads



- Transportation costs
- Commission
- Pre-delivery inspection costs
- Transport to depot
- Port fees
- Customs fees
- Warranty costs
- Domestic freight
- Insurance
- Bank Charges
- Credit
- Ocean freight and handling

G4. Fair comparison

317. To ensure a fair comparison, the normal value and export price need to be compared at the same level of trade; normally on an ex-factory level and in respect of sales made as near as possible the same time, in accordance with regulation 16(1) of the Regulations.
318. In accordance with regulation 16(2) of the Regulations the TRA may make adjustments for any differences which affect price comparability including differences relating to:
- conditions and terms of sale
 - taxation
 - levels of trade
 - quantities
 - physical adjustments.
319. The sampled exporters produce both electric and non-electric excavators. Both sampled exporters have stated that electric excavators should be excluded from the scope of the current investigation. For the purposes of the PAD, electric excavators remain in scope and no adjustments in relation to physical characteristic differences have been made. The TRA continue to investigate this aspect and the findings will be presented as part of the SEF.
320. Both the Liugong Group and the Sany Group reported fair comparison adjustments to their sales data.
321. Verification to assess the completeness, relevance, and accuracy of the information provided by the sampled parties is ongoing at the time of drafting this PAD and Recommendation. Any additional relevant information obtained will be considered in the SEF and will be included in the TRA's final determination.



322. The TRA considered whether the fair comparison adjustments made to the domestic sales would need to be made to the constructed normal value to be able to compare to the export price at the same level.
323. It was determined that in some circumstances fair comparison adjustments for credit were required. A deduction was therefore made from the constructed normal value in accordance with the data received by the participating overseas exporters.

G5. Provisional dumping margin

324. In accordance with regulation 17(1)(a) of the Regulations, the TRA compared a weighted average normal value with a weighted average export price for prices for all comparable export transactions to calculate the dumping margin for each sampled overseas exporter.
325. Where the TRA has limited its examination of overseas exporters in accordance with regulation 56 or 57 of the Regulations, it must determine an anti-dumping amount for non-sampled overseas exporters.
326. In accordance with regulation 37(3) of the Regulations, the dumping amount for cooperating non-sampled overseas exporters is calculated as the weighted average of the amounts determined for the overseas exporters in the sample.
327. For all other overseas exporters, the TRA established a residual amount in accordance with regulation 38 of the Regulations which has been determined by using a method of selecting the highest dumping margin established for a PCN that had a high export sales volume for each sampled exporter. From these PCNs a weighted average dumping margin was calculated.
328. The provisional dumping margins are shown in the table below:

Table 8: Provisional dumping margins

	Dumping margin (%)
Sampled exporter/producer	
Liugong Group	35.32%
Sany Group	56.77%
Co-operating exporter/producer	
XCMG Group	44.33%
Sunward	44.33%
All other overseas exporters/producers	
Residual dumping margin	64.17%



Section H: Provisional findings on injury

329. Injury is the term used when there is evidence of a UK industry being harmed by dumped goods. Paragraph 5(1) of Schedule 4 to the Act defines 'injury' to a UK industry in particular goods as:
- (a) material injury, or the threat of material injury, to the industry, or
 - (b) material retardation of the establishment of the industry.
330. In accordance with regulation 27(2) of the Regulations, as the TRA has determined that goods have been or are being dumped into the United Kingdom, it must determine whether:
- a UK industry has suffered or is suffering injury in accordance with regulation 30 of the Regulations (determination of injury); and
 - the dumped goods have caused or are causing that injury to that UK industry.
331. To determine whether a UK industry has suffered injury from imports of the relevant goods, in line with regulation 30(2) of the Regulations, the TRA has examined four factors:
- a) the volume of the dumped goods during the injury period;
 - b) the effect of the dumped goods on prices of the like goods in the UK market during the injury period;
 - c) the consequent impact of the dumped goods on UK industry during the injury period;
 - d) any other factors it considers relevant.
332. To determine whether the dumped goods have caused or are causing injury to UK industry, in line with regulation 35 of the Regulations, the TRA has also examined whether any known factors other than the dumped goods (other known factors) have caused or are causing injury to a UK industry. The TRA considered the following factors:
- the economic impact of the COVID-19 pandemic;
 - demand reduction;
 - inflation of raw material costs; and
 - third country imports and prices

H1. Injury Analysis

333. To conduct the injury analysis, the TRA has used the information relating to the UK industry that was provided in the questionnaire responses. Secondary sources of information were also used in accordance with the Regulations,



treated with special circumspection and, where practicable, verified using other independent sources. Secondary sources include, but are not limited to, official import statistics published by HMRC and data pertaining to relevant markets.

334. The HMRC trade data used in this document was extracted in October 2023. This data is subject to periodic adjustments and so figures may differ slightly if extracted at a different time.
335. HMRC data is only available at an eight-digit commodity code level and is only available by value (£) and by volume (kgs). The TRA does recognise some limitations in using volume by kgs as the weights of excavators can differ significantly between different PCN categories. In addition, this also means the TRA cannot exclude out of scope imports which are the smaller excavators with an operating weight of less than 11,000 kg (i.e., 11 tons) or those above 80,000 kg (80 tonnes).
336. The TRA identified some discrepancies between HMRC import data from the PRC and export data submitted by registered PRC exporters: according to the collated data submitted by the registered exporters, the total number of kgs exported to the UK of the goods concerned in both 2020/2021 and 2021/2022 are higher than the kgs registered by HMRC for all excavators under the relevant commodity codes. It is likely that this discrepancy can be explained in part due to the HMRC import data being based on country of dispatch (in line with international best practice on the compilation of National Accounts) rather than country of origin.
337. The TRA is currently assessing whether further information from HMRC can be obtained which would allow further analysis of imports based on country of origin. Any additional relevant information obtained will be considered in the SEF and will be included in the TRA's final determination.
338. The TRA does appreciate the use of kgs in its volume assessment could result in some distortions with the incorporation of out-of-scope excavators under 11 tonnes. Although it should be noted it is likely that similar issues would still be encountered if the HMRC data was to differentiate the goods into individual units.
339. It is also expected that the HMRC data will include excavators in the XXXL category for which the TRA has determined there are no like goods produced in the UK. However, based on the available evidence, it is considered this is unlikely to greatly impact the TRA's ability to obtain generalised trends from this information. This is because the available evidence indicates the import share of XXXL excavators is very low and therefore these are unlikely to over inflate any import volume and value analysis.



340. Further, the HMRC data is the only source for import data the TRA has been able to identify that provides it with a full and complete dataset for the injury period. More importantly, it is the only source for data that includes imports from third countries and the use of it means a level of consistency when analysing import trends and market shares from different countries. Therefore, and despite its limitations, the TRA has determined that the HMRC import data is still the most appropriate source of import data to estimate import volume trends and market share. In the full circumstances, the TRA will treat the analysis using the HMRC data with the appropriate level of caution.
341. In contrast, for the price analysis, the TRA does have the ability to use data obtained from the PRC exporters. This allows for a direct comparison between the relevant goods and the like goods produced in the UK, using an average price. The TRA converted the information provided in Chinese Yuan based on a five-year average exchange rate. Using the average price does mean that the completeness of the available data, and the variances identified between the volumes of goods, is not as material to the TRA's ability to reasonably compare the two datasets.

H1.1 Volume of the dumped goods

342. In accordance with regulation 31 of the Regulations, when determining whether the UK industry has suffered injury, the TRA has considered whether there has been a significant increase in the dumped goods in the UK either in absolute terms (the volume of dumped goods being imported into the UK market) or relative to domestic production or consumption.

H1.1.1 Volume of dumped goods in absolute terms

343. Information on absolute volume of the relevant goods gives an indication of the rate at which imports of these goods increased or decreased during the injury period.
344. The table below provides the import volumes (kgs) of all excavators from the PRC throughout the injury period. These import volumes are compared with the total import volumes of excavators into the UK:



Table 9: Import volume ('000 kg) of all excavators from the PRC and total import volumes, July 2019 to June 2023

Imports	2019/2020	2020/2021	2021/2022	POI
Total imports into the UK ('000s kgs)	100,963	111,775	134,709	163,727
Total imports into the UK (indexed)	100	111	133	162
Imports into the UK from PRC ('000 kgs)	4,537	2,587	7,716	15,958
Imports into the UK from PRC (indexed)	100	57	170	352
Imports from PRC as a percentage of total imports	4.5%	2.3%	5.7%	9.7%
Imports from PRC as a percentage of total imports (indexed)	100	52	127	217

Source: HMRC import data

345. Table 9 shows that total import volumes of excavators into the UK increased year on year during the injury period. Total imports were 62% higher in the POI than at the beginning of the injury period.
346. Imports from the PRC initially decreased by 43% from 2019/2020 to 2020/2021. Thereafter, the volume of imports recovered and were 252% higher in the POI when compared to the beginning of the injury period.
347. UK industry's application noted that due to the COVID-19 pandemic, the figures for 2020 are unrepresentative of the normal UK market. The timing of the COVID-19 pandemic would directly correspond with the decrease identified in the import of the PRC imports of excavators between 2019/2020 to 2020/2021. To further assess the potential disruptive effects of the COVID-19 pandemic in the volume of imports to the UK during 2020 and 2021, the TRA looked at the changes to import levels each calendar year between 2019 and 2022:



Table 10: Import volume ('000 kg) of excavators from the PRC and total import volumes, Jan 2019 to December 2022

Imports	2019	2020	2021	2022
Total imports into the UK ('000s kgs)	144,874	88,414	128,664	159,970
Total imports into the UK (indexed)	100	58	89	110
Imports into the UK from PRC ('000 kgs)	6,203	2,117	4,252	10,058
Imports into the UK from PRC (indexed)	100	34	69	162
Imports from PRC as a percentage of total imports	4.3%	2.5%	3.3%	6.3%
Imports from PRC as a percentage of total imports (indexed)	100	59	77	147

Source: HMRC import data

348. Secondary sources of data also suggest that [global trade was negatively impacted](#) due to disruptions affecting transport, increased shipping costs and the fact parties experienced [temporary difficulties in producing goods due to pandemic restrictions](#). The TRA identified transport was disrupted during the COVID-19 pandemic as there were fewer available containers and ships. [Transportation costs subsequently increased, particularly in 2020](#).
349. It is worth noting that the decrease in imports of all PRC excavators during the calendar years 2020 and 2021 is generally in line with the import trends observed for excavators from all third countries during the same period. That said the reductions in year-to-year imports and the level of recovery in 2022 were much greater for PRC excavators.
350. UK industry suggested that due to the impact of the COVID-19 pandemic the TRA should add an additional year to the injury period. On review there is no evidence to suggest the current injury period is not representative. It is appreciated that the use of an index with a starting point in a period impacted by the COVID-19 pandemic could superfluously inflate subsequent increases in the remaining years of the injury period. However, it remains the overall trends stayed the same even if import data before July 2019 is incorporated.
351. Table 9 also shows that imports from PRC made up 9.7% of total imports of excavators in the POI, which is an increase from 4.5% at the beginning of the injury period (this upwards trend is also seen in table 10). This 117% increase over the injury period is higher than the 62% increase that can be seen for total imports of excavators into the UK. Imports of excavators from the PRC



therefore retained an increased share of imports across the injury period following the initial decrease in 2020/2021.

352. Given the known effects of the COVID-19 pandemic in 2020 and 2021, it is noted there was still an increase of PRC imports from the beginning of the injury period to the POI.
353. The TRA has determined that during the injury period there has been a significant increase in imports of excavators from the PRC in absolute terms (an increase of 252%).

H1.1.2 Volume of dumped goods relative to domestic production

354. Information on import volumes of the relevant goods in relative terms gives an indication of the rate at which imports of these goods increased or decreased during the injury period when compared to the UK domestic production of the like goods.
355. The following table provides the import volumes (kgs) of excavators from the PRC throughout the injury period in comparison to total UK domestic production of the like goods:

Table 11: Relative change in the total import volume ('000 kg) of excavators from PRC in relation to UK production, July 2019 to June 2023

Imports and UK domestic production	2019/2020	2020/2021	2021/2022	POI
Imports into the UK from PRC ('000 kgs)	4,537	2,587	7,716	15,958
Imports into the UK from PRC (indexed)	100	57	170	352
UK domestic production (kgs) (indexed)	100	99	118	143
PRC imports relative to UK domestic production (indexed)	100	57	144	246

Source: Questionnaire response and HMRC import data

356. Total imports from the PRC relative to UK domestic production significantly increased by 146% during the injury period. Although the earlier effects of the COVID-19 pandemic in 2020 and 2021 disrupted the upward trends at this time, PRC imports quickly recovered. This includes an increase of 102 percentage points relative to UK production between 2021/2022 and the POI.
357. UK domestic production did increase by 43% over the injury period. However, this increase was at a lower level than the 252% increase in PRC imports over



the same period indicating that PRC imports to the UK increased by 146% relative to UK production.

358. In conclusion, based on the available evidence, the TRA consider that the increase in import volumes from PRC in the injury period was significant. UK production also increased but this was at a much lower rate. Therefore, the TRA has established that there has been a significant increase in imports of the relevant goods relative to UK production.

