

THE E-BOOK MARKET – ITS STRUCTURE, MAIN TRENDS AND PERSPECTIVES FOR GROWTH

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ABSTRACT

This paper presents the structure of the e-book market and points out key factors which will influence its growth. In the first part of the article, the global publishing market is presented with some key data showing market shares according to form of book. In the next part of the article, some important facts concerning the e-book market are presented. It is shown that a small number of relatively new global companies are setting the framework of the e-book market. It is also argued that prices of e-books differ because of large differences in value added tax policies, since in some countries the VAT rate is much higher for e-books than for traditional books. Next, the concept of self-publishing is briefly described. The problem of piracy and its influence on the e-book market is analysed, showing different approaches to this phenomenon. Next, the digitalization of old titles is described in the context of e-book supply. The next part of the article presents the research conducted. The study presents an analysis of the relationship of the value of the e-book market per capita with the number of Internet users (per 100 population) and GDP per capita for chosen European countries, together with China, Japan, the US and India. The following section discusses the results obtained, showing unexpected significant differences concerning the e-book market in countries with a similar level of economic development. It is also shown that countries with a similar percentage of Internet use have noteworthy differences in the value of the e-book market per capita. The last part of the article presents conclusions.

KEYWORDS

e-book market, digital book, publishing market

1. INTRODUCTION

An e-book (an electronic book or digital book) can be defined as a book/publication in digital form, consisting of text and images and available on electronic devices, such as specifically designed e-book readers [Gardiner & Musto, 2010]. The most popular e-book device in the world (according to market share) is the Amazon Kindle, originally released in 2007 [en.wikipedia.org/wiki/Amazon_Kindle]. E-books may also be read on computers, tablets and smartphones. The e-book market has been growing over the last decade, but there are significant differences in the pace of growth among countries.

The aim of this article is to point out key factors which will influence the growth of the e-book market and to analyze the relationship of its value per capita with GDP per capita and the number of Internet users. The structure of the article is as follows: the first part briefly presents the publishing market. The next section presents selected factors which have an influence on the e-book market. The next part of the article presents an analysis concerning the relationship of the value of the e-book market per capita with Internet users (per 100 population) and GDP per capita for chosen European countries, together with China, Japan, the US and India. The final section of the article contains short conclusions.

2. PUBLISHING MARKET

Concerning the global share of the book publishing market, it can be seen that more than a quarter belongs to the US (Fig. 1). The global value of the market is \$106bn with an annual growth (2011-2016) of

about 0.7% [<http://www.ibisworld.com/industry/global/global-book-publishing.html>]. The three main products in the book publishing market are: books for private use, educational books, professional and scientific books.

