

# VTech and LeapFrog

A report on the completed acquisition by  
VTech Holdings Limited of LeapFrog  
Enterprises, Inc

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*Website:* [www.gov.uk/cma](http://www.gov.uk/cma)

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The Competition and Markets Authority has excluded from this published version of the report information which the Inquiry Group considers should be excluded having regard to the three considerations set out in section 244 of the Enterprise Act 2002 (specified information: considerations relevant to disclosure). The omissions are indicated by [✂]. Some numbers have been replaced by a range. These are shown in square brackets.

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## Glossary

## Summary

1. On 30 August 2016, the Competition and Markets Authority (CMA) referred the completed acquisition by VTech Holdings Limited (VTech) of LeapFrog Enterprises, Inc. (LeapFrog) (the Merger) for an in-depth (phase 2) merger inquiry. The CMA is required to address the following questions:
  - (a) whether a relevant merger situation has been created; and
  - (b) if so, whether the creation of that situation has resulted, or may be expected to result, in a substantial lessening of competition (SLC) within any market or markets in the UK for goods or services.<sup>1</sup>
2. VTech is a supplier of electronic learning toys for infant and pre-school children, incorporated in Bermuda but with its head office in Hong Kong. VTech's operations in the UK are limited to the import and distribution of toys, sold through VTech Electronics Europe PLC.
3. LeapFrog is a US corporation that develops and supplies educational entertainment for children, including multimedia learning platforms, related content and learning toys. LeapFrog's UK subsidiary is LeapFrog Toys (UK) Limited, which sells and distributes LeapFrog toys to retailers.
4. VTech and LeapFrog (the Parties) overlap in the supply of learning toys and child tablets and content in the UK.

### Relevant merger situation

5. We have found that the Merger has resulted in a relevant merger situation within the meaning of the Act.

### Counterfactual

6. Before turning to our analysis of the competitive effects of the Merger, we considered what would have happened to LeapFrog in the absence of the Merger (the counterfactual). We found that LeapFrog's financial position had deteriorated and, absent additional funding, LeapFrog would have failed financially by June/July 2016 at the latest.
7. We then considered whether, in the absence of the Merger, there would have been an alternative purchaser for the firm or its assets.

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<sup>1</sup> Enterprise Act 2002 (the Act), section [35](#).

8. Our view is that absent the merger with VTech, on balance, it is likely that there would have been an alternative purchaser of LeapFrog.
9. We have concluded that the appropriate counterfactual against which to assess the effect of the Merger is prevailing conditions of competition (with LeapFrog remaining in the market under alternative ownership).

### **Market definition**

10. The purpose of market definition in a merger inquiry is to provide a framework for the analysis of the competitive effects of the merger.
11. We initially considered a market for Toddler Electronic Learning (TEL) toys, but we conclude from evidence provided to us (particularly from the consumer survey evidence and views from retailers) that our competitive effects assessment should consider a wider market to include other types of educational/learning toys. This market should include learning toys that are recommended for use for children aged 0 to 5 years, as the Parties target the majority of their toys at this age group. We note that the boundaries of this market are not clearly defined and have taken account of this in our competitive effects assessment.
12. When considering child tablets, our view is that the market is likely to be wider than child tablets alone. However, our view is that to include the diverse range of products that constrain child tablets would not aid the assessment of the competitive effects of the Merger. We have therefore not formally defined a wider market; instead, we have taken into account the constraint placed by these other products when we considered the competitive effects of the Merger.
13. We also considered whether child electronic reading systems should be assessed separately. We have concluded that child electronic reading systems are within the wider market for learning toys, and that the potential overlap between the Parties is not close enough to warrant investigation under a separate theory of harm.
14. We have therefore concluded that the relevant markets in the UK on which to base our competitive assessment are: learning toys for children aged 0 to 5 years; and child tablets and content.

### **Competitive assessment**

15. We next turned to the assessment of the effects of the Merger on competition. We first examined the nature of competition in the toy sector, and considered

how manufacturers and retailers contract with each other and what influences retailer demand. We have found the key dimensions to competition in this market are:

- (a) Manufacturers and retailers conduct bilateral negotiations, which can either be across the whole range of that manufacturer's products or for individual products. These bilateral negotiations will determine the terms of sale, which typically include the wholesale price, advertising support and promotional activity.
  - (b) Retailers' purchasing decisions are based on their anticipation of consumer demand, but retailers also have some ability to influence consumer demand for certain products through promotional activity or the way products are displayed.
16. We focused our analysis on determining which outside options are available to retailers during their negotiations with manufacturers to determine if there are a sufficient number of close outside options available, such that there would not be scope for the Parties to deteriorate their offering as a result of the Merger.

#### ***Learning toys for children aged 0 to 5 years***

17. We considered whether the removal of one party as a competitive constraint in the supply of learning toys would allow the merged entity to deteriorate elements of its competitive offering profitably in the UK (such as price or quality).
18. For learning toys, we found there were a number of current and potential competitors, including in particular the Fisher Price brand (owned by Mattel) as well as several other strong brands and own-label toys. Both retailers and consumers regarded these other brands as alternatives to the Parties' learning toys.
19. Our view is therefore that the Parties' products are sufficiently similar that they are close competitors in learning toys, but that there are other suppliers who compete just as closely.
20. We then looked at alternatives to the Parties' products available to retailers and consumers. We found that there were a significant number of competitors supplying products which were in some ways similar to the Parties' products. This includes other well-known brands, which could expand given the opportunity. We found that retailers had outside options to which they could switch, which acted as constraints on the Parties. This was corroborated by the consumer research undertaken for this inquiry. This research indicates



that consumers were looking for age-appropriate toys which are educational and/or interactive, and would consider a number of different products and suppliers as alternatives to the Parties' products.

21. We also looked at whether new or lesser known brands would be able to grow in the marketplace. We found that although branding is important, in terms of getting products stocked, this can be mitigated by the use of licences, which are prevalent in the industry, and through which a new entrant can in effect buy into a licensed brand. In addition, the churn rate in products is high with many new products being introduced each year, which is likely to make it easier for a new entrant.
22. Our view is therefore that retailers (and consumers) have credible alternatives to the Parties' products to which they could switch.
23. Lastly, we looked at countervailing buyer power. It is our view that as retailers have credible alternative options to the Parties' products, they have a degree of countervailing buyer power that is likely to act as a competitive constraint on the merged entity.
24. We have concluded that the Merger has not resulted, and may not be expected to result, in an SLC in the supply of learning toys for children aged 0 to 5 years.

### ***Child tablets and content***

25. We considered whether the removal of one party as a competitive constraint in the supply of child tablets and content could allow the merged entity to deteriorate elements of their competitive offering profitably in the UK. The ability of the Parties to do this will depend on how closely the Parties compete with each other and the strength of outside options available to retailers during their negotiations with manufacturers.
26. We found that the Parties supply child tablets that are functionally similar, aimed at the same age group and with the same price point, although we note that there may be some differences in the content. The functional similarity suggests that the Parties' tablets may be close substitutes, although we note that other tablets exist which are functionally similar to the Parties' products. Our consumer research indicated that they were close competitors, with Amazon Fire Kids Edition as a close substitute. However, we note that this survey was backward looking and the market is evolving rapidly.
27. Our consumer research also indicates that child tablets are constrained by a range of products, including other toys as well as standard tablets. Retailers have indicated that they do not view child tablets as a 'must have' category,

and there is no requirement for them to stock either VTech or LeapFrog's child tablets. We have concluded that retailers have alternative options to stocking the Parties' toys in the event of the merged entity worsening its offering.

28. We looked at how the child tablet market was evolving, and found that sales of the Parties' child tablets have declined substantially in recent years. This has coincided with the launch and growth of new products delivering content to children through a wide range of electronic devices. The evidence provided to us indicated that the child tablet market is evolving with content being separated from hardware. We therefore expect additional constraints on the Parties as non-child-specific hardware can be used to deliver child-specific content.
29. We also looked at countervailing factors, including new entry and buyer power. While we note that a contracting market may make entry less attractive, barriers to entry are not particularly high for existing players in the toy industry, and there continues to be new entry into the supply of child tablets.
30. We have concluded that the Merger has not resulted, and may not be expected to result, in an SLC in the supply of child tablets and content.

### ***Future innovation in toys***

31. We looked at whether the Merger would have a negative effect on the number of innovative new toys in the future.
32. If the main driver for innovation was the competition between VTech and LeapFrog, then the Merger could lead to less innovation in toys. We have not received evidence to indicate this is the case. The evidence indicates that innovation comes from competition between the Parties and other toy manufacturers.
33. As regards learning toys, we have concluded that the Merger has not resulted, and may not be expected to result, in an SLC. Therefore continuing competition between the merged entity and other toy manufacturers post-merger is likely to prevent the Merger from leading to a reduction in innovation and product development within learning toys. The same is true for child tablets and content, where the merged entity will face continued pressure to innovate (including from non-toy manufacturers) in a rapidly evolving market.
34. We also note that competition to bring such developments to children's toys occurs at a European or global level rather than in the UK.

35. We have therefore concluded that the Merger has not resulted, and may not be expected to result, in an SLC in respect of future innovation in toys.

## **Conclusions**

36. We have concluded that the Merger has not resulted, and may not be expected to result, in an SLC in any of the markets considered in this inquiry.

# Findings

## 1. The reference

- 1.1 On 30 August 2016, the CMA referred the completed acquisition by VTech of LeapFrog (the Merger) for an in-depth phase 2 inquiry. In exercise of its duty under section 22(1) of the Enterprise Act 2002 (the Act), the CMA made a reference to its chair for the constitution of a group<sup>2</sup> of CMA panel members (the inquiry group) in order to investigate and report on the following questions in accordance with section 35(1) of the Act:
- (a) whether a relevant merger situation has been created; and
  - (b) if so, whether the creation of that situation has resulted, or may be expected to result, in a substantial lessening of competition (SLC) within any market or markets in the UK for goods or services.
- 1.2 Our terms of reference, along with information on the conduct of the inquiry, are in Appendix A. We are required to publish our final report by 13 February 2017.
- 1.3 This document, together with its appendices, constitutes our findings, published and notified to VTech and LeapFrog in line with the CMA's rules of procedure.<sup>3</sup> Further information relevant to this inquiry, including non-confidential versions of the submissions received from VTech, as well as summaries of evidence received in oral hearings, can be found on our [webpages](#).
- 1.4 Throughout this document, where relevant, we refer to VTech and LeapFrog collectively as the Parties. Where we refer to Parties' views, we recognise that although the submissions were provided to us by VTech (as the Merger has been completed), they contained data and views from both VTech and LeapFrog staff (now part of VTech). Where we have received information confidential to LeapFrog from former LeapFrog employees, we refer to that as having been provided to us by LeapFrog.

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<sup>2</sup> Section 22(1) of the Act provides that the group is to be constituted under Schedule 4 to the Enterprise and Regulatory Reform Act 2013.

<sup>3</sup> [CMA rules of procedure for merger, market and special reference groups \(CMA17\)](#), Rule 11.

## **2. The products**

- 2.1 The Parties are both suppliers of toys. This chapter introduces the relevant types of toys and describes where the Parties overlap, before we look at the Parties in more detail (in Chapter 3).
- 2.2 Children learn by playing and toys help to stimulate and develop their physical, cognitive, social and emotional development. While all toys could be considered to have some educational or developmental value/benefit, some toys are specifically designed and/or marketed as being able to support the development of the relevant physical, cognitive, social and emotional skills at different ages/stages as a result of the child interacting with the toy. These toys are typically referred to as learning toys.
- 2.3 Some of these toys have an electronic element which is responsible for producing music, vibrations, lights and sound effects.
- 2.4 The Parties supply toys with an electronic element and a learning purpose, and targeted at children aged 0 to 3 years (also known as toddler electronic learning (TEL) toys). These TEL toys include number/ alphabet learning toys, fine motor skills toys (eg shape sorters, stacking toys), role play toys, musical toys, soft (or plush) toys, toy tablets and laptops, electronic books, etc.
- 2.5 The Parties also supply electronic learning toys which are targeted at and appeal to preschoolers (children aged between 3 and 5 years) as well as children older than preschool age. Examples include: VTech's DigiGo (children's smartphone); LeapFrog's LeapReader (electronic reading system<sup>4</sup>); and LeapFrog's LeapBand (wristband activity tracker).
- 2.6 The Parties also supply child tablets and content in the UK that are marketed specifically for preschoolers and children older than preschool age:
- (a) Child tablets are tablet devices that are designed or intended to be used by children and importantly they contain child-appropriate content. Although they are similar to standard tablets, they differ from standard tablets in two main ways:
    - (i) child tablets contain special internal security features such as parental controls and kid-safe web functions which ensure that children are not exposed to adult material from the internet (eg by use of a 'closed

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<sup>4</sup> LeapFrog's LeapReader reading and writing system is an electronic pen with a library of reading, activity and audio-books, used to teach children how to recognise and say letters or words, and how to write them. It is targeted at children aged four to eight.

eco-system' which does not enable access to content other than that provided by the tablet producer).

- (ii) child tablets have more robust cases which protect the tablets from breaking and can withstand the behaviour of children.

(b) Content refers to digitised content (for example, mobile applications ('apps'), ebooks, videos, etc) which is designed for use by children on tablets and often has some educational element to it. The content is the focus of the play by children.

- (i) Content can be obtained in two main ways: as downloadable content (where this refers to content that is downloaded from a website or in an app store) or as cartridges (where this refers to content that is bought separately and physically inserted in the hardware device). LeapFrog supplies downloadable content (games) in the form of digital apps<sup>5</sup> and identical versions of the same games as cartridges<sup>6</sup>.

- (ii) Content can also be downloaded onto a variety of electronic devices including smartphones, tablets, TV consoles and computers. For example, many LeapFrog videos are compatible with and may be downloaded to both the LeapPad tablet and LeapTV (TV console).<sup>7</sup> Also, LeapFrog's learning apps purchased in the App Center can be saved to five LeapFrog compatible devices.

2.7 The Parties overlap in the supply of learning toys and child tablets and content in the UK.

### **3. The Parties and the industry in which they operate**

3.1 The following section gives an overview of the Parties. It then describes other suppliers of the types of toys supplied by the Parties (as described in Chapter 2) and the customers that purchase these toys. It then describes the relevant trends in the toy sector.

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<sup>5</sup> An app is a self-contained program or piece of software designed to fulfil a particular purpose. Apps can be downloaded to a range of electronic devices such as a tablet or mobile device. Apps can confer a wide range of functionalities to users, for example games, entertainment, learning material, news or social media.

<sup>6</sup> See [Leapfrog website](#).

<sup>7</sup> See [Leapfrog website](#).

## ***The Parties***

### ***VTech***

- 3.2 VTech is a supplier of electronic learning toys for infant and preschool children. It is not exclusively a toy manufacturer and also produces cordless telephones amongst other products and is a provider of contract manufacturing services.
- 3.3 VTech has operations in 11 countries and regions, employs approximately 30,000 employees, including around 1,500 research and development (R&D) professionals in R&D centres in Canada, Germany, Hong Kong and China.
- 3.4 VTech is incorporated in Bermuda, has its corporate/head office in Hong Kong and has two subsidiaries in the UK (VTech Electronics Europe Plc and VTech Communications Limited).
- 3.5 VTech's operations in the UK are limited to the import and distribution of products as product development occurs in the research centres noted in paragraph 3.3 and manufacturing is largely undertaken in-house. In the UK (and Republic of Ireland), VTech sells its toys and electronic products through VTech Electronics Europe Plc and VTech Electronics Limited.
- 3.6 For the financial year ended 31 March 2016, VTech achieved a global turnover in its toys division of approximately £473.6 million of which approximately £[§] relate to VTech's business in the UK.<sup>8</sup> In the UK, VTech supplies a range of toys, ranging from baby walkers, rattles and soft toys to electronic learning toys, tablets, and gaming consoles.<sup>9</sup>

### ***LeapFrog***

- 3.7 Prior to the Merger, LeapFrog Enterprises, Inc. (LeapFrog) was the parent of the LeapFrog Group. It was incorporated and listed in the USA and had its global headquarters in California prior to the Merger. LeapFrog had two operating segments:<sup>10</sup>

(a) The United States segment was responsible for:

the development, design, sale and marketing of multimedia learning platforms, related content and learning toys, which

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<sup>8</sup> Initial submission, paragraph 39.

<sup>9</sup> Purchasers of some of these toys register their purchases on the VTech website. See [VTech website](#).

<sup>10</sup> [LeapFrog 2015 Annual Report and Accounts](#), Note 21 Segment Reporting.

are sold primarily through retailers, distributors, and directly to consumers via the App Center<sup>11</sup> in the U.S. The App Center includes both content developed by the Company and content from third parties that the Company curates and distributes.

(b) The International segment was responsible for:

the localization, sale and marketing of multimedia learning platforms, related content, and learning toys, originally developed for the U.S. This segment markets and sells the Company's toys to national and regional mass-market and specialty retailers and other outlets through the Company's offices outside of the U.S., through distributors in various international markets, and directly to consumers via the App Center.

- 3.8 LeapFrog described itself as a leading developer of educational entertainment for children with a product portfolio consisting of multimedia learning platforms and related content and learning toys.<sup>12</sup>
- 3.9 The manufacturing of LeapFrog's toys was substantially outsourced to a limited number of manufacturers, mostly in facilities in the Guangdong province in the south-eastern region of China.<sup>13</sup>
- 3.10 LeapFrog's activities in the UK and Republic of Ireland were carried out through the wholly owned subsidiary, LeapFrog Toys (UK) Limited. The principal activity of the UK subsidiary is the sale and distribution of LeapFrog toys to retailers.
- 3.11 Prior to the Merger, the UK marketing team provided input to the toy development and design process (which occurred in the USA) on local tastes, competitors and how successful a toy might have been in the UK. LeapFrog Toys (UK) Limited sells toys directly to retailers in the UK and Republic of Ireland, as well as to retailers in other countries. LeapFrog Toys (UK) Limited also sells directly to customers through the online App centre. LeapFrog employed approximately 35 staff in the UK. The business leased a small amount of office and warehouse space in the UK but had no major fixed assets.

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<sup>11</sup> The online App center is a web-based store through which customers can purchase and download digital content developed by LeapFrog for compatible LeapFrog devices.

<sup>12</sup> [LeapFrog 2015 Annual Report and Accounts](#), p1.

<sup>13</sup> [LeapFrog 2015 Annual Report and Accounts](#), p5.



- 3.12 LeapFrog's global turnover was £146.5 million for the financial year ended 31 March 2016.<sup>14</sup> Further detail on the financial performance and position of LeapFrog can be found in Appendix C.
- 3.13 In the financial year ended 2015, US sales represented around 70% of the turnover of the LeapFrog Group. The UK was LeapFrog's second largest market making up approximately 12% of the Groups' sales that year. No other country accounted for more than 10% of sales.<sup>15</sup>
- 3.14 In the UK, LeapFrog supplies a range of toys, including multi-media learning platforms, electronic learning toys, tablets, developmental games, and 'learn to read and write' systems.

### **Competitors**

- 3.15 The following are brief overviews of some of the other main suppliers of learning toys and child tablets in the UK.

#### *Amazon*

- 3.16 Amazon launched the Fire Kids Edition tablet in 2015. The hardware for the Fire Kids Edition is the same as the adult version but the children's version has a cover to make it more robust. The Fire Kids Edition tablet allows access to a wide array of online content such as apps and videos. The tablet has built in parental controls that allow parents to control access to pre-screened age-appropriate content. These controls allow parents to select additional on-line material.<sup>16</sup>

#### *Artsana Group*

- 3.17 The Artsana Group, which has headquarters in Italy, is a provider of children's toys<sup>17</sup> with a particular focus on babies and toddlers. The company has a number of brands in the UK such as Chicco and Boppy. Under the Chicco brand, it sells a number of toys including electronic toys targeted at children aged under five years.<sup>18</sup>

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<sup>14</sup> [Initial submission](#), paragraph 54.

<sup>15</sup> [LeapFrog 2015 Annual Report and Accounts](#), Note 21 Segment Reporting; [Initial submission](#), paragraph 54.

<sup>16</sup> See [Amazon website](#).

<sup>17</sup> The Artsana Group are also involved in the health and beauty sectors.

<sup>18</sup> See [Chicco website](#).

### *Chad Valley*

- 3.18 The Chad Valley brand is owned by J Sainsbury Plc and is an established brand of toys sold in the UK that provides a range of toys for children. The Chad Valley label includes a wide selection of TEL toys including: the Baby Tablet, the Teddy Bear Laptop, Pull Along Caterpillar and Electronic SmartPhone toys.<sup>19</sup>

### *Clementoni*

- 3.19 The Clementoni range includes toys for children from birth to 12 years and older, starting from early childhood with the 'Baby Clementoni', 'Disney Baby' and 'Clemmy' lines; preschool and educational games such as the 'Sapientino' brand; the 'Science&Play' range scientific games and tablets.<sup>20</sup> In 2012 Clementoni launched its first tablet in Italy, the Clempad, with educational content. Clementoni has not launched its child tablets in the UK.