H1.1.3 Volume of dumped goods relative to domestic consumption

359. To assess the imports relative to UK consumption, the TRA calculated the overall UK consumption of the relevant goods. UK consumption was established on the basis of HMRC import volumes of excavators from all countries and domestic sales volumes of the UK industry. The TRA then calculated the market share of PRC imports by dividing total imports of the relevant goods by the total UK consumption figure. The UK's market share was calculated by dividing its domestic sales volumes by the total UK consumption figure.

Table 12: Relative change in the total import volume ('000 kg) of excavators from PRC in relation to UK consumption, July 2019 to June 2023

Imports and UK consumption	2019/2020	2020/2021	2021/2022	POI
Imports into the UK from PRC ('000 kgs)	4,537	2,587	7,716	15,958
Imports into the UK from PRC (indexed)	100	57	170	352
UK consumption (kgs) (indexed)	100	109	132	160
Imports from PRC relative to UK consumption/ PRC market share (indexed)	100	52	129	220
UK producer's market share (indexed)	100	91	90	89

Source: Questionnaire response and HMRC import data

360. UK consumption of excavators has increased over the injury period. After analysing the evidence provided by parties and secondary sources of data, the TRA is satisfied the COVID-19 pandemic restrictions placed by the UK government did impact demand in 2020 and to a lesser extent in 2021. However, it remains that these do not materially alter the identified trends across the injury period.



361. It is explained in [Section H1.1.1](#) that it is considered that the COVID-19 pandemic had the effect of limiting imports into the UK during 2020 and 2021. It follows that the decrease in relative imports during those years, when compared to other years of the injury period, can be attributed to the effects of the COVID-19 pandemic.
362. UK industry's market share has decreased by 11% over the injury period. This decrease occurred while PRC import volumes increased by 252% in the same period and overall, UK consumption increased by 60%. Therefore, imports of the relevant goods were increasing at a significantly higher rate than UK consumption during the injury period.
363. However, as already noted in [Section H1](#), the HMRC data used incorporates imports of goods out of scope of this investigation. This is likely to suppress the market share figures for the UK industry (as actual sales of like goods in scope are being considered) as well as inflating the figure of the total PRC imports. While the TRA is satisfied that the overall trends are unlikely to be affected, it cannot currently determine to what extent the individual figures were impacted.
364. In conclusion, based on the available evidence, the TRA consider that the increase in import volumes from PRC in the injury period was significant. A decrease in market share for UK industry has been identified in a period which saw growth in UK consumption and an increase in the market share of imports from the PRC. Therefore, the TRA has established that there has been a significant increase in imports of the relevant goods relative to UK consumption.

H1.2 Effect of dumped goods on prices

365. In accordance with regulation 32 of the Regulations, to assess the effect of the dumped goods on prices of the like goods in the UK during the injury period, the TRA has considered whether:
- (a) there has been significant price undercutting by the dumped goods as compared with the price of the like goods produced in the UK; or
 - (b) the dumped goods have depressed or suppressed domestic prices of the like goods produced in the UK to a significant degree.

H1.2.1 Price undercutting

366. Price undercutting is where the imported goods are consistently sold at a price below that of the like goods in the UK.
367. An undercutting margin is calculated by comparing the UK sales price (ex-factory) with the import price (the landed price) for similar products during the



POI. The landed price is the price of the relevant goods when they arrive at a UK port. It equates to the CIF import price plus any relevant import duties and other costs associated with importing.

368. An undercutting margin (%) reflects the extent to which landed prices of the relevant goods imported from the PRC are lower than the UK sales prices of the like goods.
369. The TRA determined that it would not be appropriate to calculate the landed price using the CIF import prices for the relevant goods provided by the sampled PRC exporters. This was because of the direct association between the PRC exporters and the associated importers of the relevant goods in the UK. Therefore, for both sampled exporters, the landed price was constructed by recalculating the CIF import price with the relevant adjustments for post-importation costs being applied.
370. The recalculation of the CIF import price was done on the basis of the actual price and profits at which the relevant goods were first sold to an independent buyer in the UK. This action is in accordance with regulations 15(2) and 15(4)(a) of the Regulations. The initial calculation to obtain a CIF import price was completed using the same methodology used as part of the construction the export price in the dumping margin calculation. Further detail of this calculation is set out in [Section G3](#) and [Section G4](#).
371. The TRA found significant evidence of price undercutting, calculating an average undercutting margin of 21.49% in the POI.
372. Price undercutting was identified in all four PCN's categories that are produced by UK industry. The TRA subsequently considered the price impacts of the relevant goods from the PRC on the UK like goods during the course of the injury period and whether these has led to either price depression or price suppression.

H1.2.2 Price depression

373. Price depression occurs when the UK industry is forced to reduce its prices to compete against lower priced dumped goods.
374. The TRA would ordinarily consider price depression by directly comparing the average domestic sales prices of UK industry's like goods to the average import prices of the relevant goods during the injury period. However, the TRA did not consider this approach can be strictly applied given the limitations of the HMRC data noted in [Section H1](#).
375. Therefore, the TRA has assessed the changes to the domestic sales pricing, to identify the trends during the injury period. Average domestic prices of the



like goods were reviewed per unit and by kgs. The average unit sales price was calculated by dividing total domestic sales values by number of units sold. The per kg value was calculated by dividing total domestic sales values by total domestic sales volumes (kgs) using UK industry’s updated questionnaire responses.

376. For comparison purposes, the TRA calculated a per kg value for the goods concerned based on the collated price data submitted by the sampled PRC exporters rather than HMRC import data. This was also calculated by dividing total sales values by total sales volumes. It should be noted that the TRA was unable to construct a unit sales price for the goods concerned for the injury period, as it does not hold sales information at the PCN level beyond the POI.

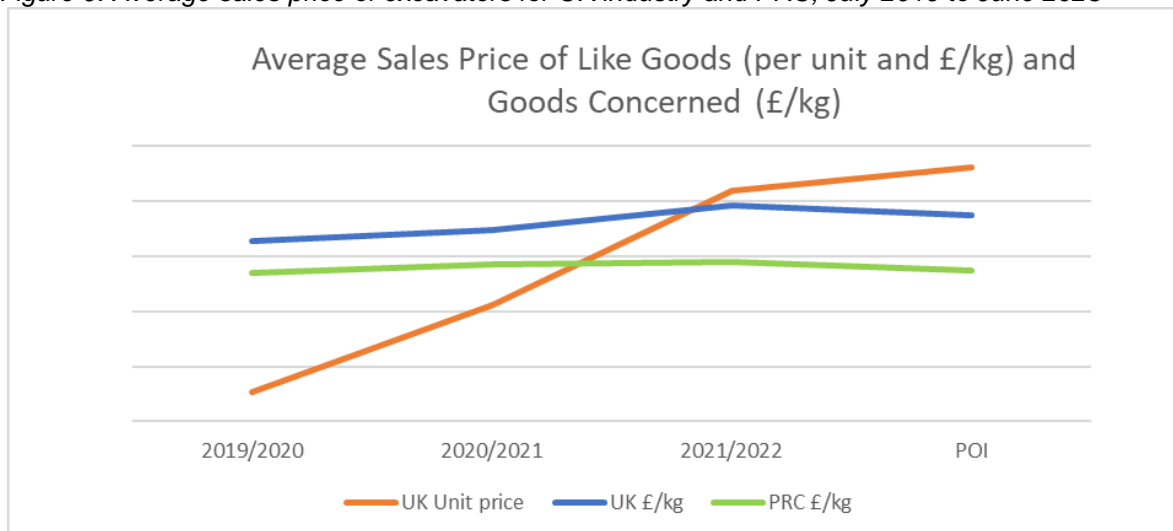
377. The following table and graph show how average prices of the like goods produced by UK industry and the goods concerned developed throughout the injury period:

Table 13: Average sales price of excavators per kg for UK industry and PRC, July 2019 to June 2023

Average sales price per kg	2019/2020	2020/2021	2021/2022	POI
Average domestic sales price of the like goods per kg (indexed)	100	106	119	114
Calculated average import price of the goods concerned per kg (indexed)	100	106	107	102

Source: Questionnaire response and HMRC import data

Figure 9: Average sales price of excavators for UK industry and PRC, July 2019 to June 2023



Source: Questionnaire response



378. Figure 9 and Table 13 shows during the injury period the UK industry’s sales price initially increased and subsequently reduced in the POI. The indicative price increase of the goods concerned generally followed the same pattern, albeit the year-to-year changes were not as high. The average sales price per unit of the like goods increased each year of the injury period.
379. The per kg price of the goods concerned marginally increased between 2019/2020 and 2021/2022. While there was a subsequent decrease between 2021/2022 and POI, this was still slightly higher than at the start of the injury period.
380. When directly comparing the per kg prices of the like goods and the goods concerned over the injury period, Figure 9 illustrates that the price of the goods concerned were lower throughout. This would suggest the price of the goods concerned were consistently undercutting the price of the like goods during the injury period.
381. However, the average sales price of the like goods increased over the injury period by both metrics the TRA used. The TRA has therefore determined that there is no evidence of price depression, as UK industry did increase its sales prices over the injury period.

H1.2.3 Price suppression

382. Price suppression occurs where price increases for the like goods, which otherwise would have occurred, have been prevented to a significant degree due to the price of the relevant goods.
383. To assess whether there was any evidence of price suppression, the TRA examined changes to domestic sales prices and changes to the cost of production for the like goods produced in the UK during the injury period. The figures are based on questionnaire responses and are presented in the following table:

Table 14: UK industry’s average domestic sales unit price and unit cost of production, July 2019 to June 2023

Sales price and cost of production per unit	2019/2020	2020/2021	2021/2022	POI
Average domestic sales price per unit (indexed)	100	104	110	112
Average cost of production per unit (indexed)	100	100	106	113

Source: Questionnaire response



384. Table 14 shows both the cost of production and domestic sales prices increased throughout the injury period. Only between 2021/2022 and the POI did the cost of production of the like goods increase at a faster rate than the domestic sales price.
385. In isolation, Table 14 suggests that UK industry was able to effectively increase its prices at the same rate as the increases to its costs of production during the injury period. However, the TRA has now established its consideration of the changes to UK industry's domestic sales price and costs of production does require further context.
386. UK industry stated in its [questionnaire](#) its current sales prices are below its target sales prices due to price pressure from the goods concerned, and alleged that it is, "...left with no choice but to sell its Excavators on the UK market below its costs of production..."
387. On review it has been identified throughout the injury period UK industry was in fact selling its like goods at a loss. Further, the increases to the domestic sales price during the injury period were not sufficient to allow UK industry to meet its costs of production, also see [Section H1.3.2](#). As set out in [Section H1.2.2](#) this occurred while the average PRC import prices continued to be significantly below that of the UK industry's domestic sales price.
388. The TRA has assessed that this evidence would suggest significant price suppression. It has been determined that the considerably lower priced dumped imports of the relative goods as shown prevented the UK industry from further price increases in order to remain competitive.

H1.3. Impact of dumped goods on UK industry during the injury period

389. In considering, for the purpose of regulation 30(2)(c), the impact of the dumped goods on the UK industry, the TRA must take into account all relevant economic factors and indices having a bearing on the UK industry. Regulation 33 of the Regulations notes that these can include:
- actual and potential decline in sales, profits, market share, output and production capacity utilisation, and growth;
 - actual and potential negative effects on employment and productivity, wages, return on investments and cash flows, as well as stock levels.
390. The following sections will address each of these factors in turn before undertaking a holistic assessment of the impact on UK industry.



H1.3.1 Sales

391. The TRA assessed the changes in the volume and the value of the UK industry’s sales during the injury period. This includes both domestic and export sales.

