

OFFICE OF FAIR TRADING

Completed acquisition by Thermo Electron Manufacturing Limited of GV Instruments Limited

The OFT's decision on reference under section 22(1) given on 15 December 2006. Full text of decision published 10 January 2007.

Please note that square brackets indicate figures or text that has been deleted or replaced at the request of the parties or third parties for reasons of commercial confidentiality.

PARTIES AND TRANSACTION

1. **Thermo Electron Manufacturing Limited** (Thermo) is a subsidiary of U.S.-based Thermo Electron Corp., a worldwide supplier of various analytical instruments, scientific equipment, services, software solutions and consumables. It provides instruments for a variety of manufacturing processes and in-the-field applications, including mass spectrometry. Thermo's worldwide turnover for the financial year ended 31 December 2005 was approximately \$2.6 billion.
2. **GV Instruments Ltd** (GVI) is a UK company and worldwide supplier of a range of mass spectrometers. It sells mass spectrometry instruments, spare parts, services and upgrades. Its total UK turnover for the financial year ending 28 February 2006 was less than £70 million.
3. Thermo acquired the entire issued share capital of GVI on 20 July 2006.

JURISDICTION

4. As a result of this transaction Thermo and GVI have ceased to be distinct. The parties overlap in the supply of Isotope Ratio Mass Spectrometers (IRMS) with UK shares of supply in Gas IRMS of between 94 per cent and

97 per cent, 100 per cent in Thermal Ionization Mass Spectrometers and 60 per cent in Multicollector-Inductively Coupled Plasma-MS respectively.

5. The share of supply test in section 23 of the Enterprise Act 2002 (the Act) is met. The OFT therefore believes that it is or may be the case that a relevant merger situation has been created.

BACKGROUND

6. In 1995, Thermo notified under U.S. merger control its proposed acquisition of the UK company, Fisons plc. The parties to that transaction overlapped in IRMS, among other areas.
7. According to press coverage of the case, the U.S. Federal Trade Commission (FTC) did not challenge the transaction under U.S. merger law on the condition that Thermo agreed to an upfront divestment of the entire overlap in mass spectrometry, which included IRMS. The parties submit that the FTC settlement related to a much larger business than the current transaction of which the IRMS business was only a small part. It nevertheless appears that antitrust risk associated with combination of mass spectrometry (including IRMS) businesses ought reasonably to have been apparent to Thermo.
8. This transaction was not subject to pre-merger clearance in any other jurisdiction, and Thermo acquired the entire issued share capital of GVI on 20 July 2006. As noted, however, the transaction does qualify for investigation under the UK's voluntary regime pursuant to the share of supply test.
9. Customer complaints to the OFT once the transaction had completed prompted the OFT to open an investigation, as a result of which:
 - the parties signed initial undertakings pursuant to Section 71 of the Act on 25 October 2006, which the OFT had requested for the purposes of preventing (further) pre-emptive action that might prejudice potential remedial action by the OFT or Competition Commission
 - the OFT received a satisfactory submission on 6 November 2006. The 40-working day administrative deadline therefore expires on 4 January

2007, and

- the OFT and Thermo agreed to an extension of the four-month statutory deadline to 17 January 2007.
10. Meanwhile, on 19 September 2006, Thermo notified the acquisition of Fisher Scientific International Inc. (Fisher) with the EC Commission under the EC Merger Regulation. The parties to that transaction were both active in some laboratory and diagnostic equipment sectors, but did not overlap in mass spectrometry. On 9 November 2006 the EC Commission accepted Phase 1 undertakings in that case. The same transaction was notified to the FTC on 24 July 2006 and the Consent Decree accepting the same divestment remedy is dated 17 October 2006.

RELEVANT MARKETS

Product market

11. The parties overlap in the supply of mass spectrometers (MS). MS are instruments of measurement in which a chemical compound is converted from a molecule into ions. These ions are then separated and measured. Of relevance to this assessment are IRMS which are a specific sub-group of MS. IRMS are used to measure the ratio of the different isotopes¹ of elements. The main customers of the IRMS in question are the nuclear industry and life science departments of universities and research institutes.
12. In particular, the parties overlap in the following IRMS segments:
- i) Gas (or 'Stable') Isotope Ratio Mass Spectrometers (Gas IRMS);
 - ii) Thermal Ionization Mass Spectrometers (TIMS); and
 - iii) Multicollector-Inductively Coupled Plasma-MS (MC-ICP-MS).
13. Gas IRMS are used to identify and measure the relative ratios of non-radioactive (stable) isotopes in samples which are, for the purpose of the analysis, converted into a gas that will be destroyed as a result of the

¹ Isotopes are different forms of the same chemical element, which differ in their atomic mass but not their chemical behaviour.

analytical process. TIMS and MC-ICP-MS are mainly used to measure the relative isotope ratios based on the decay of radioactive isotopes.

