

**A BENCHMARKING STUDY: WORLD VOLUMES IN ONLINE-FASHION-RETAILING AND MAIN PLAYERS**M.N. EHSAN<sup>1</sup> AND A.K.M. MAHABUBUZZAMAN<sup>2</sup><sup>1</sup>Department of Textile Engineering, Southeast University, Dhaka; <sup>2</sup>Mechanical Processing Division, Bangladesh Jute Research Institute.

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**ABSTRACT**Ehsan MN, Mahabubuzzaman AKM (2011) A benchmarking study: world volumes in online-fashion-retailing and main players. *J. Innov. Dev. Strategy* 5(1), 9-16.

Internationally as a retailing medium the internet has grown very fast over the last decade alone. Online retailing is the process, through which consumers purchase products or services by the Internet. In this study the comparison among different nations and continents are shown about online retailing as well as fashion e-retailing based on volumes and consumer trend or buying behaviour. Latest data on internet usage and broadband usage in different regions of world are included. Forecasting on online sales is also considered to define the future market.

**Key words:** *fashion retailing, internet, market, e-commerce***INTRODUCTION**

In the 21th century internet is the main communication tool used in every step of daily life to make life easier for modern people. There has been many innovations to improve internet such as introduction of Web 2.0. Internet offers new platforms for users to share their opinions or find innovative ideas supported by visual media. Since the internet is managing a lot of activities to ease the life for people, the growth of online retailing is inevitable.

Consumers are starting to realize the benefits, including convenience, time saving, discounted prices, and increased business transparency. The risks are also considerable with online retailing such as not being able to see the product prior to purchase, as well as security fears in providing credit card details. However, these risks are currently being acknowledged by retailers and they are working on reassuring customers in all ways possible. It is forecast that in the near future, consumers will feel more comfortable shopping online and as a consequence, regularly mix online and offline purchases. According to ACNielsen (2008), more than 875 million people in the world have shopped online, an increase of 40 percent over the past two years.

To assess the leader in e-commerce is not a straight forward task for two reasons. First, there is a lack of comparable and complete data between two nations and second, there is no clear agreement on which e-commerce measures should be included and at what weights. The most important factors or variables that to be considers for assessing international leadership are retail e-commerce as a share of GDP; percent of citizens who have purchased online; percent of firms purchasing online; percent of firms with a Web site; number of domain names per number of firms; secure servers per 100,000 inhabitants; and overall online sales and purchases as a share of total sales and purchases.

**MATERIALS AND METHODS****Total revenue for global online retailing industry**

The total revenue for global online industry in the year 2008 was 325.2 billion and the growth rate percentage was 13.6% compare to the year 2007. The growth rate was not so high because of economic recession. The table below shows total revenue and growth percentage from the year 2004 to 2008.

Table 1. Global Online Retail Sector Value \$ billion, 2004-2008

Year	\$ billion	% Growth
2004	135.0	
2005	180.1	33.3 %
2006	227.4	26.3 %
2007	286.1	25.8 %
2008	325.2	13.6 %

Source: Data Monitor Research Store, 2009

**World Volume of online fashion retailing**

Online fashion retailing is one of the well established sales channel in most developed countries. In 2008 clothing was the fastest growing category of consumer goods to be sold online in the UK and the USA. Moreover, China and France have the largest category in terms of value. Online retailing has many advantages compare to general shopping for shoppers and retailers. Shoppers can compare the product from a wide range of product and retailers can offers a broad range of product. Also the cost for same product in online shop is less then physical store because the physical store has different kind of cost like rent, staff salaries, maintenance etc.

In order to compare among different countries it is important to consider the market share among different region of the world. World market can be divided into 4 parts, America, Europe, Asia-Pacific and the rest. The leader of the online fashion retailing sector is America with a share of 49.5%, Europe is the following continent getting 28.3% of the market's value. Asia-Pacific accounts 17.7% and the rest of the world accounts 4.5% of the market share. The total revenue of America from online fashion retailing is \$26.5 billion, Europe \$13,3 billion, Asia-Pacific \$8 billion and the rest of the world \$2,3 billion.