392. The following table shows how the UK industry’s domestic sales of excavators, as well as the average domestic and export sales prices, developed throughout the injury period:

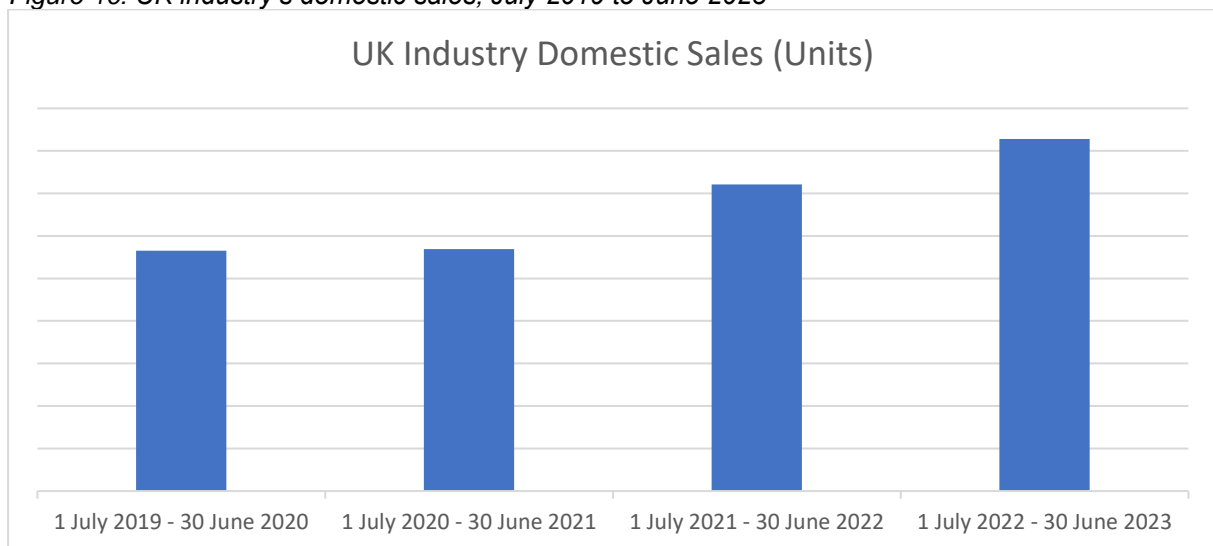
Table 15: UK industry’s domestic sales, July 2019 to June 2023

Domestic sales	2019/2020	2020/2021	2021/2022	POI
Domestic sales volumes (unit) (indexed)	100	101	128	147
Domestic sales values (indexed)	100	105	141	163
Av. unit domestic sales price (indexed)	100	104	110	112

Source: Questionnaire responses

393. Figure 10 shows the changes to UK industry’s domestic sales (by unit) throughout the injury period:

Figure 10: UK industry’s domestic sales, July 2019 to June 2023



Source: Questionnaire response



394. As can be observed in figure 10 and table 15, the volume of domestic sales increased year by year throughout the injury period and was 47% higher in the POI than its initial level. The value of the domestic sales increased 63% during the injury period.
395. In 2020/2021, the level of sales remained very static when compared to the first year of the injury period. It was assessed that this lack of movement, alongside the scale of indexed changes, is associated with the impact of the COVID-19 pandemic. This is further demonstrated by the changes in the level of imports, as illustrated in table 12. The TRA remains satisfied that the COVID-19 pandemic by itself would not account for the overall changes in domestic sales across the injury period, with these increasing year-on-year after 2020/2021.
396. The TRA assessed the significance of export sales of excavators to the UK industry by analysing the trends that volumes and values form throughout the injury period. The following table also sets the percentage of the exports against total sales volume:

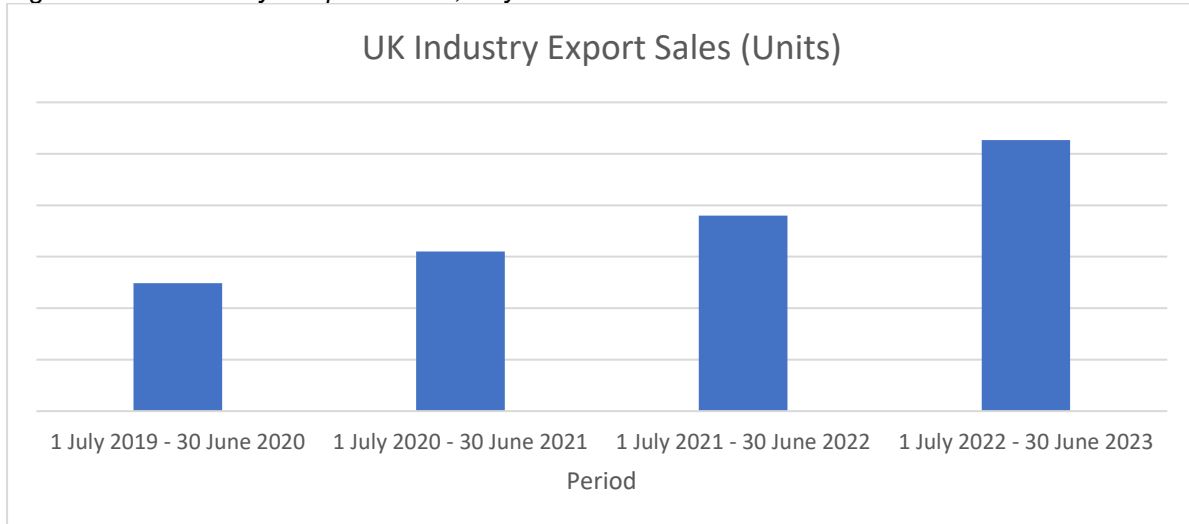
Table 16: UK industry's export sales, July 2019 to June 2023

Export sales	2019/2020	2020/2021	2021/2022	POI
Export sales volumes (unit) (indexed)	100	125	153	212
Export sales values (indexed)	100	126	162	259
Av. unit export sales price (indexed)	100	101	106	122
Exports as % of total sales volume (units)	47%	52%	51%	56%

Source: Questionnaire response



Figure 11: UK industry's exports sales, July 2019 to June 2023



Source: Questionnaire response

397. Export sales increased by both volume and value during the injury period, increasing by 159% in terms of value and 112% in terms of volume at the end of the injury period. Exports as a percentage of total sales increased by 9 percentage points throughout the injury period.
398. As already identified in [Section H1.1.1](#), it is reasonable to suggest the scale of the identified increases are likely to be inflated due to indexing in a period impacted by the COVID-19 pandemic.
399. Average sales prices for both export sales and domestic sales increased during the injury period. Export sales prices increased by 159% and domestic sales prices increased by 63%. While the unit prices for export sales were higher than domestic sales to the UK industry, there is no evidence to suggest that the changes to the level of UK industry's domestic sales was due to a focus on sales to overseas markets.
400. This takes into consideration that while there were increases in the proportion of exports sales against total sales for the UK industry over the injury period, this remained around 50%. Further, the slower increases in domestic sales across the injury period appear to be aligned to UK industry's failure to capture market share as illustrated in [Section H1.1.3](#).
401. Further, UK industry argued in its [application](#) that the price of the goods concerned meant it had to maintain unsustainably low prices domestically. Whereas the price pressures of PRC imports did not have the same effect on its pricing in its export markets.
402. UK industry also suggested that this price differential was also suggestive of injury. However, the TRA is satisfied it could not use the identified gap in



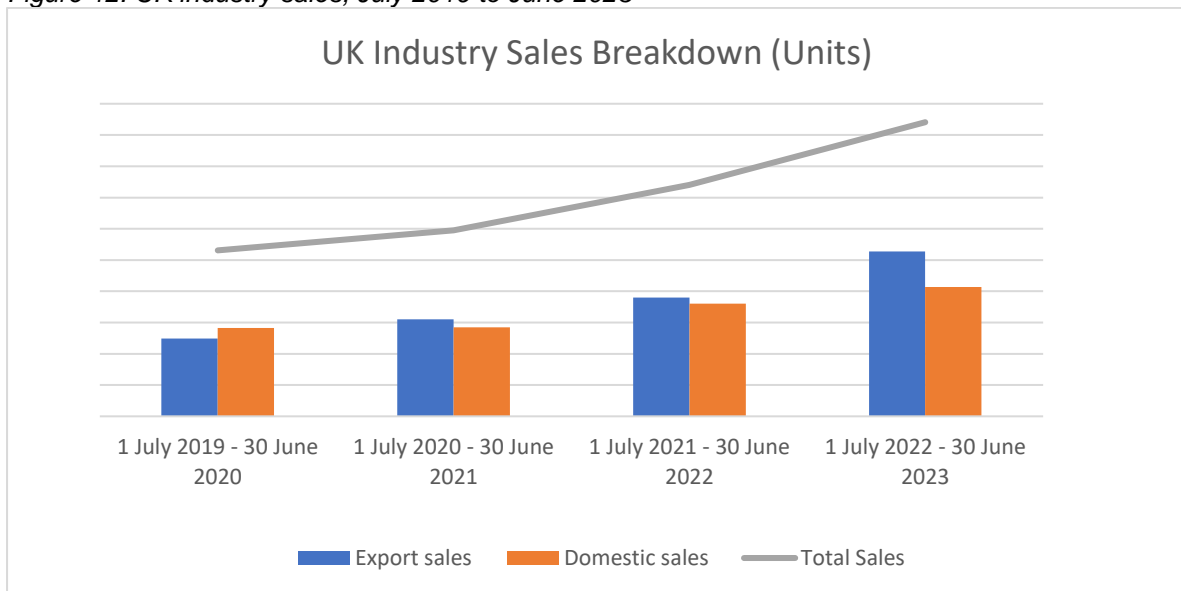
pricing for the injury analysis without full consideration of the associated forces and conditions in the individual export markets.

Table 17: UK industry's total sales volume, July 2019 to June 2023

Total sales	2019/2020	2020/2021	2021/2022	POI
Total sales volumes (unit) (indexed)	100	112	139	177
Total sales values (indexed)	100	116	151	212

Source: Questionnaire response

Figure 12: UK industry sales, July 2019 to June 2023



Source: Questionnaire response

403. The TRA has determined that the increase in sales of the like goods, both in volume and value, could indicate UK industry has not suffered injury during the injury period.
404. However, while increases can be observed both for domestic and export sales of excavators, it was found that domestic sales have not increased at the same rate as UK consumption (as seen in [Section H1.1.3](#)). Which subsequently led to a decrease in market share. Further, while export sales increased at a higher rate than domestic sales, it does not appear the lower increase rate in domestic sales is caused by an increased focus on export markets. The sharp increase in exports volumes was not mirrored in the relative increases of exports as a percentage of total sales or production capacity utilisation for excavators (as seen in [Section H1.3.4](#)). Instead it would



appear domestic sales were impacted by price pressure from the relevant goods as described in [Section H1.2.3](#).

H1.3.2 Profits

405. The TRA assessed the changes in profitability of the UK industry during the injury period.
406. The following table and graph show how the UK industry’s profits and profit margins for the like goods, including those destined for export markets, developed throughout the injury period. These figures represent net operating profit/loss after tax (NOPAT) for these sales:

Table 18: Profitability of sales of the like good, July 2019 to June 2023

Profits	2019/2020	2020/2021	2021/2022	POI
Average NOPAT margin of like goods (% of sales turnover) (indexed)	(100)	(91)	(66)	(9)
NOPAT from like goods (£) (indexed)	(100)	(106)	(100)	(19)

Source: Questionnaire response

407. The available data indicates UK industry has made losses on its sales of all like goods in every year of the injury period. However, the level of these losses were lower in the POI than what they were at the beginning of the injury period. These increases appear to align with the increased export sales and, more importantly, the average unit sale price that these specific sales were achieving.
408. The identified trend does not immediately follow what the TRA would expect to see based on its findings in [Section H1.2.3](#). UK industry had advised it was selling its like goods on the UK market below its costs of production, due to price suppression from imports of the relevant goods from the PRC.
409. The TRA is therefore currently assessing whether further information from UK industry can be obtained for its NOPAT based solely on its domestic sales of like goods. This is in line with regulation 30(3) of the Regulations which explains the TRA must conduct its examination only by reference to data that relates to the production of the like goods in the UK which are not exported. Any additional relevant information obtained will be considered in the SEF and will be included in the TRA’s final determination.



410. In the interim, the TRA is still satisfied that overall the changes to the UK industry’s profit margins for sales of its total like goods would still present a challenge to the financial and operational health of the UK industry.

H1.3.3 Market share

411. The TRA assessed the changes in the market share by volume (kgs) of the UK industry during the injury period.

412. Market share has been calculated as per the methodology described under [Section H1.1.3](#).

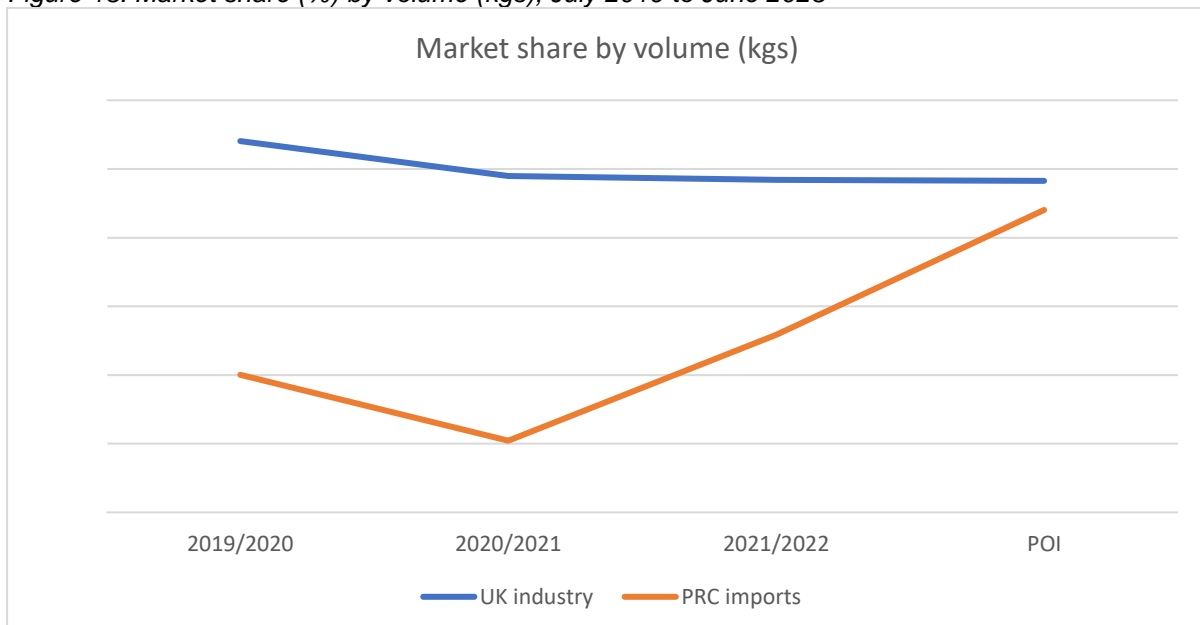
413. The following table and graph show how the UK industry’s and the PRC’s market share developed throughout the injury period.