14. GVI, but not Thermo, is active in Noble Gas MS, which are used to measure very small amounts of gases and are therefore characterized by very sensitive measurement capabilities.
15. Thermo submits that the different types of MS products listed above are substitutable for many applications, and that they can be substituted by other mass spectrometry products or instruments reliant on certain alternative technologies outside MS such as gas chromatography and liquid chromatography. Thermo submits that the relevant product market should therefore be considered that of laboratory life science and analytical scientific instruments. As an example, Thermo has mentioned medical diagnostic tests for the helicobacter pylori bacterium as a niche application where Gas IRMS was replaced by an alternative technology. However, even Thermo accepts that at present and in the near future, there cannot be expected to be substitutability across the entire range of IRMS applications.
16. On the demand side responses from customers almost unanimously indicate that the sub-segments of IRMS products as outlined above are not substitutable, nor that other mass spectrometry products would be substitutes. Customers have responded that they would be unable to switch to other types of spectrometers from the one they currently use in response to a 5-10 per cent price increase. The different types of IRMS are viewed as having fundamentally different requirements, performance and prices. Further, the products differ in sample preparation and the functions performed for and by each instrument. A few responses, however, confirm the parties' submission that there may be an overlap – albeit limited – between TIMS and MC-ICP-MS functions, but this may only be the case for certain applications and certain types of customers.
17. Customer and supplier responses also indicate that products based on alternative technologies, such as analytical (optical) devices, are not substitutable, because they do not offer sufficient levels of precision. The OFT has contacted a number of suppliers of such alternative technologies but only one replied. This supplier said that they did not consider themselves to compete with IRMS products.

18. In terms of supply-side substitutability, supplier responses also did not indicate much substitutability between different product types. Competitors suggested that the time required for undertaking development of another type of mass spectrometry product, and the associated costs, would be significant. Third parties have provided estimates of the time frame required to enter a particular IRMS product segment ranging from two to five years. While the OFT has not received sufficient evidence to quantify the scale of investment required for manufacturers of other types of IRMS products to switch in response to a relative price increase, the maturity of the market would discourage potential alternative suppliers, as would the fact that the number of customers is limited and purchases are infrequent, due to the five to ten year life-span of IRMS products.
19. The evidence the OFT has gathered suggests that there is very little scope for substitution between different IRMS types as well as between IRMS and other analytical devices. Consequently, the relevant frames of reference for the purpose of this assessment are: (i) Gas IRMS; (ii) TIMS; (iii) MC-ICP-MS.
20. Spare parts and servicing account for a considerable share of the parties' revenues in the overall IRMS segment (see Table 1 below).

Table 1: Primary and secondary markets' contribution to sales

Area/Company	GVI	Thermo
Worldwide		
IRMS unit sales	66 per cent	87 per cent
Spare parts etc	34 per cent	13 per cent
UK		
IRMS unit sales	43 per cent	87 per cent
Spare parts etc	57 per cent	13 per cent

Source: Thermo estimates, based on 2005 sales.

21. To the extent that there is some interoperability between different manufacturers' products, the frame of reference for spare parts and services could be considered separately from the primary IRMS equipment.

Third parties have indicated that some spare parts could be purchased from independent manufacturers whereas others, integral to the IRMS products, would be purchased from the original manufacturer. However, the OFT does not consider it necessary to conclude on this point for the purposes of analysing the current transaction, as it does not materially impact on the assessment. No customer has raised a concern about spare parts and/or after-sales services.