### *Hasbro*

- 3.20 Hasbro is one of the largest toy manufacturers in the UK with a wide range of toys. Its main brands include 'Littlest Pet Shop', 'Magic: The Gathering', 'Monopoly', 'My Little Pony', 'Nerf', 'Play-Doh' and 'Transformers', which together accounted for approximately 52% of its worldwide revenue in 2015.<sup>21</sup> Most of Hasbro's toys are targeted at school age children.

### *KD Group*

- 3.21 The KD Group (KD) describes itself as a developer and manufacturer of children's educational and innovative toys with exciting design and using the latest technology.<sup>22</sup> KD's toys are marketed and sold worldwide, and its main toys include the 'Kurio' children's tablet.<sup>23</sup> KD has offices in Spain, the Netherlands, the UK, Hong Kong, the USA and France. KD produces toys under licences such as 'Disney Princess', 'Postman Pat', 'Bob The Builder', 'Fireman Sam', 'Ba-Bar', 'Pokémon', 'Pocoyo', 'Handz On', 'Mike The Knight', 'JCB' and 'National Geographic'.<sup>24</sup> In 2012, KD introduced Kurio into the UK, marketed as 'the children's tablet', and is currently introducing its new 'Kurio S

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<sup>19</sup> Initial submission, paragraph 324.

<sup>20</sup> See Clementoni website.

<sup>21</sup> See Hasbro 2015 Annual Report, p2.

<sup>22</sup> See KD Group website.

<sup>23</sup> See KD Group website.

<sup>24</sup> See KD Group website.

Series' toys.<sup>25</sup> Kurio toys run on the Android operating system (OS) and are designed for children and families.

### *Kids II*

- 3.22 Kids II is a US based, global manufacturer of children's toys. Kids II manufactures and distributes a variety of toys and other child products under various brands including the Bright Starts and Baby Einstein brands.<sup>26</sup> Its range includes but is not limited to baby toys, child gyms, nursing pillows and child seat covers. Some of Kids II's toys are electronic, the electronic element often being musical in nature.

### *Mattel, Inc.*

- 3.23 Mattel, Inc. is a large multinational toy manufacturer. Mattel's brands include 'Barbie', 'Hot Wheels', 'Monster High', 'American Girl', 'Thomas & Friends' and 'Fisher Price', as well as a wide array of licensed entertainment-inspired toy lines.<sup>27</sup> In January 2016, Mattel acquired Fuhu, Inc, a US manufacturer of electronic toys for children. Fuhu, Inc had filed for bankruptcy after it lost the support of its suppliers having built up large debts due to two failed tablet launches in 2014.<sup>28</sup> Fuhu's core toys include the 'Nabi' tablets designed for children, which Mattel has only released in North America.

### *MGA Entertainment*

- 3.24 MGA Entertainment is a consumer entertainment products company that manufactures a variety of toy and consumer electronics products. The company also licenses its products in areas such as home décor, stationery and sporting goods. MGA Entertainment brands include 'Little Tikes', 'Lalaloopsy', 'ProjectMc2', 'Bratz', 'Num Noms', and 'Zapf Creation'.<sup>29</sup>

### *Ravensburger*

- 3.25 Ravensburger has its headquarters in Ravensburg, Germany and describes itself as Europe's leading manufacturer of puzzles, games and activity toys. Ravensburger's Digital Products division develops products for media and gaming platforms. Products include apps for mobile devices such as smartphones and tablets.<sup>30</sup> Ravensburger also manufactures the 'TipToi'

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<sup>25</sup> See [Kurio website](#).

<sup>26</sup> See [Kids II website](#).

<sup>27</sup> See [Mattel investor website](#).

<sup>28</sup> See [Inc.com article on Fuhu](#).

<sup>29</sup> [MGA Entertainment press releases](#).

<sup>30</sup> Ravensburger 2015 Annual Report, p58.

electronic learning system that interacts not only with books, but also with games and toys. It is currently only available in the German language.

### *Spin Master*

- 3.26 Spin Master is a global children's entertainment company that creates, designs, manufactures and markets toys, games, and other entertainment toys. Spin Master's main brands and licences include 'Paw Patrol', 'Meccano', 'Zoomer Dino', 'Flutterbye', 'Air Hogs', and 'Spin Master Games'. In June 2016, Spin Master, through its subsidiary Toca Boca, made a soft launch<sup>31</sup> in Canada of a video platform, 'Toca TV'. Toca TV is currently available for the iPad only in Canada, Australia and New Zealand but it is expected to launch in other English-speaking countries.

### **Purchasers**

- 3.27 Toy manufacturers rarely sell directly to children (who ultimately are the end users). In this report, we have used the following terminology for the purchasers and users of toys.

### *Customers*

- 3.28 The direct customers of the toy manufacturers are generally retailers that sell on to end consumers. Toy manufacturers operating in the UK sell most of their toys through retailers such as Argos, Amazon, Toys R Us, Tesco and Smyths which together account for the majority of annual gross sales in the UK. The majority of LeapFrog's and VTech's toys are sold through these retailers. These may be bricks-and-mortar, online or both. In this report, we use 'retailers' to mean online and bricks-and-mortar, specifying when there are different considerations.

### *Consumers*

- 3.29 For present purposes, adults are treated as the relevant consumers for toys as by and large they make the purchasing decision. Children below a certain age are unlikely to have any direct influence over the purchasing decisions of adults. Consumers are able to purchase toys from retailers on the internet (online), via catalogues and/or through bricks-and-mortar shops (where these include dedicated toy stores as well as supermarkets/hypermarkets).

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<sup>31</sup> The release of a new product or service to a restricted audience or market in advance of a full launch.

### *End users*

- 3.30 Although parents are treated as the relevant consumers, children are the end users of toys.

### ***Characteristics of the toy sector***

- 3.31 In this section, we set out briefly some of the key features of the toy sector which are of relevance to this inquiry, in particular, relating to:

- (a) the importance/role of innovation;
- (b) the importance of licensing;
- (c) the seasonality of the business; and
- (d) the size of the UK toy sector.

### *Innovation*

- 3.32 Success in the toy sector is based on the ability to predict correctly highly changeable consumer preferences and toy trends. To remain competitive and stimulate consumer demand, toy suppliers must continue to develop new toys and services on an annual basis and successfully manage frequent toy introductions and transitions.
- 3.33 Continued success requires continual toy development. This is particularly important with complex electronic toys such as tablets and smart watches which must keep pace with advances in technology. General advances in technology directly impact consumer preferences and attitudes year on year, for example the recent emergence of smart watches.
- 3.34 Strong sales one year can fall away in the following year if the toy is not refreshed or updated. The financial impact of falling demand is exacerbated by incorrectly predicting its occurrence which would lead to the accumulation of slow moving stock.
- 3.35 The Parties submitted that over [X]% of the toys in the top quartile of sales in the Infant/Toddler segment in 2014 either featured in the bottom quartile for sales or exited within two years. This is more pronounced with preschool toys, with just under [X]% of all preschool toys in the top quartile in 2014 being in the bottom quartile or exiting within two years.<sup>32</sup>

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<sup>32</sup> [Initial submission](#), paragraph 173.

- 3.36 R&D involves understanding consumer preferences and tastes, together with the specification of toy design, toy quality and the technology used to provide the interactive element of toys.

### *Licensing*

- 3.37 Licences are an important feature of the toy industry. A licence may be granted by a party ('licensor') to another party ('licensee') as an element of an agreement between those parties. In the context of the toy sector, the content licensors provide to licensees typically relates to characters popular with children which are used to market the licensee's toys.
- 3.38 An example of a licensor would be The Walt Disney Company (Disney), which has a large number of well-known Disney characters. Disney grants licences to many toy manufactures to use these characters on their toys.
- 3.39 The licensing business in the toy sector accounts for 20-25% of the toy market<sup>33</sup> and the use of licences is becoming even more prevalent in the preschool toy market.

### *Seasonality and demand*

- 3.40 There are two occasions during a year when most children will receive a toy as a gift: their birthday and Christmas. The gift driven nature of toy sales results in a high degree of seasonality in sales, with the Christmas period being particularly important and annual operating results of toy manufacturers depend largely on sales relating to the Christmas period.<sup>34</sup>
- 3.41 As a result, toy manufacturers structure their year around the release of a spring and a winter collection and follow the following timetable:<sup>35</sup>
- (a) The spring collection is previewed to retailers in July of the preceding year. Final range plan proposals are made in August with the final range selection occurring in September.
  - (b) The winter collection is previewed to retailers in November and December of the preceding year, followed by toy fairs in Hong Kong, London and Nuremburg in January. Also in January, manufacturers and retailers begin

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<sup>33</sup> Study on the competitiveness of the toy industry, European Commission Report, 30 August 2013, p76.

<sup>34</sup> In order to examine consumer preferences, we commissioned DJS to undertake an online survey of the Parties' customers. The CMA survey found that for child tablets, around 60% were purchased for Christmas and around 30% for a birthday.

<sup>35</sup> For example: [TOMY hearing summary](#), paragraph 14. [Toys'R'Us hearing summary](#), paragraph 13.

to negotiate terms, culminating in a final range plan proposal in February and final range selection in March.

- 3.42 Previews allow manufacturers to give retail buyers an early sight of their range, including any new or updated products. This will typically be accompanied by an indicative price list. Following previews, retailers will indicate which products they are interested in, although at this stage they will not have agreed terms or be committed to purchasing any volume. They will then negotiate terms with the manufacturers.
- 3.43 The majority of toys are manufactured in Asia, and as such, are subject to a significant lead time, with shipping (by container ship) taking around a month. Deliveries into retailers, for the winter season, will typically occur from September/October onwards.
- 3.44 Irrespective of the shipping method used, any product which is new for the season will typically have to be ordered before any sales to end consumers have been made (ie before it is known what the 'hot' toy<sup>36</sup> will be).

#### *Size of the UK toy sector*

- 3.45 The NPD Group, Inc. (NPD) is a market research company offering consumer and point-of-sale market research and business solutions for the beauty, foodservice, sport and toy industry. NPD divides its database into super-categories and further into segments and subclasses. The Parties are active within two super-categories: Infant/Toddler/Preschool toys and Youth electronics. TEL toys, as defined above, and child tablets map into two subclasses, namely Early Electronic Learning and Preschool Electronic Learning.<sup>37</sup>
- 3.46 According to NPD, at the start of 2016 the British toy sector was valued at £3.2 billion.<sup>38</sup> NPD figures indicate that the British toy sector sales increased in value by £150 million year on year to 2015 and the UK retained its position as the largest toy market in Europe. More than 58,000 new toys were launched in 2015, equating to 31% of UK toy sales or £1 billion at retail. On average last year 38 toys per child were purchased.<sup>39</sup>

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<sup>36</sup> A hot toy, is a toy which sells in significant volume for only a short period of time. For instance, it could be a popular toy for one Christmas, selling a large volume with sales dropping after that.

<sup>37</sup> The Parties point to one exception, LeapFrog's LeapPad Epic, which is not included in the Preschool Electronic Learning subclass.

<sup>38</sup> Estimated value of total retail sales in the toy sector.

<sup>39</sup> See NPD press release: '[UK Toy Industry Grew by 5.9 Percent Making It the Largest Toy Market in Europe](#)'.

- 3.47 The overall toy sector in the UK is growing. The VTech UK Toy Market 2015 Year in Review presentation, sourced from the market research company NPD, shows that the overall toy sector sales grew by [REDACTED]% in 2015.

#### **4. Merger and relevant merger situation**

##### ***The transaction***

- 4.1 On 4 April 2016 VTech, through its wholly owned subsidiaries, completed the purchase of the entire share capital of LeapFrog (the Merger). The acquisition by VTech was of 100% of the outstanding common stock of LeapFrog at \$1 per share through an all cash tender. The aggregate consideration was approximately \$72 million (see Appendix B for more detail about the transaction).
- 4.2 VTech informed the CMA that the Merger was not notified to any competition authority but that the US Federal Trade Commission launched a voluntary investigation which it closed with no action on 28 March 2016.

##### ***The rationale for the transaction***

###### ***VTech***

- 4.3 VTech told us that its decision to acquire LeapFrog was driven by commercial and strategic considerations:
- (a) [REDACTED]
  - (b) [REDACTED]
  - (c) [REDACTED]
  - (d) [REDACTED]

###### ***LeapFrog***

- 4.4 LeapFrog's decision to sell the company was due to the company's poor financial health, its inability to successfully restructure the business and performance experienced in 2016 and preceding years.



- 4.5 In light of the severe financial difficulties, LeapFrog said that it considered that [X].<sup>40</sup>

### ***Relevant merger situation***

- 4.6 The first statutory question which the CMA is required to decide under section 35 of the Act is whether a relevant merger situation has been created. A relevant merger situation is created if two or more enterprises have ceased to be distinct within the statutory time frame and either the share of supply or turnover test set out in the Act is satisfied.<sup>41</sup>
- 4.7 The merger concerns the acquisition by VTech of the entire share capital of LeapFrog. As a consequence, the activities of both businesses, that is the enterprises, which were previously separate have ceased to be distinct as both are now under common ownership and control.<sup>42</sup> The enterprises ceased to be distinct within the statutory time frame.<sup>43</sup>
- 4.8 The value of turnover of LeapFrog in the UK did not exceed £70 million, so the turnover test in the Act is not met. The share of supply test is met if a merger creates or enhances a share of supply in the UK of at least 25%.<sup>44</sup> As a result of the Merger, VTech's share of supply in the UK of TEL toys increased from [10–20]% to [50–60]%. We therefore consider that the share of supply test is met.

### ***Conclusion on relevant merger situation***

- 4.9 We conclude that the Merger has resulted in the creation of a relevant merger situation.
- 4.10 We go on to consider the second of the statutory questions, namely whether that relevant merger situation has resulted, or may be expected to result, in an SLC in any market or markets in the UK for goods or services.

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<sup>40</sup> [Initial submission](#), paragraph 71.

<sup>41</sup> The Act, sections [23](#), [24](#) and [26](#). See also sections [27](#) and [28](#).

<sup>42</sup> The Act, section [26](#).

<sup>43</sup> Section [24](#) of the Act provides that enterprises have ceased to be distinct if they ceased to be distinct not more than four months prior to the date of the reference. In this case, the merger occurred on 4 April 2016, the CMA commenced its investigation on 27 April 2016 and the reference was made on 30 August 2016. The statutory period had been extended to 8 September 2016 in accordance with section [25](#) of the Act.

<sup>44</sup> The Act, section [23](#).

## 5. Counterfactual

### *Our approach to the counterfactual assessment*

- 5.1 Before we turn to analysing the effects of the Merger, we need to assess what we expect would have been the competitive situation in the absence of the Merger. This is called the ‘counterfactual’.<sup>45</sup> The counterfactual is an analytical tool used to provide a benchmark against which the expected effects of the Merger can be assessed. The counterfactual takes events and circumstances and their consequences into account to the extent that they are foreseeable.<sup>46</sup> The foreseeable period can sometimes be relatively short.<sup>47</sup>
- 5.2 A situation where the CMA may consider a counterfactual different from the prevailing conditions of competition (the pre-merger situation) is the ‘exiting firm scenario’.<sup>48</sup>
- 5.3 In this case, VTech submitted that LeapFrog was a ‘failing firm’ and that in the absence of the Merger, LeapFrog would have had no alternative but to enter into bankruptcy proceedings and exit the market, and there was no realistic prospect of the entire business being sold to a purchaser other than VTech.<sup>49</sup>
- 5.4 In forming a view on an ‘exiting firm scenario’, the CMA will consider:
- (a) whether the firm would have exited (through failure or otherwise); and, if so,
  - (b) whether there would have been an alternative purchaser for the firm or its assets to the acquirer under consideration; and if not,
  - (c) what would have happened to the sales of the firm in the event of its exit.
- 5.5 Appendix C sets out further detail on evidence received in relation to the counterfactual. The remainder of this section discusses our assessment of the counterfactual.

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<sup>45</sup> [Merger Assessment Guidelines](#) (CC2/OFT1254), paragraph 4.3.1.

<sup>46</sup> [Merger Assessment Guidelines](#), paragraph 4.3.2.

<sup>47</sup> See [Merger Assessment Guidelines](#), paragraph 4.3.2.

<sup>48</sup> Other situations referred to in the [Merger Assessment Guidelines](#) are: the loss of a potential entrant scenario; and where there are competing bids and parallel transactions. None of those two is applicable in the present case.

<sup>49</sup> [Initial submission](#), paragraphs 11 & 12.

***Would LeapFrog have exited (through failure or otherwise) in the absence of the Merger?***

5.6 We looked first at whether LeapFrog was able to meet its financial obligations and, if not, whether it was able to restructure itself successfully.<sup>50</sup>

***Evidence from the Parties***<sup>51</sup>

5.7 The Parties told us that:

- (a) LeapFrog had made significant losses in recent years;
- (b) the share price had fallen below \$1 in September 2015, which put its listing on the New York Stock Exchange in jeopardy;
- (c) LeapFrog was forecast to run out of cash by July 2016; and
- (d) the Bank of America Merrill Lynch (BofA) (LeapFrog's primary source of credit) had imposed a [REDACTED] restriction on LeapFrog's credit facility and was unlikely to extend credit to LeapFrog during a period of negative cash flow.

5.8 The Parties told us that not only was the LeapFrog business performing badly, but that numerous steps had been taken to turn the business around without success.

5.9 The Parties submitted an analysis using the 'Altman Z Score' which is a credit-strength test that gauges a publicly traded company's likelihood of bankruptcy within a foreseeable time frame. [REDACTED]

***Evidence from third parties***

5.10 BofA<sup>52</sup> told us that it agreed with LeapFrog's own assessment that it would probably have defaulted on its covenants by June 2016 if it had not obtained liquidity before then and that a liquidity crisis was likely absent further action by LeapFrog. [REDACTED]

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<sup>50</sup> [Merger Assessment Guidelines](#), paragraph 4.3.14.

<sup>51</sup> Further detail is in Appendix C.

<sup>52</sup> BofA provided LeapFrog with a seasonal, revolving credit facility of up to \$75 million during the peak Christmas holiday season and up to \$50 million during the remainder of the year. This was the only source of borrowed funds used by LeapFrog.

- 5.11 Morgan Stanley<sup>53</sup> told us that [REDACTED].<sup>54</sup>
- 5.12 As early as July 2015, Blue Pacific Partners, a minority shareholder, stated publicly that it intended to vote against a LeapFrog proposal to amend the company's Equity and Incentive Plan in light of its serious concern that the amendment to this plan incentivised and rewarded poor operating and share performance.<sup>55</sup>
- 5.13 Some potential purchasers cited LeapFrog's financial difficulties as a reason for withdrawing from the sale process, terminating their interest in acquiring LeapFrog.<sup>56</sup>

### *Our assessment*

- 5.14 In assessing whether LeapFrog would have exited the market for reasons of financial failure, we considered whether the firm would have been unable to meet its financial obligations in the near future and whether it would have been unable to restructure itself successfully.<sup>57</sup>
- 5.15 We note that LeapFrog had been loss-making since early 2014 and successive attempts by management to restructure the business had been unsuccessful. The size of losses incurred by LeapFrog and the consequent reduction in its net asset value were significant. The stock market's lack of confidence in LeapFrog was shown clearly by the collapse of its share price from over \$10 a share in 2013 to around \$1 a share in 2016 (see Appendix B for further detail). We noted that LeapFrog's cash flow projections showed a significant cash shortfall around mid-2016, which is consistent with LeapFrog's 10Q report, dated 9 February 2016, which raised doubt over the company's ability to continue as a going concern. Although at the time of the Merger, LeapFrog's suppliers do not appear to have been seeking early payment, it is possible that demands by trade creditors would have increased the pressures faced by LeapFrog as cash balances reduced.
- 5.16 Evidence from third parties, in particular BofA, raised serious concerns over the future viability of LeapFrog and its ability to secure finance.
- 5.17 LeapFrog's financial circumstances and cash flow difficulties indicated that the business would have faced a challenge to remain financially viable, in particular from mid-2016 onwards. Despite the steps which LeapFrog had

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<sup>53</sup> Morgan Stanley was appointed as LeapFrog's financial adviser to explore a sale of the company and strategic alternatives. Morgan Stanley remained LeapFrog's financial adviser until the end of the sale process.

<sup>54</sup> [Morgan Stanley hearing summary](#), paragraph 4.

<sup>55</sup> Press release (15 July 2015): '[Blue Pacific Partners Delivers Letter to LeapFrog Board](#)'.

<sup>56</sup> See Appendix C for details.