Table 19: Evolution of UK industry’s market share, July 2019 to June 2023

Market share	2019/2020	2020/2021	2021/2022	POI
UK industry domestic market share (kg) (indexed)	100	91	90	89
Imports from PRC market share in UK (indexed)	100	52	129	220

Source: Questionnaire response and HMRC

Figure 13: Market share (%) by volume (kgs), July 2019 to June 2023



Source: Questionnaire response and HMRC import data



414. During the injury period UK industry has lost market share overall. Imports from the PRC initially decreased in 2020/2021 but have continued to increase thereafter, peaking in the POI.
415. The UK industry's market share decreased in the injury period despite increasing sales volumes. However, while the reduced volume of imports from the PRC in 2020/2021 caused a reduction in its market share, the increased import volumes since then have continued to capture market share.
416. It should be noted the analysis of market share does need to be considered with a level of caution. The TRA has been unable to accurately identify to what level the HMRC data used to calculate UK consumption is impacted by incorporating data of imports of goods out of scope of this investigation. However, the TRA remains satisfied that this data represents the best facts available and would generally return a similar trend to that which would be expected given the totality of the information reviewed.

H1.3.4 Outputs (production) and production capacity utilisation

417. The TRA assessed the changes in the output and production capacity utilisation of the UK industry during the injury period.
418. Output is measured by the volume of like goods produced by the UK industry during the injury period. Production capacity is a measure of the maximum of excavators that can be produced over a respective period. Production capacity utilisation contrasts these two figures to illustrate how much of the industry's capacity is being used over a set period to produce excavators.
419. The TRA assessed total output by analysing the volumes of all excavators, including those destined for export markets, produced by the UK industry during the injury period based on figures it provided. Domestic production was also considered separately. The TRA has also observed the volume trends relative to production capacity for both set of figures.
420. The following table shows how the UK industry's total output and production capacity for excavators developed during the injury period based on the questionnaire responses.



Table 20: UK industry's production and production utilisation during injury period

Output and production capacity utilisation	2019/2020	2020/2021	2021/2022	POI
Total production capacity (unit) (indexed)	100	100	100	100
Total production (unit) (indexed)	100	112	139	177
Total production capacity utilisation (%)	15%	17%	21%	26% 177
Domestic production (unit) (indexed)	100	101	128	147
Domestic production capacity utilisation (%)	8%	8%	10%	12%

Source: Questionnaire response

421. Production capacity has remained consistent during the injury period.
422. Both total and domestic production have increased year on year and in the POI were 77% and 47% above their initial levels.
423. Production capacity utilisation followed the same upwards pattern as production. However, it has been observed there is a significant difference between how much UK industry can produce (production capacity) and how much it actually produces (production).
424. The increases in the production and production capacity utilisation factors can be directly linked to total sales during the injury period, as outlined in [Section H1.3.1](#). This takes into consideration UK industry's [application](#) where it explains that the like goods are generally built to order.
425. While the trends in output and production capacity utilisation were positive over the injury period it was found that UK production did not increase at the same rate as the relative increases to the level of PRC imports. Therefore, despite the increases in production UK industry has still failed to gain market share when UK consumption is also increasing.

H1.3.5 Growth

426. The TRA has assessed the changes in the growth of the UK industry during the injury period.



427. Growth has been measured by comparing trends in total UK consumption of excavators with the UK industry’s domestic sales volumes (by kgs), UK industry’s market share, production and total employment figures.
428. The following table shows how these trends developed throughout the injury period:

Table 21: Growth indicators, July 2019 to June 2023

UK consumption, sales, market share and employment	2019/2020	2020/2021	2021/2022	POI
UK consumption (kgs) (indexed)	100	109	132	160
UK domestic sales volumes (kgs) (indexed)	100	99	118	143
UK market share (indexed)	100	91	90	89
UK domestic production (kgs) (indexed)	100	99	118	143
Employment for like goods (indexed)	100	87	83	97

Source: Questionnaire responses and HMRC import data

429. UK consumption of excavators increased by 60% in the injury period. However, in the same period UK industry’s market share decreased by 11%.
430. The UK industry’s sales volumes increased by 43% over the injury period while employment for the like goods decreased by 3%. It was established in [Section H1.3.4](#) that the increase in sales volume is mirrored by the UK industry’s production output, as the industry produces its goods to order. It is likely the same model, and the wider context of selling goods when prices are suppressed, also influenced employment numbers.
431. In relative terms, UK industry’s increased sales volume did not translate into an increase to its market share, even with increased UK consumption. Therefore, the TRA does not consider this be reflective of any industry growth.

H1.3.6 Employment and productivity

432. The TRA assessed the changes in the employment and productivity of the UK industry during the injury period.
433. Employment trends were assessed by analysing how the number of employees in the production of all like goods (sold both domestically and exported) has changed throughout the injury period in absolute terms and relative to the UK industry’s total number of employees. Productivity is



measured by establishing the output (number of like goods produced) per employee during the injury period.

434. The following table provides figures of the UK industry’s employment and productivity throughout the injury period based on information it provided.

Table 22: UK industry employment and productivity, July 2019 to June 2023

Employment and productivity	2019/2020	2020/2021	2021/2022	POI
Total number of employees (indexed)	100	90	82	88
Number of employees for all like goods (indexed)	100	87	83	97
Proportion of employment in all like goods	65%	62%	65%	71%
Average productivity (indexed)	100	129	169	183

Source: Questionnaire response

435. The total number of employees decreased in both 2020/2021 and 2021/2020 before increasing in the POI. The same trend can be seen on the number of employees involved in the production of all like goods. In the POI, the number of employees involved in the production of the like good was marginally lower than at the start of the injury period.
436. Productivity increased throughout the injury period, with the POI figure being 83% higher than at the start of the injury period. This indicates a positive trend. However, the overall increase in productivity is to be expected when this has run concurrently with the increase in UK industry’s domestic sales. The increasing demand has resulted in more production being required as more orders are made, which also appears to have then impacted the required employment levels.
437. The TRA is currently assessing whether further information from UK industry can be obtained for its employment and productivity figures based solely on its domestic sales of like goods. This is in line with regulation 30(3) of the Regulations which explains the TRA must conduct its examination only by reference to data that relates to the production of the like goods in the UK which are not exported. Any additional relevant information obtained will be considered in the SEF and will be included in the TRA’s final determination.



H1.3.7 Wages

438. The TRA assessed the changes in the level of wages paid by the UK industry during the injury period.
439. Wages were assessed by analysing the trends formed over the injury period. The TRA considered whether this indicator has been trending positively or negatively, which may contribute to its determination of the current state of the UK industry.
440. The following table provides the mean wage of the UK industry based on information provided by UK industry and the minimum wage in the UK:

Table 23: UK industry wages for employees involved in the like goods, July 2019 to June 2023

Wages	2019/2020	2020/2021	2021/2022	POI
Hourly mean wage for FTE engaged in activities related to the like goods (indexed)	100	90	120	130
Hourly minimum wage in the UK (indexed)	100	106	109	116

Source: Questionnaire response and www.gov.uk (minimum wage)

441. The average mean wage paid by the UK industry has increased by 30% over the injury period. Outside of 2020/2021, the year-on-year increases to the mean wage was above the increases to the minimum wage in the UK, which itself increased 16% over the injury period.
442. The mean wages by UK industry remained above what the UK industry was legally required to provide when compared to the minimum wage. While this did decrease in 2020/2021 this corresponds with the reduction in the number of staff as identified in [Section H1.3.6](#).

H1.3.8 Investments, return on investments and cash flow

443. The TRA assessed the changes in the level of investments, the return on these investments (ROI) and cash flow of the UK industry during the injury period.
444. The following table and graph show how these factors developed throughout the injury period.



Table 24: UK industry's ROI, Cash flow and investments in relation to the like goods, July 2019 to June 2023

Investment, ROI and cash flow	2019/2020	2020/2021	2021/2022	POI
ROI (% of net assets) (indexed)	(100)	(103)	(90)	(8)
Cash flow for the like goods (£) (indexed)	(100)	(106)	(101)	(12)
Investments in relation to like goods (£) (indexed)	100	103	111	225

Source: Questionnaire response

445. The level of investments increased during the injury period.
446. During the injury period, the ROI, defined as the profit in percentage of the net book value of investments, remained negative in line with UK industry's profitability as set in [Section H1.3.2](#). However, there was a significant improvement to the ROI during the POI.
447. The net cash flow from the like goods was also negative throughout the whole injury period, prior to experiencing a considerable improvement in the POI. This improvement coincides with the increased export sales volumes in the POI as set out in [Section H1.3.1](#).

H1.3.9 Stocks

448. The TRA assessed the changes to the UK industry's inventories of the like goods during the injury period.
449. Inventories were assessed by analysing the volumes of excavators in stock throughout the injury period in absolute terms and relative to production.
450. The following table and graph provide figures of the UK industry's inventory of excavators throughout the injury period based on information it provided.

Table 25: UK industry inventories of like goods, July 2019 to June 2023

Stocks	2019/2020	2020/2021	2021/2022	POI
Stocks at end of the year (units)	0	0	0	0
Stocks at end of the year (indexed)	N/A	N/A	N/A	N/A
Stocks as % of Production	N/A	N/A	N/A	N/A



Source: Questionnaire response

451. As referenced in [Section H1.3.4](#), UK industry has advised that its products are made to order and therefore it does not hold stock. This does mean there is no data for the TRA to analyse in relation to this factor.

H1.4 Conclusion on injury

452. Having fully considered the available information the TRA has determined, in accordance with regulation 27(2) of the Regulations, that:

- UK industry has suffered or is suffering injury in accordance with regulation 30 of the Regulations (determination of injury); and
- the dumped goods have caused or are causing that injury to that UK industry.

453. The TRA is satisfied that the majority of the economic factors indicate that UK industry has suffered injury by showing negative developments in absolute and/or relative terms during the injury period.

454. Given the magnitude of dumping identified and the level of undercutting found on imports of the relevant goods from the PRC (which corresponds with the identified negative developments) the TRA also considers the dumped goods from the PRC to be the cause of injury to the UK industry.

H2. Causation and non-attribution

455. In accordance with regulation 35 of the Regulations, injury caused by other known factors must not be attributed to dumped imports of the relevant goods. The TRA considered whether any other known factors, other than the dumped goods, caused or are causing injury to the UK industry. The TRA has assessed the following factors:

- economic impact of the COVID-19 pandemic;
- demand reduction;
- inflation of raw material costs; and
- third country imports and prices.

456. These factors were identified on review of the submissions from all parties. The TRA also considered the other known factors specifically identified within regulation 35(3) of the Regulations.

H2.1 Economic impact of the COVID-19 pandemic

457. During the injury period UK consumption developed as follows:



Table 26: Total excavators consumption in volume (kgs), July 2019 to June 2023

UK consumption	2019/2020	2020/2021	2021/2022	POI
UK consumption (kgs) (indexed)	100	109	132	160

Source: Questionnaire response and HMRC import data

458. It was established in [Section H1.1.1](#) and [Section H3.1.1](#) that the volume of imports and the volume of domestic sales increased over the injury period. UK consumption includes the volume of all imports of excavators, not just the relevant goods from the PRC, and the UK industry's domestic sales of the like goods.
459. It was concluded in the relevant sections that there were disruptions to both PRC imports of excavators and domestic sales/production of the like goods due to the COVID-19 pandemic. This is supported by the submissions received and in the open sources the TRA has reviewed.
460. However, the COVID-19 pandemic by itself would not account for the overall trends in domestic sales of the like goods across the entirety of the injury period. This also includes other injury considerations returning to, and exceeding, pre-pandemic levels.
461. In addition, it remains that the analysis of non-attribution and the effects of the COVID-19 pandemic would always be focussed on 2020 and 2021. This is based on the time frame during which it was actually having an impact due to governmental restrictions. It follows it cannot be used to explain any identified injury after 2021.
462. The TRA has determined the COVID-19 pandemic did not break the link between the relevant goods and the indicative injury suffered by UK industry.

H2.2 Demand reduction

463. Following on from the consideration of the potential economic impact of the COVID-19 pandemic, the TRA also assessed potential demand reduction. However, it was determined in [Section H1.1.3](#), that during the injury period UK consumption of certain excavators did in fact increase. It follows that there is no evidence to suggest demand has reduced.
464. The TRA has determined that demand reduction was not present and therefore did not break the link between the relevant goods and the injury suffered by UK industry.



H2.3 Inflation in raw material costs

465. During the injury period, the overall cost of production for UK industry increased, as seen in [Section H1.2.3](#). Steel is the main raw material used in the many of the component parts of the like goods. The TRA therefore assessed how the development of steel prices may have affected the overall cost of production.
466. Information from secondary sources of data [confirm steep increase in the steel](#) prices particularly during the middle part of the injury period. Reasons for the increase in the price of steel include the increase in costs of raw materials (iron ore and scrap), delays of imports from Europe [due to adjustments from the EU exit](#) and low supply due to strict lockdowns in the PRC. Prices of steel started to decline in 2022, [due partly to weaker demand](#), but were still above their long-term average.
467. However, the negative trends observed in UK industry's profitability pre-date the steep increases in steel prices. It follows that the TRA cannot directly link the identified injury to UK industry to these steel price developments. It can be seen in [Section H1.3.2](#) there was an upward movement in UK industry's profitability over the course of the injury period. This was despite the steady increases to the costs of production in the same period, as illustrated in table 14. These changes would suggest the increases in raw-material prices did not have a significant impact on UK industry.
468. That is not to say the rising costs of raw materials during the injury period would not have had any negative impact on UK industry's profits whatsoever. However, it has been established that the rising material costs are less significant than that of the imports of the relevant goods.
469. The TRA has determined that the increase in raw material costs did not break the link between the relevant goods and the indicative injury suffered by UK industry.