Geographic market

22. Thermo submitted, and all third parties that responded to our inquiries have agreed, that the geographic frame of reference is global. Evidence supplied by Thermo on the profile of their customers and the requirements of tender calls reveal that geographic location of the supplier is not considered important. Customers' responses confirm that national presence of the original manufacturer is not required, although after-sales availability for service is considered important. Respondents indicate that sufficient after-sales service is provided by an international supplier's local or regional service teams. Distribution costs are not considered to amount to a significant proportion of the overall price.
23. For the purpose of this assessment, the OFT therefore considers the relevant geographic frame of reference to be global.

HORIZONTAL ISSUES

Share data

24. Table 2 below contains shares of supply in Gas IRMS, TIMS and MC-ICP-MS on a worldwide European and UK basis.

Table 2

Area/Company	Gas IRMS	TIMS	MC-ICP-MS ⁺
Worldwide			
Thermo	66-79 per cent	59-81 per cent	48-60 per cent
GVI	17-30 per cent	17-38 per cent	0-12 per cent
Others	4-5 per cent	0 per cent	40 per cent
European			
Thermo	63-85 per cent	67-10 per cent	40-60 per cent
GVI	9-32 per cent	0-33 per cent	0-20 per cent
Others	3-6 per cent	0 per cent	40 per cent
UK			
Thermo	73-96 per cent	75-10 per cent	40 per cent
GVI	0-23 per cent	0-25 per cent	20 per cent
Others	3-4 per cent	0 per cent	40 per cent

Source: Thermo estimates, based on annual figures calculated over a three year period. 'Others' are residual calculations. Range of shares for 2003-2006 (to date)

Notes: ⁺ The UK shares for this segment are only based on 2003 figures.

IRMS in general

25. In terms of product quality, the OFT has received mixed responses and while some third parties confirm that GVI's products were considered of a lower quality standard than Thermo's, it appears that a number of customers traded off considerations of price and quality and considered the parties to be each other's closest, and in some cases, each other's only, competitors. Thermo noted that GVI has, in the past, altered its pricing policies to reflect improvements in Thermo's product offering. This may be suggestive of competitive interaction between the merging parties although Thermo claimed that its development decisions had never been influenced by GVI (so that any competitive constraint was asymmetric). Also, limited bidding data the OFT has received from the parties suggests that GVI has been successful in cases when Thermo was also bidding. In addition, customers told the OFT that they had in the past successfully played the parties off against each other, for example, to achieve discounts.

Gas IRMS

26. The OFT found that Thermo and GVI had by far the strongest presence in the Gas IRMS market, as demonstrated by joint shares of supply in excess of 90 per cent (with an increment of up to 30 per cent). A number of customers have identified GVI as Thermo's closest competitor, and, although responses are mixed on the efficiency of GVI itself, a number of customers confirmed that they considered both firms when tendering for the supply of Gas IRMS instruments. They submitted that competition between the parties pre-merger enabled them to negotiate better prices and/or discounts.
27. Thermo submitted that there was little pre-merger competition between GVI and Thermo. In particular, Thermo put it to the OFT that the parties' products should be viewed as complements rather than close competitors, since Thermo would traditionally supply 'high end' Gas IRMS products to customers that specifically require high performance, whereas GVI's Gas IRMS products were always lower priced, reflecting their less sophisticated functionality. While it is true that Thermo does produce a more expensive high-performance Gas IRMS product (Thermo Mat 253), it does also produce a lower end product, Thermo Delta, which appears to be in more direct competition with GVI's IsoPrime. Moreover, a number of third party

responses indicate that customers trade off price and quality considerations when making their purchase of Gas IRMS.

28. Thermo also submitted that smaller firms active in this segment, such as MS Solutions and SerCon have been successful in securing a number of contracts and would therefore sufficiently constrain the merged entity. However, some respondents did not identify these firms as (potential) suppliers of IRMS products. Third parties have also submitted that these remaining competitors are of significantly smaller size than the new entity. Their share of supply was less than 4 per cent collectively and it is unclear how much of a competitive constraint they will be able to pose on the merged entity going forward.

TIMS

29. The OFT found that Thermo and GVI are the only two firms with a presence in the manufacturing of TIMS. The merger effectively represents a reduction from two firms to one in this segment. The parties submit that GVI has not sold any TIMS units in the UK since 2003 and that JSC Sumy (from Ukraine) is an alternative supplier. However, third parties did not mention Sumy as viable competitor in TIMS. In light of the global frame of reference and despite volatile shares of supply, the increment of about 40 per cent (over the 2003-2006 period) as a result of the merger is considered significant. Thermo has not sought to argue that a high-end/low-end distinction may apply in this segment.