<sup>57</sup> [Merger Assessment Guidelines](#), paragraph 4.3.14.

taken to restructure its business, the evidence indicates that LeapFrog would have been unlikely to have continued as a going concern beyond June/July 2016 without further funds being obtained. There is no evidence that further funds would have been forthcoming from either BofA or LeapFrog's existing shareholders.

- 5.18 We acknowledge that the Altman Z Score may be a further indication of the weak financial position of LeapFrog. We note, however that the strong seasonality and dynamic nature of the toy sector means that a year-end snapshot may not give a fair representation of LeapFrog's financial position, particularly given that there was an accounting year end change that would distort any trend in the score.

#### *Our view on exit*

- 5.19 Based on the evidence we have set out above and in Appendix C, our view is that LeapFrog would have failed financially and exited at the latest June/July 2016.

#### ***Would there have been an alternative purchaser for LeapFrog or its assets?***

- 5.20 When considering the prospect of an alternative purchaser for the firm or its assets, the CMA will look at available evidence supporting any claims that the merger under consideration was the only possible merger.<sup>58</sup>
- 5.21 As specified in the CMA's guidelines, we considered whether, in the absence of the Merger, there would have been another buyer of LeapFrog as a going concern or of its assets. An alternative purchaser may have produced a better outcome for competition than the Merger.

#### *Background to sales process*

- 5.22 The sales process was run by Morgan Stanley.<sup>59</sup> A description of the events leading up to the sale of LeapFrog to VTech is provided in Appendix B.
- 5.23 Table 1 below describes the potential purchasers of LeapFrog considered in our assessment.

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<sup>58</sup> [Merger Assessment Guidelines](#), paragraphs 4.3.16 & 4.3.17.

<sup>59</sup> Morgan Stanley was formally engaged by the LeapFrog board in May 2015 as LeapFrog's financial adviser to provide financial advisory services in connection with an evaluation of strategic alternatives, including a potential sale of the company. Morgan Stanley remained LeapFrog's financial advisor until the end of the sale process.

**Table 1: Identities of other parties that submitted indications of interest**

<i>Reference</i>	<i>Company</i>
Bidder 1	[REDACTED]
Bidder 2	[REDACTED]
Bidder 3	[REDACTED]
Bidder 4	[REDACTED]
Bidder 5	[REDACTED]
Bidder 6	[REDACTED]
Bidder 7	[REDACTED]
Bidder 8	[REDACTED]

5.24 Bidders 1 to 4 were approached by Morgan Stanley on 21 July 2015. After these bidders withdrew or were rejected, on 16 November 2015 Morgan Stanley approached a number of firms in Beijing and Hong Kong. Among these firms were Bidders 5 to 7. Bidder 8 submitted an unsolicited offer on 22 March 2016.

*Indications of interest at the time VTech's offer was accepted*

5.25 At the time the VTech offer was publicly announced on 5 February 2016, there were three other active Indications of Interest in acquiring or investing in LeapFrog:

- (a) Bidder 5 offered to purchase preferred stock to be issued by LeapFrog for \$0.85 per share.
- (b) An offer from Bidder 6 to LeapFrog to issue equity at \$1.00 per share.
- (c) An offer from Bidder 7 for LeapFrog to issue equity at \$1.20 per share.
- (d) After the VTech offer was accepted and publicly announced Bidder 8 made an unsolicited offer at \$1.10 per share.

*Evidence from the Parties and third parties concerning the bids*

*Bidder 5*

5.26 Bidder 5 offered to purchase a majority stake in LeapFrog with an investment of \$65 million in exchange for a new series of preferred stock. This offer was a revised offer made by Bidder 5 after attending the January 2016 data room to conduct some due diligence.

5.27 Bidder 5 told us that it was a financial investor with experience in the education sector in [REDACTED], whose strategy focused on looking for firms with the opportunity to expand in [REDACTED]. Bidder 5 told us that it was surprised to learn on

5 February 2016 that LeapFrog had accepted VTech's offer as it had thought it was still in with a chance of having its bid accepted.<sup>60</sup>

5.28 Bidder 5 indicated that it considered itself a serious bidder for LeapFrog, which was evidenced by:

- (a) submitting a detailed second round bid;
- (b) making two trips to meet the management of LeapFrog in San Francisco; and
- (c) engaging the services of both a law firm and an accounting firm in New York for legal and financial due diligence work.<sup>61</sup>

5.29 In the outline business proposal by Bidder 5 of 2 February 2016 to Morgan Stanley, Bidder 5 cited its resources and experience to support the growth plan in [REDACTED]. Set out in further detail in Appendix C, Bidder 5's resources and expertise, in particular in the education sector were listed under the following:

- (a) Strong government and public relationships.
- (b) Deal experience in the [REDACTED] education sector and understanding of local business environment.
- (c) National media and publisher network.
- (d) Resources and networks for [REDACTED].

5.30 Although Bidder 5 had not completed full due diligence, it had completed the first phase of legal, accounting and tax due diligence ('red-flag' checks) and told us it still remained interested at the point that the VTech deal was publicly announced. It said that its revised offer (of \$65 million) was made in recognition of the fact that the LeapFrog business needed additional funds in order to remain solvent.<sup>62</sup>

5.31 The Parties told us that Bidder 5's request to conduct further due diligence, a lack of a marked-up sales and purchase agreement, the lack of a detailed plan as to how Bidder 5 planned to turn the company's financial performance around and revising its offer indicated that the offer was not an offer capable of acceptance.<sup>63</sup>

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<sup>60</sup> ME/6614/16: Completed acquisition by VTech Holdings Ltd of LeapFrog Enterprises Inc (CMA's phase 1 decision), paragraph 80.

<sup>61</sup> CMA's phase 1 decision, paragraph 80.

<sup>62</sup> CMA's phase 1 decision, paragraph 81.

<sup>63</sup> Initial submission, Annex 1: The Counterfactual, paragraph 42.

- 5.32 The Parties also told us that the Bidder 5 offer would have required separate approval from class A and B shareholders, a process that would take some time, by which point LeapFrog's liquidity crisis might have materialised. The Parties also raised the prospect of securing approval from Class B shareholders<sup>64</sup> whom LeapFrog considered [REDACTED] and that the Bidder 5 offer would significantly dilute their shareholding.
- 5.33 We note that at the time of the Merger in February 2016, LeapFrog had not completely ruled out Bidder 5's offer despite deciding the VTech offer was better value. In particular, the update presented to the LeapFrog board stated that entrance into a definitive agreement with VTech would not prevent the LeapFrog board from entering into a superior proposal, from Bidder 5 or any other party, if the LeapFrog board determined that a competing offer merited a change of recommendation.<sup>65</sup>
- 5.34 We noted that Bidder 5 had not completed its due diligence and had not submitted a detailed plan regarding the future direction of LeapFrog. The plan provided to Morgan Stanley indicated that Bidder 5 would aim to stabilise Leapfrog's finances and in the future develop opportunities in the [REDACTED] market.
- 5.35 Bidder 5 told us that it was committed to investing in LeapFrog and while aware of the financial difficulties, it did not envisage any major obstacles to a swift completion once it had completed its due diligence.
- 5.36 Bidder 5 told us that it had significant financial resources at its disposal and sufficient investments in the educational, language and media markets to make its acquisition both rational and credible. Its offer did not appear speculative as its offer to invest was at a premium to the market price at the time.

### *Bidder 6*

- 5.37 As well as making an initial offer, Bidder 6 had engaged professional advisers and attended a data room in January 2016 to conduct some due diligence.
- 5.38 However, the Parties told us that Bidder 6 had performed limited diligence in LeapFrog's electronic data room and had not conducted on-site diligence

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<sup>64</sup> LeapFrog had two types of shares, Class A and B. The shares were identical in every way with the exception of Class B shares having x10 voting power. Class B shares were held by a small number of related individuals who had a combined voting power of approximately 40%.

<sup>65</sup> [REDACTED] [Schedule 14-D](#), p23.



meetings.<sup>66</sup> The Parties told us that no operating plan had been provided to LeapFrog.

- 5.39 The Parties told us that Bidder 6 told Morgan Stanley that it did not at the time have the financing in place to fund the deal, although it was exploring alternatives. Bidder 6 said that its proposal was subject to the approval of several governmental and regulatory agencies and parties and that it would have taken at least five to six months to obtain these approvals and complete the transaction.

#### *Bidder 7*

- 5.40 As well as making an initial offer, Bidder 7 had engaged professional advisers.
- 5.41 However, Bidder 7 told Morgan Stanley that it did not have the capability of financing its offer but was exploring options. Bidder 7 chose not to conduct on-site diligence meetings with LeapFrog's senior management and had requested an extension to the end of February 2016 to submit a more definitive proposal.

#### *Bidder 8*

- 5.42 Bidder 8 submitted an unsolicited proposed agreement and plan of merger and tender and support agreement on 22 March 2016 with a suggested closing date of 23 May 2016.<sup>67</sup> This offer was made six weeks after the VTech deal was publicly announced. The CEO of Bidder 8 is related by common ownership to [X], which was invited by Morgan Stanley to bid for LeapFrog but did not.<sup>68</sup>
- 5.43 The Parties told us that Bidder 8 did not itself have any assets, that the late stage of the offer made it unlikely that LeapFrog would have been able to accept the offer given its liquidity issues, the finance proposal from an independent brokerage firm did not specify any amounts and that the LeapFrog board were concerned that the offer was not viable.<sup>69</sup>

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<sup>66</sup> [Initial submission](#), Annex 1: The Counterfactual, paragraph 46.

<sup>67</sup> [Schedule 14D-9 \(Rule 14d-101\) Solicitation/recommendation statement](#).

<sup>68</sup> [X]

<sup>69</sup> See Amendment No.2 of 25 March 2016 to LeapFrog SC14D9 and [Initial submission](#), paragraph 57.

## *Our assessment*

5.44 On the basis of the information available to us in this case, we have identified the following criteria as being key to assessing each of the potential purchasers noted above:

- (a) The extent to which financial and legal due diligence had been completed.
- (b) Whether there was agreement on the structure of the acquisition with the vendors (acquisition of the firm or its assets).
- (c) The availability of committed funding.
- (d) The ability to complete before LeapFrog's funding shortfall.
- (e) Experience in the sector.

5.45 Evaluating the prospective purchasers against the above criteria:

- (a) **The extent to which financial and legal due diligence had been completed.** None of the bidders had completed their due diligence. Neither Bidder 7 nor Bidder 8 attended a data room, however Bidder 6 and Bidder 5 both completed some due diligence in the January 2016 data room. Bidder 6 did not schedule any meetings during this period. Bidder 5 held several meetings with LeapFrog management but requested 30 days exclusivity to complete its due-diligence.
- (b) **Whether there was agreement on the structure of the acquisition with the vendors (acquisition of the firm or its assets).** All of the offers were non-binding. Bidder 5, Bidder 6 and Bidder 8 were offering to invest or purchase LeapFrog as a going concern. Bidder 7 requested to the end of February 2016 to submit a new offer. Bidder 8 submitted a proposed sale and purchase agreement.
- (c) **The availability of committed funding.** Bidder 6 and the Bidder 7 both noted that funding was not currently in place. Bidder 8 provided a finance proposal from an independent brokerage firm but this did not specify any amounts. Bidder 5 is a large investment firm and did not indicate any concerns over the ability to raise finance but we note that Bidder 5 had not received final approval from its internal investment committee.
- (d) **Ability to complete before LeapFrog's funding shortfall.** As noted, we consider that LeapFrog had a forecast liquidity shortfall in June/July 2016. Against this, Bidder 6 suggested in January 2016 that it might need five to six months to get the requisite approvals to complete the deal. Bidder 7 did not indicate a time for completing the deal but in January 2016

requested an extension to the end of February to submit a revised offer. Bidder 8 made its offer very late in the process, not until 22 March 2016, however it suggested a closing date of 23 May 2016. Bidder 5 requested a further three weeks at the end of January 2016 to complete due diligence. Shareholder approval would likely have been required for all the deals except Bidder 8. If obtained, VTech told us that shareholder approval could delay the process by up to three months.

- (e) **Experience in the sector.** The CEO of Bidder 8 is related by common ownership to [REDACTED], which did not make an offer for LeapFrog. None of the other prospective purchasers have experience in the toy sector. Bidder 5 and to a lesser extent Bidder 6 both have experience in the education sector in [REDACTED] and both of these parties and Bidder 7 have experience in the digital publishing sectors in [REDACTED].

### *LeapFrog and liquidation*

- 5.46 The Parties' submitted that there was no alternative purchaser for LeapFrog and that the only option left would have been for LeapFrog to enter into bankruptcy proceedings as early as May 2016. This would have resulted in LeapFrog being liquidated.
- 5.47 LeapFrog's Securities and Exchange submission, Schedule-14D, notes that Morgan Stanley analysis calculated that liquidation was not likely to return more than \$0.75 per share to stockholders.<sup>70</sup>
- 5.48 The LeapFrog board expressed the view that this analysis likely understated the costs involved in a liquidation and the impact that a liquidation would have on realisable asset value. This view took into account possible adverse reactions from retailer distribution channels which might decline to purchase toys or seek price adjustments to inventories of LeapFrog's toys, as they might need to be sold at deep discounts due to consumers' reluctance to purchase toys from a company going out of business.<sup>71</sup>
- 5.49 In recommending the merger agreement with VTech, the view of LeapFrog's board set out in the Securities and Exchange submission, Schedule-14D, notes that if the company were liquidated or pursued an asset sale under section 363, the amount recoverable for stockholders of the company could be very small, or zero.

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<sup>70</sup> [Schedule 14D](#), p16.

<sup>71</sup> [Schedule 14-D](#), p16.

- 5.50 The Vice President and Corporate Controller for LeapFrog at the time of the Merger told us that liquidation would have been one of the worst outcomes for LeapFrog's shareholders and anything before liquidation would probably have been better.
- 5.51 LeapFrog also told us that given LeapFrog's financial position some creditors may have wanted more cash in advance, which would have had an additional negative impact on LeapFrog's cash position against LeapFrog's forecasts.
- 5.52 Morgan Stanley told us that if VTech had dropped out, it (at the direction of the LeapFrog board) would have continued to [REDACTED] for alternative buyers for LeapFrog, [REDACTED] but it was unable to predict whether it would have found any alternative bidder or strategic investor [REDACTED].

*Our conclusion on whether there was an alternative purchaser for LeapFrog or its assets*

- 5.53 Taking account of the evidence set out in paragraphs 5.25 to 5.52, our view is that, it is likely that absent the Merger, LeapFrog would have pursued one or more of the potential purchasers identified above.
- 5.54 In reaching this view, we took into account our finding that LeapFrog would have failed financially by June/July 2016 at the latest and that LeapFrog had taken preliminary advice on the possible return to shareholders of liquidation of LeapFrog. Given the evidence, it would likely have been in the interest of LeapFrog's shareholders, absent the VTech offer, to pursue one or more of the potential purchasers.
- 5.55 Our conclusion therefore is that, absent the merger with VTech, there would have been an alternative purchaser for LeapFrog.

*Our conclusion on the most likely alternative purchaser*

- 5.56 Based on the evidence, we have concluded that, on balance, Bidder 5 was the most likely alternative purchaser.

***Conclusion on the counterfactual***

- 5.57 We have concluded that, absent the merger with VTech, LeapFrog would have failed financially, at the latest June/July 2016 but there would have been an alternative purchaser for LeapFrog. On balance, Bidder 5 was the most likely alternative purchaser. The exiting firm scenario does not therefore apply.

- 5.58 As regards the competitive effects assessment, we note that the evidence we have on Bidder 5's plans for the LeapFrog business is limited and does not mention specific plans for the UK. However, the high level plan it presented to the LeapFrog board stated that it would 'refocus on the core business (reading and learning toys) and bring the company back to profitability, and then make investment into new opportunities such as a subscription model, and international markets – [REDACTED]'.<sup>72</sup>
- 5.59 Moreover, under Bidder 5's growth plan, the high level plan aimed for a stable learning toys business and stabilised tablet revenue.
- 5.60 In light of this, we conclude that the counterfactual against which to assess the effects of the merger is prevailing conditions of competition (that is pre-merger conditions) with LeapFrog no longer on its rapid downward trend under the ownership of Bidder 5.

## **6. Nature of competition**

- 6.1 The way in which firms contract with each other affects how competition in an industry occurs. In Chapters 2 and 3 we described characteristics of the toy sector. In this chapter, we assess how manufacturers and retailers contract with one another and over what parameters. We also consider what the parameters of competition are in the UK for the Parties.
- 6.2 In this section we consider:
- (a) factors that affect the supplier/retailer relationships within the toy sector;
  - (b) parameters which manufacturers in general, and the Parties specifically, are able to flex within the UK in response to competition; and
  - (c) the influence of retailers on consumer demand.

### ***Factors that affect supplier/retailer relationships within the toy sector***

#### ***Negotiations between toy suppliers and retailers***

- 6.3 Retailers and manufacturers negotiate range and terms on a bilateral basis,<sup>72</sup> with each retailer independently choosing the range of products that they stock and negotiating price and terms with manufacturers. [REDACTED]<sup>73</sup> The majority

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<sup>72</sup> As opposed to manufacturers having a standardised offering which they do not vary between different retailers.

<sup>73</sup> [Initial submission](#), paragraph 469.

of retailers<sup>74</sup> also indicated that they negotiate terms with manufacturers on an annual basis, although one large retailer stated that its negotiations are based around its six monthly catalogue cycle. Retailers indicated that although key terms are typically fixed, renegotiations can occur throughout the year.<sup>75</sup>

- 6.4 Bricks-and-mortar retailers and catalogue retailers are constrained in the number of products that they are able to offer by the amount of space available to them. This differs widely between retailers with non-specialist toy retailers such as supermarkets having the most limited shelf space. Although specialist toy retailers stock an extensive range of toys, they are limited by the footprint of the store. Only online retailers are able to stock or list a full range of toy products.
- 6.5 The Parties submitted that the fact that negotiations take place across the entire range significantly strengthens the retailer's negotiation ability. Even when a manufacturer has a 'hot' toy,<sup>76</sup> it is unable to significantly exploit this fact with retailers given that it still wants to place as much of its range as possible with the retailer. The Parties told us that because retailers have many alternatives to manufacturers' toys across the range, the threat not to take the full range is more than sufficient to discipline the manufacturer in its pricing of 'hot' toys.
- 6.6 The majority of retailers<sup>77</sup> agreed that terms are negotiated across the range of products within the brand, although two retailers indicated that they negotiate prices on a product-by-product basis. Retailers told us that they had ongoing relationships with manufacturers.<sup>78</sup> As a result of this long-term relationship retailers often referred to their relationship with manufacturers as a partnership.

### *Churn rate*<sup>79</sup>

- 6.7 The Parties submitted an analysis of the number of new toys entering the UK market each year (see Table 2), which demonstrates that the toy sector is characterised by a constant and significant stream of new toys coming into the market.<sup>80</sup> The analysis includes sales in 2016 up to August, and as such

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<sup>74</sup> See Appendix F for details.

<sup>75</sup> For instance, [§<].

<sup>76</sup> [Initial submission](#), paragraph 19.

<sup>77</sup> See Appendix F for details.

<sup>78</sup> For example, Smyths said that it had long-term, mutually beneficial relationships with many of its suppliers ([Smyths hearing summary](#), paragraph 16).

<sup>79</sup> The churn rate is the percentage of toys which enter and leave the market in a given year.

<sup>80</sup> VTech told us that one limitation of the NPD data for the purpose of this analysis is that own-label products, which account for a large proportion of these segments, are collapsed in a single line in the data. As such it is not possible to capture trends and life cycles for these products. This means that the dynamism in the market is likely to be underestimated as the analysis does not take account of these products.

will not include all products that will be launched over the Christmas period. Therefore, when considering churn rates, most weight should be placed on the 2014 and 2015 data.

**Table 2: Introduction of new products into the UK toy market**

	Infant/toddler			Preschool		
	[X]	[X]	[X]	[X]	[X]	[X]
Total products	[X]	[X]	[X]	[X]	[X]	[X]
Number of manufacturers	[X]	[X]	[X]	[X]	[X]	[X]
New launches	[X]	[X]	[X]	[X]	[X]	[X]
Number of manufacturers	[X]	[X]	[X]	[X]	[X]	[X]
New launches as % of total products	[X]	[X]	[X]	[X]	[X]	[X]
Number of new manufacturers as % of all manufacturers	[X]	[X]	[X]	[X]	[X]	[X]

Source: CRA analysis submitted by the Parties based on NPD point of sales data. New launches in the data were identified as products associated with positive sales that year but zero sales in the previous years.

\* January to August.

6.8 The analysis demonstrates that there is a high rate of churn in the market, with the overall number of products stable, despite the launch of a significant number of new products. These new products can range from minor updates of existing toys, such as an existing product being launched in a new colour, or with additional features, to entirely new products different to anything previously available on the market.

