Have we passed peak book?

The uncoupling of book sales from economic growth

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Abstract

This paper uses time series data on UK book sales to establish what correlation exists between the national income of a country and its sales of books. This is tested by comparing series data in real terms for GDP per capita and for various data series for the UK market, including sales invoiced by publishers and point of sale data on consumer purchasing. The first period, from 1985 to 1999, shows a strong relationship between total sales and GDP per capita. In the second period, from 2001 to 2015, the link appears to disappear when we examine invoiced sales from publishers, even before the impact of the 2008 crisis. This is also including the growth of digital sales towards the end of the period. The direct

consumer data shows sales tracking GDP until the onset of the financial crisis; thereafter the only trade sector to have kept pace with GDP is children's, and this contrasts with the areas of adult fiction and non-fiction. Have we therefore seen a structural shift in the book market? If we have passed peak book, what has brought about this uncoupling of book sales from economic growth? Factors are considered including changes in retail, competition from other media, and a prioritization of experience over the accumulation of stuff.

Keywords: peak book, GDP, economic growth, book retail, book consumption, peak stuff, digital books

Introduction

The received wisdom is that individual book consumption is broadly determined by two factors: socio-economic grouping and level of education. Those who are more affluent and leave education at a higher level are likely to consume more books. Can we establish an even broader connection between national income and book consumption, using the UK as a case study? This paper tests the hypothesis that such a correlation exists. The analysis also offers insights into the effects of the 2008 financial crisis and the growth of digital sales, and the question of whether the book market has left behind a golden age of growth that existed in the period around the millennium. How has the market been affected by factors such as competition from other media and changes in retailing?

The last decades of the twentieth century saw a revolution in both publishing and bookselling, with consolidation amongst publishers and a greater emphasis on commercial success. The growth of chain bookshops brought a more professional approach to retail and overall there was an emphasis on bestsellers. A significant change was the ending of fixed prices for books. Can we see these developments reflected in the data for the publishing business?

This paper uses time series data on book sales to establish what correlation if any exists between the national income of a country and its sales of books. Correlation does not necessarily imply causation but it would seem plausible that higher living standards should encourage the sale of books; it is to be hoped that governments would in turn recognize that reading should be good for the economy (there is no VAT on printed books in the UK). The decision was taken to concentrate on one possible influence whilst recognizing that other factors may be important, and could be included in further studies. 'Cultural demand is typically found to be driven by three fundamental determinants: the size of demand (usually measured in relation to population size), the purchasing power (approximated with wages or GDP per capita indicators) and human capital (i.e., the level of education). The level of education is an important determinant for book demand, even stronger than income, though the effects of the two variables are not easy to separate.' (Borowiecki & Navarrete, 2015, 7) During the period covered by this study the number of graduates in the UK increased substantially: 'The percentage of the population classed as graduates has been rising steadily from 17% in 1992, to 38% in 2013.' (ONS, 2013, 3) There must be doubt that this

increase has been reflected in such strong growth in the book market, but we could argue that there should have been a positive impact on book sales.

A US study concluded that 'book readers differed from non-book readers in that a higher proportion was female, college educated, and in the higher-wealth group'. (Bavishi et al., 2016, 45). In the time period covered by this study, the UK population altered its gender balance towards men in the direction of a more even balance. 'The sex ratio is the number of males per 100 females in the population. Since the 1950s, the overall UK sex ratio has generally been rising and is moving towards equality, increasing from 92.5 in 1953 to 96.9 in 2014. The sex ratio has also grown faster since 2000, increasing by 1.9 men per 100 women in the 14 years between 2000 and 2014, compared with 2.4 men per 100 women in the 46 years between 1953 and 1999.' (ONS, 2016) If important, this trend would act as a contra influence on book consumption.

Usage of public libraries is another possible factor in the sales of books and this has been in decline. 'The Department of Culture, Media and Sport has measured the public's usage of libraries in England since 2005. In the 12 months to March 2016, it reported that just 33.4% of adults had used a public library, compared with 48.2% of adults in 2005/2006, when the survey began. This marks a drop of 30.7% over the decade.' (*Guardian*, 16 August 2016) This could be a positive influence for book sales or simply reflect less interest in reading.