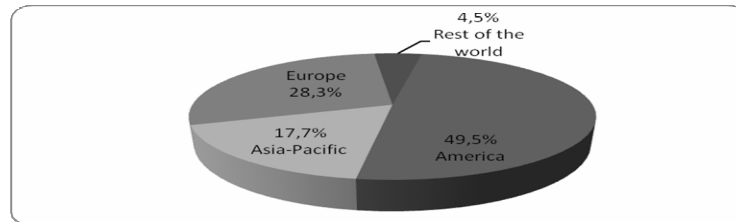


Figure 1. Global Online Fashion Retail Market Segmentation

Source: Data Monitor Research Store, 2009

### Market segmentation of online product

Online retailing sector consists of different types of products such as e-books, DVDs and CDs, electronics, beverages, pharmaceuticals and etc. There are more than millions of different consumer goods being offered to purchase by the online retailers. However, it is possible to categorize them under 6 main headings which are listed below:

Table 2. Global Online Retail Sector Value \$ billion, 2004-2008

Category	% Share
Electronics	24.6 %
Apparel	15.8 %
Household	14.2 %
Food and Drink	12.8 %
Beauty and Pharmaceuticals	2.6 %
Other	30 %
TOTAL	100 %

Source: Data Monitor Research Store, 2009

Electronics segment accounts for 24.6% of the global online retailing sector's value and the leader of the market in turns of its share. Apparel segment gets a share of the total value of 15.8%.

### Consumer trend in online shopping

The Internet economy has grown dramatically since the 1999 Guidelines were adopted. It has opened up new commercial opportunities for business and consumers. Consumers have benefitted significantly through enhanced capacity to research and compare products, expanded choice in products that may be purchased at any time and from anywhere, and more possibilities to customise products to better meet personal preferences. In addition, increased transparency has intensified competition, oftentimes resulting in lower prices for consumers.

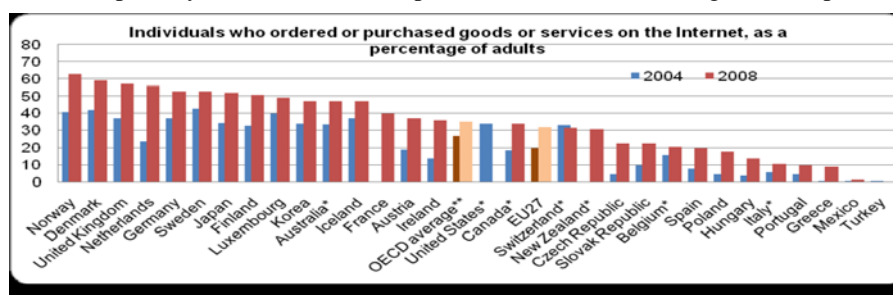


Figure 2. Individuals who ordered or purchased goods or services on the Internet as a percentage of adults<sup>1</sup>

Source: OECD ICT Database

<sup>1</sup> Notes: (\*) Australia (data for 2007 instead of 2008), Belgium (data for 2005 instead of 2004), Canada (data for 2003 instead of 2004, 2007 instead of 2008), Italy (data for 2005 instead of 2004), New Zealand (data for 2006 instead of 2008), Switzerland (data for 2005 instead of 2008), United States (data for 2003 instead of 2004). (\*\*) OECD average (simple average of available data). Generally, data from the EU Community Survey on household use of ICT, which covers EU countries plus Iceland, Norway and Turkey, relate to the first quarter of the reference year. For the Czech Republic, data relate to the fourth quarter of the reference year. Individuals aged 16-74 years, except for Canada (18-74), the Czech Republic (15+), Japan (6+), Mexico (18+), Switzerland (14-74). Data generally refer to Internet use in the last 12 months for non-Eurostat countries and for Eurostat countries.