6.9 The high churn rate implies that few manufacturers have a stable product line which will remain in demand over a number of years. As a result, the negotiation process between manufacturers and retailers is best characterised as a long term repeated game, rather than a one shot negotiation.

### ***Parameters of competition in the UK for the Parties***

6.10 The Parties noted that the most important parameters of competition in the UK toy sector are: pricing, product range, product quality and promotion.<sup>81</sup> However, the Parties are both international firms with headquarters outside the UK. They have indicated that although there is a range of parameters of competition between manufacturers, only a subset of these are determined in the UK. The Parties have indicated that the main parameters of competition for them in the UK are therefore promotional and marketing support and price.

6.11 The Parties submit that other aspects of the overall offer, such as the range or product quality, are uniform across all geographic markets in which it is offered for sale, and as such are not UK parameters of competition. The

<sup>81</sup> [Initial submission](#), paragraph 273.

Parties submit that there are no specific UK factors which influence the characteristics of their toys. Although UK teams [REDACTED].

6.12 Once a toy has been developed for the international market, the Parties indicated that there is a relatively limited amount of adjustment that may be made in the UK. [REDACTED]

6.13 [REDACTED]<sup>82</sup>

6.14 As stated earlier (see Chapter 3), the Parties indicated that the UK accounted for approximately 12% of LeapFrog's sales, making the UK the second biggest market behind the US, which accounts for around 70% of sales.<sup>83</sup> Similarly, VTech generates around [REDACTED]% of its toy sales in the UK.<sup>84</sup>

6.15 We have considered whether the UK is sufficiently important to either Party's sales that internationally set parameters of competition would be adjusted in response to a change in the competitive conditions in the UK. Although some products are developed exclusively for the UK, this represents a small proportion of the overall portfolio. Since LeapFrog's sales in the UK accounted for around 12% of its' overall revenues,<sup>85</sup> it is unlikely that a change in the competitive conditions in the UK will alter quality parameters set internationally. For this reason, much of our analysis of the competitive effects of the Merger will focus on price, rather than quality or other parameters of competition.

### ***Influence of retailers on consumer demand***

6.16 As discussed earlier (see paragraph 3.28), manufacturers sell to retailers, who then sell the products on to consumers. While retailers stock and sell products if there is sufficient consumer demand for them, they are able to influence consumer demand to some degree. Therefore, retailer demand will be based on a combination of retailers' anticipation of consumer demand (since they negotiate with manufacturers before they have made any sales that season, see paragraph 3.42) and the extent to which retailers are able to influence consumer demand.

6.17 Retailers have told us that, in general, they believe that they have the ability to influence consumer demand (see Appendix F for details). This could either be

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<sup>82</sup> The Parties provided the following examples: (a) VTech Tree Fu Tom Learn & Go (based on a TV programme on the BBC) for the UK market. (b) VTech Toot Toot Drivers and Maya the Bee (a TV show popular in France, Germany and Benelux) for European market and not US. This was later extended to USA due to success in Europe. (c) LeapFrog Scout and Friends BabyWalker specifically developed for European market in 2011.

<sup>83</sup> [LeapFrog 2015 Annual Report and Accounts](#), Note 21 Segment Reporting.

<sup>84</sup> [Initial submission](#), paragraph 39.

<sup>85</sup> [LeapFrog 2015 Annual Report and Accounts](#), Note 21 Segment Reporting.



when the consumer is in-store, through promotional activity or product placement, or outside the store through mailings or advertisements. The survey evidence is consistent with this for TEL toys, which encapsulates a range of relatively low price-point toys, where the majority of consumers have not made their purchasing decision before they enter the store (see paragraph 8.41). Therefore, we consider that retailers have the ability to influence consumer demand for a range of products including TEL toys.

- 6.18 We note that consumers may choose what they want to purchase before they enter a store for more expensive goods, and as such retailers may not be able to influence demand for these to the same extent. The CMA survey of tablets,<sup>86</sup> and electronic reading systems,<sup>87</sup> which have relatively higher retail prices,<sup>88</sup> found that more than 80% of consumers had planned their purchase in advance. This suggests that retailers may have less ability to influence consumer demand for these products than for TEL toys.

### ***Our view of the nature of competition and implications for our competitive assessment***

- 6.19 In view of the discussion above, we have reached the following views in respect of those factors concerning the toy sector that are relevant to our competitive assessment:
- (a) Manufacturers and retailers conduct bilateral negotiations, which can either be across the whole range of that manufacturer's products or for individual products. These bilateral negotiations will determine the terms of sale, which typically include the wholesale price, advertising support and promotional activity.
  - (b) Retailers' purchasing decisions are based on their anticipation of consumer demand, but for less expensive toys, retailers also have the ability to influence consumer demand to some extent for some products through promotional activity or the way products are displayed.
- 6.20 Therefore, we have focused our analysis on determining which outside options<sup>89</sup> are available to retailers during their negotiations with

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<sup>86</sup> The survey found that 88% of customers planned their purchase in advance, with only 10% making an impulse buy. Around 80% of customers who planned their purchase in advance spent at least 30 minutes researching their purchase. See Appendix E for more detail.

<sup>87</sup> The survey found that 84% of customers planned their purchase in advance, with only 15% making an impulse buy. Around 35% of customers who planned their purchase in advance spent at least 30 minutes researching their purchase.

<sup>88</sup> Prices vary depending on the product and retailer, with tablets prices currently around £80 and reading systems around £35.

<sup>89</sup> In economic terms, the outside option is the next best alternative or business proposition of buyers in case their negotiations with a given supplier break down.

manufacturers. Intuitively, a buyer with a good outside option can negotiate a good deal, because they have a credible and favourable alternative to choose from if the negotiations break down, so can leave the negotiating table without suffering significant harm. In contrast, a buyer with few outside options will have to accept a bad deal, because their bargaining position is weak. In this context, the effect of a merger could manifest itself by changing the outside option of the buyers and forcing them to accept a worse deal than they would pre-merger.

- 6.21 In instances where merging parties are close competitors to each other and the outside options are limited, retailers will be in a weak negotiating position as they will have little alternative but to stock the Parties' product. In such circumstances, the merging parties will be able to increase the wholesale price, which will either result in higher retail prices or a reduction in profitability for the retailer, both of which equate to harm. Where the reverse is true and there are a number of other firms to which retailers could credibly switch without being any worse off, retailers will be in a strong negotiating position and the merging parties will not be able to increase prices, even if they are close competitors to one another.
- 6.22 If there are a sufficient number of close outside options available, there will not be scope for the Parties to deteriorate their offering.
- 6.23 In addition, we conclude from the evidence in this chapter that VTech and LeapFrog determine price and promotional expenditure in the UK, but other parameters of competition such as quality or innovation are determined outside the UK. For this reason, we will be focusing on price in our competitive effects analysis.

## **7. Market definition**

- 7.1 The Parties overlap in the supply of different types of toys to retailers, both in the UK and globally. In this section we consider how to group these products together to form a relevant economic market and whether that market is the UK, or wider in scope.
- 7.2 The relevant market contains the most significant competitive alternatives available to the customers of the merged firms and includes the sources of competition to the merged firms that are the immediate determinants of the effects of the merger (ie the CMA's aim when identifying the relevant market is to include the most relevant constraints on behaviour of the merged firms).

The CMA will ensure that the relevant market it identifies satisfies the hypothetical monopolist test.<sup>90</sup>

- 7.3 However, the boundaries of the market do not determine the outcome of the analysis of the competitive effects of the merger, as there can be constraints on merging parties from outside the relevant market, or the market may be segmented such that there can be competitive concerns in a portion of the relevant market.<sup>91</sup>

### ***Product market definition***

- 7.4 Our analysis of the product information supplied by the Parties shows that they overlap in the supply of learning toys, and that they have a focus on electronic toys. We established the following groupings of the Parties' products as a starting point:<sup>92</sup>

(a) TEL toys (for children aged 0 to 3 years).<sup>93</sup>

(b) Child tablets and content.<sup>94</sup>

(c) Child electronic reading systems.

- 7.5 We used these definitions when collecting evidence and both the Parties and third parties referred to these definitions in their responses.

- 7.6 In this section, we have considered whether the markets should be wider than our initial product grouping. In making our assessment, we have considered the following:

(a) The Parties' views on market definition.

(b) Internal documents.

(c) Consumer research, to determine whether consumers would switch to alternative products.

(d) Retailers' views, on how they categorise and choose products.

(e) Competitors' views.

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<sup>90</sup> [Merger Assessment Guidelines](#), paragraph 5.2.1.

<sup>91</sup> [Merger Assessment Guidelines](#), paragraph 5.2.2.

<sup>92</sup> See [issues statement](#).

<sup>93</sup> See paragraph 2.4 for a full description of TEL toys. Note that [X]. The Early Electronic Learning subclass is more narrowly defined than our definition of TEL toys.

<sup>94</sup> See paragraph 2.6 for a full description of child tablets and content.

(f) Margin-concentration analysis.

(g) Evidence on whether there is supply-side substitutability.

### ***Toddler electronic learning toys***

7.7 The Parties overlap in the supply of learning toys with an electronic element. Learning toys covers a large and diverse range of toys, and there is a significant degree of differentiation between these toys. This makes it difficult to draw clear and precise boundaries when defining the relevant market

7.8 Early electronic learning and pre-school electronic learning toys are two toy categories defined by NPD, which between them include most of the Parties' electronic learning toys. For practical purposes, we have used these NPD categories as a starting point for our analysis.

### ***Parties' views***

7.9 The Parties submitted that TEL is not a relevant economic market and that a wide frame of reference, at least including infant/toddler/preschool toys, is appropriate.<sup>95</sup> The Parties submitted that while NPD data was informative as to the different categories of toys that existed, it was not a helpful way of segmenting the market. Specifically, the Parties believed that NPD categories did not reflect competitive dynamics and in particular demand-side and supply-side substitutability. This was because of the high degree of overlap between the different NPD categories. For example:<sup>96</sup>

(a) Ravensburger's Pull Along Engine had been classified as [X] while its Push Along Fire Truck had been classified as [X] (neither of which are TEL).

(b) VTech's Baby's First Smartphone and Clementoni's Minnie Mouse Baby Smartphone belonged to the [X] subclass while KD Group's Peppa Pig Smartphone, Disney Frozen Smartphone and Thomas & Friends Smartphone pertained to the [X] subclass. The Parties submitted that the classification was not only arbitrary, but erroneous, as, for example, KD Group's Peppa Pig was marketed to be suitable from 18 months upward (and therefore could also fall into the [X] subclass).

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<sup>95</sup> Initial submission, paragraph VI.1.

<sup>96</sup> Initial submission, paragraph 199.

- 7.10 Furthermore, NPD categorisation was not static and had evolved over time. For example, NPD had recently renamed [X]. This illustrated the looseness of the NPD categories, which did not constitute a robust basis for any market definition exercise.<sup>97</sup>
- 7.11 The Parties considered that there was demand-side substitutability between electronic and non-electronic toys for infants and toddlers. In particular, given that purchases of toys for children under three years of age were primarily adult-led, a parent would essentially purchase a toy that would entertain their infant or toddler, and that might very well include toys which were not necessarily electronic.<sup>98</sup> They also said that a rigid segmentation by age, according to precise age cut-offs, would be arbitrary<sup>99</sup> and that a distinction between learning and non-learning toys would not be robust for toys intended for infants and toddlers.<sup>100</sup>
- 7.12 The Parties submitted a margin-concentration analysis that tested whether the NPD subclass of TEL toys was a correctly defined market.<sup>101</sup> The Parties hypothesised that if the market was correctly defined, a positive relationship would be observed between the level of concentration in that market and profit margins. This is because a higher concentration should result in a lower level of competition and consequently higher profitability. The Parties found no relationship between the level of concentration within the NPD subclasses and the Parties' margins within those subclasses. The analysis is described in detail in Appendix D, and assessed in paragraph 7.31.
- 7.13 Furthermore, the Parties noted that retailers were the Parties' direct customers. An important indicator of the demand-side perspective for retailers was the fact that they generally had procurement teams with substantially broader purchasing responsibility than just TEL toys and typically did not structure procurement decisions based on whether a toy was electronic and/or educational. If retailers did segment the procurement of toys, it was more likely to be based on gender, age or broader usage (for example, infant/preschool toys, outdoor toys, girls' toys, boys' toys or board games).<sup>7</sup> This holds true for all types of retailers, whether grocers, toy specialists or others, and there was no such thing as a specialist procurement team for TEL toys.<sup>102</sup>

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<sup>97</sup> Initial submission, paragraph 200.

<sup>98</sup> Initial submission, paragraph 204.

<sup>99</sup> Initial submission, paragraph 206.

<sup>100</sup> Initial submission, paragraph 202.

<sup>101</sup> NPD no longer records a [X]. Note that the NPD subclass Early Electronic Learning is more narrowly defined than our definition of TEL toys.

<sup>102</sup> Initial submission, paragraph 212.

### *Internal documents*

- 7.14 Internal documents can provide a valuable source of information in merger inquiries, as they show how the Parties view the market outside the context of a merger inquiry.
- 7.15 In its management accounts for 2016, LeapFrog recognised three segments:
- (a) [REDACTED]
  - (b) [REDACTED]
  - (c) [REDACTED]
- 7.16 In its UK management accounts for March 2016, VTech recognised two segments:
- (a) [REDACTED]
  - (b) [REDACTED]

### *Consumer research*

- 7.17 Consumer research was commissioned during the inquiry to assess whether consumers would switch from the Parties' toys to alternative products.
- 7.18 In order to examine consumer preference for TEL toys, we commissioned a set of in-depth qualitative interviews of customers who had purchased one of a limited range of TEL toys. Additionally, the Parties commissioned a face-to-face consumer survey across a wider range of TEL toys using a quantitative questionnaire. Both surveys involved recruiting consumers who had purchased TEL toys in the last 12 months. Such a sample was necessary as the Parties did not have information to enable them to identify and contact those consumers who had purchased the majority of their TEL toys. For further information on both surveys see Appendix E.
- 7.19 Both surveys asked a number of questions around the consumers' purchase in order to ascertain what sort of product they would have bought if the one that they had purchased had not been available.
- 7.20 The CMA qualitative interviews found that the majority of participants said they would have bought a different toy of the same type if the toy purchased was not available, while others said that they would have bought a different

type of toy.<sup>103</sup> The majority of those who would have bought a toy, whether of the same or a different type, said that they would have bought another learning<sup>104</sup> or interactive toy. This indicates that the electronic element of TEL may be less important compared with the learning element.

- 7.21 The Parties' survey also asked consumers what type of product they would have purchased if the one they had bought was not available. The responses show that less than 15% of consumers said they would have purchased a different electronic toy if the toy they had originally purchased was not available. Of the reminder about half said they would have bought another toy or something else, about 20% would not have bought anything and 15% didn't know what they would have done. Of those who would have bought another toy or something else, over 40% said that they would have purchased an educational toy. This also suggests that the electronic element of TEL may not be the foremost consideration when consumers purchase a toy and that consumers consider non-electronic toys, particularly those with a learning element, as alternatives to the Parties' TEL toys.
- 7.22 The Parties' survey also asked consumers what other types of product(s) they considered purchasing instead of the product they had actually bought. The responses showed that a learning toy was something that many respondents considered (47% of LeapFrog customers and 33% of VTech customers), but they also considered a wide variety of alternatives such as a soft toy (LeapFrog 17%, VTech 12%) and/or a toy car or train (LeapFrog 10%, VTech 16%).
- 7.23 In our view, the survey evidence indicates that TEL is too narrowly defined to constitute an economic market, with a significant proportion of customers saying they would divert to other types of toys. In particular, the survey evidence suggests that the market should be widened to include at least learning toys that do not have an electronic element.
- 7.24 The consumer research also informed the relevant age range to include in the market definition. The Parties' survey asked respondents to state the age of the child who the toy was bought for.<sup>105</sup> For both Parties, the majority of toys were purchased for a child aged under five (about 90%). The survey indicated that LeapFrog's end users tended to be older on average than those of

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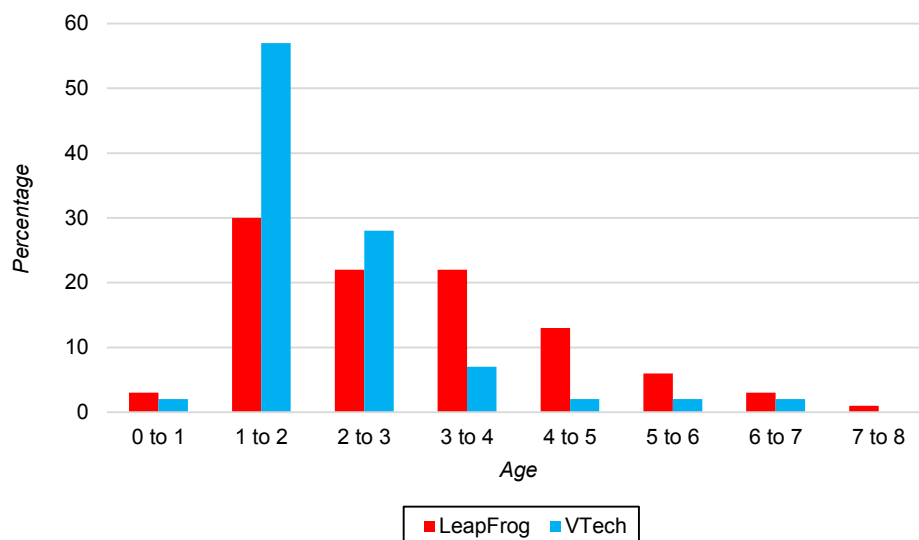
<sup>103</sup> A minority would not have bought anything, particularly if the toy had been bought on impulse.

<sup>104</sup> The survey used the term 'educational' but this is synonymous with 'learning', which we are using for the market definition.

<sup>105</sup> The screening question for eligibility for participation in the survey allowed for the toy to have been bought for a child no older than 9 years.

VTech. These results are consistent with the view expressed by the Parties that their learning toys are aimed at children who are aged 5 years and under.

**Figure 1: Distribution of age of recipient of toy**



Source: VTech-LeapFrog: Summary of the consumer survey of TEL toys.

Question: 'How old was the child who the VTech or LeapFrog toy was purchased for at the time it was purchased?'

Base: 190 LeapFrog, 265 VTech.

Note: 'Prefer not to say': LeapFrog 1%, VTech 0%. 'Don't know': LeapFrog, 1%, VTech 2%.

### *Retailers' views*

- 7.25 How retailers choose to segment the products they stock can provide insights into whether a set of products is likely to form an economic market. Retailers will have an incentive to stock substitute products near to each other, to allow consumers to easily select what they would like to purchase. In instances where products are not stocked near to each other they are unlikely to be viewed as substitutes. For similar reasons, the segments/categories retailers choose to use to group products together are likely to provide an indication of whether they are substitutes.
- 7.26 We asked retailers how they segment products in their stores and found that there was no commonly accepted segmentation, with different retailers using slightly different categories.
- 7.27 Despite these differences, retailers typically segment toys by categories (action figures, dolls, outdoor toys vehicle etc), age (baby, toddler, preschool etc), brand, gender or a combination of category, age, brand and/or gender. Many retailers also told us that they allocated shelf space according to these segmentations (see Appendix F for further details).



- 7.28 As set out in paragraphs 6.5 and 6.6, most retailers negotiate with manufacturers over their entire range of products. For most retailers, these negotiations cover all elements of the offering and are conducted at brand rather than product level. No retailer we spoke to indicated that it negotiated over the narrower segment of TEL toys.
- 7.29 Retailers did not consider that the electronic element of toys was particularly important and suggested that consumers were primarily concerned that a toy had a learning element.<sup>106</sup> This, coupled with the way they choose to segment their retail space, suggests that the market is wider than TEL toys. We note that although different retailers use different classifications, they commonly have a category for learning or educational toys.

#### *Competitors' views*

- 7.30 Competitors typically segmented toys by categories (action figures, dolls, outdoor toys vehicle etc), age (baby, toddler, preschool etc), brand, licences, gender or a combination of the above. Four out of 12 competitors told us they had an educational/learning category. One competitor considered electronic learning toys to be a distinct segment within preschool. Another competitor told us that at one time electronics had been an amazingly effective way to add value to a play pattern, but now it was commonplace.<sup>107</sup>

#### *Parties' margin-concentration analysis*

- 7.31 As set out in paragraph 7.12, the Parties submitted a margin-concentration analysis to test whether TEL was a correctly defined market. We consider that this analysis is in line with the Parties' argument that the TEL grouping defined in paragraph 7.4 is constrained by other products, and hence not a correctly defined market. However, there are a number of issues with this analysis, principally:

- (a) There might be measurement issues in how margins are calculated. Measurement issues that reduce variation in margins across products may explain the lack of a positive relationship between concentration and margins. As discussed in Appendix D, there are a number of costs that are variable but not product specific. To the extent that these vary across products, this may lead to measurement error. Furthermore, both measurement issues and differences in cost structures across products may explain differences in margins across products.