It is possible that no link will be found between living standards and book consumption. Kovač (2008) examined book data across a number of European

countries and compared the level of reading against a variety of indicators, including GDP per capita. His overall conclusion was that the level of GDP does not affect book industries and reading. 'Once book reading becomes established, it seems to have no direct connection with the level of GDP. Most probably, the boundary between book and non-book societies is decided by a variety of cultural and historical reasons and factors.' (Kovač, 2008, 89) However, his comparison was across countries – between countries with a similar level of GDP per capita – rather than an examination within the same country over a period of time.

Methodology

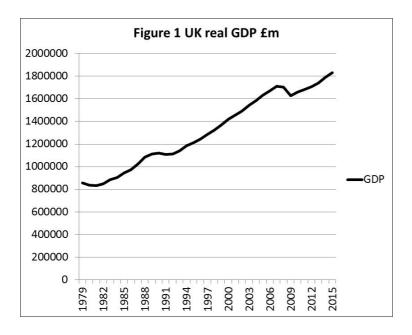
Data on book sales has been taken from two sources: the Publishers Association, which collects information directly from publishers on their sales into the different parts of the market; and Nielsen BookScan, which collects point of sale data from consumer outlets.

There are certain provisos around the data. The PA changed its methodology at the turn of the millennium so we should be cautious about combining the two time series from before and after this point. The earlier series used and continued a dataset based on the Business Monitor statistics published by the Central Statistical Office until 1992; this was then updated annually by applying percentage changes derived from an annual survey of PA members. This had its problems due to an inconsistent response to the annual survey: the response rate varied and, for example, reached 51 per cent in 1995 but was only 30 per cent in 1998. In 2000 the PA replaced its annual survey of members with a new

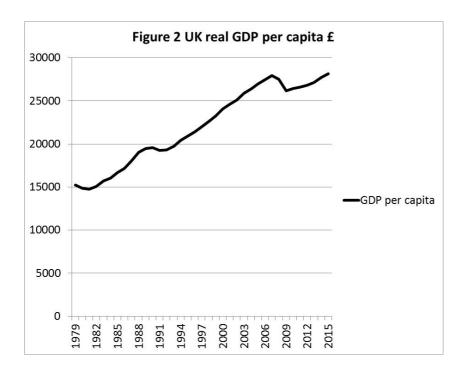
system of data collection, collecting data from distributors and large publishers on a monthly or quarterly basis.

Nielsen BookScan does not release data on all ebook sales and only releases detailed weekly statistics on the UK print market. There is also no accurate data available on self-publishing and its sales, although there are estimates that it may total over 20 per cent by volume of the ebook market. It should be noted when presenting figures on unit sales, that there are different product types represented across and within the different market sectors. As well as hardbacks and paperbacks, there may be low-priced editions which sell in large numbers.

For national income figures this study has taken the real GDP figures for the UK as represented at 2015 prices (www.econdata.uk). Gross domestic product is the total value of goods and services produced in the economy, and is used as one measure of valuing the worth of an economy. This offers a reasonable guide to changes in living standards.



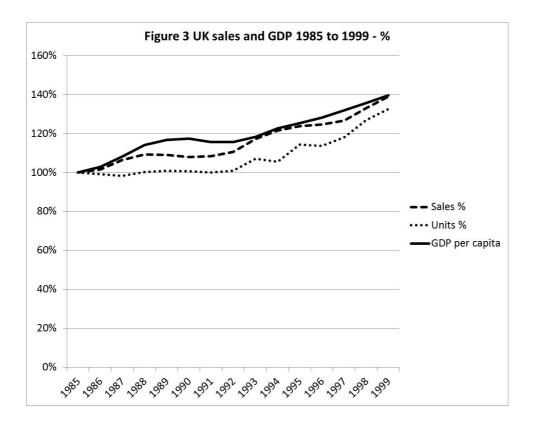
Data was examined for both total GDP and per capital GDP in real terms. As can be seen the per capita graph (Figure 2) is similar in shape to that of the total GDP data (Figure 1), and it was decided to use the per capita data as a point of comparison when analysing the data on books. The recession of the early 1990s is evident, as are the effects of the financial crisis from 2008 - per capita GDP only recovered to pre-crisis levels in 2015.