MC-ICP-MS

30. The OFT found that pre-merger there were three manufacturers in this segment. The merger therefore represents a reduction of worldwide manufacturers from three to two, with Thermo having a post-merger share of supply of 60 per cent (increment of up to 20 per cent).
31. Given that the share of Nu Instruments (the other player in this sector) is considerably higher than GVI's, the OFT believe that it is a credible competitor in MC-ICP-MS. However, the OFT has not received evidence that indicates that post-merger competition between Nu Instruments and Thermo alone would be sufficiently vigorous to offset the loss of competition resulting from the merger. On the contrary, a reduction from three to two players may give rise to competition concerns. As in the case

of TIMS, Thermo did not seek to contend that the parties were, pre-merger, active in differentiated high-end and low-end segments respectively.

Barriers to entry and expansion

32. As set out below, the OFT does not believe that entry or expansion would be timely, likely or sufficient to resolve the competition concerns raised.
33. Thermo has submitted that entry into Gas IRMS would not be difficult, in so far as the technology required is well known and readily available from many sources. Thermo believes entry could be undertaken in stages. MS Solutions and SerCon were mentioned as recent UK entrants. However, it is unclear to what extent SerCon could be classed as a new entrant, as it entered the market by purchasing the assets of a former Gas IRMS supplier. Thermo indicated that SerCon has increased its market share from 0 per cent to 10 per cent, although third party estimates put this much lower as indeed do Thermo's own estimates as provided to the OFT (and summarised in Table 2 above). In particular, Thermo provided the OFT with a list of customers that it believed SerCon had supplied with Gas IRMS products during 2006. However, this information was only provided at a very late stage in the investigation and the OFT was unable to verify the information in the time available.
34. [...]
35. Thermo acknowledged that entry into TIMS and MC-ICP-MS might be less easy, in view of the low value of the market and the more complex technology involved. It submitted that entry was most likely by current suppliers of TIMS for entry in the MC-ICP-MS and vice versa.
36. Third party responses indicate that barriers to entry in Gas IRMS, MC-ICP-MS and TIMS may be high, both in terms of time required to develop the technology, time to recover the research costs and the level of investment. Moreover the need to hire qualified engineers could be an obstacle. Also, the parties were perceived as well-established players in what is generally believed to be a mature market. In particular with regard to TIMS, third parties commented that there are a small number of contracts globally, which make it difficult to recover the cost of investment in a reasonable time-frame.

Buyer power

37. Buyers in this market are often universities or publicly funded institutions that apply for the amount of money they need to buy a new MS. Thermo contended that due to the infrequent demand, each project would represent a large proportion of any manufacturers' revenue and so would be eagerly competed for. Negotiation power would therefore remain due to the continued presence of SerCon and MS Solutions in respect of Gas IRMS and NU Instruments in MC-ICP-MS. However, the OFT believes that the infrequency of purchases, coupled with the fact that there are no bulk or significant size orders, means that the buyers' negotiating power is expected to be limited. Third parties who believed that they had buyer power pre-merger, for instance due to the reputation of their university/research institution and/or the ability to select between Thermo and GVI, expect the merger to greatly reduce any negotiation strength they may previously have had.

Conclusion

38. On the basis of the foregoing, the OFT believes that the transaction results in a (near) monopoly in both Gas IRMS and TIMS, and creates a duopoly in MC-ICP-MS, and that countervailing factors (entry, buyer power) are insufficient to resolve the concerns raised. As a result, and consistent with customer concerns, the OFT believes that post-merger, Thermo may have an incentive to raise prices and/or lower product or service quality; it may also result in Thermo facing less of an incentive to adapt products to the individual customer's specification needs. In the longer run, and as many third parties respondents have pointed out, the transaction may also have had an adverse effect on future product innovation. As suggested above, this harm does not depend on Thermo and GVI both occupying the same point on the price/quality spectrum: pressure from GVI's lower-priced offerings may have made Thermo innovate to a greater degree to distinguish its products (or product/service package) on a value-for-money basis from GVI's competing proposition.