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<sup>106</sup> See [Toys'R'Us hearing summary](#), paragraph 5.

<sup>107</sup> [TOMY hearing summary](#), paragraph 5.

(b) This type of analysis is known to suffer from endogeneity bias. That is, there might be factors that are not taken into account in the analysis that affect both the level of concentration in a market and margins. This might also explain the lack of a positive relationship between concentration and margins.

7.32 Given these issues, our view is that the results do not, in and of themselves, prove the Parties' argument that the TEL grouping is not a correctly defined market. However, our view is that the results are consistent with this argument, as well as with other evidence we have received during our inquiry.

#### *Evidence on supply-side substitutability*

7.33 The Parties submitted that toy manufacturers constantly renewed their product offering in order to anticipate changes in consumer trends. Furthermore, the development and manufacture of toys, including electronic toys, was not a technology-intensive industry nor one that would require a high degree of know-how, such that suppliers in other infant/toddler categories could easily switch to supplying TEL toys (and in a timely fashion) in the event of a 5 to 10% price increase of TEL toys.<sup>108</sup>

7.34 The majority of competitors indicated that a company would need a year or more to develop new TEL toys. As CMA guidance states that firms need to have the ability to enter quickly (generally within a year),<sup>109</sup> we have discussed this under entry and expansion in paragraph 8.66 to 8.79.

#### *Our conclusion*

7.35 We conclude that the market is for learning toys taking into account the following findings:

- (a) We have found that there is significant demand-side substitution away from TEL toys by consumers, with consumers less likely to buy another TEL toy if the one they had purchased was not available than another educational/learning toy.
- (b) The survey evidence indicates that many consumers are primarily interested in buying a learning toy and that the electronic element is less

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<sup>108</sup> Initial submission, paragraph 218.

<sup>109</sup> Merger Assessment Guidelines, paragraph 5.2.17: circumstances where markets may be aggregated due to supply-side substitutability include where 'production assets can be used by firms to supply a range of different products that are not demand-side substitutes, and the firms have the ability and incentive quickly (generally within a year) to shift capacity between these different products depending on demand for each'.

important for many consumers. This suggests that the market should be at least learning toys.

- (c) We found that retailers typically include any TEL toys within a wider educational or learning category. This is because retailers do not consider that the electronic element of toys is that important.

7.36 Finally, we note that learning toys covers a large and diverse range of toys, and there is a significant degree of differentiation between these toys. This makes it difficult to draw clear and precise boundaries when defining the relevant market and have taken account of this in our competitive effects assessment.

7.37 In addition, since the Parties target the majority of their products at children aged 0 to 5 years, we consider that this market should include toys that are recommended for use by children who are five years of age and younger.

### ***Child tablets and content***

7.38 LeapFrog and VTech both produce a range of child-specific tablets, as well as content to run on them.<sup>110</sup> These are targeted at children aged three<sup>111</sup> and above. Child tablets can be used to provide educational content to children, and as such could be part of a wider learning toys market. However, they are also able to provide non-educational content and may be constrained by standard tablets and other electronic devices, which is less likely to be the case for other learning toys. Therefore, on a cautious basis, we have analysed these toys separately taking into account:

- (a) the unique features of these products and the extent to which these are differentiated from (or similar to) standard tablets;
- (b) the extent to which customers would switch to alternative toys and the options available to them (including standard tablets); and
- (c) how retailers categorise and choose child tablets.

7.39 The Parties sell content digitally through their own app stores, and on physical devices such as cartridges. Content is designed for use by children and often has some learning element to it. Currently the majority of LeapFrog tablets run

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<sup>110</sup> See paragraph 2.6(a) for description of a child tablet.

<sup>111</sup> This would be consistent with the approach used by NPD in which the starting age (in the recommended age range for a toy) is used as the guideline for where the product should be placed, not the end age.

on a proprietary operating system (Brio). The LeapFrog Epic and VTech tablets both run on a customised version of Android.

- 7.40 In our view, it is appropriate to consider child tablets and content together, as both are required to satisfy the needs of the end user. We note that the Parties currently operate relatively closed ecosystems,<sup>112</sup> with content available to download from their proprietary stores or to purchase physically in cartridge form. As content becomes more freely available via the internet, consumers will increasingly be able to replicate the offering of the Parties, through a tablet, protective bumper/case and content.
- 7.41 We also considered whether there is an overlap in child laptops and whether these should be included in this frame of reference. We found that although LeapFrog produces a toy version of a laptop, this does not have the technological functionality associated with child tablets. Additionally the majority of VTech's child laptop products are imitation products, rather than functional technology. The Parties' laptops are therefore considered under learning toys, rather than with child tablets and content.
- 7.42 We then considered whether we should define a wider market than child tablets and content, using the approach set out in paragraph 7.6.

#### *Parties' views*

- 7.43 The Parties submitted that standard tablets<sup>113</sup> did not differ significantly from child tablets for the following reasons:
- Special safety features: the vast majority of tablets' operating systems allow the setting up of restricted profiles enabling the device administrator (ie a parent) to control the app permissions of each user profile. In addition, several child-safe applications exist, which are easily downloadable from the internet (some of which are free) and which ensure an appropriate level of parental control.
  - Robustness of the cases: several child-proof frames or cases are available and are easily transposable to standard tablets.
- 7.44 The Parties submitted that from a consumer's perspective, demand for children's tablets might be satisfied not only by devices specifically targeted at

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<sup>112</sup> A closed ecosystem is a combination of hardware/operating system/apps. It is in contrast to a hardware- or device-neutral system like the Android (Google) model. Epic and all VTech products run on customised versions of Android. VTech allow access to a curated selection of Apps and not to Google Play, but the Android operating system is open source.

<sup>113</sup> That is, a tablet not specifically designed for children.

children, but also by standard tablets and by tablets that were designed for children but not captured as part of the NPD audit or definition (such as Amazon's Fire products). Indeed, this substitution was most clearly demonstrated by parents simply allowing their children to use their devices.<sup>114</sup> Furthermore, VTech told us that a number of standard tablets were cheaper or in a similar price range to the LeapPad3.<sup>115</sup>

- 7.45 The Parties also noted that there was a significant degree of substitutability with other types of toys. The arguments made above (see paragraphs 3.40 – 3.44) concerning the toy sector being a trend-driven and seasonal business, where products were constantly being renewed, also applied to child tablets. The Parties submitted that there was a high degree of substitutability across different types of toys.<sup>116</sup>

#### *Internal documents*

- 7.46 As noted in paragraphs 7.15 and 7.16, [REDACTED].

#### *Consumer research*

- 7.47 In order to examine consumer preference for child tablets, we commissioned DJS Research (a market research company) to undertake an online survey of customers who had registered their VTech or LeapFrog child tablet product online. To be eligible for the survey the consumer must have purchased (or been involved in the purchase decision for) the tablet in the last 12 months.
- 7.48 The survey asked consumers about their preferences and what type of product they would have purchased if the one they had bought was not available, before asking them which brand they would have bought. The response to the later set of questions can be used to calculate the proportion of customers who would have switched to different types of products if the one they had purchased was not available (this is referred to as the diversion ratio).
- 7.49 The diversion ratio tells us how closely consumers consider two products, or brands, compete with each other. Where the diversion ratio is high, two parties are closer competitors and there is greater scope for unilateral effects.
- 7.50 The survey showed that:

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<sup>114</sup> Initial submission, paragraph 225.

<sup>115</sup> Initial submission, paragraph 233.

<sup>116</sup> Initial submission, paragraph 236.

(a) Content (apps/downloads/support) was the most widely cited choice factor for both Parties, with 32% of VTech and 31% of LeapFrog customers indicating it was a reason why they chose the brand.<sup>117</sup>

(b) Around 43% of consumers would have diverted to another child tablet if the one that they had originally purchased was not available.

7.51 The survey results and implications are discussed in detail in paragraphs 8.108 to 8.115. Here, we note that we consider that the survey evidence is indicative of child tablets being constrained by other products, and may be consistent with the market being wider. Additionally, it suggests that content is an important factor driving the purchasing decision.

#### *How retailers categorise and choose products*

7.52 Retailers typically grouped child tablets together, although they often included them within a wider category of educational or learning toys. Some bricks-and-mortar toy retailers only stock child tablets, whereas others also stock standard tablets. Online retailers such as Amazon and Shop Direct and catalogue retailers such as Argos stock standard tablets as well as child tablets, although they are normally listed in different areas of the store.

7.53 As discussed in paragraphs 8.97 to 8.99, retailers did not consider that the only alternative to a child tablet was another child tablet. This suggests that there may be constraints on child tablets from other types of products.

#### *Competitors' views*

7.54 A competitor indicated that it did not see its child tablets as toys, but as consumer electronics developed with children in mind.<sup>118</sup>

7.55 Competitors indicated that there is a trend in the market away from closed ecosystems, and that such a trend will reduce the difference between child tablets and standard tablets (as we discuss further in Chapter 8). In particular:

(a) Mattel told us that there was a general view that the numbers of children using tablets and mobile phones, at a younger and younger age, was increasing.<sup>119</sup>

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<sup>117</sup> However, we note that less than 15% of both Parties' customers said it was the main reason for their choice.

<sup>118</sup> [KD Group hearing summary](#), paragraph 5.

<sup>119</sup> [Mattel hearing summary](#), paragraph 8.

(b) KD Group told us that it believed that child tablets were moving towards content and hardware was becoming less important. It highlighted that a subscription-based model had already been launched by Disney.<sup>120</sup>

#### *Margin-concentration analysis*

- 7.56 The Parties submitted a margin-concentration analysis to test whether child tablets is a correctly defined market. To test this, the Parties investigated whether NPD subclasses are correctly defined markets. Child tablets maps into the NPD subclass Preschool Electronic Learning.<sup>121</sup> Furthermore, the Parties compared margins on tablets to margins on other toys. The analyses are described in detail in Appendix D, with the key details set out below.
- 7.57 The Parties hypothesize that if the market was correctly defined, we would observe a positive relationship between the level of concentration in that market and margins (see paragraph 7.12). The Parties found no relationship between the level of concentration within the NPD subclasses and the Parties' margins within those subclasses. Furthermore, the Parties found that [REDACTED].
- 7.58 We extended the Parties' analysis to cover child tablets and content. Margins on child tablets may be a misleading proxy of profitability if child tablets and content are sold as a bundle. We found that [REDACTED].
- 7.59 Our view is that the Parties' analyses and our extension are consistent with the Parties' argument that child tablets are constrained by other products, and hence not a correctly defined market. However, as discussed in paragraphs 7.9 and 7.10, there are several issues with the NPD subclass analysis. Furthermore, the measurement issues discussed in paragraph 7.31(a) also apply to the analysis where margins on child tablets (and content) are compared with margins on other products. Thus, we believe that the results do not, in and of themselves, prove the Parties' argument.

#### *Evidence on supply-side substitutability*

- 7.60 [REDACTED] As CMA guidance states that firms need to have the ability to enter quickly (generally within a year),<sup>122</sup> we have discussed this under entry and expansion in paragraph 8.143 to 8.154.

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<sup>120</sup> [KD Group hearing summary](#), paragraph 11.

<sup>121</sup> Note that this NPD subclass includes more than child tablets.

<sup>122</sup> [Merger Assessment Guidelines](#), paragraph 5.2.17: circumstances where markets may be aggregated due to supply-side substitutability include where 'production assets can be used by firms to supply a range of different products that are not demand-side substitutes, and the firms have the ability and incentive quickly (generally within a year) to shift capacity between these different products depending on demand for each '.

### *Our conclusion*

7.61 We conclude that the market is likely to be wider than child tablets alone on the basis of the following key findings:

- (a) We found that there is some demand-side substitution away from child tablets by consumers. Our consumer survey shows that the majority of consumers (57%) said that they would have done something other than buy a child tablet if the one that they had purchased was not available. Around 35% of consumers would have bought a product other than a child tablet,<sup>123</sup> while 7% said they would have given their child or allowed their child to use an existing family tablet and 12% that they would not have bought anything.
- (b) We also found that while retailers typically group child tablets together in the same area of the store, this is often part of a wider category of educational or learning toys. In any case, retailers indicated that they could replace a child tablet with another type of product.
- (c) We found that child tablets are constrained by a number of diverse products (eg standard tablets, other learning toys, etc).
- (d) We also found that content is very important when considering the choice of child tablet. As discussed in paragraph 7.55, we also found that there is a trend away from closed ecosystems, with software becoming increasingly widely available through iOS and Android. This trend, with the addition of a protective bumper, allows parents to choose standard tablets rather than child tablets. This trend may increase the competitive constraints faced by child-specific tablets over time.

7.62 We considered that widening the market to include the diverse range of products that constrain child tablets would not aid the assessment of the competitive effects of the Merger. In particular there is no obvious market definition which includes products constraining child tablets without it being too wide for meaningful analysis. In our view, it is better to retain the narrow definition and take into account constraints from outside the market. We have therefore not formally defined a wider market; instead, we have taken into account the constraint placed by these other products when we considered the competitive effects of the Merger.

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<sup>123</sup> 7% said they would have bought an adult tablet and 28% said they would have bought something else (that is, other than a tablet).



## ***Child electronic reading systems***

- 7.63 We previously considered that there was a potential overlap between the Parties in child electronic reading systems.<sup>124</sup> Although child electronic reading systems may be part of the wider learning toys market, they are differentiated. We therefore first investigated whether there was a potential overlap between the Parties' products, before assessing whether child electronic reading systems should be treated as being part of the learning toys market.
- 7.64 LeapFrog's LeapReader reading and writing system is built around the functionality of an electronic pen which teaches children how to trace, recognise, say and write letters. In the case of LeapFrog's LeapStart, the electronic pen (stylus) recognises elements in dedicated physical books and speaks aloud to aid reading or for other educational purposes.
- 7.65 Prior to the Merger, VTech was developing a new product which had some similarities to the LeapFrog reading system products. [REDACTED]
- 7.66 While certain features of the Parties' products overlap (ie audio narration of stories), the LeapFrog product is significantly more advanced. As such, it is not clear that the Parties' products are capable of fulfilling the same need such that they would be considered as substitutes by consumers.
- 7.67 To the extent that the VTech [REDACTED] can be considered a child electronic reading system, there are many other products supplied by the Parties and other toy suppliers that have similar functionality or purpose and which would be considered substitutes. These would include:
- (a) reading apps for tablets and websites which help with reading and writing, such as Reading Eggs, Reading Raven, Marbleminds Phonics, Jolly Phonics, etc; and
  - (b) audio narration apps for tablets and audio books, such as Farfaria and Reading Rainbow.
- 7.68 We have gone on to consider whether child electronic reading systems should be considered separately or as part of the learning toys market. We commissioned a survey of consumers who had purchased LeapFrog's reading systems. The survey found that 49% of LeapFrog's consumers considered buying another educational toy.

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<sup>124</sup> See [issues statement](#).

7.69 The survey went on to ask consumers what product they would purchase if the LeapFrog reading system they originally purchased was unavailable. The results show:

- (a) 28% said they would have bought a different electronic reader;
- (b) 35% said they would have bought something else and, amongst those customers, a learning toy was the most popular choice; and
- (c) 27% said that they would not have bought anything.<sup>125</sup>

7.70 This evidence indicates that learning toys are seen as substitutes to child electronic reading systems by a majority of consumers. We draw two conclusions from that:

- (a) first, that child electronic reading systems are within the wider market for learning toys; and
- (b) second, that had VTech launched its toy, it would not have been a close enough substitute for LeapFrog's child electronic reading systems in order to warrant investigation under a separate theory of harm.

### ***Geographic market definition***

7.71 There are similarities between the approach to defining the relevant geographic market and to defining the relevant product market, since both seek to include the set of products that are substitutes to the merging parties. Relevant geographic markets typically include all geographic areas where there are suppliers who customers consider to be substitutes.

7.72 The Parties submitted that the geographic scope for the supply of toys (and any relevant sub-segments therein) is at least national in scope. However, the Parties submitted that some elements of the competitive offering, and in particular product innovation, could not be viewed solely at the national level and instead must be considered under a wider lens. Indeed, the Parties told us that the number of products launched by either Party specifically for the UK, and in no other country, is negligible.

7.73 Retailers indicated that although they might source their own-brand products from manufacturers based overseas, they would not source branded products from suppliers which did not have a UK presence.

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<sup>125</sup> 10% indicated 'other' or 'do not know'.

- 7.74 Most competitors considered it important to have established relationships with key retailers, with the majority of competitors setting their price, advertising and marketing policy at a national level. One competitor indicated that differences [✂].<sup>126</sup>
- 7.75 Notwithstanding the Parties' views, the evidence from retailers and competitors indicates that there are specific considerations in supplying toys for the UK market. Therefore, on a cautious basis, we conclude that the market is UK-wide in scope.

### ***Conclusion on market definition***

- 7.76 We conclude that the relevant markets on which to base our competitive assessment are UK in scope and comprise:

- (a) learning toys for children aged 0 to 5 years; and
- (b) child tablets and content, noting that there are constraints from outside this narrowly defined market.

## **8. Assessment of the competitive effects of the Merger**

- 8.1 As noted in paragraph 5.60, we have concluded that our counterfactual is prevailing conditions of competition, with LeapFrog no longer continuing on its rapid downward trend. It is against this counterfactual that we assess the competitive effects of the Merger.
- 8.2 We have set out in Chapter 6 our view of the nature of competition in the toy sector pre-merger, and the implications for our competitive assessment.
- 8.3 We now set out our theories of harm<sup>127</sup> which describe the possible ways in which an SLC could arise as a result of the merger and provide the framework for our analysis of the competitive effects of the Merger:<sup>128</sup>
- Horizontal unilateral effects through the loss of actual competition in learning toys targeted at children aged 0 to 5 years.<sup>129</sup>

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<sup>126</sup> [Amazon hearing summary](#), paragraph 12.

<sup>127</sup> Note that in the issues statement we proposed investigating another theory of harm: Horizontal unilateral effects through the loss of potential competition in child electronic reading systems. However, as explained in Chapter 7, we no longer consider child electronic reading systems to be a separate market.

<sup>128</sup> See the [issues statement](#). Note that we redefined the relevant markets, as explained in Section 7: Market definition).

<sup>129</sup> We include in this market toys that are recommended for use by children who are five years of age and younger, but we acknowledge they may be used by children who are above this age.

- Horizontal unilateral effects through the loss of actual competition in child tablets and content targeted.
- Loss of future competition in innovation.

### ***Learning toys for children aged 0 to 5 years***

8.4 We have considered whether the removal of one party as a competitive constraint in the supply of learning toys<sup>130</sup> could allow the merged entity to deteriorate elements of its competitive offering profitably in the UK by:

- (a) increasing the price of learning toys; and/or
- (b) deteriorating another competitive parameter important to retailers or consumers such as quality<sup>131</sup>.

8.5 The effect of the Merger on competition will depend on:

- (a) the extent of competition between the Parties prior to the Merger;
- (b) the competitive constraint imposed by existing competitors prior to the Merger;
- (c) the competitive constraint imposed by entry or expansion; and
- (d) the countervailing buyer power of customers.

8.6 It is important to note that at the time we started collecting evidence we were using the market definition of TEL toys from the issues statement. Therefore a substantial proportion of the evidence from the Parties, third parties and the CMA consumer research uses or refers to these definitions. We have taken evidence gathered under the previous definitions and applied it to our revised definitions. We have stated where we think that the difference in the definitions will affect the interpretation of the evidence.

### ***The extent of competition between the Parties prior to the Merger***

8.7 To assess the extent of competition between the Parties prior to the Merger, we will look in turn at the Parties' views, where their products overlap, consumer research and retailers' views.

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<sup>130</sup> Throughout this chapter, 'learning toys', refers to learning toys for children aged 0 to 5 years.

<sup>131</sup> Although as noted in Section 6 on the nature of competition, for VTech and LeapFrog, these parameters of competition are not necessarily determined within the UK.

### *Parties' views*

8.8 The Parties said that the products of LeapFrog and VTech were differentiated and that they were not close brands, identifying two main differences between them:

- (a) LeapFrog focused on curriculum-based learning experience while VTech focused on physical development and fun toys.
- (b) LeapFrog's focus was on toys for children aged three to five years, whereas VTech was stronger in toys for 0 to 3 year olds and for children aged five years and older.<sup>132</sup>

### *Product overlaps*

- 8.9 To assess whether the Parties' products are sufficiently similar to each other, such that they might be close competitors, we reviewed a comparison of products submitted by the Parties (see Appendix F).
- 8.10 For the selection of LeapFrog products compared with other toys in the market, we found that VTech had a product that was functionally similar to each of them, but that there were a number of other manufacturers who produced products which fulfilled a similar learning need. However the list of products compared is far from exhaustive and others manufacturers make similar products. That the Parties have functionally similar products may suggest that the Parties' products are close substitutes. However, we note that highly differentiated products make it difficult to draw any conclusions about the degree of substitution between them by looking at the similarity of their functions alone. This is discussed in more detail in paragraphs 7.7 to 7.37.