H2.4 Third country imports and prices

470. Imports from other countries were examined to ascertain whether these imports had caused injury to the UK industry.
471. As previously noted, HMRC data is only available at the eight-digit commodity code level and is only available by value (£) and by volume (kgs). This does mean there remains some limitations when trying to differentiate between different models of excavators. This is especially relevant when out of scope imports which are the smaller excavators with an operating weight of less than 11,000 kg (i.e., 11 tons) cannot be excluded from the data.



472. A level of circumspection also has to be applied on the basis that HMRC data is based on the country of dispatch. This is of particular importance as excavators from Japan, the Netherlands and Belgium represent 55% of the total imports of excavators into the UK in 2023 (and historically are the main exporters of excavators into the UK).
473. JCB’s [application](#) also highlighted this issue and went onto to state, “This explains why these statistics report significant import values from Belgium, in which there is no Excavator production. Further, there are Excavator manufacturers who finish Excavators manufactured outside the EU in the EU (e.g., assembling imported sub-assemblies) before exporting them to the UK.” TRA’s own independent research identified that PRC exporters have European subsidiaries and operate dealer networks in Europe.
474. The following table, which is a repeat of Table 3 in paragraph 108, shows how the imports of excavators have developed throughout the injury period. The TRA has compared the imports from all other countries excluding the PRC as well as reviewing the main exporters to the UK. The volume and value of the imports have all been considered at the same level:

Table 27 (repeat of Table 3 from paragraph 108): Imports from third countries, July 2019 to June 2023 (excluding PRC)

	2019/2020	2020/2021	2021/2022	POI
Imports from all third countries ('000 kg)	96,427	109,188	126,993	147,770
Imports from all third countries (indexed)	100	113	132	153
Market share of imports from all third countries	85.2%	88.1%	85.1%	81.5%
Market share of imports from all third countries (indexed)	100	103	100	96
Price of imports from all third countries (£/kg)	£4.49	£4.74	£5.25	£5.83
Price of imports from all third countries (indexed)	100	106	117	130
Imports from Japan ('000 kg)	41,112	46,430	41,465	40,365
Imports from Japan (indexed)	100	113	101	98
Market share of imports from Japan	36.3%	37.5%	27.8%	22.3%



Trade Remedies
Authority

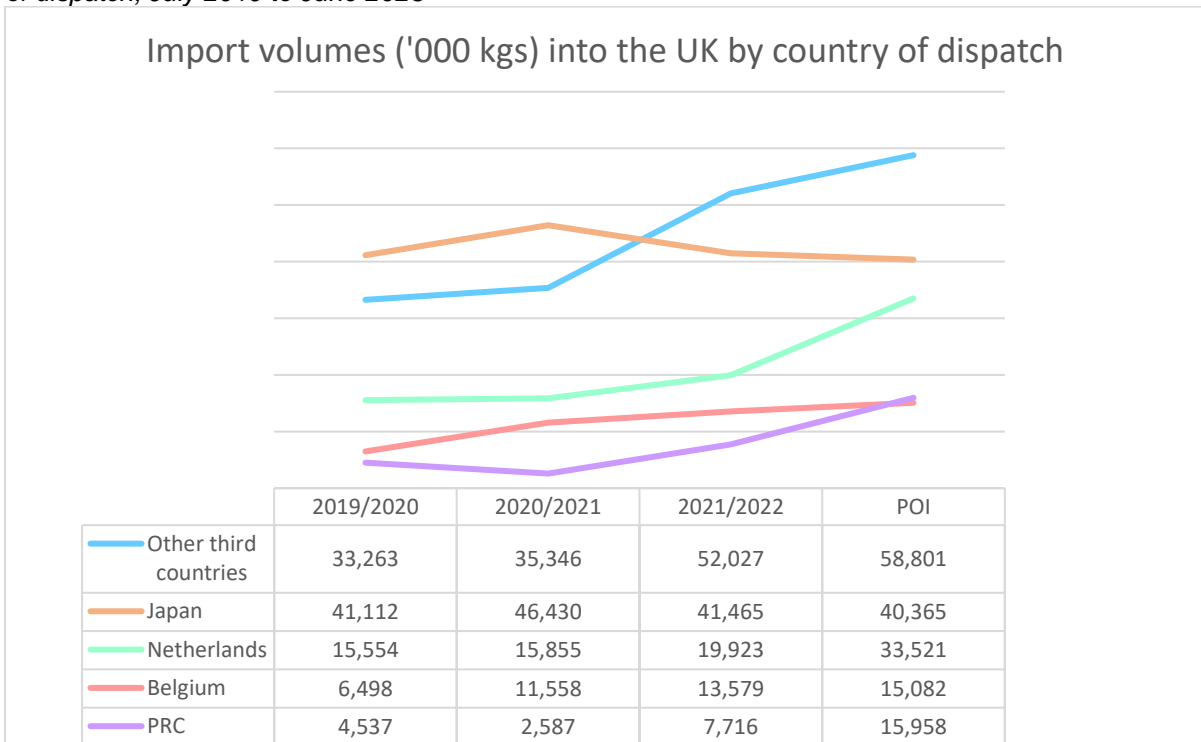
Market share of imports from Japan (indexed)	100	103	77	61
Price of imports from Japan (£/kg)	£4.91	£5.09	£5.26	£6.06
Price of imports from Japan (indexed)	100	104	107	124
Imports from Belgium ('000 kg)	6,498	11,558	13,579	15,082
Imports from Belgium (indexed)	100	178	209	232
Market share of imports from Belgium	5.7%	9.3%	9.1%	8.3%
Market share of imports from Belgium (indexed)	100	163	159	145
Price of imports from Belgium (£/kg)	£5.15	£5.17	£5.60	£6.31
Price of imports from Belgium (indexed)	100	100	109	113
Imports from the Netherlands ('000 kg)	15,554	15,855	19,923	33,521
Imports from the Netherlands (indexed)	100	102	128	216
Market share of imports from the Netherlands	13.7%	12.8%	13.4%	18.5%
Market share of imports from the Netherlands (indexed)	100	93	97	135
Price of imports from the Netherlands (£/kg)	£4.66	£4.67	£5.07	£5.92
Price of imports from the Netherlands (indexed)	100	100	109	117
Imports from other third countries excluding Japan, Belgium and the Netherlands ('000 kg)	33,263	35,346	52,057	58,801
Imports from other third countries excluding Japan, Belgium and the Netherlands (indexed)	100	106	156	177
Market share of imports from other third countries excluding Japan, Belgium and the Netherlands	29.4%	28.5%	34.9%	32.4%



Market share of imports from other third countries excluding Japan, Belgium and the Netherlands (indexed)	100	97	119	110
Price of imports from all other third countries excluding Japan, Belgium and the Netherlands (£/kg)	£3.77	£4.17	£5.21	£5.51
Price of imports from all other third countries excluding Japan, Belgium and the Netherlands (indexed)	100	111	138	146

Source: HMRC import data

Figure 14 (repeat of Figure 2 from paragraph 101): Changes in the import volumes based on country of dispatch, July 2019 to June 2023



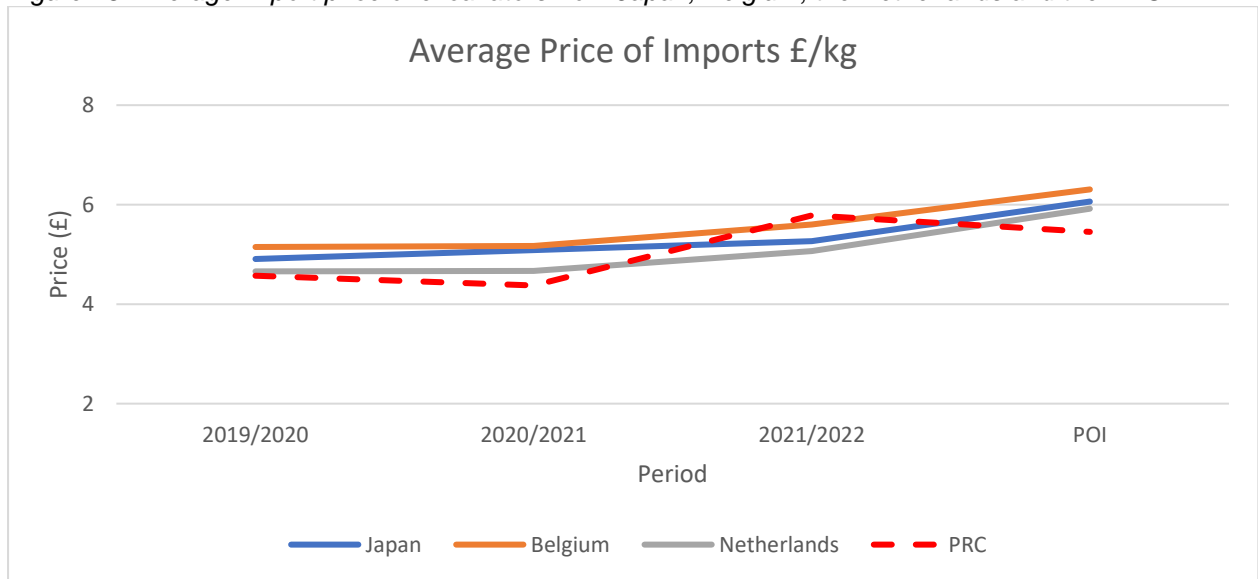
Source: HMRC import data

475. The volume of imports from all third countries other than the PRC increased 53% during the injury period. The volume of imports from all third countries taken as a whole was approximately 147,770 tonnes during the POI, which equated to a market share of 81.5%.
476. As noted above, the majority of third country imports were dispatched from Japan, the Netherlands and Belgium. The volume of imports from Japan declined 2% over the injury period, which significantly reduced its market



share from 36.3% to 22.3%. In comparison import volumes from both the Netherlands and Belgium increased over the injury period, which translated to respective increases to market share of 35% and 45%. The volume of imports from other third countries also increased significantly in the final two years of the injury period. In the POI, the imports of other third countries were 58,801 tonnes, which was a 77% increase when compared to the beginning of the injury period.

Figure 15: Average import price of excavators from Japan, Belgium, the Netherlands and the PRC



Source: HMRC import data

477. The average prices of imports also increased across the injury period within a range of 13% to 30%. The PRC import price was below that of imports from Japan, Netherlands and Belgium's throughout most of the injury period. This is particularly evident in the POI. This remains the case when the TRA compares imports from the PRC to all other third countries.
478. It follows that the impact of imports from third countries are clearly less significant than those of imports from the PRC. While imports from the other third countries increased during the injury period, this was not at the same rate as imports of the relevant goods. Importantly, the market share of imports from all third countries decreased over the injury period, and this share was captured by imports of the goods concerned.
479. The TRA determined that the impact of third country imports was not sufficient to break the causal link between the relevant goods and the indicative injury suffered by the UK industry.



H3. Conclusion

480. The TRA has holistically assessed and verified, to the extent possible at the time of writing, all the evidence provided to date by the parties registered to the case. It has been concluded that the UK industry has suffered injury during the injury period which is caused by the imports of the relevant goods.

Volume of dumped imports

481. The TRA determined that there has been a significant increase in the import volumes from the PRC during the injury period. It was also established that at the same time there had been a significant increase in the dumped imports relative to UK production and UK consumption.

Effect of dumped imports on UK prices

482. The TRA determined that in the POI there had been significant price undercutting of 21.49% by the dumped imports of the relevant goods when compared with the price of the like goods produced in the UK.

483. There was no evidence of price depression since the UK industry did not reduce their sales prices.

484. The TRA obtained evidence of price suppression and determined that this was caused by the considerably lower priced dumped PRC imports. Throughout the injury period UK industry was selling its like goods at a loss while the average PRC import price continued to be significantly below that of the UK industry's domestic sales price.

Impact on UK industry

485. The TRA assessed the trends of the economic factors throughout the injury period and determined that the following factors indicate that UK industry has suffered injury:

- **Profits:** UK industry reported negative profit margins and losses on all like goods across the injury period.
- **Market share:** UK industry's market share decreased by 11% over the injury period.
- **Growth:** UK industry did not grow its market share despite increased domestic sales, UK production and UK consumption.
- **Investments, return on investments and cash flow:** The level of investments increased during the injury period. However, UK industry experienced no return on investment and a negative cash flow for the like goods.



486. The following factors showed improving developments in absolute terms while in relative terms indicate that UK industry has suffered injury:
- **Sales:** Domestic and export sales increased in both volume and value during the injury period. However, UK industry still failed to gain market share in the period when UK consumption was increasing.
 - **Output and production capacity utilisation:** Output and production capacity utilisation increased over the injury period in line with increasing demand and sales. However, UK industry still failed to gain market share in the period when UK consumption was increasing and did not utilise its full production capacity.
487. The TRA assessed that the following factors did not suggest that UK industry has suffered injury:
- **Employment and productivity:** Both total employment and number of employees involved in the production of the like goods decreased during the injury period. But both increased in the POI, with the number of employees for like goods only 3% lower at the end of injury period. Productivity increased over the entirety of the injury period.
 - **Wages:** Wages increased over the injury period.
 - **Stocks:** UK industry does not hold stocks of the like goods and the TRA are therefore unable to attain either a positive or a negative determination regarding whether the UK industry has suffered injury using this factor.
488. The TRA has determined that the majority of the economic factors it has assessed indicate that UK industry has suffered injury by showing negative developments in absolute and/or relative terms during the injury period.