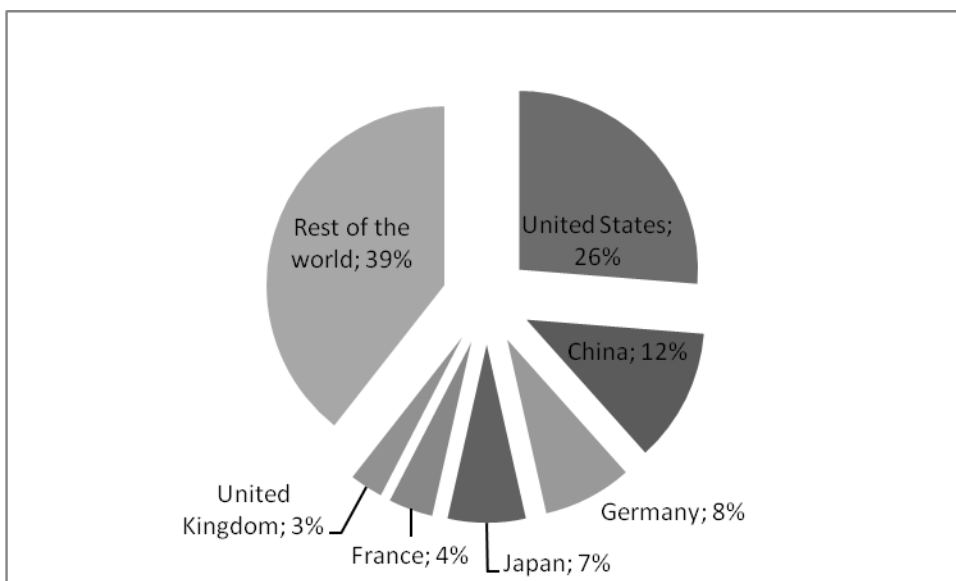


Fig. 1 The 6 largest book publishing markets, by value

Source: (Various sources, compiled by Rüdiger Wischenbart Content & Consulting for the International Publishers Association, 2013) [Wischenbart, 2013]

Concerning the media through which books are distributed, we can distinguish: traditional (paper) books, audio-books, e-books. Audiobooks and e-books are distributed either via the Internet or through media devices like CDs, DVDs and pendrives (rarely). E-books can be downloaded via various portable devices (e-readers), such as the Apple iPad, the Amazon Kindle, Barnes & Nobles' Nook, or Kobo [EPR, 2016].

Traditional books are still the dominant medium, but the dynamics of e-book sales suggests that in the future digital forms of books will comprise the majority of the market. As shown in Table 1, the value of the market for printed books in the EU-5 countries is shrinking at the same pace as the e-book market is growing – the overall market value is almost constant.

Table 1 E-book markets in the EU-5, 2008-2014 (billion Euros)

	2008	2009	2010	2011	2012	2013	2014
Print	17.6	17.5	17.2	16.9	16.5	16.2	16
E-book	0.1	0.2	0.4	0.6	1	1.3	1.6
Overall	17.7	17.7	17.6	17.5	17.5	17.5	17.6

Source: own elaboration based on [EPR, 2016]

3. IMPORTANT FACTORS OF THE PACE OF GROWTH OF THE E-BOOK MARKET

Analyzing the e-book market, we can point out some important facts. Due to limitations on the length of this article, the author has chosen only a few important factors, which have a significant influence on the demand for and supply of e-books.

3.1. New e-book market structure

Analyzing the e-book market, it can be noticed that a small number of relatively new global companies are setting and changing the framework of how books are published and distributed to readers and consumers, where for over two centuries a relatively balanced value chain had existed, from author to publisher to retailer to reader [Wischenbart, 2013]. As shown in Table 2, Amazon's share in the e-book market in the US and UK is over 60%, which suggests that these markets are tending towards a monopolistic market structure. Monopolization of these two key e-book markets will probably slow down market growth, as monopolization usually does, but it also might be the case that the huge capital available in Amazon could be invested in new innovative solutions, which may change customers' attitudes to e-books.

Table 2. Estimated market share of online bookselling and of Amazon and local platforms for print and e-books.

Country	Amazon market share in e-books	Number 1 local online retailer	Market share local number 1
US	67%	Barnes & Noble	12%
UK	79%	Waterstones	3,3%
Germany	43%	Tolino alliance	37%

Source: [Wischenbart, 2013]

It is also an interesting fact that e-book bestsellers are not necessarily the same titles as those in print [Wischenbart, 2013]. This suggests that e-book purchasers differ from purchasers of traditional books. This fact may have a positive influence on smaller publishing houses which sell niche titles.

3.2. Prices of e-books

Analyzing prices on the e-book market, one can notice that pricing strategies differ significantly between countries [Wischenbart, 2013]. The Internet is becoming the main distribution channel for e-books as this form of distribution is much cheaper than publishing digital books on CD/DVDs. This should theoretically cause a decrease in the prices of e-books and, consequently, a growth in demand. However, the prices of e-books also differ between countries because of large differences in tax policies (especially value added tax). In most European countries, the VAT rate is much higher for e-books than for traditional books. Table 3 presents VAT rates for print books and e-books. As can be seen, all of the EU countries, except Denmark and Bulgaria, apply reduced VAT rates to print books, whereas only two countries (France and Italy) apply reduced VAT rates to e-books. The lower VAT rates in France and Italy have not significantly influenced the growth of the e-book market - as shown in Table 4. In these two countries, the market share of e-books is very low.