### *Consumer research evidence*

- 8.11 The CMA and the Parties conducted consumer research with purchasers of the Parties' TEL toys for this inquiry.

### *Parties' survey*

- 8.12 The Parties commissioned a quantitative survey of recent purchasers of their TEL<sup>133</sup> toys. We consider that this survey provides evidence that may be

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<sup>132</sup> [Initial submission](#), paragraph 24.

<sup>133</sup> Given that the majority of the Parties' products contain electronics, we consider that sampling under the definition of TEL toys has not yielded a substantially different sample to one using learning toys. We note that some of the purchasers bought the products for children over the age of five.

taken into account in our inquiry, but note it has a number of limitations and issues likely to affect quality (see Appendix E for further details).

8.13 The survey indicated a number of points of differentiation between the Parties. LeapFrog consumers were more likely to indicate that the learning element of the toy was a reason for buying it than VTech consumers. Conversely, VTech consumers were more likely to purchase the product simply as a toy. Table 3 provides a summary of the survey results covering the reasons for purchase of the TEL toy.

**Table 3: Parties’ TEL survey – reason for purchase**

<i>Reason for purchase</i>	<i>LeapFrog consumers</i>	<i>VTech consumers</i>
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]

Source: VTech-LeapFrog: Summary of the consumer survey of TEL toys.

[REDACTED]  
[REDACTED]

8.14 As set out in paragraph 7.24, the Parties’ survey also indicated that the target age ranges for VTech and LeapFrog products differ, with the vast majority of VTech products purchased for under 2 year olds, whereas LeapFrog products were purchased for slightly older children.<sup>134</sup>

8.15 The differences in the Parties’ end user age profile and reason for purchase indicate that LeapFrog is stronger in learning toys and the preschool age group, and VTech is stronger in fun toys and focused on the younger end of our 0 to 5 year age range.

8.16 Within the consumer survey the Parties asked a series of questions to try to estimate the proportion of consumers who would divert to the other merging party, if the product that they purchased was not available. Additionally, for those consumers who indicated that they would buy another product from the same Party, the Parties asked what they would purchase if the brand as a whole had not been available. The results can be used to calculate the diversion ratio between the Parties.<sup>135</sup>

<sup>134</sup> We note that, to some extent, the age distributions will be influenced by the Parties’ toys in scope for the survey, which did not include the full range of the Parties’ TEL toys and had a cut off of 9 years of age for the child for whom the toy was bought.

<sup>135</sup> See paragraph 7.48 and 7.49 for definition of diversion ratio.

- 8.17 We have used the data from the Parties' survey to calculate diversion ratios. These show that, not allowing for own-party diversion, 13% of LeapFrog's consumers would have diverted to VTech if LeapFrog brand had been unavailable and 8% of VTech consumers would have diverted to LeapFrog.

*CMA consumer research*

- 8.18 We commissioned two pieces of research into TEL toys (detailed in Appendix E):
- (a) Quantitative research with consumers for a limited range of the Parties' TEL toys. We consider that the number of respondents was too low to give the results evidentiary weight, and so do not consider the results in this report.
  - (b) Qualitative research with 50 people who had bought one of the top 15<sup>136</sup> VTech or LeapFrog TEL toys.
- 8.19 We found that:
- (a) the majority of the participants owned other VTech or LeapFrog toys.
  - (b) brand was a key purchase motivator with 41 of the 50 participants indicating that the brand influenced their decision either 'a great deal' or 'a fair amount'<sup>137</sup>
  - (c) Respondents associated similar attributes with both brands, for example 'educational', 'established' and 'value for money'. Respondents also identified some differences, with several participants mentioning that VTech was aimed at younger children and LeapFrog toys were more advanced (ie aimed at older children).<sup>138</sup>
  - (d) Although the Parties submitted that LeapFrog was more focused on learning and VTech on fun, both brands were perceived as 'fun' and 'educational'.
- 8.20 The results of our qualitative survey were consistent with those from the Parties' survey and indicated that there were differences in the age profile of the Parties' consumers, although we found that consumers believed the brands had similar attributes.

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<sup>136</sup> By sales.

<sup>137</sup> Of these, 20 said 'a great deal'

<sup>138</sup> However, a couple of participants said the opposite.

### *Retailers' views*

8.21 We asked retailers how similar they considered the Parties' TEL products to be. Seven out of nine retailers said that the Parties' products or aspects of their products were similar).

8.22 The main differences given were:

(a) VTech had a broader range or covered a wider age range, particularly in the younger age group under the VTech Baby brand. LeapFrog had a narrower range focused around characters that helped learn with the child.

(b) LeapFrog tended to be a little cheaper and had a greater heritage in learning.

(c) VTech was more centred around entertainment and LeapFrog more around education.

### *Our assessment*

8.23 The Parties' views that their products are differentiated seems to be largely supported by the evidence.

8.24 First, the survey evidence and comments from retailers indicate that LeapFrog focuses on curriculum-based learning while VTech focuses on physical development and fun toys.

8.25 Second, the survey and retailers' comments also suggest that LeapFrog focuses on children over the age of 3 years and VTech on those under the age of 3 years

8.26 Third, the diversion ratios from the Parties' survey suggest that only one in eight LeapFrog consumers would switch to VTech (and less than one in ten would switch from VTech to LeapFrog) if the product they bought had not been available.

8.27 Our view is that although the Parties are perceived slightly differently to one another by both consumers and retailers, a number of the Parties' products are similar and meet similar development needs. This would be an issue following the Merger if few alternatives to these products were available. This will be discussed in the next section.



*The competitive constraint imposed by existing competitors prior to the Merger*

- 8.28 To determine the competitive constraint imposed by existing competitors prior to the Merger, we looked at the Parties' views, suppliers' shares within the market, consumer research evidence, retailers' views, competitors' views and internal documents.

*Parties' views*

- 8.29 The Parties listed a number of current and potential competitors:

- (a) Particularly strong within TEL toys: Mattel (Fisher Price).<sup>139</sup>
- (b) Strong presence, capable of expanding range within TEL toys: MGA (Little Tikes); Clementoni; Kids II; KD Group.<sup>140</sup>
- (c) Strong brand and broad range: TOMY, Artsana (Chicco), Hasbro, plus 17 other named competitors. These competitors had a smaller share of supply the Parties in the NPD TEL subclass. However, they exercised a competitive constraint on the Parties because retailers could allocate limited shelf/catalogue space to these suppliers if they had better expected margins and volumes. Also, these other suppliers could be the source of the next 'hot' toy and therefore build their market share quickly.<sup>141</sup>
- (d) Own label: Argos (Chad Valley); Mothercare (Early Learning Centre); Hamleys; John Lewis; Tesco (Carousel); Toys'R'Us (Bruin). The Parties said that own brands gave retailers an even stronger bargaining position because retailers were less dependent on branded manufacturers. Also the stock risk for own brand would lie with the retailer and therefore such retailers were more risk-averse when committing to buying branded products.<sup>142</sup>

- 8.30 The Parties told us that these competitors, and others, produced a number of other competing toys which were just as 'close' as the Parties' toys, as provided in the Parties' comparison of toys (see paragraphs 8.9 and 8.10).<sup>143</sup> The comparisons with products from other suppliers suggested that some have very similar features to the Parties' products.

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<sup>139</sup> Initial submission, paragraphs 313–317.

<sup>140</sup> Initial submission, paragraph 318.

<sup>141</sup> Initial submission, paragraphs 319–323.

<sup>142</sup> Initial submission, paragraphs 324–332.

<sup>143</sup> Initial submission, paragraph 341.

- 8.31 The Parties gave an example from negotiations with retailers, illustrating the closeness of its competition with Mattel. They cited an occasion when [REDACTED].<sup>144</sup>
- 8.32 The Parties also told us that consumer tastes were highly trend driven and changed rapidly, independently of any formal categorisation. Therefore products might be highly successful for a short period of time and then lose popularity. Having a successful product in any given year was not predictive of any future successes,<sup>145</sup> since new competitors could come into the market and rapidly grow.

#### *Parties' shares*

- 8.33 We have calculated shares to give some indication of the relative size of different firms within this market. We have calculated these shares based on the 'Infant/Toddler' NPD category because we believe this is the closest to our definition of 'learning toys' among NPD categories (see Table 4).<sup>146</sup>
- 8.34 We note, however, as set out in Chapter 6 on the nature of competition, prices are set through bilateral negotiations with retailers and, as such, closeness of competition is determined by the strength of the outside option during those negotiations. Shares are unlikely to provide an accurate indication of whether firms are close competitors. The reasons for this are as follows:
- (a) First, the toy market is highly differentiated and market shares provide a weaker indication of closeness of competition in such markets as they do not account for this differentiation.
  - (b) Second, in instances where retailers choose to stock a very narrow range of products, they may choose not to stock the next best alternative to a given product. However, this next best alternative may still be used in negotiations to constrain the prices of products which are stocked. This will not be reflected in market shares based on sales.

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<sup>144</sup> Initial submission, paragraph 315.

<sup>145</sup> Initial submission, paragraph 21.

<sup>146</sup> Infant/Toddler' covers toys up to the age of three; for this age group the majority of toys will have some kind of learning element. We acknowledge that this excludes learning toys for those aged four and five. While NPD's Preschool toys segment includes toys for three to four year olds, we consider that it is likely to contain a larger proportion of toys which are primarily entertainment-focused and are therefore outside our definition.

**Table 4: NPD shares – Infant/Toddler toys segment, 2015**

<i>Infant/Toddler</i>		%
<i>Company</i>	<i>Value*</i>	<i>Volume†</i>
VTech (Corp)	[20–30]	[10–20]
LeapFrog	[0–5]	[0–5]
Character Options	[0–5]	[0–5]
Chicco	[0–5]	[0–5]
Golden Bear	[0–5]	[0–5]
Hasbro (Corp)	[0–5]	[0–5]
Kids II	[0–5]	[0–5]
Lindam	[0–5]	[0–5]
Mattel (Corp)	[10–20]	[10–20]
MGA Entertainment (Corp)	[0–5]	[5–10]
TOMY	[0–5]	[0–5]
Vulli	[0–5]	[0–5]
Other‡	[30–40]	[40–50]
<b>Total market</b>	<b>100.0</b>	<b>100.0</b>

Source: Parties

\* Total value of segment: £[§].

† Total number of units sold in segment: [§].

‡ 'Other' includes sales of own-brand products.

Note: NPD data does not include data from some retailers, such as [§].

8.35 We have also calculated shares including two of the preschool toys NPD subclasses where the Parties overlap (Preschool Electronic Learning<sup>147</sup> and Preschool Musical Instruments) to check if this substantially changes the shares. These are shown for VTech, LeapFrog, Mattel and NPD's 'Other' category only in Table 5.

**Table 5: Infant/Toddler toys segment plus Preschool Electronic Learning and Preschool Musical Instruments, 2015, VTech, LeapFrog, Mattel and 'Other' only**

		%
<i>Infant/Toddler, Preschool Electronic Learning and Preschool Musical Instruments</i>		
<i>Company</i>	<i>Value*</i>	<i>Volume†</i>
VTech (Corp)	[20–30]	[10–20]
LeapFrog	[5–10]	[5–10]
Mattel (Corp)	[10–20]	[5–10]
Other‡	[30–40]	[40–50]
<b>Total market</b>	<b>100.0</b>	<b>100.0</b>

Source: Parties

\* Total value of segment: [§].

† Total number of units sold in segment: [§].

‡ 'Other' includes sales of own brand products.

Note: NPD data does not include data from some retailers, such as [§]. Also, smaller brands are not listed in table.

8.36 Including some products from the preschool category increases LeapFrog's share, which is consistent with the Parties' submission that LeapFrog is stronger for the older age range. However we do not think that including these

<sup>147</sup> We note that Preschool Electronic Learning includes the Parties' TV platforms and some smartwatches. However, other smartwatches are in Electronic Entertainment Excluding Tablets (4+). We have not included this in our calculations as it may include products aimed children over five, which are not included in our market definition.

two additional subclasses changes considerably our understanding of the relative size of suppliers in the market.

- 8.37 Although we acknowledge that the NPD data does not perfectly match our definition of learning toys, our view is that these shares give an indication of the relative size of suppliers in the learning toys market.
- 8.38 We also considered shares over time, notwithstanding the limitations of these for the reasons discussed above. We found that the shares for the Parties and Mattel did not fluctuate substantially year by year.

*Consumer research evidence*<sup>148</sup>

- *Parties' survey*

- 8.39 As discussed in paragraphs 7.17 to 7.24 and at Appendix E, the Parties conducted a survey into TEL toys. This found that consumers considered a variety of alternative products when purchasing one of the Parties' TEL toys. The majority of consumers also said they would have switched to one of a number of different products if the product they bought had not been available.
- 8.40 Using the Parties' survey data, we have calculated diversion ratios for those who bought the Parties' TEL products indicating what brands they might have bought had the Parties' toy they bought not been available (see Table 6).<sup>149</sup> This evidence indicates that consumers are not specifically diverting from one Party to the other merger Party, which is what would be expected if they were substantially closer competitors to each other than to the rest of the suppliers in the segment.

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<sup>148</sup> See Appendix E: CMA's assessment of the consumer survey evidence.

<sup>149</sup> See footnote 91.

**Table 6: Parties' survey, TEL toys diversion ratios – not allowing own-party diversion**

		%	
<i>LeapFrog consumers</i>		<i>VTech consumers</i>	
Not bought anything	22	Not bought anything	24
LeapFrog	N/A	VTech	N/A
VTech	13	LeapFrog	8
Fisher Price	25	Fisher Price	23
TOMY	10	TOMY	4
Chad Valley	7	Chad Valley	3
Early Learning Centre	4	Early Learning Centre	21
Chicco	3	Chicco	1
Disney	2	Hasbro	3
Baby Annabell	2	Golden Bear	1
Play Doh	2	Play Doh	1
Lego	2	Lego	3
Xbox	2	Little Tikes	3
Mothercare	1	LadyBird	1
Bruin	1	Fingerprint	3
Total	100	Total	100

Source: CMA calculations using data from Parties' consumer survey of TEL toys.  
Base: LeapFrog 144, VTech 203.

8.41 The Parties' survey also found that 57% of consumers' TEL purchase was an impulse buy. Furthermore, 62% of those consumers who did plan their purchase in advance spent less than 30 minutes researching their purchase. This is consistent with the finding that consumers considered a variety of products when purchasing the product they bought; they did not have a fixed idea of the product they wanted, but chose between the range available at the point of purchase.

- *CMA survey*

8.42 The CMA's TEL<sup>150</sup> qualitative research found that around half the purchases were impulse buys. Several participants mentioned that the purchase was 'semi-planned', that is, they were planning to buy some kind of educational/interactive toy but had not necessarily chosen that particular toy beforehand.

8.43 The research also found that, at the point of purchase, those who considered an alternative product often considered 'similar age-related toys'. When asked what they would have done if the toy they had bought had not been available, the majority said they would have bought another educational/interactive toy.

8.44 The characteristics associated with both brands were broadly similar (see paragraph 8.19). Many participants struggled to think of another competitor to

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<sup>150</sup> Given that the majority of the Parties' products contain electronics, we consider that sampling under the definition of TEL toys has not yielded a substantially different sample to one using learning toys.

VTech and LeapFrog, but the main perceived competitor mentioned by some participants was Fisher Price.

#### *Retailers' views*

- 8.45 The five largest retailers of the Parties' toys are Amazon, Argos, Smyths, Tesco and Toys'R'Us which together accounted for over 70% of each Parties' sales of toys in 2015. The Parties also sell to a large number of other retailers, but none of these have more than a 5% share of either of the Party's toys.

**Table 7: Share of Parties sales by retailer, 2015**

	%	
	<i>VTech</i>	<i>LeapFrog</i>
Amazon EU Sarl	[10–20]	[20–30]
Argos Distributors Limited	[10–20]	[10–20]
Smyths Toys UK Ltd.	[10–20]	[10–20]
Tesco Stores Ltd.	[5–10]	[5–10]
Toys'R'Us Ltd.	[10–20]	[5–10]
<b>Sum of top five</b>	<b>[70–80]</b>	<b>[70–80]</b>

Source: Parties.

- 8.46 Retailers indicated that they stock a number of other suppliers' products in the same categories as the Parties (see Appendix F for details).
- 8.47 Consistent with their current stocking practices, retailers considered that there were alternative suppliers to the Parties who they could switch to if the Parties worsened their offer. Most retailers listed Mattel (Fisher Price) as an alternative supplier. Other alternative suppliers included Artsana (Chicco), Clementoni, Kids II, MGA (Little Tikes), Mothercare (Early Learning Centre), the Learning Journey, Lexibook, KD Group, IMC, Hasbro, Flair, Spin Master and private label.
- 8.48 We note that although some of the alternative suppliers are currently relatively small in learning toys (see Table 4), they are well-known brands. Retailers may well stock other products from these suppliers elsewhere in the store, so are already negotiating with them. For example, [X].
- 8.49 Of the retailers we spoke to only two retailers (which were smaller in terms of sales from the Parties) told us that they would not consider other suppliers' products to be alternatives to the Parties' products. [X]
- 8.50 How retailers choose to use these alternatives varies depending on their negotiating strategy. Some retailers are seeking the widest possible range of products in their store or on their website, for example [X] and Amazon. These retailers may therefore continue to stock these products despite not getting the terms they want, however this is likely to impact on how the retailers promote these products.

- 8.51 In contrast other retailers stock a more narrow range and would consider delisting products if they cannot secure satisfactory terms. [REDACTED] However one smaller retailer, [REDACTED]. This might imply this particular retailer had limited outside options.
- 8.52 Most retailers were not concerned about the impact of the Merger on negotiations. One expressed some concern, but later clarified that it was not concerned about learning toys.

#### *Competitors' views*

- 8.53 Mattel told us that it believed that Fisher Price was closer to VTech with regards to the products it offered.<sup>151</sup> [REDACTED]<sup>152</sup>
- 8.54 Other competitors recognised differences between their own products and those of the Parties, but felt that the similarities in target age, play pattern or developmental stage meant that consumers chose between their products and the Parties' products (see Appendix F for more details). Competitors did not specifically monitor the Parties' products; they either monitored the wider market or did very little monitoring.
- 8.55 This evidence from competitors is consistent with there being a large number of competing brands in the learning toys market, including own-label.

#### *Internal documents*

- 8.56 The Parties' internal documents included market research reports from the USA<sup>153</sup> and UK which indicated that VTech, LeapFrog and Mattel (Fisher Price) were the brands most often mentioned by consumers; and the same brands were most often mentioned in a question about spontaneous awareness of electronic toy brands in the UK.<sup>154</sup> Both VTech and LeapFrog compare themselves against each other and Fisher Price.<sup>155</sup> VTech also monitored the most successful toys in the market, including those from Fisher Price and LeapFrog.<sup>156</sup>

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<sup>151</sup> [Mattel hearing summary](#), paragraph 11.

<sup>152</sup> [Mattel hearing summary](#), paragraph 12.

<sup>153</sup> Product development occurred abroad, so some of the Parties' internal documents were produced with reference to the US market, where the Parties make the majority of their sales. However, we note that the relative importance of competitors in the US market differs from the UK market and we have therefore placed less weight on this evidence than if the internal documents had been UK focused.

<sup>154</sup> [REDACTED]

<sup>155</sup> [REDACTED]

<sup>156</sup> [REDACTED]

- 8.57 The internal documents are consistent with VTech, LeapFrog and Fisher Price being close competitors to each other.

*Our assessment*

- 8.58 The Parties' views that they compete particularly strongly with Mattel (Fisher Price) are consistent with Mattel having a relatively high share in the infant/toddler sector. The view is also supported by evidence from the diversion ratios, responses from retailers and internal documents.
- 8.59 The Parties' view is that there are a number of other competitors, beyond Mattel, which are capable of expanding and therefore act as a constraint on the Parties. This is backed up by evidence from the diversion ratios (that is, only one in eight would divert from LeapFrog to VTech and one in ten from VTech to LeapFrog), qualitative research and the responses from retailers. The majority of retailers listed a number of alternative providers whose products they either currently stock or would consider as alternatives to the Parties' products. Furthermore, retailers' online space is not as constrained as shelf or catalogue space, so there are opportunities for suppliers to be listed online even if their products are not available on shelves.
- 8.60 Although retailers view their negotiations with manufacturers in the context of a long-term partnership and do not explicitly threaten to switch to alternative suppliers, they have provided some evidence that they have reduced shelf space or stopped stocking products in response to price rises.
- 8.61 Retailers' views that they can stock alternatives are credible due to the prevalence of impulse buying in the learning toy sector with relatively few consumers having a fixed idea of the product they wish to buy. The consumer research suggests that consumers are looking for age-appropriate toys which are educational and/or interactive, rather than for very specific product features, and would consider a number of different products and suppliers as alternatives to the Parties' products. In particular, diversion ratios are broadly proportional to shares of supply, which suggests that consumers are not specifically diverting from one Party to the other, which is what would be expected if they were substantially closer competitors to each other than to the rest of the suppliers in the segment.
- 8.62 Competitors consider that their products are alternatives to the Parties' products if they fulfil the same play pattern or meet the same developmental needs, even if functionality differs (for example, the sophistication of electronics). This is consistent with the consumer research and the views of retailers. We note, however, that differences such as the sophistication of



electronics differentiate these products and will affect preferences for at least some consumers.