COUNTERFACTUAL

39. The relevant statutory test is Section 22 of the Act, which imposes a duty to refer upon the OFT 'if the OFT believes it is or may be the case that [the

completed acquisition by Thermo Electron Manufacturing Limited of GV Instruments Limited] has resulted or may be expected to result in a substantial lessening of competition within any market or markets in the United Kingdom for goods or services'.

40. In order to decide whether the duty to refer applies, the OFT considers the merger's impact relative to the situation expected to prevail absent the merger (i.e. the counterfactual). Generally speaking, this will be current (pre-merger) conditions of competition.
41. In this case, Thermo has submitted that GVI would have exited the market within a short period of time regardless of the transaction and that the 'failing firm defence' criteria are met.²
42. In order to treat this contention as the appropriate counterfactual for assessment of the merger situation, the OFT considers that sufficient compelling evidence is required, particularly as the postulated counterfactual involves the exit of one of the merging parties. In effect, the parties are arguing that, to the extent competitive harm may arise, the merger is not the cause of that harm as it would occur in any event. Where this type of absence of causation between the merger and the lessening of competition is argued, the OFT will as a matter of policy seek a high level of supporting evidence (within the parameters of its belief relevant to the reference test of the Act, which entails a comparison of the outcomes with and without the merger). This approach to evidentiary burden is appropriate given the asymmetry of information on such a key point: such claims are easily made but difficult to verify independently, not least within the constraints of first-phase merger control. The OFT notes, however, that the standard has been met in previous decisional practice at first-phase,³ and following analysis is consistent with that adopted in previous OFT decisional practice under the Act.⁴

² See further the OFT's treatment of evidence required to meet the conditions of its failing firm defence (*Mergers: Substantive Assessment Guidance*, para 4.36-39).

³ See First West Yorkshire/Black Prince, decision of 27 May 2005.

⁴ See above; see also BAI/P&O Ferries, decision of 7 December 2004; Arcelor/Corus, decision of 9 September 2004, Taminco/Air Products, decision of 16 July 2004.

GVI's market exit absent the merger

43. Thermo has submitted a number of factors to support its assertion that GVI's exit from the supply of IRMS products was sufficiently immediate, irrevocable and unconnected to its acquisition by Thermo:

- According to GVI's management accounts for the 16 months prior to the transaction, the firm made a cumulative operating loss of £ 1.68 million. Its asset base had deteriorated substantially and as a consequence, GVI's net current assets decreased from around £1.4 million in February 2005 to £322,000 in July 2006. Moreover, Thermo submitted that there were further numerous material unrecorded liabilities and issues, for example, obsolete stock that was not correctly accounted for, such that the real position was even worse than this.
- GVI's significant cash-flow problems seriously damaged its relationships with key suppliers to the extent that suppliers were withholding deliveries until outstanding debts were paid and therefore GVI was no longer able to keep manufacturing and shipping its products. Several suppliers had issued proceedings resulting in court judgements. As a result, at the time of acquisition, GVI had accumulated an order backlog of 30 customers for IRMS products. As GVI's key suppliers would no longer deliver the necessary inputs, it could not complete and sell its products in order to generate the necessary cash to settle its outstanding liabilities. At the same time, there was some evidence that, in the period leading up to the merger, GVI had been accepting orders on terms which it was aware it could not meet in order to secure up-front deposits with which to pay other debtors.
- Immediately after the acquisition, Thermo was required to inject some £2.4 million into GVI in order to meet outstanding trading liabilities.
- GVI's access to external funding was restricted, because it had already factored its receivables and had insufficient assets left against which to secure a loan - it had previously used the life insurance policies of two of the company's directors to secure loans. Thermo also believes that GVI was in regular breach of banking covenants in relation to the bank loan and overdraft facilities secured in 2005.

44. In the light of the above, the OFT believes that GVI, as the business it then was, was in such a parlous position that without the merger it would have exited the market and this would have occurred in the near future. In our view, the practice of seeking orders – on terms that could not be met – in order to seek deposits to pay suppliers so that other orders could be completed, would lead to a spiral of debt against ever decreasing net assets. However, the fact that the business in question, under existing management, would have ceased operation is not decisive of the question as to whether the relevant assets of GVI of competitive significance would necessarily have exited the market on a permanent basis. This question is considered in more detail below.

Could the GVI business have been re-organised?