The number of consumers purchasing goods and services over the Internet is rising. As shown in Figure 2, the percentage of adults doing so increased from 26.9% in 2004, to 35% in 2008. There is, however, considerable variation among countries. More than 50% of adults from Japan and several European countries ordered or purchased goods or services on the Internet in 2008, while in a number of other OECD countries, less than 10% did so.<sup>2</sup>

According to a survey, 66% of “online Americans” purchased a product on-line in 2007, up from 46% in 2000 (Pew Internet & American Life Project, 2008, p. 2). In 2008 in the EU, out of the 36% of Internet users who compared goods or services through price comparison websites, 17% purchased a product on-line and 10% in a shop, while 13% did not make a purchase (EC, 2009a, p. 9).

## RESULTS AND DISCUSSION

### *Internet as a main tool in online retailing*

The Internet is a global system of interconnected computer networks that use the standard Internet Protocol Suite (TCP/IP) to serve billions of users worldwide. It is a *network of networks* that consists of millions of private, public, academic, business, and government networks, of local to global scope, that are linked by a broad array of electronic and optical networking technologies. The Internet carries a vast range of information resources and services, such as the inter-linked hypertext documents of the World Wide Web (WWW) and the infrastructure to support electronic mail (: <http://en.wikipedia.org/wiki/Internet>).

The internet has a major changes on economical and social forces since 1990s. Given the changes in the past ten years in how the Internet has evolved-blogging, social networks, online video, and tagging were all completely unheard of in 1998 (Eskelsen *et al.* 2009).

Now a days many big companies are taking the advantage of internet by using online advertising or e-commerce for their business. Internet has no boundry for speading the information from one place to other.

### *Worldwide internet usage*

The worldwide number of Internet users surpassed 1.59 billion in 2008-up from only 2M+ in 1990, 45M in 1995 and 430M in 2000. Worldwide yearly increase in Internet users is 140M to 145M in the next five years, which means the 2B mark will happen in 2011 or 2012. Much of current and future Internet user growth is coming from populous countries-especially the BRIC countries-Brazil, Russia, India, China (<http://www.etforecasts.com/pr/pr051009.htm>).

Table 3. Worldwide internet usage 2010 (<http://www.internetworldstats.com/stats.htm>.)

WORLD INTERNET USAGE AND POPULATION STATISTICS						
World Regions	Population ( 2010 Est.)	InternetUsers Dec. 31, 2000	InternetUsers Latest Data	Penetration (% Population)	Growth 2000-2010	Users % of Table
Africa	1,013,779,050	4,514,400	110,931,700	10.9 %	2,357.3%	5.6 %
Asia	3,834,792,852	114,304,000	825,094,396	21.5 %	621.8%	42.0 %
Europe	813,319,511	105,096,093	475,069,448	58.4 %	352.0%	24.2 %
Middle East	212,336,924	3,284,800	63,240,946	29.8 %	1,825.3%	3.2 %
North merica	344,124,450	108,096,800	266,224,500	77.4 %	146.3 %	13.5 %
LatinA./Caribbean	592,556,972	18,068,919	204,689,836	34.5 %	1,032.8%	10.4 %
Oceania/Australia	34,700,201	7,620,480	21,263,990	61.3 %	179.0 %	1.1 %
WORLD TOTAL	6,845,609,960	360,985,492	1,966,514,816	28.7 %	444.8 %	100.0%

### *Broadband usage statistics*

Broadband is a high data rate connection to the internet-typically contrasted with dial-up access using a 56k modem. Dial-up modems are limited to a bit rates of less than 56 Kbit/s (kilobits per second) and require the dedicated use of a telephone line-whereas broadband technologies supply more than double this rate and generally without disrupting telephone use.

The number of broadband subscribers worldwide is expected to increase from 338 million at the end of 2007 to 534 million by 2013, according to Telecom View. According to a 2007 In-Stat survey, 16 million U.S. households are likely to use broadband service more than television service over the next three years.