Publishers' sales

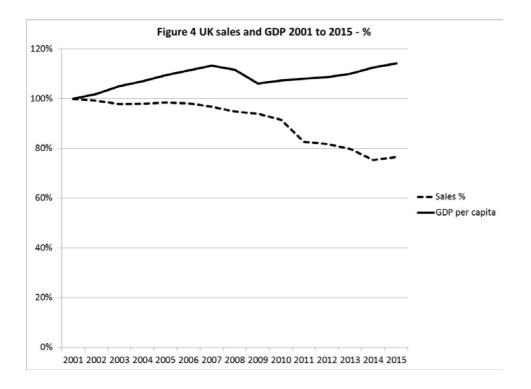
Using headline data from the PA statistical Yearbooks, a time series was created from 1985 to 1999, and from 2001 to 2015 – the break shows the point at which the methodology was changed. We have figures for both unit sales and the total value of the sales invoiced by publishers in the home market, and again value figures were converted into the equivalent values at 2015 prices. For each series, the base year was taken as 100 per cent, allowing us to match the pattern of sales to a similar projection for GDP per capita.

The first period, from 1985 to 1999, shows a striking relationship between total sales and GDP per capita (a correlation coefficient of 0.968); and the unit sales graph also shows a similar pattern (Figure 3). As the economy grew and living standards rose (excepting the recession of 1990 to 1992), both value and volume sales followed a similar upwards trajectory. In the last twenty years of the 20th century the UK saw a revolution in bookselling with the growth of chains such as Waterstone's and Borders, and the development of superstores on the model found in the USA. Towards the end of this period, the market lost fixed prices for books; the Net Book Agreement fell into disuse in the mid-1990s, formally ending in 1997. Writing in 2006, Stephen Brown could see the independent bookshop in decline, and the chains continuing to expand: 'the chain bookstores ... are burgeoning like nobody's business. In Britain, Waterstone's has 200 outlets, with eight more planned. Ottakars [to be taken over by Waterstone's in 2006] added 12 new stores in 2004 alone and Borders has announced massive UK expansion plans.' (Brown, 2006, 5) Meanwhile Amazon had also revolutionized bookselling through its range of stock and level of service; Amazon opened in the UK in 1998. Discounting became the norm, and 'by the mid-1990s, the major supermarkets were devoting more space to bestselling books and were intent on driving down book prices to the consumer, and their costs of supply'. (Clark and Phillips, 2008, 20)



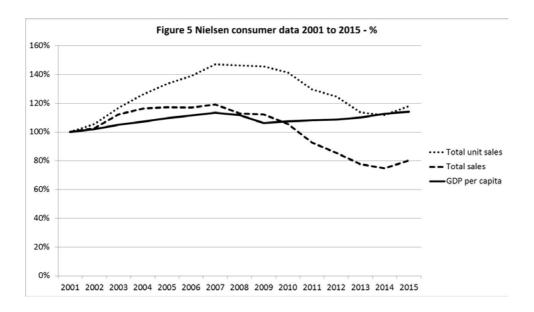
The second series, using a more complete survey of publishers, starts in 2001. There is no continuity observable in the value or volume figures from the previous run, so we should regard this as a new time series. There is a fairly continuous downward slope for the graph of sales by value and certainly little link with GDP, except for a dip which follows, after a lag, behind the fall in GDP (Figure 4). The figures used are for total UK sales across market sectors, and the first substantial impact of digital is only recorded from around 2012. The PA data is accurate including digital from 2013; and an estimating function has been used to give a figure for the years 2008 to 2012 (60 per cent of all digital sales are estimated to be in the home market). It is not possible to provide a consistent series of unit sales, given the arrival of digital sales, but a link with GDP was observed until 2009, when the connection appears to have broken. In terms of

retail space, the Borders shops disappeared from the market in 2009, leaving Waterstone's as the only significant high street operation dedicated to books. There has also been a consistent decline in the number of independent bookshops, and by 2014 the total had fallen below 1,000: there were 987 in 2017 compared to 1,535 in 2005 (*The Bookseller*, 24 February 2014). Overall a loss of value from the book market is evident from the perspective of sales invoiced by publishers; yet there had already been a big increase in the discounts given to retailers in the two decades at the end of the twentieth century.