- 8.63 Although it is not possible to attribute much weight to the shares calculated using NPD data, the shares give an indication that VTech and Fisher Price are the largest suppliers of learning toys. LeapFrog is significantly smaller and there are a number of other suppliers of a similar size. Some of the suppliers in the Infant/Toddler toys segment are well-known brands, despite having smaller shares than the Parties. As they already have brand recognition, they could expand their share should they see an opportunity.
- 8.64 Our view is therefore that existing competitors impose a competitive constraint on the parties.

*Our conclusion*

- 8.65 Based on the evidence set out above, we have concluded that the Merger has not, and may not be expected to result, in a substantial lessening of competition in the market for learning toys for children aged 0 to 5 years.

*The competitive constraint imposed by entry or expansion*

- 8.66 Given the conclusion on the existing constraints on the Parties with respect to learning toys, we do not need to rely on barriers to entry/ expansion preventing an SLC.
- 8.67 Nevertheless, for completeness, we have given consideration to the constraint placed on the Parties by potential entry and/or expansion.

*Parties' views*

- 8.68 The Parties said that the toy sector had no significant barriers to entry. They said that competition was based primarily on the ability to design and develop new toys, to procure licences for popular characters and trademarks and to successfully market products. There were limited technology, know-how, or capital requirements, and manufacturer brand loyalty played a minor role.<sup>157</sup>
- 8.69 Furthermore, the Parties submitted six examples of expansion in the TEL toy sector, however we note that all but one of these involved either the acquisition of an existing brand or gaining a licence for a popular TV show.<sup>158</sup>

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<sup>157</sup> Initial submission, paragraph 487.

<sup>158</sup> Initial submission, paragraph 367.

### *Third party views – cost of entry/expansion*

- 8.70 Competitors told us that the costs associated with entry and expansion were primarily around design, development and tooling. One competitor (TOMY) said that the costs would range from \$20,000–\$80,000 depending on the toy. Competitors said that the time taken to enter ranged from 3 to 24 months.

### *Third party views – likelihood of entry/expansion*

- 8.71 There are examples of expansion from some competitors. Three competitors told us about recent or planned expansion in learning toys (see Appendix F).
- 8.72 Retailers stated that they would not, or would be unlikely to, sponsor entry, but a number of them have their own brand.
- 8.73 Some retailers said that they would work with manufacturers with existing products to grow their business.<sup>159</sup> In general, retailers would only consider stocking products from a new supplier if they met the required quality standards and had sufficient marketing support.
- 8.74 We note one example of a toy retailer seeking to encourage a toy manufacturer selling a product outside of the UK to supply that toy in the UK, but that toy manufacturer having no interest in doing so. Ravensburger was not minded to bring its TipToi reading product to the UK, despite being encouraged to do so by Toys'R'Us.<sup>160</sup>
- 8.75 However, despite the high rate of churn (see paragraph 6.8) there is some evidence that entry and expansion may be difficult if a manufacturer does not have a strong brand. TOMY said it was not easy for a new or lesser known brand to grow in the toy market. It said that for a product to be successful it had to differentiate itself, hold wide appeal and be able to afford to market the product to tell people about it.<sup>161</sup>

### *Our assessment*

- 8.76 Monetary barriers to entry are not particularly high for existing players, and we have received evidence of recent and planned expansion in infant, toddler and preschool toys. While TOMY raised concerns that it would be difficult for a new or lesser-known brand to grow in the toy market, this may be more

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<sup>159</sup> [Shop Direct hearing summary](#), paragraph 11; [Amazon retailer hearing summary](#), paragraphs 22–24.

<sup>160</sup> [Toys'R'Us hearing summary](#), paragraph 25.

<sup>161</sup> [TOMY hearing summary](#), paragraph 24.

problematic for a new entrant, rather than expansion of an existing operator in the market.

- 8.77 We note that the very high churn rate for toys (around [X]%) is likely to make it easier for a new entrant to enter or for an existing player to expand. Retailers indicated that they would stock a product if it had the right support and they thought it would sell.
- 8.78 We note that branding is important in this sector, but the significance of licences for infant, toddler and preschool toys means that it is possible to buy a well-known brand. It may also be possible to build a reputation by being stocked online, where space is more easily available than in a catalogue or in store.
- 8.79 Given that there are a large number of smaller operators in the market, it appears that expansion is more likely than a completely new entrant. Many of these smaller operators have well-known brands and barriers to expansion appear limited. However, given the conclusion on the existing constraints on the Parties with respect to learning toys, we do not need to rely on barriers to entry/expansion preventing an SLC and therefore we have not concluded on the likelihood of entry/expansion in the event of a post-merger increase in prices.

#### *The countervailing buyer power of customers*

- 8.80 The Parties submitted that retailers had buyer power in toys, including TEL, for a number of reasons. These included:
- (a) the indispensability of retailers for manufacturers to access consumers;
  - (b) the majority of the Parties' sales being attributable to a few major retailers;
  - (c) the ability of retailers to substitute across a wide range of toys;
  - (d) yearly price negotiations taking place across the entire range of the Parties' products coupled with the need to encourage retailers to take as many products within the Parties' range as possible; and
  - (e) the ability of retailers to develop their own-label products or support less well-known brands at attractive margins.<sup>162</sup>

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<sup>162</sup> Initial submission, paragraph 361.

### *Our assessment*

- 8.81 The strength of any buyer power is directly related to the strength of the outside options the retailer has. As discussed in paragraphs 8.58 to 8.63, we have concluded that retailers have credible and strong outside options to the Parties' learning toys for children aged 0 to 5 years, which they could use in their negotiations to prevent the Parties from raising price. These outside options imply that retailers have a degree of buyer power.
- 8.82 Furthermore, as noted in paragraph 6.55, negotiation over the entire range strengthens retailers' negotiation ability. However, given the conclusion on the existing constraints on the Parties with respect to learning toys, we do not need to consider whether the existence of countervailing buyer power would make an SLC less likely and therefore we have not concluded on the likelihood of buyer power preventing a post-merger increase in prices.

### *Our conclusion*

- 8.83 As stated earlier, based on the evidence set out above, we have concluded that the Merger has not resulted, and may not be expected to result, in an SLC in the market for learning toys for children aged 0 to 5 years.

### ***Child tablets and content***

- 8.84 The removal of one party as a competitive constraint in the market for the supply of child tablets could allow the merged entity to deteriorate elements of its competitive offering profitably in the UK. These could include:
- (a) increasing the price of child tablets; and/or
  - (b) deteriorating another competitive parameter that matters to retailers or consumers, such as quality.
- 8.85 The ability of the Parties to increase the wholesale price of child tablets or deteriorate another element of the competitive offering identified in the section on parameters of competition (see paragraphs 6.10 to 6.15), will depend on how closely the Parties compete with each other and what other constraints they face from other suppliers of child tablets and other products.
- 8.86 We therefore assessed the following:
- (a) Pre-merger competition between the parties and with competitors.
  - (b) Evolution in child tablets and emerging competitive constraints.
  - (c) Entry.

(d) Countervailing buyer power.

- 8.87 As discussed in paragraphs 6.16 to 6.18, manufacturers sell their products to retailers, which sell on to consumers. As such, we have taken account of both consumer and retailer demand in our assessment.

#### *Pre-merger competition in child tablets*

- 8.88 To assess the competition between the Parties in child tablets prior to the Merger, we considered how closely the Parties competed with each other, and how they competed with other suppliers (both of child tablets and other learning toys). We looked at the Parties' views, third parties' views, product overlaps of parties and competitors, and consumer research.

#### *Parties' views*

- 8.89 The Parties submitted that they were not particularly close competitors in the child tablet segment in the UK. The Parties considered that their products were differentiated due to differences in their content. They told us that LeapFrog's content was heavily focused on curriculum-based learning and child development while VTech's was more generally for entertainment purposes.
- 8.90 The Parties submitted that the child tablet market had declined substantially since its peak in 2012/13. They submitted that this meant:
- (a) child tablets were no longer a 'must have' product in the eyes of retailers;
  - (b) the amount of retail and catalogue space given to child tablets was in decline;
  - (c) consumers' tastes had changed and they were buying products other than child tablets.
- 8.91 The Parties provided data on their sales of child tablets and content, which show that both Parties' sales have declined substantially from 2012 to 2015, as shown in the tables below:

**Table 8: Parties' sales of child tablets and content, 2012 to 2015**

Name of product	Sales value (£)				Sales volume			
	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
All LeapFrog tablets	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
LeapPad 2	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
LeapPad 3	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
LeapPad Platinum	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
LeapPad Ultra	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
LeapPad Epic	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Average selling price	[X]	[X]	[X]	[X]				
All VTech tablets*	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
InnoTab 2	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
InnoTab 3	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
InnoTab 3S	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
InnoTab 7	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Average selling price	[X]	[X]	[X]	[X]				
All LeapFrog software	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Average selling price	[X]	[X]	[X]	[X]				
All VTech software	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]
Average selling price	[X]	[X]	[X]	[X]				

Source: Parties.

8.92 The Parties told us that Amazon launched the Amazon Fire Kids Edition in 2015. They submitted that this had grown rapidly and was regarded by consumer reviews as the number one child tablet in the market and, as such, was as close a competitor to the Parties as they are to each other.<sup>163</sup>

8.93 The Parties submitted that there were numerous competing child tablets, including: Amazon Fire Kids Edition, Kurio, Nabi, Samsung Tab3 and Dragon Touch. Furthermore, as set out in paragraph 7.43 to 7.45, the Parties submitted that child tablets were not a distinct market and as such were constrained by a number of other products including standard tablets and other toys. In support of this they submitted a margin-concentration analysis that was described in Chapter 7 (Market Definition).

### *Third party views*

8.94 We asked retailers about the brands of child tablets which they currently stock, the alternatives to the Parties' tablets available to them, and how alternative options are used in negotiations with the parties.

- *Brands of child tablets currently stocked*

8.95 Retailers have indicated that where they chose to stock more than one child tablet, they normally stocked VTech and LeapFrog. As such, retailers viewed

<sup>163</sup> Initial submission, paragraph 384 and 404.

them as competitors. However, retailers did not indicate that the Parties' products were 'must stock', nor, importantly, that when looking to stock a child tablet, they must stock either VTech or LeapFrog. The extent of retailers' outside options is discussed in paragraphs 8.98 to 8.100.

8.96 Table 9 sets out which child tablets are currently stocked by different retailers, as well as the percentage of the retailers' child tablet sales accounted for by the Parties. The Parties account for a high proportion of many of the larger customers' sales of child tablets. Nevertheless, some retailers stock child tablets from rival manufacturers.

**Table 9: Retailers' sales of child tablets**

<i>Retailer</i>	<i>Manufacturer</i>	<i>Units Volume of sales</i>	<i>£ Value of sales</i>
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]		
	[REDACTED]		
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]		
	[REDACTED]		
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]	[REDACTED]	[REDACTED]
	[REDACTED]		

Source: CMA analysis.

[REDACTED]  
[REDACTED]  
[REDACTED]

- *Outside options to Parties' child tablets*

8.97 We asked retailers which other suppliers' products they would consider as alternatives to the Parties' child tablet/laptop products (see Table 10) when negotiating terms. In response to this question, retailers named Kurio, Lexibook, Samsung and Amazon amongst others.

8.98 In addition to other brands of child tablets, retailers also considered other toys to be alternatives to the Parties' child tablets, in terms of using the shelf space currently used for the Parties' tablets.

**Table 10: Alternatives to Parties' child tablets by retailer**

<i>Retailer</i>	<i>Supplier</i>
Toys'R'Us	KD Group, Samsung, Sakar, Curtis (also stocks standard tablet)
Argos	Lexibook, Samsung, Amazon, KD Designs*
Shop Direct	Lexibook, KD (Kurio)
Smyths	KD Group (Kurio)**
Debenhams	None – only stock VTech, consider consumers view Kidz Delight and iPad to be alternatives
Hamley's	It may look at comparable products if available
Ocado	None – only stock a range of VTech toys which includes tablets.
Boots	[X]

Source: CMA analysis of retailer responses to information requests

\* Argos said that these products were alternatives when it considered ranging, but this was different to alternatives when negotiating terms.

8.99 The ability of retailers to substitute alternative products in place of the Parties' tablets is demonstrated by the practice of the Parties' largest customers, which have all reduced the amount of space dedicated to child tablets over the past five years (see Appendix F for more detail).

- *Negotiations*

8.100 As set out in paragraph 6.5, the majority of retailers have indicated that they negotiate over the entirety of the Parties' range (see Appendix F for details). Retailers indicated that the amount of space within their stores was not flexible and that if a product increased in price they would review it against a range of products and would not necessarily replace it with the same type of product.<sup>164</sup>

8.101 Additionally, we asked retailers to provide any instances where either of the Parties had tried to increase prices over the past five years. For tablets, there had been no attempted price increases, [X].

*Product overlaps*







8.102 The table below sets out the functionality of the main tablets available for sale in the UK.

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<sup>164</sup> For example, the Parties told us that John Lewis decided to no longer list children's tablets/laptops due to its policy of being 'never knowingly undersold', which led to retail price erosion. (Initial submission, footnote 159).



**Table 11: Overview of the main tablets available for sale in the UK**

	 <b>Fire Kids Edition</b>	 <b>Samsung Tab3</b>	 <b>VTech Innotab</b>	 <b>LeapPad Epic</b>	 <b>Kurio Tab 2</b>	 <b>EE Robin (4G)</b>
<b>Price</b>	£99.99	£199.99	£89.00	£119.99	£89.99	N/A/£129.99/N/A
<b>Parental controls</b>						
Parent mode	✓	✓	✓	✓	✓	✓
Individual profiles	✓	✓	✓	✓	✓	✓
Time limits	✓	✓	✓	✓	✓	✓
Educational goals	✓	✗	✗	✓	✗	✗
Manage content	✓	✓	✓	✓	✓	✓
<b>Content</b>						
Apps	Comes with 300+	10 preloaded. More available to purchase	18 preloaded. More available to purchase	20 preloaded. More available to purchase in Appstore	50 preloaded. More available to purchase in GP	40 preloaded. More available to purchase in GP
Videos	Comes with 4000+	YouTube	Available to buy via online store	Available to buy via online store	Available to purchase from GP	Includes 3 months of Hopster TV
Books	Comes with 1000+	No	Available to buy via online store	Available to buy via online store	150 included, more available to purchase from GP	Available to purchase from GP
Web	Kids safe browser – with 1000s of pre-approved sites and videos	No	Kid safe browser	Kid safe browser	Kid safe browser	Kid safe browser
<b>Device</b>						
Warranty	2 year worry-free	1 year manufacturer	1 year manufacturer	1 year manufacturer	1 year manufacturer	1 year manufacturer
Display	7" 1024 x 600	7" 1024 x 600	7" 1024 x 600	7" 1024 x 600	7" 1024 x 600	7" 1024 x 600
Processor	1.3Ghz Quad Core	1.2Ghz Dual Core	1.2Ghz Dual Core	1.3Ghz Quad Core	1.2Ghz Dual Core	Quad core
Storage	16GB, microSD to 128	8GB, microSD to 32	8GB, microSD to 32	16GB, microSD to 32	8GB, microSD to 32	8GB, microSD to 32
Camera	Front and Rear	Front and Rear	Front and Rear	Front and Rear	Front and Rear	Front and Rear only

Source: CMA

8.103 In comparing the Parties' products with each other and other child tablets sold in the UK, we note that:

- (a) The Parties' tablets both have parental controls with a child-safe browser. The same is true of the main other child tablets on the market, [REDACTED].
- (b) The LeapPad Epic and VTech InnoTab have a similar amount of preloaded content. The Samsung Tab3 has slightly less and the Kurio Tab 2 and EE Robin have more. The Amazon Fire Kids Edition, however, has a much wider range of pre-loaded content.
- (c) Additional content is available to purchase for all the child tablets compared. For VTech and LeapFrog, these have to be purchased as cartridges or downloaded from the Parties' own app stores, with the price ranges set out in Table 12 below.

**Table 12: Parties average software prices**

	£		
	<i>Max</i>	<i>Min</i>	<i>Average</i>
<b>Cartridges</b>			
LeapFrog	[REDACTED]	[REDACTED]	[REDACTED]
VTech	[REDACTED]	[REDACTED]	[REDACTED]
<b>Downloads</b>			
LeapFrog	[REDACTED]		[REDACTED]
VTech	[REDACTED]	[REDACTED]	[REDACTED]

Source: CMA analysis. Prices as of 3 November 2016.

- (d) The Amazon Fire Kids Edition comes with a 12-month subscription to Fire for Kids Unlimited, which gives access 'to thousands of books, TV shows, educational apps, and games.'<sup>165</sup> After the initial period a subscription is £3.99 per month for non-Prime members, or £1.99 per month for Prime members.<sup>166</sup> The Kurio Tab 2 includes KD Group's curated 'KIDDOZ Store' as well as allowing children to access Google Play. For the tablets, running Android or iOS, software can be downloaded from the Google Play or Appstore (or a curated store similar to KD Group's if the firm operates one).
- (e) The device specifications are broadly similar between the Parties' tablets and those of competitors. However the Amazon Fire Kids Edition has a more comprehensive warranty, offering a free 'no questions asked' replacement if it is broken or damaged within the first two years, and more storage.

<sup>165</sup> Quote taken from Amazon.co.uk.

<sup>166</sup> Prices are for one child.

(f) The recommended age for the Parties' tablets (three to nine years old) is very similar to that of other products available,<sup>167</sup> although LeapFrog told us that its products were the 'go to' tablet for younger children. Despite this, the CMA consumer survey found that 74% of VTech and 76% of LeapFrog tablets were purchased for three to six year olds, with 20% purchased for under-threes.

(g) The Parties' products have integral physical protection which cannot be removed, while other suppliers' products have removable bumpers which enable the appearance of the tablet to change as the child gets older.

8.104 Table 13 sets out the current selling price and launch date of the Parties' tablets and the principal competitors in the UK.

**Table 13: Price and launch date of child tablets in the UK**

<i>Manufacturer</i>	<i>Product</i>	<i>Selling price (as at 3 November 2016)</i>	<i>Launched</i>
LeapFrog	LeapPad 2	£29.99	2012
	LeapPad 3	£59.99	2013
	Platinum	£74.99	2015
	Epic	£89.99	2015
VTech	Innotab 3	£59.99	2013
	Innotab 3s	£89.99	2013
	Innotab 7 Max	£75	2014
KD Designs	Kurio Tab 2	£82.56	
	Kurio XL 10 inch	£139.92	
Amazon	Kindle Fire Kids	£99.99	2015
Lexibook		£79.99	
EE Robin	Mobile network and has a different payment method, £29.99 per month and £16 per month		

Samsung – seems to sell Galaxy Tab3 for £88 and a separate child safe case for £17.99

Source: CMA analysis, prices obtained from Amazon.uk website

8.105 The price of the most recently launched LeapFrog tablets (Platinum and Epic) is similar to that of the Innotab 3s and Innotab 7 Max.

8.106 The majority of retailers who responded to our enquiries indicated that the Parties' products were similar and that they held similar licences. However, three third parties suggested that there was some differentiation between the Parties, with VTech's offering centred around entertainment and LeapFrog's around education.

<sup>167</sup> 3+ for: Amazon Fire Kids Edition, Samsung Galaxy Tab3, and 4+ for Kurio.