Dumped goods causing injury to UK industry

489. The TRA has identified there was significant increase in import volumes of the relevant goods from PRC in absolute terms during the injury period. The available information would also suggest these goods were priced considerably lower than UK industry's domestic sales price throughout the injury period. The goods from PRC were also generally priced lower than all other imports into the UK, including in the POI. The increase in these lower priced imports directly coincided with the negative developments in the economic factors that indicated UK industry has suffered injury.
490. Despite increased domestic sales, and with increased UK consumption, UK industry has still lost market share during the injury period. Imports of the relevant goods from the PRC have not only captured market share from UK industry but during the injury period also increased its share of all imports into the UK. The TRA is satisfied this was as a direct result of the pricing levels of the dumped goods.



491. It is accepted that certain economic factors have shown considerable improvement over the injury period. However, this is to be expected with the increased sales activity, which would always positively impact UK industry's output and production capacity utilisation (particularly with the initial reduction in employment). That said further analysis of NOPAT based solely on domestic sales of the like goods is required. This will allow the TRA to properly place these developments in context and assess UK industry's ability to maintain its operations and adjust to normal market forces.
492. This takes into consideration that UK industry has been unable to increase its domestic sales price to a level that would cover its costs of production. This would not be a sustainable business model with increased imports levels and a continued failure to gain market share. The TRA does consider that the low prices of the relevant goods from the PRC are preventing domestic sales prices of like goods in the UK from rising to a level they would otherwise achieve. It follows that in the absence of price suppression in the UK market the TRA has identified, the negative developments identified in the economic factors would be improved.
493. The TRA has concluded that UK industry has suffered injury based on the full consideration of import volumes, price affects and the economic factor analysis. The totality of the available information reasonably evidences injury across multiple economic factors despite increased UK consumption during the injury period. It remains that although UK industry experienced increased sales and production of the like goods, it continued to be loss making with negative ROI and no industry growth.
494. It has also been determined that dumped PRC imports, which suppressed the domestic sales prices of like goods, were the main cause of injury to UK industry during the injury period. There were also no other known factors that broke that causal link.
495. The TRA has therefore concluded that it is the dumped imports of the relevant goods, which suppressed the domestic sales prices of like goods, have caused injury to UK industry during the injury period.

Other known factors and causation

496. As part of the causation assessment, the TRA considered whether there are other known factors that may be impacting the economic indicators and thereby be the cause of the injury. The impact of the COVID-19 pandemic, demand reduction, inflation of raw material costs and third country imports and prices were reviewed.



497. The TRA determined that the COVID-19 pandemic would have disrupted imports of the relevant goods and domestic sales/production of the like goods. However, the COVID-19 pandemic would not account for the overall trends across the full injury period. This factor is of a temporary nature and the negative impacts of the relevant goods on the economic factors were still evident after the pandemic restrictions had been lifted.
498. The TRA considered the potential impact of a reduction in demand for certain excavators. However, the available evidence shows UK consumption, or demand, did increase during the injury period rather than reduce.
499. The inflation of raw material costs was primarily experienced during the middle part of the injury period. This is when the cost for steel, the main input material for excavator components, saw a steep rise. However, the TRA determined that the rising costs of raw materials did not have a significant impact on UK industry. It was established that the rising material costs are not the cause of injury, as the profit indicators of injury pre-date the steep increases.
500. With regards to third country imports and prices, it was identified that the volumes of imports did increase during the injury period. However, this was not at the same rate as PRC imports. Importantly, the market share of imports from all third countries decreased over the injury period, and this share was captured by imports from the PRC. In addition, PRC import prices were below that of imports from third countries throughout the injury period and in particular in the POI. The TRA therefore determined that the impact of third country imports was not sufficient to break the causal link between the relevant goods and the injury suffered by the UK industry.

H4. Provisional injury margin

501. The injury margin is the extent at which the UK industry is being injured. The default method is to base the injury margin for each exporter on its underselling margin. This is calculated by comparing a benchmark UK price (the target price) with the import price (the landed price) for each matching PCN. As referenced in [Section E7](#), PCN-by-PCN calculations were possible for PCNs that were both sold in the UK as domestically produced like goods and exported from PRC to the UK as the relevant goods. This included sales across four PCN's (S, M, L and XL).
502. The total amount of underselling is then expressed as a percentage of the total import value of the goods concerned. This method was used to calculate an injury margin for each cooperating exporter.
503. Further to [Section H1.2.1](#), given the full circumstances of this case the TRA constructed the landed price by recalculating the CIF import price with the relevant adjustments.



504. The target price is the price that a UK producer would expect to sell its like goods at if it were not being affected by the dumped goods. The TRA calculated this price by using UK industry's costs of production for the like goods, administrative, selling and general (AS&G) costs and applying a normal rate of profit (before tax).
505. The normal rate of profit for the UK industry was determined by considering the UK industry's submissions for the rate of net profit it said it would reasonably achieve in the absence of injury from the goods concerned. The TRA noted that the 11% submitted by UK industry was in line with the identified profit margin for unrelated UK importers of the excavators and also supported when compared to the calculated profit margins for the sampled PRC exporters.
506. It follows that based on the available evidence; the TRA concluded 11% for the normal rate of profit (before tax) appears to be reasonable.
507. The ranges for the average unit values that make up the injury margin calculation for each matching PCN are as follows:

Table 28: Average unit values for injury margin calculations by PCN (£/unit)

Category	Average Landed price (£/unit)	Average Target price (£/unit)	Underselling amount (£/unit)
S	£47,650 - £64,500	£88,300 - £113,350	£37,100 - £48,850
M	£51,000 - £69,000	£92,400 - £125,000	£41,400 - £56,100
L	£68,750 - £93,000	£115,000 - £155,500	£46,200 - £62,550
XL	£122,350 - £165,500	£134,850 - £182,450	£12,500 - £16,900

508. The TRA also calculated the injury margin for non-sampled cooperating exporters; this was the weighted average of the injury margins calculated for each of the sampled, cooperating exporters.
509. The TRA calculated a residual injury margin for overseas exporters where it has not determined an individual subsidy amount and the exporter is not a non-sampled overseas exporter within the meaning of regulation 37 of the Regulations. This was based on the level of the highest underselling margin for the PCN with the highest sales volume when compared to the total import volumes during the POI. This was calculated using evidence provided by the sampled PRC producers.



510. The provisional injury margins are shown in the table below:

Table 29: Provisional injury margins

Overseas exporter/producer	Injury margin (%)
Liugong Group	54.54%
Sany Group	62.97%
XCMG Group	58.09%
Sunward Group	58.09%
All other overseas exporters (residual dumping margin)	82.72%

511. These margins were calculated based on the data submitted to the TRA up until 18 July 2024. This included questionnaire submissions from UK industry about its costs of production during the POI as well as its domestic sales. The TRA also considered the questionnaire submissions from the sampled PRC exporters and their associated importers as part of its calculation of landed prices.



Section I: Lesser duty rule and form of provisional measure

512. In accordance with paragraph 11(1) of Schedule 4 to the Act, the TRA has determined that:
- the relevant goods have been or are being dumped in the UK; and
 - the dumping of the relevant goods has caused or is causing injury to a UK industry in those goods.
513. The TRA is also satisfied that, in accordance with paragraph 13(4)(a) of Schedule 4 to the Act, that requiring a guarantee in accordance with its recommendation is necessary to prevent injury being caused during the investigation to the UK industry in the relevant goods.
514. The TRA has calculated provisional anti-dumping amounts and injury margins for the Sany Group and Liugong Group, for XCMG Group and Sunward as well as for all other overseas exporters. In accordance with paragraph 14(3) and paragraph 14(4) of Schedule 4 to the Act, and regulation 36 of the Regulations, the recommended guarantee should be set at a level that does not exceed the anti-dumping amount, in relation to the goods as determined by the TRA as part of its provisional affirmative determination, or the amount which the TRA is satisfied would be adequate to remove the injury to the UK industry in the goods if that amount is less than the anti-dumping amount.
515. Given the circumstances of this case the recommended guarantee would therefore equate to an ad valorem duty based on the relevant provisional dumping margins (as the lower of the dumping amounts and the injury margins as shown in table 30 below).

Table 30: Dumping and injury margins by group

	Dumping Margin (%)	Injury Margin (%)
Liugong Group	35.32%	54.54%
Sany Group	56.77%	62.97%
XCMG Group	44.33%	58.09%
Sunward Group	44.33%	58.09%
All other overseas exporters (residual dumping margin)	64.17%	82.72%

516. The TRA recommends that the requirement to give a guarantee ends six months from the day after the date of the publication of the Taxation Notice published under paragraph 15(5) of Schedule 4 to the Act, or when the definitive remedy is implemented, whichever is sooner.



Section J: Economic Interest Test (EIT)

J1. Introduction

517. In accordance with paragraph 13(3)(a) of Schedule 4 to the Act, the TRA may recommend to the Secretary of State all importers of the relevant goods should be required to give a guarantee in respect of any additional import duty which would have been applicable, or potentially applicable, to the goods if an anti-dumping amount had been applied to the goods based on the PAD.
518. In accordance with paragraph 13(8A) where the TRA makes a recommendation under sub-paragraph (3), it must advise the Secretary of State whether and why it considers that requiring importers to give a guarantee in accordance with the recommendation would meet the Economic Interest Test (EIT).
519. The EIT is set out in paragraph 25 of Schedule 4 to the Act and, in accordance with paragraph 25(3) of Schedule 4 to the Act, the TRA will presume the EIT to be met unless it is satisfied that the requirement of the guarantee is not in the economic interest of the UK.
520. In line with paragraph 25 of Schedule 4 to the Act, the TRA has taken account of the following in conducting the EIT:
- the injury caused by dumping of the goods to a UK industry in the like goods and the benefits to that UK industry in removing that injury;
 - the economic significance of affected industries and consumers in the UK;
 - the likely impact on affected industries and consumers in the UK;
 - the likely impact on particular geographic areas, or particular groups, in the UK;
 - the likely consequences for the competitive environment, and for the structure of markets for like goods, in the UK; and
 - such other matters as the TRA considers relevant.
521. As this is a provisional determination, only the period from the implementation of a guarantee until the final determination will be considered for assessing any impacts. Longer term impacts that may result from the imposition or non-imposition of a final measure will be addressed in the Statement of Essential Facts (SEF).

J2. Evidence base

522. The TRA received the following questionnaire responses which contained information relevant to the EIT:



- one producer of excavators in the UK, JCB Heavy Products Limited (JCB);
- three importers of excavators, Sany Heavy Machinery (UK) Limited, XCMG UK Sales and Services Limited, Liugong Machinery (UK) Limited; and
- one downstream retailer of excavators, Fox Group Equipment Sales Limited.

523. The TRA has supplemented these submissions with background research and collated additional data and information from sources such as Companies House, Dun & Bradstreet, ONS (Nomis) and HMRC (Overseas Trade in Goods Statistics and Find UK Traders tool).

J3. Injury caused by dumping and benefits to UK industry in removing injury

524. In the injury section, the TRA found that the UK industry has been suffered injury as a result of the dumped goods from the PRC.

525. The injury assessment concluded that there would be further injury to UK industry were a guarantee not imposed. It is expected that the proposed measure will remove the material injury to UK industry.

J4. Economic significance of affected industries and consumers in the UK

526. The TRA has identified the following groups as potentially being affected by the proposed measure:

- Upstream industries: this group includes suppliers of engines, hydraulics, cabs, tracks and computer systems. It also includes businesses involved in large and small metal fabrication.
- UK producers of excavators.
- Retailers and importers of excavators: the TRA has chosen to group these together due to the significant overlaps between them.
- End users: this group includes businesses in civil engineering, construction, demolition, quarrying, agriculture and forestry.

527. As certain excavators are typically bought by end user companies rather than private individuals, final consumers have not been factored into the TRA's analysis. The term 'consumer' for the purposes of the TRA's EIT analysis refers to end user companies rather than final consumers.



528. For each affected group the TRA selected businesses and analysed data from Companies House and Dun & Bradstreet to calculate employment, Gross Value Added (GVA), Turnover, Earnings Before Interest, Taxes, Depreciation and Amortisation (EBITDA), and the EBITDA margin.
529. Using available evidence, the TRA assessed the financial vulnerability of each industry group, as well as the importance of excavators to them.

J4.1 Upstream industries

530. We identified 16 upstream businesses that supply raw materials and inputs to UK producers of excavators. Of these, the TRA selected seven upstream businesses. The businesses were proportionally selected to cover a range of purchased component costs based on cost to the producer.
531. On average, over the five most recent years for which financial accounts have been published, the selected businesses employed approximately 2,000 workers, had a total GVA of around £100m, turnover of £588m and an average EBITDA of £6.5m.
532. On average around 5% of the selected upstream businesses' turnover was linked to their sales to UK producers of excavators. Therefore, the TRA concluded that excavators are somewhat important for upstream businesses.