45. Thermo provided the OFT with a copy of an internal GVI document entitled '*GV Instruments Restructuring Summer 2006*' which had, apparently, been drafted by a senior technical manager within GVI. It is unclear, however, whether this plan was ever put to GVI senior management. Clearly it was never acted upon since the merger with Thermo was completed shortly thereafter (the plan is not dated but appears to have been written in Summer 2006 and the merger with Thermo was completed on 20 July 2006).
46. The plan begins 'In 2005 GV Instruments made a loss despite a robust order log' and then makes certain recommendations for change including certain redundancies/retirements; improving supplier relationships; and setting gross factory margins at no less than 55 per cent. Thermo commented that the plan had a number of weaknesses since the redundancies would have affected GVI's ability to supply and service products and there was no explanation as to how such redundancies would be financed. To improve supplier relationships the plan set out a requirement for a cash injection of £500,000 to be in place by June 2006. Thermo pointed out that not only did GVI not have access to such cash injections but the financial position was actually even worse than was portrayed in the document. GVI was simply not able to achieve greater gross margins (presumably by increasing prices).
47. On the available evidence, the OFT accepts that re-organisation of the GVI business to improve its viability would have required a substantial cash

injection of at least £0.5 million and possibly as much as the £2.4 million that Thermo was injected. The internal GVI documents (and statement of one of the former directors) seen by the OFT indicate that the company had considered and rejected the possibility of re-organisation given that GVI's 'scope to attract funding had become limited'. Nothing that the OFT has seen would suggest that such a level of cash injection could have been obtained

No less anti-competitive alternative to the merger?

48. In light of the above, pre-merger conditions (the status quo ante) is an inappropriate counterfactual because GVI was in a parlous financial situation without serious prospect of re-organisation. Instead, the relevant counterfactual, as comparator to the post merger outcome, is the outcome assuming either (i) a realistic alternative purchaser(s) of the business pre-liquidation or (ii) failure of GVI and liquidation of the relevant assets.

Alternative purchaser

49. On this basis, and in light of Thermo's position in IRMS products, it appears that the purchase of GVI by any other realistic buyer would have resulted in lower combined shares of supply in the IRMS product segments in question. Such a purchase would potentially represent a less anti-competitive alternative to the merger.
50. In order to be satisfied that no other realistic purchaser existed, the OFT has sought to gather sufficient compelling evidence on this point, including evidence that 'all possible options have been explored'⁵. The OFT interprets this standard with commercial reasonableness in mind: it does not require that wholly unrealistic options be pursued or that every conceivable global acquirer be contacted. Consistent with international practice, the OFT does require sufficient evidence that the allegedly failing firm or division has made unsuccessful good faith efforts to elicit reasonable alternative offers of acquisition of the assets above liquidation value.⁶

⁵ See *Mergers: Substantive assessment guidance*, para. 4.39 as reflected in previous decisional practice cited at note 4 above.

⁶ Compare the U.S. Horizontal Merger Guidelines paras. 5.1-5.2 and the OFT's BAI/P&O Ferries decision of 7 December 2005.

51. On the balance of the evidence put before it, the OFT believes that GVI could have elicited reasonable alternative offers during the 18-month period from early 2005 to mid 2006 or in any event attempted to do so, and thus demonstrate to the OFT's satisfaction that no realistic alternative purchased does or did in fact exist. In the absence of such evidence, the OFT believes that it may be the case that a realistic and competitively-preferable purchaser to Thermo exists or would have existed at the relevant time. In this connection, the following is relevant.

- The parties have submitted that GVI was essentially up for sale for a period of 18 months. In May 2005, GVI had received an acceptable indicative offer from Glenrose, a private equity vehicle set up by former Thermo employees. However, after nine months of discussions, which included a 90-day exclusivity period, GVI's directors ended the negotiations because Glenrose had not taken any further steps (such as instructing lawyers or accountants) to follow the offer through. GVI concluded that Glenrose was not seriously interested in a transaction. In January and February 2006, GVI entered into discussions with MKS Instruments Ltd (MKS) and Gatan Inc. (Gatan) but these negotiations collapsed without any offers being made. Subsequently, GVI approached Thermo.
- According to a statement by John Myatt, former chairman of GVI, the following factors were considered in the selection of a viable buyer; sufficient economic resources (including the means to see GVI through a possible period of low sales); maximising the value on sale; and safeguarding its employees and minimising redundancies.
- In light of the financial difficulties mentioned above, Thermo submitted that time was of the essence and that GVI could not have survived during the additional three or four months which would have been required to find an alternative buyer to Thermo. From GVI's perspective, the need to find a buyer quickly was compounded by the fact that the company founder and CFO was terminally ill at that time. It was believed (by GVI) that Thermo was the only company that could realistically complete the purchase in time.
- Set against the parties' plausible assertions, however, are certain uncontested facts. According to the submissions to the OFT made by Thermo, there are a number of potential competitors to the parties,