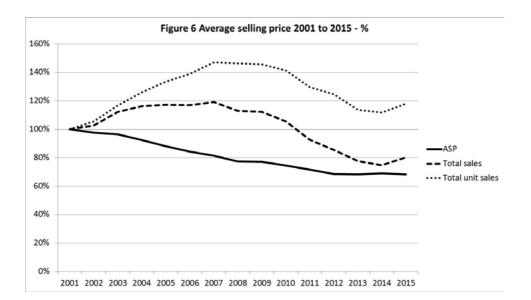
Consumer sales

The invoiced sales from publishers examined above include revenues across market sectors, including educational and academic, as well as digital revenues. Sales to institutional markets are influenced by a variety of factors, so we now turn to the particular case of sales to consumers using a time series from Nielsen Bookscan, which captures point of sales data for *physical* books across all channels including the internet (largely through Amazon). It seems plausible that there is a link between consumer spending on books and living standards in the overall economy.



This data series shows similarly shaped curves for both unit and value, and unit sales outpaced the growth in GDP per capita for much of the period, yet this performance gradually diminished to end at a similar point (Figure 5). Discounting by retailers may explain the strong growth in unit sales but again the financial crisis appears to have taken its toll. Unit sales reached a peak in 2008/9 but ended the period only 18 per cent higher than in 2001. It is important to note that digital sales are not included in this analysis. Sales in value terms (adjusted to 2015 prices) do have a link with GDP until the financial crisis, from 2001 to 2010 (a correlation coefficient of 0.842) but ended the period at only 80 per cent of the levels of 2001.

The disappearance of value from the market is confirmed by a long-term decline in the average selling price (at 2015 prices), recorded in the next graph (Figure 6). There is a continuous downward gradient from 2001 to 2015, with no apparent change at the onset of the financial crisis. By the end of the period the average selling price was 32 per cent lower than in 2001.

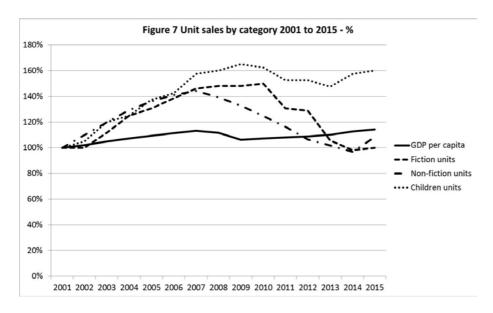


Market sectors

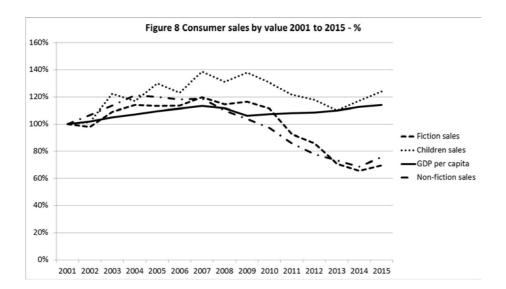
Further analysis enables us to identify differences in the performance of different market sectors: fiction, non-fiction and children's. The latter two categories have been relatively unaffected by the arrival of digital, whereas the fiction market has seen ebook shares for individual titles reaching 40 to 50 per cent. We should be able to predict with some certainty that fiction would take a tumble.

The graph below (Figure 7) shows unit sales across the three parts of the consumer market, alongside GDP per capita. The unit sales within each category

will be broadly similar in type so the comparison over time should provide a reasonable perspective. There is a strong performance in all three categories in the earlier part of the series. We can indeed see a steep fall in fiction sales from a high point in 2010, and by the end of the period sales were at the same level as in 2001. The decline from 2012 can be reasonably explained by the arrival of significant sales of ebooks. What is striking is an earlier decline in non-fiction unit sales, presumably influenced by the financial crisis of 2008. Children's sales show robust growth, with little falling away in the later part of the period. This explains the strong interest in the children's market from trade publishers; and contrasts with the 1990s, when it is thought that the market for children's books declined in the period from 1990 to 1997 (Fishwick, 1999, 52). The first Harry Potter title was published in 1997, and this and a further six books revolutionized perceptions of the children's market.