Table 3 VAT rates in the EU (%), (September 2015)

	Country	Standard VAT rate	VAT rate - print books	VAT rate - e-books
1	Austria	20	10	20
2	Belgium	21	6	21
3	Bulgaria	20	20	20
4	Croatia	25	5	25
5	Czech Republic	21	10	21
6	Cyprus	19	5	19
7	Denmark	25	25	25
8	Estonia	20	9	20
9	Finland	24	10	24
10	France	20	5,5	5,5
11	Germany	19	7	19
12	Greece	23	6	23

13	Hungary	27	5	27
14	Ireland	23	0	23
15	Italy	24	4	4
16	Latvia	21	12	21
17	Lithuania	21	9	21
18	Luxembourg	17	3	17
19	Malta	18	5	18
20	Netherlands	21	6	21
21	Poland	23	5	23
22	Portugal	23	6	23
23	Romania	24	9	24
24	Slovakia	20	10	20
25	Slovenia	22	9,5	22
26	Spain	21	4	21
27	Sweden	25	6	25
28	United Kingdom	20	0	20

Data source: European Commission, VAT rates applied in the Member States of the EU, 2015 [EPR, 2016].

3.3. Self-publishing

A new phenomenon on the e-book market is that many authors have decided to self-publish their books as an alternative to the traditional distribution channel. Authors have started to use global self-publishing platforms and communities, some proposed by publishing companies [Wischenbart, 2013]. This fact may cause a growth in supply, as the barriers to entering the market are shrinking. Many new writers are appearing on the market offering new e-book titles in many different fields. From the economic standpoint, such an increase in supply should result in a decrease in the prices of e-books.

3.4. Piracy problem

One disadvantage for publishing houses and authors involved in electronic publishing is that readers do not always choose to download e-books from legal sources, therefore they should consider whether and how to fight against piracy. There are huge differences between countries according to the percentage share of e-book piracy. According to figures published by [http://mashable.com/2013/07/09/russia-ebook-piracy/#dVz3_nDUoaqL], 92% of Russian readers download their books from the Internet for free, compared to around 12% in the US. Not every author is against piracy. Some authors seem to relish the idea of e-book piracy, as they feel that it is simply good to be visible. They also feel that being recognized can be profitable, as they use alternative ways of obtaining revenue, like issuing advertisements in on-line services from which e-books are downloaded [Bethune, 2008].

To protect e-books against piracy, publishers use various forms of protection (e.g. DRM - Digital Rights Management). Empirical investigation shows the implications of consumer attitudes to DRM in the e-book market in Germany. Whereas e-books are generally perceived as being useful, there are differences in the valuation of free (unprotected) and purchasable (protected) eBooks [Smith & Telang, 2009]. Consumers, in general, find protected e-books to be less valuable than unprotected ones for two reasons: they find interoperability between different devices to be important, and they have an aversion to getting locked-in when purchasing a specific e-book reader which comes with an installed DRM. Hence, they prefer unprotected e-books, which can be downloaded for free and read on almost any device with the appropriate conversion software. For such customers, purchasing e-books is perceived as being rather complicated and e-book prices are considered to be too high. Worries about the emergence of different systems for DRM protection are slowing down the diffusion of e-books [Loebbecke et al., 2010].

The problem of piracy and resulting protection policies may decrease the pace of growth of the e-book market, as it can have a negative influence on both supply and demand. Publishing houses will suffer losses from unregistered downloads of e-books. They will also have to invest money in new forms of protection and marketing campaigns against piracy. Customers may be disappointed if the protection policy employed is too strict, which causes difficulties in the buying and reading process.

3.5. Digitalization of old titles

New editions of books are usually digitalized, but there is a problem of digitalizing previously published books. Of course, there are various technical possibilities available, but the main problem is the cost of digitalization, which suggests digitalizing only those titles which are predicted to be sold in such amounts ensuring getting past the break-even point. There are some initiatives, such as Google Books, which enable not only the digitalization of a huge number of previously printed books, but also access to a bookstore or library (if the book is out of copyright) of these books [<https://books.google.com/googlebooks/about/index.html>]. The digitalization of older titles and easy access to them has caused growth in the supply of e-books, mainly in English (most of the books Google has scanned are in English [https://en.wikipedia.org/wiki/Google_Books]). It can also be noticed that in more and more countries, publishing markets are developing a bilingual segment, as an increasing numbers of customers are reading both in their mother tongue and in English, which has introduced opportunities and challenges to both publishers and retailers [Wischenbart, 2013].