including Applied Biosystems, Waters Corporation, Agilent Technologies, Bruker Biosciences Corporation, Shimadzu Scientific Instruments, SerCon, MS Solutions, Nu Instruments, Sumy JSC and Los Gatos Research Inc.. None of these companies had been approached by GVI and it is not clear to the OFT how and why GVI had selected MKS and Gatan for an approach rather than its alleged competitors (other than, ultimately, Thermo). While Thermo submitted that it was well-known in the industry that GVI was looking for a buyer and that anyone interested could therefore have approached it with an offer, the fact remains that the merger with Thermo itself was initiated by GVI and was not the result of an approach by Thermo to GVI. It is not therefore appropriate to rule out all of the above potential industry purchasers on the flawed premise that their failure to approach GVI demonstrates that each is an unrealistic alternative purchaser.

- On the contrary, on the evidence before it, the OFT does not have the requisite level of belief that potential buyers were not only aware of GVI's difficult financial situation but positively knew that it was up for sale. The OFT's investigation elicited a response from one third party to suggest that the third party in question could have been a realistic buyer of all or some of the business had it been approached prior to Thermo's acquisition of GVI.

Failure of the firm

52. As an alternative to a purchaser other than Thermo, the OFT has also considered the following.⁷ Even absent a viable alternative buyer who could have continued operating GVI as a going concern in whole or in part prior to the failure of GVI as a business, there remains the possibility that relevant GVI assets could have been acquired by one or more third parties out of GVI's liquidation and used to compete in the segments in question.
53. Thermo submitted that there is no guarantee that smaller competitors could gain market share by acquiring GVI's assets. It would be more realistic, Thermo said, to assume that GVI's share would accrue to Thermo. However, there is some evidence to suggest that previous entry was partly driven by the availability of assets and personnel from failed companies

⁷ See *Mergers: Substantive assessment guidance*, paras. 4.37.

(see the examples of SerCon and MS Solutions under 'Barriers to entry and expansion' above) and that, as such, it is plausible that smaller (potential) competitors could have gained market share by acquiring (some) GVI assets.

54. One countervailing benefit raised by Thermo was that the merger protected the position of those customers that had outstanding orders with GVI. Had GVI failed, or been allowed to fail, such customers would probably have lost any deposits that had been paid. Similarly, the position of existing customers requiring spare parts or service support would have been made worse. The OFT does not exclude the possibility that the acquisition of a failing firm, which results in a substantial lessening of competition, can result in customer benefits. Such benefits would need to outweigh the customer detriments which arise through loss of competition.⁸ The OFT would expect parties to produce detailed and verifiable evidence of any benefits and the OFT must believe that the claimed benefits will materialise within a reasonable period of time and would be unlikely to arise without the merger.⁹ In this case, Thermo has not produced detailed and verifiable evidence of the claimed benefits and the OFT is not satisfied that such benefits, if any, would outweigh customer detriment resulting from the loss of competition.

Conclusion

55. Overall, the OFT believes that it is entirely possible that there may be no less anticompetitive alternative to the merger. However, the OFT did not receive sufficient compelling evidence to dismiss the realistic prospect that there may be (or may have been) a less anti-competitive alternative to the merger, namely competition flowing from the acquisition by one or more purchasers of relevant GVI assets, either pre- or post-liquidation.
56. In these circumstances, the OFT is under a duty to refer the transaction because it is or may be the case that the post-merger outcome has resulted or may be expected to result in a substantial lessening of competition relative to the realistic less anti-competitive alternatives identified above.

⁸ Ibid. paragraph 4.38.

⁹ Ibid. paragraph 4.7.