Turning to sales by value, the following graph (Figure 8) maps the performance of the three sectors alongside each other. There is an observable link between both fiction and non-fiction sales, and the level of GDP, until the financial crisis, when this is broken. There is a strong correlation for fiction from 2001 until 2010 (a correlation coefficient of 0.859) and for non-fiction from 2001 to 2007 (a coefficient of 0.861). There is a good performance from the children's sector, holding its own against the per capita graph by the end of the period.



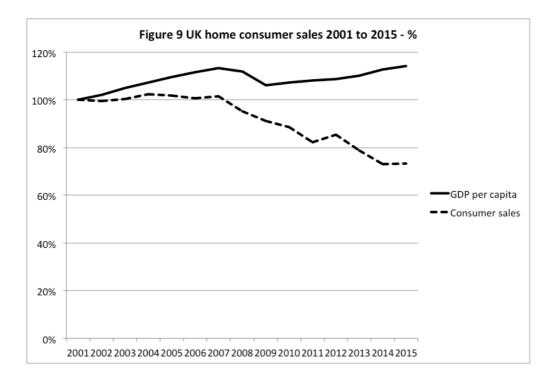
Examination of the average selling price for the three categories shows a marked decline in real terms (expressed at 2015 prices) over the whole period. The rise in unit sales of children's books provided a counter influence to this trend.

	2001	2008	2015	% fall from	
				2001 to 2015	
Fiction	9.56	7.32	6.62	31	
Non-fiction	14.02	11.18	9.94	29	
Children's	7.31	5.97	5.58	24	

The arrival of digital

Significant sales of digital books can be first seen from around 2011 and 2012, and the PA Yearbook of 2012 calls for improved recording of data by genre and territory. In 2011 around 12 per cent of fiction sales were digital, and in 2012 the figure had reached 26 per cent (35 per cent in 2015). Overall in the home market, digital sales were 16 per cent in 2013, 18 per cent in 2014, and 18 per cent in 2015.

It is difficult to construct a time series of unit data which includes digital, but we can arrive at a reasonably consistent set of data for home consumer sales by value, invoiced by publishers. This data is available in the PA Yearbook for the years 2013 to 2015, and for 2011 and 2012 we can apply an estimating function, scaling up by a third the figures available for the home sales of digital fiction (sales in other consumer categories would be less important). For earlier years we can use the data on sales of physical books. There is a kink in the graph in 2011/12: this can be explained either by the use of an estimate, or by the success of the *Fifty Shades of Grey* books by E. L. James in 2012 (sales of 10.6 m paperbacks and nearly 3.8 m ebooks).



Over the complete period there is a drift away in value from the GDP graph, but also the market lost 27 per cent of its value in real terms (Figure 9). There is an obvious decline that can be traced back to the financial crisis of 2008. Whilst GDP has recovered to its previous levels, this has not been the case for the value of the book market.

We could attempt to include self-published titles in this series but there is no firm data available. It is estimated that self-published titles took up 22 per cent by volume of the ebook market in 2015 (*The Bookseller*, 23 March 2016) - 16 per cent in 2014 - mainly in fiction, but often the books are sold at very low prices. In value terms the addition of such sales would have little impact on the graph – the likely figure for 2015 is around £25 million against total sales of £1.19 billion.

Conclusion

This paper began with the hypothesis that there is a correlation between changes in GDP and the overall book market. This was tested by comparing series data in real terms for GDP and for various data series for the UK market, including sales invoiced by publishers and point of sale data on consumer purchasing.