<sup>2</sup> The information is extracted from the report OECD Conference on Empowering E-consumers Strengthening Consumer Protection in the Internet Economy

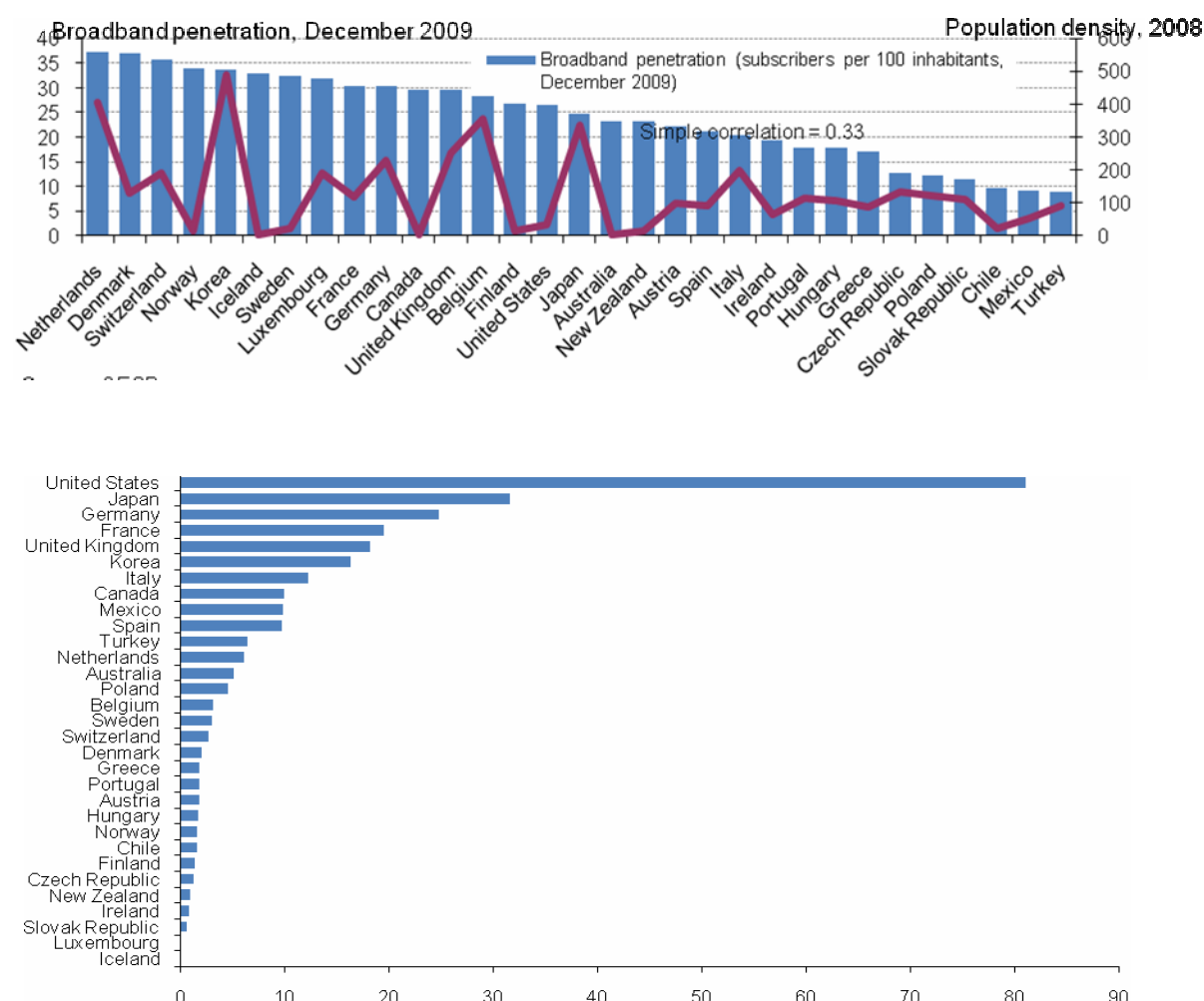


Figure 3. Total broadband subscribers, by country, millions, December 2009

Source: OECD<sup>3</sup>

Broadband remains a key tool in e-commerce<sup>11</sup>. By enabling consumers and companies to interact more efficiently, broadband technology has the potential to markedly increase sales in every sub-category of e-commerce. As of 2008, the top ten broadband countries in terms of absolute subscribers were China, the United States, Japan, Germany, the United Kingdom, France, Korea, Italy, Canada, and Spain. China surpassed the United States as the country with the highest number of broadband subscribers in 2008, reaching 83.4 million subscribers. Within the OECD, the Netherlands had the highest penetration rate with 38.1 per 100 inhabitants having broadband access in 2009, followed by the Denmark with 37. As of June 2009, the number of broadband subscribers per 100 inhabitants in the U.S. was 26.7, ranking 15<sup>th</sup> among OECD nations.