J4.2 UK producers of excavators

533. Excavators produced in the UK are manufactured by two businesses: JCB Heavy Products Limited and Komatsu UK Limited.
534. The TRA estimated that during the POI UK producers of excavators employed around 900 workers, had a GVA of around £51m, turnover of just under £500m and an average EBITDA of £0.5m.
535. The data in JCB's questionnaire response indicated that excavators are a very important product to them and the TRA considers the same is likely to be true for Komatsu.

J4.3 Retailers and importers

536. The TRA identified a total of 136 retailers and importers of excavators that source excavators from UK and non-UK producers.



537. The TRA selected nine businesses to analyse the economic significance of this group. Many retailers are small businesses and so they only publish abbreviated accounts. The businesses were selected to represent sales of excavators from all major excavator producers.
538. During the POI these selected retailers employed around 3,000 workers, had a total GVA of around £239m, turnover of £1,452m and an average EBITDA of £87.1m.
539. Although less than 10% of turnover of selected retailers was related to purchases of excavators, the TRA consider excavators to be important to them. In its quantitative analysis the TRA could not fully assess the importance of excavators to the overall business model of downstream retailers, which is likely to involve other excavator related activities, including sale and hire of excavators, and services, for which we did not have accurate data and information.

J4.4 End users

540. The selected end users of excavators cover a range of principal business activities, including waste management, house building, quarrying, civil engineering, demolition and earthmoving, identified from market data.
541. During the POI these selected end users employed around 30,500 workers, had a total GVA of around £3,559m, turnover of £12,460m and an average EBITDA of £1,996m.
542. The TRA assessed that excavators are a somewhat important product to downstream end users.
543. It is important to note that end users are a diverse group, where businesses are likely to be varied in the nature and the size range from small and medium-sized contracting businesses to large businesses in construction industries.

J4.5 Summary table

544. Table 31 presents data on the economic significance of different industries, which could be impacted by the measure on excavators.
545. Based on data, as discussed and as set out in the table, the TRA find that excavators are a very important product for the UK producers and an important product for retailers and importers. The TRA assess that for



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upstream businesses and end users excavators are a somewhat important product, although there is likely to be variation between different businesses.



Table 31: Significance metrics for the UK stakeholders potentially affected by the proposed measure

	Upstream industries	UK producers of excavators	Downstream industries: retailers	Downstream industries: end users
Sample details				
Number of known UK businesses	16	2	136	8
Number of selected UK businesses	7	2	9	8
Sample statistics ^{a)}				
Total employment	2,050	880	3,020	30,480
Total GVA (£m) ^{b)}	100	51	239	3,559
Total turnover (£m)	588	499	1,452	12,460
Total EBITDA (£m) ^{c)}	7	1	87	1,996
Average EBITDA margin (%) ^{d)}	1.1%	0.1%	6.0%	16.0%
Conclusions				
Economic vulnerability (financial data) ^{e)}	Low level of vulnerability to negative economic shocks*	Medium level of vulnerability	Overall low level of vulnerability	Overall low level of vulnerability
Estimated importance of excavators to this group ^{f)}	Somewhat important (5%)	Very important (55%)	Important (8%)*	Somewhat important (8%)

Source: Questionnaire responses submitted by interested parties to TRA; *Companies House, 2023; Dun and Bradstreet, 2023; HMRC, trader data, 2023.*

Notes:

^{a)} The significance metrics are derived by taking an average or weighted average of financial data for selected businesses over the most recent five years of published financial accounts.



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- b) GVA (Gross Value Added) was calculated as follows: $GVA = \text{operating profits} + \text{employment costs (total employees remuneration and total directors' remuneration)} + \text{depreciation} + \text{amortisation}$.
- c) EBITDA (Earnings Before Interest, Taxes, Depreciation and Amortisation) was calculated as follows: $EBITDA = \text{operating profit} + \text{depreciation} + \text{amortisation}$.
- d) EBITDA margin was calculated as follows: $EBITDA \text{ margin} = EBITDA / \text{turnover}$.
- e) Economic vulnerability is assessed using financial data of the sampled businesses, including profitability (EBITDA and EBITDA margin), turnover and employment, and relevant trends over the injury period (from 1 July 2018 to 30 June 2022) and in more recent period (using most recent financial data available).
- f) The estimated importance metrics are derived by taking a weighted average of sales and financial data from participating and selected businesses during an accounting period that covers the POI. Where financial data is not reported between POI dates, the closest accounting period reported is selected. This is true for importance analysis of all sectors excepting the end user sector, in which, financial data from the five most recent published financial accounts is used.



J5. Likely impact on affected industries and consumers

546. In this section The TRA assesses the overall impact that the requirement to give a guarantee might have on the affected groups identified. The TRA does this by looking at how prices and quantities of goods in the excavators supply chain might change under two scenarios: (i) if the provisional measure was to be imposed, and (ii) if the provisional measure was not to be imposed. The possible impacts for affected industries and end users (i.e. consumers) are then considered and compared across the two scenarios.

J5.1 Inputs and assumptions in quantification of economic impacts

547. There are two UK producers that sell in the UK market: JCB and Komatsu. Only JCB participated in this investigation, and supplied data and evidence to us. The TRA’s assessment of the quantity, the value and the unit price of excavators supplied to the UK market by Komatsu was informed by data from Systematics that JCB shared with the TRA.

548. JCB Brasil was the sole third country producer that participated in this investigation, and supplied data and evidence to us. With limited data and evidence from third country producers, the TRA’s assessment of the quantity, the value and the unit price of excavators supplied to the UK market by third country producers was also informed by data from Systematics that JCB shared with us.

549. In the TRA’s analysis it considered one scenario with the provisional measure and one scenario without the provisional measure, as detailed in Table 32. The TRA also considered the effects of different assumptions of tariff to price pass through (PT) and different assumptions of price elasticity of demand (PED).

Table 32: Scenarios used in quantification of economic impact.

Scenario	Description
Scenario with the provisional measure	All producers increase prices of excavators by between 33.26% (low PT of 75%) and 44.34% (high PT of 100%).
Scenario without the provisional measure	There are no changes to prices of excavators and quantities of excavators sold in the UK.

Notes: PT stands for tariff to price pass through. PT of 75% indicates that where an import tariff increases by 1%, prices increase by 0.75% as a result. PT of 100% indicates that where an import tariff increases by 1%, prices increase by 1% as a result.



550. In its analysis for the level of the measure the TRA use a weighted average of the individual and residual duties set out in [Section G](#) using current import values. This equates to an average duty of 44.34%.
551. The TRA's assumption of PED for excavators was based on the PED estimates from the work of Ghodsi et al. (2016).¹ In its different quantification scenarios the TRA used PED for Excavators ranging from -0.6 (low PED) to -1.0 (high PED).
552. The TRA's assumption of PT for excavators was based on internal research by the Department for Business and Trade (DBT) which found that the proportion of tariff costs passed on to downstream businesses typically range between 75% and 100%.
553. For UK producers, the TRA assumed that their marginal cost was equal to the sum of variable costs that are involved in production and sale of excavators. For UK downstream retailers, the TRA assumed that their marginal cost was equal to the price of the excavators that they purchased.
554. The TRA considers it is reasonable to expect that prices of all excavators sold in the UK, including UK-produced, PRC-produced and third country produced ones, would increase as a result of the requirement to give a guarantee. This is because there is currently evidence that PRC excavators sold in the UK undercut prices of other excavators sold here. As the provisional dumping margin is less than the provisional injury margin, this demonstrates that UK producers will want to increase prices of excavators that they sell in the UK by the amount of the provisional measure. The TRA also considers that it is reasonable to assume that prices of third country excavators would also increase. This is because the average price of third country excavator is similar to the average price of UK excavator. This suggests that third country excavators are also competing with PRC excavators on price when sold in the UK market.

J5.2 Impact on prices and quantities if the provisional measure was imposed

555. For the scenario with the measure, the TRA has assumed that all producers will raise their prices by the level of the measure – by between 33.26% (low PT of 75%) and 44.34% (high PT of 100%) – and market shares will remain

¹ Ghodsi, M., Grüber, J. and Stehrer, R. (2016) Import Demand Elasticities Revisited, The Vienna Institute for International Economic Studies, Wiener Institut für Internationale Wirtschaftsvergleiche, available at: <https://wiiw.ac.at/import-demand-elasticities-revisited-p-4075.html>.



unchanged. The TRA expect retailers to pass on these prices to their customers in order to maintain their profit margins.

556. These price increases are likely to lead to a reduction in quantities of excavators sold to end users. The TRA estimate that quantities could reduce by between 20% and 40% depending on degree to which the costs of the tariff are passed on to end users and their sensitivity to changes in prices.
557. The TRA does not assume that these increases in prices are likely to lead to excavator producers entering or exiting the UK market. This is because this provisional measure will be imposed for a maximum period of six months, with no certainty that it will be extended for a longer period.

J5.3 Impact on prices and quantities if the provisional measure was not imposed

558. In a scenario where the provisional measure was not imposed, the TRA assume that there are no changes to the existing UK market structure. This means that the prices and the quantities of excavators supplied to the UK market by UK producers, PRC producers and third country producers will remain unchanged.
559. While UK producers have suffered injury, the TRA does not believe they would be likely to exit the market before the provisional measure would expire.

J5.4 Likely impacts on affected industries and consumers

560. The TRA estimated welfare impacts for each scenario by looking at the change in producer and consumer surplus. Consumer surplus is the welfare a consumer gets from buying a product. Producer surplus is the welfare a producer gets from selling a product. Surplus was estimated using the following formulas:

$$PRODUCER SURPLUS = (Price per unit - Marginal cost) \times Quantity sold$$

$$\Delta CONSUMER SURPLUS = -\frac{1}{2} \times (Q_{TARIFF} + Q_{NO TARIFF}) \times (P_{TARIFF} - P_{NO TARIFF})$$

where:

Q_{TARIFF} is the quantity of excavators consumed with a provisional measure

$Q_{NO TARIFF}$ is the quantity of excavators consumed without a provisional measure

P_{TARIFF} is the average price of excavators with a provisional measure

$P_{NO TARIFF}$ is the average price of excavators without a provisional measure



561. In its quantification of the likely impact the TRA assume that the provisional measure is imposed for six months.
562. Table 32 shows the welfare impacts for different affected industries and consumers for each of the modelled scenarios. The impacts on different groups are explained in the following sections.



Table 33: Estimated welfare impact of imposing the provisional anti-dumping measure (as compared to not imposing it) on affected UK industries and consumers.

Scenario	UK producers (Δ PS) (£m)	UK importers and retailers (Δ PS) (£m)	UK end users (Δ CS) (£m)	Total change in welfare (£m)	Impact per Excavator purchased (£)
High PT, high PED	£15.0	-£8.3	-£110.0	-£103.3	-£55,128
High PT, low PED	£19.8	-£5.0	-£121.6	-£106.8	-£47,387
Low PT, high PED	£13.4	-£6.3	-£87.9	-£80.8	-£37,387
Low PT, low PED	£16.1	-£3.8	-£94.4	-£82.1	-£33,977
Range	£13.4 to £19.8	£-8.3 to £-3.8	£-121.6 to £-87.9	£-106.8 to £-80.8	£-55128 to £-33977
Average across all scenarios	£16.1	-£5.8	-£103.5	-£93.3	-£43,470

Notes: The TRA assumes the provisional measure is imposed for six months. Total change in welfare is the sum of the change in surplus for UK producers, UK retailers and UK end users (where end users are defined as downstream end user businesses and not as consumers that are private individuals). The TRA could not quantify change in welfare for UK upstream businesses. Total change in welfare does not account for change in tariff revenue because the TRA cannot directly attribute as a benefit or a cost to any affected industries and consumers. Δ PS = Change in Producer Surplus. Δ CS = Change in Consumer Surplus. PED = Price Elasticity of Demand. PT = Tariff to Price Pass Through.



J5.4.1 Upstream industries

563. In its assessment the TRA could not quantify change in welfare for upstream industries due to a lack of participation from upstream businesses.
564. JCB said that the measure could lead to increased production of excavators in the UK, which could increase the need for inputs benefitting upstream industries. The TRA considers these benefits to be unlikely to be large given the measure would only be in place for a maximum period of six months.

J5.4.2 UK producers of excavators

565. The TRA estimate that UK producers may benefit from the provisional measure by between £13.4m and £19.8m due to an increase in average prices of excavators sold in the UK.

J5.4.3 UK retailers and importers

566. The provisional measure is likely to have a negative effect on UK retailers, whose producer surplus could decrease by between £3.8m and £8.3m. Although UK downstream retailers will benefit from their ability to sell excavators to end users at higher prices, they will see a reduction in sales volume and value leading to an overall reduction in welfare.

J5.4.4 End users

567. In the TRA's assessment we quantified change in welfare for end users, which we considered to be downstream end user businesses.
568. The TRA's analysis suggests that the provisional measure could decrease consumer surplus of end users by between £87.9m to £121.6m. This negative impact of the provisional measures on end users outweighs the positive impact of the measure on UK producers. This is because end users are a more economically significant group in terms of economic size (employment, GVA, turnover) than other affected groups in the supply chain for excavators taken together.

J6. Likely impact on particular geographic areas or particular groups in the UK

569. This section explores how impacts of the proposed measure are likely to be geographically distributed and whether any particular groups might be disproportionately impacted. The TRA's spatial units of analysis are Travel to Work Areas (TTWAs).