	1985	1999	2001	2008	2015
	base		base		
	year		year		
GDP per	100%	140%	100%	112%	114%
capita					
Total	100%	139%	100%	95%	77%
home sales					
Total units	100%	133%			
ASP			100%	77%	68%
All			100%	95%	73%
consumer					
sales					

In the first period, from 1985 to 1999, there appears to be a strong correlation between living standards and sales of books. In the second period, from 2001 to 2015, the link appears to disappear when we examine invoiced sales from publishers, even before the impact of the 2008 crisis. This is also including the growth of digital sales towards the end of the period. The direct consumer data shows sales tracking GDP until the onset of the financial crisis; thereafter the only trade sector to have kept pace with GDP is children's, and this contrasts with the areas of adult fiction and non-fiction.

Category	Invoiced	Unit	Nielsen	Nielsen	
	sales	sales	sales	units	
		(physical	(physical	(physical	
		books)	books)	books)	
Highest value year	1999	1999			
– series 1985 to					
1999					
Highest value year	2004 to	2008	2007	2007	
– series 2001 to	2007				
2015					

It is to be hoped that a link between GDP and book sales is restored but given the competition from other media and free content, from film and TV to the internet and social media, and given a decline in the time given to reading books, this seems unlikely. (Phillips, 2014) There are concerns that attention spans have shrunk significantly, making it harder for us to concentrate on continuous prose. A Microsoft study in Canada suggested that the average human attention span has reduced from 12 seconds in 2000 to 8 seconds in 2013. (Microsoft, 2015) In England in 2014/15, '64 per cent of adults cited that they had read for pleasure in their own time in the last 12 months'; this means that 36 per cent did not read

at all. (DCMS, 2015, 7) One in 10 households in the UK say that they do not own a single hard copy book, rising to 19 per cent of households where people are aged under 25. (Aviva, 2017) The Family Spending Survey (ONS) tracks weekly household expenditure in the UK, and between 2001 and 2015, spending on newspapers fell from £2.98 to £1.50, and on magazines from £1.49 to £0.70 (at 2015 prices). The weekly expenditure for books fell from £2.54 to £1.20, although the earlier figure did also include maps and diaries so an exact comparison is not possible.

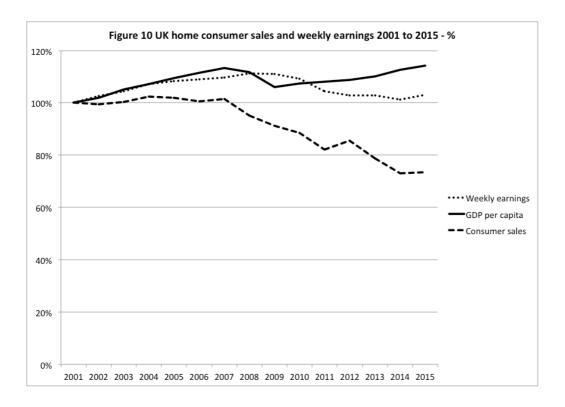
Did we perhaps pass a peak time for books? We cannot join together the time series across periods but if we make the reasonable assumption that growth continued in the market across the bridge year of 2000, it looks like the decade leading up to the financial crisis of 2008 was the peak time for the book. This period also coincides with the publication of the seven Harry Potter books (1997 to 2007). There are still grounds for optimism as the market sector of children's books continues to hold its own and has yet to fall behind by comparison to GDP: there are new readers coming through into the adult market. This optimism is tempered by the realization that 30 per cent of all children's books, and 75 per cent of YA fiction, is read by people over 16 (Nielsen, 2016).

Has the nature of economic growth changed? It is argued that developed economies have reached 'peak stuff' – moving from buying things to doing things. Quite where books fit into this story is debatable – books deliver an experience – but retailers have reported a decline in the sales of bookcases (John Lewis, 2015). The environmental writer Chris Goodall points to 2001, some time before the onset of the financial crisis, as a tipping point for the consumption of stuff, including paper: 'Consumption (not production) of paper and board reached a peak of 12.9 million tonnes in 2001. It fell 6% to 12.1 m tonnes by 2007 and has since [by 2011] shrunk to just over 10m tonnes, levels that were last seen in the mid nineties.' (Goodall, 2011, 11)

Digital sales have not replaced what was a loss of value in the book market, compared to the overall performance of the economy. After the collapse of the NBA the book market was notable for deep discounts from publishers to retailers, and promotion on price by retailers. Before 2008 this had the effect of raising volume sales across fiction, non-fiction and children's, but then fiction and non-fiction sales fell back sharply.