THIRD PARTY VIEWS

57. Third parties agreed that in light of the degree of specification of different IRMS products they are not generally considered to be substitutes. A large majority of customers were concerned about this transaction.
58. Third parties' main concern related to the loss of GVI as a constraint on Thermo as a result of the merger. In particular, respondents indicated that this might reduce the incentive for Thermo to innovate in the future. Switching supply from one type of IRMS to another was not considered to be easy because of high time and monetary barriers to entry and expansion. Notwithstanding Thermo's claim that it would provide GVI customers with world-class customer support, some customers raised the concern that continuous technical support for users of GVI products might not be available long enough to cover the 10-20 year life-span of the instruments in question.
59. In light of the overall decision, the OFT has not needed to address one complainant's unsupported allegations that the merger might increase Thermo's incentive and/or ability to engage in cross-subsidisation between product types to aid predation and/or bundling in different market segments.

MARKETS OF INSUFFICIENT IMPORTANCE

60. Pursuant to Section 22(2)(a) of the Act there is an exception to the OFT's duty to refer where the market concerned is not of sufficient importance to justify the making of a reference. According to Thermo, the best estimate of the average global value of the Gas IRMS, TIMS and MC-ICP-MS segments combined is approximately £38 million, and the OFT believes the UK element accounts for around £2-£4 million.
61. The OFT's *Mergers Substantive Assessment Guidance* at paragraph 7.5 suggests that this may be the case where the costs of the reference would be disproportionate to the size of the markets concerned. Given the value of the UK element of the global market might be between £2-4 million (depending on the methods of calculation), the value of the markets concerned is too great to be treated as of insufficient importance based on current OFT guidance.

UNDERTAKINGS IN LIEU

62. Where the duty to make a reference under section 22(1) of the Act applies, pursuant to section 73(2) of the Act the OFT may, instead of making such a reference, and for the purpose of remedying, mitigating or preventing the substantial lessening of competition concerned or any adverse effect which has or may have resulted from it or may be expected to result from it, accept from such of the parties concerned undertakings as it considers appropriate.
63. The OFT has therefore considered whether there might be undertakings in lieu of reference which would address the competition concerns outlined above. The OFT's *Mergers Substantive Assessment Guidance* states that, 'undertakings in lieu of reference are appropriate only where the competition concerns raised by the merger and the remedies proposed to address them are clear cut, and those remedies are capable of ready implementation.' (paragraph 8.3).
64. Thermo offered assurances that it would continue to maintain after sales service facilities for GVI customers. It also submitted that it did not have the intention to discontinue GVI's Gas IRMS product. However, these proposed undertakings do not restore competition between independent suppliers of IRMS and do not address the competition concerns identified.

ASSESSMENT

65. The parties overlap in the supply of IRMS products in the UK, in particular in Gas IRMS, TIMS and MC-ICP-MS. As a result of the transaction, the merged entity holds a monopoly or near monopoly share of between 94 per cent and 97 per cent in Gas IRMS, 100 per cent in TIMS and 60 per cent in MC-ICP-MS respectively. Neither entry or buyer power alleviate the concerns raised by this degree of concentration. Indeed, a large majority of third party respondents were concerned about this transaction and submitted that they expect it to impact adversely on competition.
66. As a result, the OFT believes that with the loss of GVI as its main competitor Thermo may post-merger have the incentive to raise prices, decrease product or service quality and diminish its rate of innovation.

67. However, the OFT has concluded that the typical benchmark against which merger effects are assessed – prevailing conditions of competition – is inappropriate here, because Thermo has provided sufficient compelling evidence that GVI would have exited regardless of the merger. Given GVI's position, the question therefore is whether there may be a less anti-competitive alternative to the merger or whether competitive harm would have occurred in any event.
68. On this critical question, the OFT has not been able to conclude that there was no realistic prospect of an alternative buyer whose purchase of the business or its assets would represent an outcome significantly better for competition than the sale to Thermo.
69. In the absence of sufficient compelling evidence that a better outcome for competition than the merger could not have been achieved, the OFT is under a duty to refer this transaction pursuant to Section 22(1) of the Act.
70. Consequently, the OFT believes that it is or may be the case that the merger has resulted in a substantial lessening of competition within a market or markets in the United Kingdom.

DECISION

71. This merger will therefore be referred to the Competition Commission under Section 22(1) of the Act.