8.107 Before we turn to discuss our consumer survey, it is important to note that the Amazon Fire Kids Edition launched in June 2015. Although the majority of the Parties' sales occur in the run up to Christmas, data from 2015 may understate the competitive constraint that Amazon now imposes. For example, the CMA consumer survey may understate the number of consumers who would now consider the Amazon Fire Kids Edition as an alternative. In order to assess Amazon's current position in the market we have obtained data from Amazon on its sales of tablets. [REDACTED], as can be seen in the table below:

**Table 14: Sales of child tablets in the UK**

<i>Name of product</i>	<i>Sales value (£)</i>	<i>Sales volume (tablet only)</i>
	<i>2015</i>	<i>2015</i>
<b>All Amazon Kids</b>	[REDACTED]	[REDACTED]
Fire Kids 8GB	[REDACTED]	[REDACTED]
Fire Kids HD 8gb	[REDACTED]	[REDACTED]
Fire Kids HD 16gb	[REDACTED]	[REDACTED]
<b>All LeapFrog tablets and content</b>	[REDACTED]	[REDACTED]
LeapPad 2	[REDACTED]	[REDACTED]
LeapPad 3	[REDACTED]	[REDACTED]
LeapPad Platinum	[REDACTED]	[REDACTED]
LeapPad Ultra	[REDACTED]	[REDACTED]
LeapPad Epic	[REDACTED]	[REDACTED]
<b>All VTech tablets and content</b>	[REDACTED]	[REDACTED]
InnoTab 2	[REDACTED]	[REDACTED]
InnoTab 3	[REDACTED]	[REDACTED]
InnoTab 3S	[REDACTED]	[REDACTED]
InnoTab 7	[REDACTED]	[REDACTED]

Source: Parties and third parties

### *Consumer survey*

8.108 The CMA conducted a survey among VTech and LeapFrog customers who had purchased (or been involved in the purchase decision for) one of the Parties' child tablets within the last year and registered it online. It should be noted that 90% of VTech and 78% of LeapFrog purchases were made between six months and a year ago, with 72% of VTech and 56% of LeapFrog tablets purchased for Christmas.

8.109 The survey also found that 88% of customers planned their purchase in advance, with only 10% making an impulse buy. Around 80% of customers who planned their purchase in advance spent at least 30 minutes researching their purchase.

8.110 As described earlier in paragraph 7.48, we used the consumer survey to estimate diversion ratios. The CMA consumer survey asked a two stage

diversion question. Consumers were first asked what they would have done if the product that they had purchased had not been available. Consumers who would have purchased a different product, were then asked which brand of product they would have purchased. The responses to these sets of questions are combined to calculate the diversion ratio between the Parties and to various third parties. These are shown in Table 15 below.

**Table 15: Diversion ratios**

<i>Category of diversion</i>	<i>Party</i>	<i>LeapFrog survey</i>	<i>VTech survey</i>
		<i>Diversion ratio</i>	<i>Diversion ratio</i>
Aggregate diversion between parties	LeapFrog		35.8%
	VTech	31.8%	
Bought a different child tablet		42.5%	44.6%
	<i>LeapFrog</i>		27.9%
	<i>VTech</i>	19.7%	
	Amazon Fire Kids	10.1%	8.4%
	Clempad (by Clementoni)	0.1%	0.3%
	Disney Princess	0.5%	0.3%
	Kurio tablet	0.3%	1.0%
	Lexibook	0.4%	0.1%
	Nabi (by Fuhu/Mattel)	0.2%	
	Paw Patrol (by Spin Master)	0.4%	
	Samsung Galaxy Kids	5.6%	4.5%
	EE's Robin		0.1%
	Other (please specify)	0.6%	0.7%
Bought an adult tablet		6.2%	8.2%
Bought something else		28.2%	27.8%
	<i>LeapFrog</i>		7.9%
	<i>VTech</i>	12.1%	
Given your child/allowed your child to use an existing family tablet		8.4%	5.0%
Not bought anything		12.3%	11.0%
Other (please specify)		2.4%	3.4%
Base		1,508	843

Source: CMA consumer survey.

8.111 The aggregate diversion ratio between the Parties should be interpreted with caution as it is the sum of diversion between the Parties' tablet products and diversion from one Party's tablets to the other's general toys. Diversion ratios give a measure of the value of sales which would divert between two parties in the event that they increased price. However, it is not clear that a consumer who ceases to buy a LeapFrog tablet and buys a VTech toy, or vice versa, would spend a similar amount. As such, the monetary value of sales diverted may be lower. This means that the overall diversion ratio may overstate the value of recaptured sales and as such the closeness of competition between the Parties. As a result this is likely to be an upper bound to the diversion ratio, with the lower bound being the diversion ratio between the Parties' tablets only.

8.112 We note that a high proportion of customers wanting to buy another child tablet would buy one from the other merging Party. We have considered if the Parties could price discriminate to target these customers. If this were possible, the Parties could raise prices to just these customers, whilst

maintain the same price to other customers. In such circumstances it would be relevant for us to consider diversion within the child tablet segment, rather than for all customers.

8.113 We consider that the Parties are not able to price discriminate because (i) they cannot identify the group of consumers who have more inelastic demand than those with more elastic demand; and (ii) they are only able to raise prices to retailers as they do not sell directly to consumers. As such, even though a high proportion of consumers who only want to buy another child tablet would buy one of the Parties tablets, the Parties could not target a price rise just to these customers. Therefore, any price rise would have to target all consumers, with diversion lying between:

(a) 28% and 36% for VTech consumers diverting to LeapFrog.

(b) 20% and 32% for LeapFrog consumers diverting to VTech.

8.114 Therefore, although not low, diversion ratios between the Parties indicate that they face significant competitive constraints from other sources. These competitive constraints flow from a range of different sources:

(a) Around 57% of consumers would do something other than buy a child tablet if the one that they had purchased had not been available.

(b) For consumers wanting to buy another child tablet, Amazon Fire Kids and Samsung Galaxy<sup>168</sup> represented good alternatives.

(c) For consumers wanting a tablet, a standard<sup>169</sup> tablet represented a good alternative, with the most popular choice being the Apple iPad, followed by Samsung Galaxy and Amazon Fire.<sup>170</sup>

8.115 Additionally, the consumer survey is backward-looking and captures the competitive constraints on the Parties' child tablets at the point that consumers made their purchases. As noted in paragraph 8.108, the majority of these purchases were made between 6 and 12 months ago. Therefore, the survey may not accurately capture the current competitive conditions in the market, particularly given the decline in child tablet sales (see paragraph 8.126) and the entry of the Amazon Fire Kids in June 2015.

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<sup>168</sup> It should be noted that Samsung [X]. Given that this survey was of customers who purchased a tablet after September 2015, we infer that consumers were diverting to another tablet in the Samsung' range.

<sup>169</sup> Referred to in the survey as an 'adult' tablet

<sup>170</sup> Consumers who would have handed down or allowed the child to use an existing tablet were not asked for the make or model of tablet.

8.116 [✂]

*Our assessment*

8.117 We first looked at how closely the Parties competed in child tablets, and which brands were their closest competitors.

8.118 The Parties' products are functionally similar, and the CMA consumer survey indicates that for customers who said they would have bought another child tablet if the one they had purchased had not been available, the Parties were close competitors. However, the evidence we have seen indicates the market is changing rapidly with products and demand evolving, and in our view past survey results may not hold true within this market (this is explored further in the following section). Therefore, despite the CMA survey evidence suggesting that the principal competitors within the child tablets segment are the Parties and Amazon, these are likely to be constrained by other products in the eyes of consumers.

8.119 We then looked at the competitive constraints imposed on the merged entity by other child tablets and toys.

8.120 The Parties submitted that they were constrained in their supply of child tablets and content by both non-child specific tablets and other toys. This is consistent with CMA consumer research,<sup>171</sup> which found that around 57% of all respondents said that if the child tablet that they had purchased had not been available, they would do something other than buy a child tablet.<sup>172</sup> We consider the constraint from non-child specific tablets in the next section, but first consider the alternative options available to toy retailers

8.121 The finding from the consumer survey that only around 10% of child tablets are an impulse purchase may imply that retailers do not have much ability to influence consumer demand. Nevertheless, the high level of substitution to other products suggests that retailers may have a wider set of options in their negotiations. Retailers have indicated that they negotiate across the full range of the Parties' products, with only a minority of retailers negotiating on a product-by-product basis. Retailers indicated that they do not view child tablets as a must-have category and within that there is no requirement for them to stock either VTech or LeapFrog. As such, in response to a worsening

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<sup>171</sup> Note that the CMA survey only asked about purchases of the tablet hardware, not content.

<sup>172</sup> 35% of consumers would have bought a product other than a child tablet, 22% would have handed a tablet down or not made a purchase.

in the Parties' offering, retailers have indicated that they would either increase their purchases from other child tablet providers or switch their purchases to other products entirely.

- 8.122 Therefore, we conclude that although the Parties are close competitors to each other in child tablets, they are constrained by other child tablets, standard tablets and other learning toys.

*Evolution in child tablets and emerging competitive constraints*

- 8.123 We now consider how the child tablet market has changed over the last few years and is expected to evolve in the near future. We then consider the implications for the competitive constraints on the merged entity.

- 8.124 In this section we look at trends in sales of child tablets, the Parties' views, retailers' views and competitors' views.

*Trends in sales of child tablets*

- 8.125 As described earlier in paragraph 8.91, both Parties' sales have declined substantially over the period 2012 to 2015. We note that although the sales of Parties' content is currently [REDACTED], as the sales of VTech and LeapFrog tablets have decreased we would expect [REDACTED].

- 8.126 The decline in the Parties' child tablet sales is consistent with evidence we have about the decline in sales in child tablets over the same period, with NPD data showing that the category that includes child tablets fell in value from £[REDACTED] in 2013 to £[REDACTED] in 2015. Furthermore, data from Google Trends suggests that the decline in the Parties' child tablet sales has continued into 2016, as does the Parties' year-on-year sales data. For example, a comparison of week 43 2015 against week 43 2016 shows that:

(a) tablet sales are down by [REDACTED]% for VTech and [REDACTED]% for LeapFrog; and

(b) content sales are down by [REDACTED]% for VTech and [REDACTED]% for LeapFrog.

- 8.127 In order to assess whether the Amazon Fire Kids Edition has continued to increase its sales over the last 12 months, we have examined Google Trends data on searches for different brands of child tablets on Google Shopping in the UK. The data shows that there are currently both more searches for Amazon Fire Kids Edition than for any other child tablet and that the Amazon product is receiving more searches than at any point since it launched. This suggests Amazon is likely to further increase its sales and share of the child tablet market over 2016.



8.128 In addition, we extended the Parties' margin-concentration analysis on tablets (see paragraph 7.58). This extension shows that the margins on the bundle of child tablets and content has been falling over time. The analysis is described in detail in Appendix D. This analysis is consistent with child tablets and content being a declining market. However, the measurement issues discussed in paragraph 7.31(a) also apply to this analysis. Furthermore, a longer time series is needed to determine whether the downward trend is persistent for both VTech and LeapFrog.

#### *Parties' views*

8.129 The Parties submitted that non-child-specific tablets exercised a significant degree of competitive constraint on child tablets and compete with tablets and smartphones manufactured by more traditional tablet manufacturers such as Apple, Amazon, Samsung and Microsoft as well as other Android tablet suppliers and retailer own-label tablet brands.

8.130 The Parties submitted that the market was moving away from closed child specific ecosystems of child-safe hardware and integrated software. Child content was now widely available on both Google and Apple app stores, often either free or at very low prices. These trends were exemplified in [X]. This removed the distinction between what was and what was not a child's device.

8.131 The Parties believe that this move away from closed ecosystems was recognised particularly by LeapFrog pre-merger, with one LeapFrog shareholder noting that:

Developing educational and entertainment content and apps has become intensely competitive. Dozens of new industry participants have started offering apps and content for free or at very low prices with seemingly little or no profit motive, which is making the industry incredibly difficult to complete in profitably. The old 'razor and razor blade' model of pairing hardware and software is significantly challenged in today's world. There isn't money to be made on the razor (i.e. the tablet), and with the plethora of free to low cost apps, there is little if any money to be made on the 'razor blade' now either.<sup>173</sup>

8.132 The Parties further submitted that there is constraint from other types of toys – from the consumers' perspective, children's demand for toys is not specific to

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<sup>173</sup> Press release (15 July 2015): ['Blue Pacific Partners Delivers Letter to LeapFrog Board'](#).

tablets but can be satisfied by a range of products depending on what is popular at the time.<sup>174</sup>

#### *Retailers' views*

8.133 Toys'R'Us told us that the market for child tablets had decreased, primarily due to price reductions on conventional tablets. Other factors that had contributed to the decline were the advent of devices passed from adults to children ('hand-me-down' devices) especially as adult devices had developed, and the availability of a wider range of cheaper/free software via retailers such as Apple.<sup>175</sup>

#### *Competitors' views*

8.134 Two competitors indicated that there was a move away from integrated child hardware and software, which would lead to more products competing with the child-specific hardware and software over time.

8.135 Mattel said that there was a general view that the numbers of children using tablets and mobile phones, at a younger and younger age, was increasing. Mattel believed the software and apps for these was important and it did not see itself competing in the hardware segment of these markets.<sup>176</sup>

8.136 KD Group said that it believed that child tablets were moving towards content and hardware was becoming less important. It highlighted that a subscription-based model had already been launched by Disney.<sup>177</sup>

8.137 Another competitor [REDACTED].

8.138 Competitors also indicated that they believed that parents were increasingly handing down their old tablets to their children, when they upgraded their tablets.

#### *Internal documents*

8.139 LeapFrog's internal documents suggest that although the UK market had not yet experienced [REDACTED].<sup>178</sup> The documents indicated that these changes were principally a decline in child tablet sales and a move away from the toy aisle to consumer electronics.

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<sup>174</sup> Initial Submission, paragraphs 380, 383, 386.

<sup>175</sup> [Toys'R'Us hearing summary](#), paragraph 10.

<sup>176</sup> [Mattel hearing summary](#), paragraph 8.

<sup>177</sup> [KD Group hearing summary](#), paragraph 11.

<sup>178</sup> 3+ for: Amazon Fire Kids Edition, Samsung Galaxy Tab3, and 4+ for Kurio.

### *Our assessment*

- 8.140 From the evidence we have reviewed, our view is that child tablets, and demand for them, are evolving, with child tablet sales declining substantially in recent years. The evidence indicates that the market is moving away from closed child-specific ecosystems of child-safe hardware and integrated software,
- 8.141 Evidence also indicates that children's content is becoming increasingly widely available for use on other devices. This move is reflected in the development [X] and [X]. The increased availability of content removes much of the distinction between what is a child's device and what may previously have been viewed as an 'adult' device. This is reflected in declining sales of child tablets and the degree of switching to other products.

### *Our conclusion*

- 8.142 Based on the evidence set out above, we have concluded that the Merger has not resulted, and may not be expected to result, in an SLC in the market for child tablets and content.

### *The competitive constraint imposed by entry*

- 8.143 Given the conclusion on the existing constraints on the Parties with respect to child tablets and content, we do not need to rely on barriers to entry preventing an SLC.
- 8.144 Nevertheless, we have given consideration to the constraint placed on the Parties by potential entry.

### *Parties' views*

- 8.145 The Parties considered that there were no significant barriers to entry in the supply of tablets specifically targeted at children. This was particularly so for existing tablet manufacturers, which could easily adjust their product to tailor it for children. In particular the Parties noted that:
- (a) the hardware could be sourced from a range of suppliers based in Asia and China (as LeapFrog had done);
  - (b) there existed a large choice of software for children which could easily be downloaded and used on an 'standard' tablet; and
  - (c) there were very limited entry barriers for existing 'standard' tablet manufacturers to develop a specific child version of the tablets which in

most cases was carried out by the simplification of the existing tablets with only a limited addition of new features. There were many examples of such entry, including among others Amazon Fire Kids Edition, Samsung Tablet for children, and Kurio.<sup>179</sup>

- 8.146 Furthermore, the Parties submitted that the numerous examples of successful entry/expansion (and subsequent exits as the market declined) in child tablets in the UK illustrated that, should the opportunity arise, significant and timely entry could occur again.<sup>180</sup>

*Third party views – cost of entry*

- 8.147 We received varying estimates of the time and costs involved in launching a child tablet. Competitors suggested that there were numerous costs involved in developing a child tablet. These included product design, software development and quality assurance and a suitable protective case or ‘bumper’.
- 8.148 A toy manufacturer not currently supplying tablets would also incur costs for developing a standard tablet. One competitor estimated that it took about [REDACTED] to develop a new generic tablet, depending on the complexity of the device. A more inventive device might take longer than this, while an evolution of a previous generation would be shorter. Using a joint development model, under which design and development costs were shared between the tablet developer and the manufacturer, a typical tablet cost [REDACTED] to develop (depending on complexity). For a lower complexity model, this would break down approximately between [REDACTED].
- 8.149 In addition to these costs, a generic tablet manufacturer not already in the toy sector that wished to start producing child tablets would need to make additional investment to make the operating system and related content suitable for young children. However, this investment could be reduced by rebranding an existing product from a third party manufacturer, on a white-label basis. [REDACTED]

*Third party views – likelihood of entry*

- 8.150 [REDACTED]. Another competitor, Mattel, said that [REDACTED] it had launched Nabi tablets under the Barbie, Hot Wheels and American Girls brands in the USA, [REDACTED].<sup>181</sup>

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<sup>179</sup> Initial submission, paragraph 412.

<sup>180</sup> Initial submission, paragraph 413.

<sup>181</sup> Mattel hearing summary, paragraph 13.

8.151 Finally, no retailer we spoke to said that they were considering sponsoring entry or expansion into the manufacture of child tablets.

*Our assessment*

8.152 Demand for child tablets, particularly those with closed ecosystems, has declined significantly since 2013, making it a much less attractive segment to enter.

8.153 There are a number of examples of entry and exit into child tablets in the UK. Most notably, Amazon Fire Kids Edition entered in 2015 and [REDACTED]. Furthermore, [REDACTED]. Finally, no retailer has suggested that it would sponsor entry.

8.154 We have received no evidence to indicate that such entry (most likely by an existing toy manufacturer pairing with a generic tablet manufacturer) is likely or timely. However, this might be expected given that, as described in the competitive effects assessment, child tablets, and demand for them, is evolving, with child tablet sales declining substantially in recent years. The market is moving away from closed child-specific ecosystems of child-safe hardware and integrated software, with evidence that children's content is becoming increasingly widely available for use on other devices.

*The countervailing buyer power of customers*

8.155 As stated in paragraph 8.80, the Parties submitted that retailers had buyer power in toys, including child tablets, for a number of reasons.

*Our assessment*

8.156 The strength of any buyer power is directly related to the strength of the outside options the retailer has. As described in paragraphs 8.58 to 8.64, we have concluded that retailers have a number of credible and strong outside options to the Parties' child tablets, which they could use in their negotiations to prevent the Parties from raising prices. These outside options imply that retailers have a degree of buyer power.

8.157 Furthermore, as noted in paragraph 6.5, negotiation over the entire range strengthens retailers' negotiation ability. However, given the conclusion on the existing constraints on the Parties with respect to learning toys, we do not need to consider whether the existence of countervailing buyer power would make an SLC less likely, and therefore we have not concluded on the likelihood of buyer power preventing a post-merger increase in prices.

## *Our conclusion*

8.158 As stated earlier, based on the evidence set out above, our conclusion is that the Merger has not resulted, and may not be expected to result, in an SLC in the market for child tablets and content.

## ***Future innovation in toys***

8.159 The toy sector is characterised by a high degree of product churn (see paragraphs 6.7 to 6.9). The Parties said that approximately [X] of all products were churned on a yearly basis (replaced either by new concepts or retakes on older products). This is, essentially, a fashion-led industry.<sup>182</sup> As a result, firms need to update existing products constantly to add new features or develop entirely new products, in response to such changes by their rivals.

The removal of one party as a competitor could result in a decrease in innovation, as the Parties would no longer be competing against each other to develop new products or bring innovation to toys, and the Merger could lead to a reduction in innovation and product development across the portfolio of products. If the main driver for innovation was the competition between VTech and LeapFrog, then the Merger could lead to less innovation. We have not received evidence to indicate this is the case.

8.160 As regards learning toys, we have concluded that the Merger has not resulted, and may not be expected, to result in an SLC. Therefore continuing competition between the merged entity and other toy manufacturers post-merger is likely to prevent the Merger from leading to a reduction in innovation and product development within learning toys. The same is true for child tablets and content, where the merged entity will face continued pressure to innovate (including from non-toy manufacturers) in a rapidly evolving market.

8.161 We also note that competition between the Parties to bring such innovation to toys occurs at a European or global level rather than in the UK.

8.162 We therefore conclude that the Merger has not resulted, and may not be expected to result, in an SLC in respect of future innovation in toys.

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<sup>182</sup> [Initial submission](#), paragraph 440.

## **9. Overall conclusions**

- 9.1 Based on the evidence and analysis set out above, we have concluded that the Merger has not resulted, and may not be expected to result, in an SLC in any of the markets considered in this inquiry.<sup>183</sup>

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<sup>183</sup> By way of a cross-check we have also considered whether our finding on competitive effects would have been different if we had come to the view that LeapFrog would have exited the market. Our view is that even if we had come to such a view (that is, LeapFrog being an exiting firm) our finding in respect of no SLC would be the same.