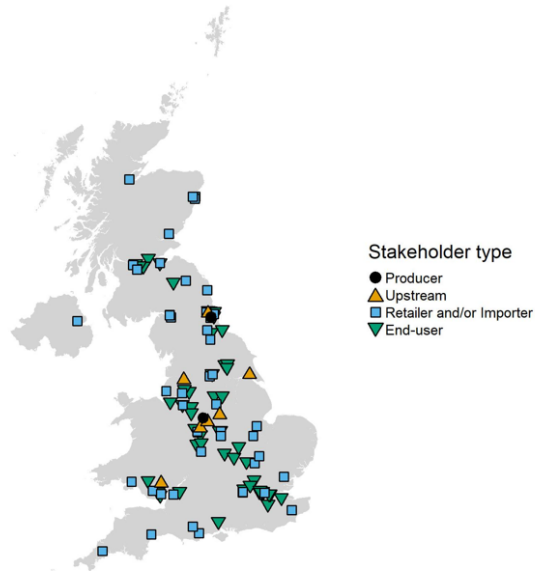
J6.1 Likely impact on particular areas

570. This section considers those companies for which the evidence suggests that certain excavators are a significant product: the UK producers, the upstream sector, the downstream (retailer) sector and the downstream (end user) sector.
571. The TRA used three sources of evidence for its employment analysis:
- Questionnaire responses: these provided employment by site and employment relating to the production of certain excavators for the participating UK producer, JCB;
 - Dun and Bradstreet business directory: this provides the location of known sites and estimates of employment by site; and
 - ONS estimates of working age population across the indicators: median earnings, job density, economic inactivity, and level of education by Travel To Work Areas (TTWAs).
572. To estimate employment by site, the TRA identified all known immediate subsidiaries of the companies selected in its analysis alongside their registered office address and known employment. Where there is no employment information for sites, the known remaining employment of the parent company is split evenly across sites.
573. Figure 17 shows the geographic distribution of businesses locations that are part of excavators supply chain in the UK. The TRA identified two concentrated areas of businesses around the main production sites of the two UK producers. However, estimated employment in these areas does not indicate a significant proportion of the working age population would be impacted by a measure.



Figure 17: Locations of UK businesses that are part of UK supply chain for excavators.

Locations of UK businesses that are part of UK Excavators supply chain.



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Notes: This map shows location of all known UK producers of excavators, sampled upstream businesses, sampled downstream retailers and importers, and sampled downstream end users.

UK producers, upstream, retailers and importers

574. The TRA did not find any areas where the estimated employment from UK producers, upstream industries, and retailers and importers constituted a significant proportion of the working age population of any TTWA.

End users

575. The TRA found the selected end user businesses employed a large portion of the working age population in the York and Leicester TTWAs so these areas could potentially be significantly affected by the proposed measure.

576. Neither area is very deprived with York being above average for all measures of deprivation considered and Leicester being above or close to the average for all.

577. The estimated employment in these areas comes from construction companies. Given the site-based nature of construction, and the relatively small impact that the TRA expects the measure to have on individual end user businesses, the TRA does not believe there are likely to be significant economic impacts on either area as a result of the proposed measure.

J6.2 Likely impact on particular groups



578. The TRA considered the likely impact on particular groups including those with protected characteristics as defined by the Equality Act 2010.

579. No party provided any evidence with respect to potential impacts on any particular groups, either as workers or consumers. There is no evidence to suggest that there will be disproportionate impacts on particular groups.

J7. Likely consequences for the competitive environment and for the structure of markets for goods in the UK

580. The assessment of likely consequences for the competitive environment and structure of the UK market considers four areas:

- The impact on the number or range of suppliers;
- The impact on the ability of suppliers to compete;
- The impact on incentives to compete vigorously; and
- The impact on the choices and information available to consumers.

581. The TRA estimate that the UK producers supplied between 10% to 20% of the UK market during the POI, with the rest supplied by imports. The largest volumes of imports came from Japan, the Netherlands and the Republic of Korea. Imports of excavators from the PRC accounted for between 5% and 10% of the UK market during the POI, and have increased compared to previous years.

582. Given the proposed measure can only be in place for a maximum of six months, the TRA does not expect the competitive environment or the structure of markets to change significantly as a result of the proposed measure.

J8. Such other matters as the TRA considers relevant

583. As part of the EIT, the TRA considers any other factors additional to those set out in the legislation, which could have implications in concluding whether the proposed trade remedy measure is in the economic interest of the UK.

584. The TRA found no evidence of any other relevant factors for this anti-dumping investigation and no evidence was submitted to us by interested parties.

J9. Conclusion on Economic Interest Test

585. In accordance with paragraph 25 of Schedule 4 to the Act, the EIT is met in relation to the requirement of a guarantee if the application of the guarantee is in the economic interest of the UK. This test is presumed to be met unless the TRA is satisfied that the application of the guarantee is not in the economic interest of the UK.



586. As described in previous sections, the TRA determined that the UK industry has suffered injury due to the dumped goods from the PRC. The [injury assessment](#) concluded that there would be further injury were the provisional measure not recommended.
587. The [economic significance section](#) assessed the financial metrics of the different groups that make up the supply chain for certain excavators in the UK. The TRA found that certain excavators were very important to UK producers, important to retailers and importers, and somewhat important to upstream businesses and end users.
588. In the TRA's assessment of the [likely economic impact](#) it was concluded that the imposition of the provisional measure would have an overall welfare reducing effect on the UK economy. The TRA's quantification of the likely impact confirmed that the provisional measure would have welfare reducing effect on UK end users, retailers and importers, which will be greater than the welfare enhancing effect on UK producers. The welfare reduction would come from an increase the price of excavators imported from the PRC up to the level of the measure, which could lead to an increase in the price of domestically produced excavators and the price of excavators imported from third countries. This increase in prices of different excavators would benefit UK producers but would impose a cost on retailers and importers, as well as end users. In the TRA's assessment it was unable to quantify change in welfare for upstream industries due to a lack of participation from upstream businesses
589. The TRA concluded that the imposition or non-imposition of the provisional measure is not expected to have any [geographical impacts](#) due to sites being distributed across the UK and employment for each site being a small proportion of total employment in each area. There was no evidence of impacts on [particular groups](#).
590. In the [competition section](#), the TRA determined that the provisional measure, which applies for a maximum period of six months, would not alter the current competitive environment or change the structure of the certain excavator market.
591. There were [no other matters](#) that the TRA identified as relevant for this anti-dumping investigation.
592. The TRA identified the following positive impacts of requiring importers to give a guarantee:
- The proposed measure will remove the material injury to UK industry.
 - UK producers could benefit from an increase in producer surplus of between £13.4m to £19.8m.
593. The contrasting negative impacts are:



- Prices of excavators from the PRC will increase as a result of a guarantee, which will have negative impact on retailers and importers, and on end users.
- The provisional measure will have welfare reducing impact on the UK economy because welfare loss for retailers and importers, and users will be greater than welfare gain for UK producers.
- Total welfare in the UK economy could decrease by between £80.8m and £106.8m.

594. Having considered the evidence submitted by interested parties and all of the factors listed in the legislation, the TRA does not consider that the negative impacts are disproportionate to the need to remove injury, and therefore conclude that the EIT is met for the proposed requirement of the guarantee.



Section K: Summary of provisional findings and recommendation to require a guarantee

K1. Preliminary findings

595. In accordance with paragraph 11(1) of Schedule 4 to the Act, the TRA has determined that:

- the relevant goods have been or are being dumped in the UK; and
- the dumping of the relevant goods has caused or is causing injury to a UK industry in those goods.

596. The TRA is satisfied that, in accordance with paragraph 13(4)(a) of Schedule 4 to the Act, its recommendation to require a guarantee is necessary to prevent injury being caused during the remainder of the investigation to the UK industry in the like goods.

597. The TRA has also determined its recommendation to require a guarantee meets the economic interest test.

K2. Recommendation

598. In line with paragraph 13(3)(a) of Schedule 4 to the Act the TRA recommends to the Secretary of State that all importers of the relevant goods should be required to give a guarantee in respect of the estimated anti-dumping amount given in Table 33 below.

599. In accordance with paragraph 14(1) of Schedule 4 to the Act a recommendation of a guarantee under paragraph 13(3) is required to specify the goods and include; the form of the guarantee; how an estimated anti-dumping amount applicable to the goods should be determined for the purpose of calculating the amount of the guarantee; how the amount of the guarantee should be calculated, and the period during which the requirement to give a guarantee should apply.

K2.1 Form of a guarantee

600. The TRA recommends that the guarantee takes the form of cash, a bond or a bank guarantee.

K2.2 Amount of guarantee

601. The guarantee should be calculated by applying the estimated anti-dumping amount as ad-valorem duties to the CIF import value of the relevant goods.

602. The TRA recommends the following estimated anti-dumping amounts for calculating the amount of the guarantee:



Table 34: Recommended duty amounts

	Dumping margin (%)	Injury Margin (%)	Estimated anti- dumping amount (%)
Sampled exporter/producer			
Liugong Group	35.32%	54.54%	35.32%
Sany Group	56.77%	62.97%	56.77%
Co-operating exporter/producer			
XCMG Group	44.33%	58.09%	44.33%
Sunward	44.33%	58.09%	44.33%
All other overseas exporters/producers			
Residual dumping margin	64.17%	82.72%	64.17%

603. The commodity code to which the rates will apply and the detailed description of the relevant goods is given in [Section E2](#).

Table 35: Duty rates by PCN

Category	Description	Basic Operating Weight	Duty rate
S	Small Excavators	>= 11 tonnes < 15 tonnes	Applicable recommended duty amount
M	Medium Excavators	>=15 tonnes < 20 tonnes	Applicable recommended duty amount
L	Large Excavators	>= 20 tonnes < 30 tonnes	Applicable recommended duty amount
XL	Extra-Large Excavators	>= 30 tonnes < 55 tonnes	Applicable recommended duty amount
XXL	Extra-Extra-Large Excavators	>= 55 tonnes < 80 tonnes	Applicable recommended duty amount
XXXL	Extra-Extra-Extra-Large Excavators	>= 80 tonnes	0%



K2.3 Period of the guarantee

604. If the TRA's Recommendation is accepted, the Secretary of State will publish a Taxation Notice, in line with paragraph 15(5)(b) of Schedule 4 to the Act. This will give effect to the imposition of the guarantee. Affected importers will be notified that they need to set up the guarantee when first importing the relevant goods into the UK. A guarantee will be required during the period of the provisional remedy.
605. The TRA recommend that the requirement to give a guarantee ends six months from the day after the date of the publication of the Taxation Notice, or when the definitive remedy is implemented, whichever is the sooner.



Annex A: Summary of submissions on the public file

The table below lists the information submitted to the TRA by interested parties and contributors to date that form part of its consideration to reach its decisions on the PAD and Recommendation.

Table 36: List of interested parties and submissions.

Interested party	Category	Submissions
China Chamber of Commerce for Import and Export of Machinery and Electronic Products	Trade Body	Pre-sampling questionnaire Contributor questionnaire
Dennison Commercials Limited	Contributor	Pre-sampling questionnaire
Fox Group Equipment Sales Limited	Contributor	Pre-sampling questionnaire
Greenshields JCB Limited	Contributor	Pre-sampling questionnaire
Guangxi Liugong Machinery Co., Ltd.	Exporter	Exporter questionnaire
Gunn JCB Limited	Contributor	Pre-sampling questionnaire
Holt JCB Limited	Contributor	Pre-sampling questionnaire
JCB do Brasil Limitada	Contributor	Pre-sampling questionnaire Third Country producer questionnaire
JCB Heavy Products Limited	Applicant	Application Pre-sampling questionnaire Producer questionnaire Comments on submissions and questionnaires Comments on sampling approach Comments on PCNs



Liugong Changzhou Machinery Co., Limited	Exporter	Pre-sampling questionnaire Exporter questionnaire
Liugong Machinery (UK) Limited	Importer	Pre-sampling questionnaire Importer questionnaire
Liugong Machinery Hong Kong Co Limited		Associated company questionnaire
Liuzhou Liugong Excavator Co., Limited	Exporter	Pre-sampling questionnaire Exporter questionnaire
Ministry of Commerce, P.R.C.	Foreign Government	Pre-sampling questionnaire Comments on PMS
Sany Heavy Machinery (UK) Limited	Importer	Pre-sampling questionnaire Importer questionnaire
Sany Heavy Machinery Limited	Exporter	Pre-sampling questionnaire Exporter questionnaire
Scot JCB Limited	Contributor	Pre-sampling questionnaire
Sany Heavy Machinery Co., Limited	Exporter Questionnaire	Pre-sampling questionnaire Exporter questionnaire Comments on PMS and possible representative country Comments on change to PCN structure
Sunward Intelligent Equipment Co., Limited	Exporter	Pre-sampling questionnaire
T. C. Harrison Group Limited	Contributor	Pre-sampling questionnaire
XCMG European Sales and Services GmbH	Exporter	Pre-sampling questionnaire Exporter questionnaire



XCMG Excavator Machinery Co., Limited	Exporter	Pre-sampling questionnaire Exporter questionnaire
XCMG UK Sales and Services Limited	Importer	Pre-sampling questionnaire Importer questionnaire
Xu Zhou Construction Machinery Group Import & Export CO., Limited	Exporter	Pre-sampling questionnaire Exporter questionnaire