4. ANALYSIS OF DATA ON THE E-BOOK MARKET

To analyze the global e-book market, the author has chosen 15 countries for which data about the e-book market were available. The data are from 2013, because for some of the analyzed countries more recent data were not available. It is also worth noting that when analyzing the diffusion of innovation in the context of e-books, the year 2013 is interesting, because in some countries the market share of e-books became noticeable.

The market share of e-books varies significantly, not only among countries from different parts of the world, but also among developed countries in the EU. The data show (Table 4, 5) that in the United States and United Kingdom the popularity of e-books is much higher than in other developed countries with similar macroeconomic indicators (GDP per capita), and with a similar number of Internet users. The obvious answer as to why these two countries stand out from the rest is the fact that these countries are English-speaking. Surprisingly, the market share of e-books in Scandinavian countries is very low, despite the fact that these are countries with a very high level of proficiency in English.

Table 4 Values of publishing markets, number of Internet users and GDP per capita for selected EU countries

	United Kingdom	Germany	France	Spain	Italy	Sweden	Denmark	Netherlands	Poland
Value of publishing market [mld €]	4.219	9.520	4.121	2.471	3.072	0.783	0.540	1.363	1.053
Value of publishing market per capita [€]	65.82	118.05	62.51	53.00	51.00	81.56	96.17	81.11	27.68
Market share of e-books	25.00%	10.00%	2.85%	4.00%	1.80%	1.00%	2.00%	4.70%	0.50%
Value of e-book market [mld €]	1.055	0.952	0.117	0.099	0.055	0.008	0.011	0.064	0.005
Value of e-book market per capita [€]	16.455	11.805	1.782	2.120	0.918	0.816	1.923	3.812	0.130
Number of Internet users (per 100 people) 20	89.8	84.2	81.9	71.6	58.5	94.8	94.6	94.0	62.8
GDP per capita PPP US\$ 2013	38743	44064	37592	32527	35019	44586	43782	46737	23903

Source: [Wischenbart, 2013], [worldbank.org], <http://www.thisisitaly-panorama.com/italy-today/ebook-future-and-present-of-the-italian-publishing-market/>

It is interesting to compare France and the United Kingdom. The values of the publishing markets in these countries are very similar, but the value of the e-book market per capita in Britain is almost 10 times as great as in France (Table 4).

The three biggest e-book markets are the US, UK and Germany. Japan and China, where e-books have similar market shares, are in fourth and fifth place, even though the total value of the publishing market in these two countries is much bigger than in the UK and Germany.

Table 5 Book market values, Internet users and GDP per capita for selected world countries

	Russia	Brazil	India	China	US	Japan
Value of the publishing market [mld €]	0.688	3.401	1.831	14.200	29.500	20.595
Value of the publishing market per capita [€]	4.79	16.65	1.43	10.46	93.21	161.73
Market share of e-books	1.50%	0.50%	2.00%	3.8%	14%	3.6%
Value of e-book market [mld €]	0.010	0.017	0.037	0.536	4.137	0.741
Value of e-book market per capita [€]	0.072	0.083	0.029	0.395	13.072	5.817
Internet users (per 100 population) 2013	68	51	15.1	45.8	84.2	89.7
GDP per capita PPP US\$ 2013	25033	15726	5302	12196	52980	36223

Source: [Wischenbart, 2013], [worldbank.org], <http://the-digital-reader.com/2015/06/30/ebook-sales-grew-by-35-in-japan-in-2014-tops-1-billion-for-the-first-time/>, <http://www.bloomberg.com/bw/articles/2012-10-25/e-books-finally-get-traction-in-japan>, <http://www.digitalbookworld.com/2013/a-few-numbers-on-brazilian-book-market/>, http://rbth.com/multimedia/infographics/2013/06/28/e-books_in_russia_27527, <http://www.publishersweekly.com/.../66714-china-at-bea-2015-the-e-book-market-in-china.html>