Have we therefore seen an uncoupling of the sales of books from economic growth? The evidence is that the 2008/9 crash was different in character from previous recessions. Whilst the rise in unemployment was not as marked as might have been feared, there was an impact over a long period on earnings. 'In contrast to the recessions of the 1980s and 1990s, real wages [fell] sharply rather than simply levelling off for a short period as, relative to the magnitude of the economic contraction, unemployment [rose] by less than expected. ... However painful falling wages may be for individual workers, it is important to note that they may have been instrumental in preventing a much larger increase in unemployment.' (Gregg et al., 2014, 408) As can be seen in the graph (Figure 10), median full-time gross weekly earnings (adjusted to 2015 prices; ONS, 2015) fell from a peak in 2008 until 2014, with a small recovery in 2015. The

level in 2015 was barely above that in 2002. Alongside the arrival of digital and competition from other media, this may go some way towards explaining the break in the link with GDP.



Did we see a further structural shift in the book market as a result of the long recession? Retail space disappeared from the high street and books have lost visibility. The late 20th-century success of book retailing carried on into the 21st century but was halted by recessionary forces which led to closure and retrenchment. The passing of peak book is felt by many players in the book market. Waterstones came close to the edge of bankruptcy (only returning to profitability in 2016), and the CEO James Daunt has presided over a cut in staffing of 35 per cent and the introduction of 'many unbookish things such as novelty items, jigsaws, games, children's toys, Paddington bears, greetings cards and upmarket stationery'. (*Observer*, 14 December 2014)

Authors have left behind what seemed a golden age for some. The author of *Birdsong* (published in 1993), Sebastian Faulks, writes: 'It has always been next to impossible for serious writers to earn a living by their books. But that need not be a problem. Most of them have always had other jobs, or are married to, or live with, people who make a living. Perhaps only twice in the last years of the 19th century, with the boom in universal literacy, and in the last years of the 20th century with the revolution in bookselling, has it been possible. But that boom is well and truly over.' (*Guardian*, 28 September 2016)

Note to the article

The author is grateful to the Publishers Association and Nielsen Bookscan for permission to reproduce their data.

References

Aviva (2017), Home Report: Digital Living Technology in the home and its impact on family lives, January.

Bavishi, Avni, Slade, Martin D., and Levy, Becca R. (2016), 'A Chapter a Day: Association of book reading with longevity', *Social Science and Medicine*, 164, 44-8. Borowiecki, Karol J. & Navarrete Trilce (2015), 'Fiscal and Economic Aspects of Book Consumption in the European Union', *Discussion Papers on Business and Economics* No. 7.

Brown, Stephen, ed. (2006), *Consuming Books: The marketing and consumption of literature*, Routledge.

Clark, Giles, and Phillips, Angus (2008), *Inside Book Publishing*, Routledge.

DCMS (2015), *Taking Part 2014/15, Focus On: Free Time Activities*, Department for Culture, Media and Sport, November 2015.

Fishwick, Francis (1999), Book Trade Yearbook, Publishers Association.

Goodall, Chris (2011), "Peak Stuff': Did the UK reach a maximum use of material resources in the early part of the last decade?', 13 October 2011. Available at https://www.carboncommentary.com

Gregg, Paul, Machin, Stephen, and Fernández-Salgado, Mariña (2014), 'Real Wages and Unemployment in the Big Squeeze', *The Economic Journal*, 124 (May), 408–32.

John Lewis, How We Shop, Live & Look, 2015.

Kovač, Miha (2008), Never Mind the Web: Here comes the book, Chandos.

Microsoft (2015), *Attention Spans*, Microsoft Canada, Spring 2015.

Nielsen (2016), Books & Consumers.

ONS (2013), *Full Report - Graduates in the UK Labour Market 2013*, Office for National Statistics, 19 November 2013.

ONS (2015), *Annual Survey of Hours and Earnings*, Office for National Statistics, 18 November.

ONS (2016), *Overview of the UK population: February 2016*, Office for National Statistics, February 2016.

Phillips, Angus (2014), *Turning the Page*, Routledge.