In the next part of the article, the relationship between the value of the e-book market per capita and two other indicators which are connected with e-book distribution is analyzed. Firstly, the author analyzed the correlation between the value of the e-book market per capita and GDP per capita. The hypothesis to be tested is the following: in rich countries the value of the e-book market per capita is higher than in poor countries. As can be seen in Figure 2, the value of the e-book market per capita is much lower in the poorer countries in the sample (India, China, Brazil, Poland and Russia). The results among rich countries are more unclear – there are examples of countries with relatively low values of the e-book market per capita, such as Sweden, Italy, Denmark and France, and examples of high values, such as the UK, US and Germany. The value of Pearson’s correlation coefficient based on all 15 countries is 0.554897 (with p-value equal to 0.03179) and without the Scandinavian countries (Sweden, Denmark) is equal to 0.676109 (with p-value equal to 0.011178).

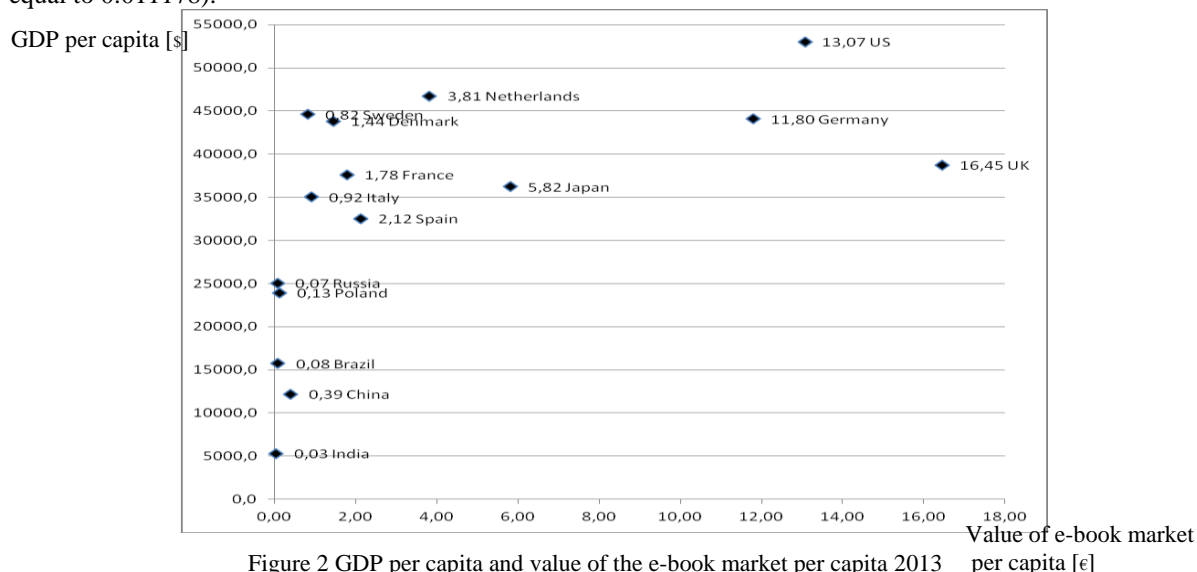


Figure 2 GDP per capita and value of the e-book market per capita 2013

Source: Author’s own elaboration based on [Wischenbart, 2013], [worldbank.org]

The relationship between the value of the e-book market per capita and the number of Internet users (per 100 population) is shown on Figure 3. The main channel of e-book distribution is the Internet. Therefore, the author hypothesizes that there will be a high correlation between the value of the e-book market per capita and the number of Internet users. The results (Figure 3) show that countries that have a low (compared with the sample) number of Internet users per 100 population also have a relatively low value of the e-book market per capita. In countries with a high number of Internet users, the values of the e-book market vary significantly. Scandinavian countries (Sweden and Denmark), which have a very high number of internet users (over 90% of the population), also have very low values of the e-book market per capita. The value of Pearson's correlation coefficient based on all 15 countries is equal to 0.465726 (with p-value equal to 0.080186, which suggests that the hypothesis is not supported). Without the Scandinavian countries (Sweden, Denmark), the value of this correlation coefficient is equal to 0.612855 (with p-value equal to 0.025944).

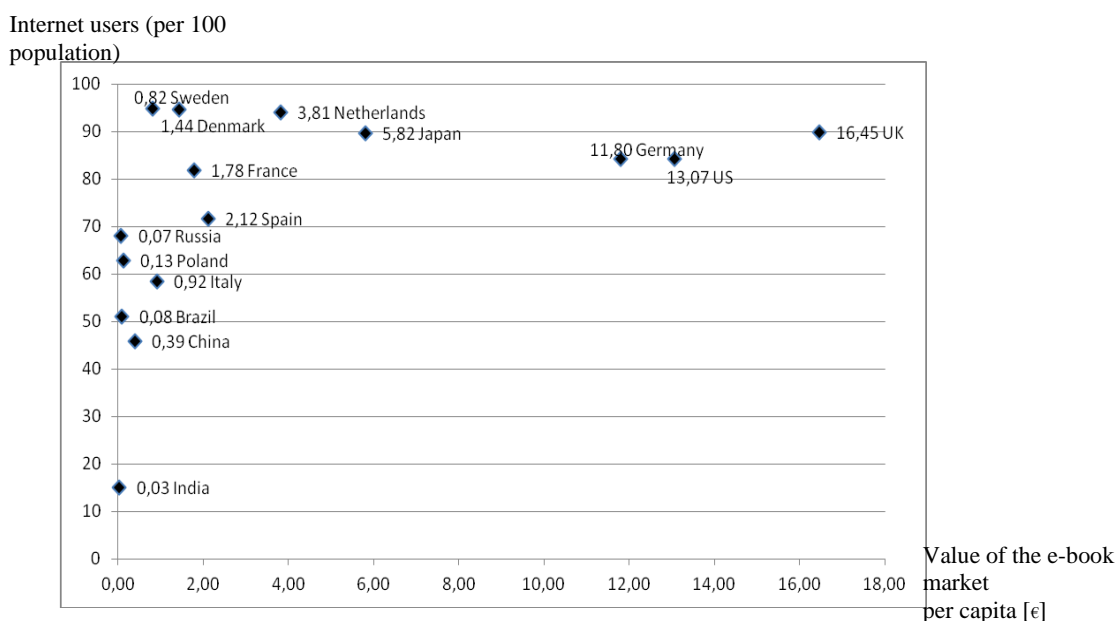


Figure 3 Number of Internet users (per 100 population) and value of the E-book market per capita 2013

Source: Author's own elaboration based on [Wisichenbart, 2013], [worldbank.org]

5. CONCLUSION

The e-book market has grown rapidly over the last decade and is taking an increasing share of the publishing market. A relatively new global player, Amazon, has set the direction of the development of the e-book market by strengthening its monopoly in some countries. The prices of e-books are determined not only by the costs of production and market competition, but also by varying VAT rates. E-books are only available at reduced VAT rates in Italy and France. New phenomena in the publishing market, such as self-publishing and the digitalization of old titles, may have a great influence on the supply side of the e-book market. The research conducted here shows that the e-book market is still at a low level of development, considering the value of the e-book market per capita in countries with a relatively low GDP per capita. It is surprising that in the richest countries analyzed the value of the e-book market per capita varies widely. The relationship between the number of Internet users (per 100 population) and the value of the e-book market per capita leads to similar conclusions that countries which have a relatively low number of Internet users per 100 population also have a low value of the e-book market per capita. However, in countries with a relatively high number of Internet users, the values of the e-book market vary significantly. These results lead to the conclusion that in rich countries where e-books have a low level of market penetration (e.g. Sweden, Denmark, France, Italy), publishers and distributors of e-books should look for other marketing strategies, as current policies are ineffective.

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