### Search engine market

For any kind of survey search engine is the most popular activities in any country. Search engines have also become one of the few success stories in monetizing Internet advertising.

According to comScore's qSearch rankings, Google is by far the top destination for online search. Google Sites led the U.S. explicit core search market in July 2010 with 65.8 percent market share, followed by Yahoo! Sites with 17.1 percent (up 0.4 percentage points) and Microsoft sites with 11.0 percent. Ask network captured 3.8 percent of explicit core searches, followed by AOL LLC with 2.3 percent (comScore Releases, July 2010).

<sup>3</sup> OECD- Organization for Economic Cooperation and Development

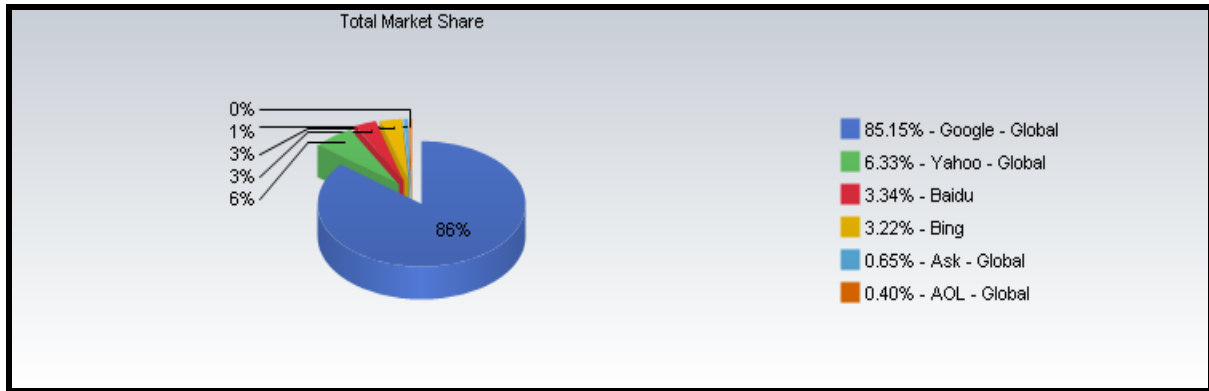


Figure 4. Total market share of search engine October 2010 (Search engine market share, 2010)

Source: marketshare.hitslink.com

### Market Analysis and main players

The four nation's leading the world in e-commerce are Denmark, Sweden, the United Kingdom, and the United States. The next group includes German, Norway, and Switzerland. The third tier includes Canada, Austria, the Netherlands, Ireland, New Zealand, Australia, Japan, and Finland. The fourth includes Korea, Luxembourg, Belgium, the Czech Republic, and France. And the fifth group includes the Slovak Republic, Hungary, Spain, Portugal, Greece, Poland, Turkey, Italy, and Mexico (Daniel *et al.* 2010).

### Online retailing in USA

United States leads the world online retailing because of continued dominance of firms such as Amazon and eBay. U.S. retail e-commerce sales reached almost \$142 billion in 2008, up from a revised \$137 billion in 2007 (See figure 3.1)-an annual gain of 3.3 percent. From 2002 to 2008, retail e-sales increased at an average annual growth rate of 21.0 percent, compared with 4.0 percent for total retail sales. In 2008, e-sales were 3.6 percent of total retail sales-up from 3.4 percent in 2007.

Retail e-commerce resumed its upward trend in 2009, as the economy regained strength, reaching \$35.9 billion in the 4<sup>th</sup> quarter and \$134.9 billion for the year, a 4.5 percent quarterly increase and 2.0 percent annual increase.

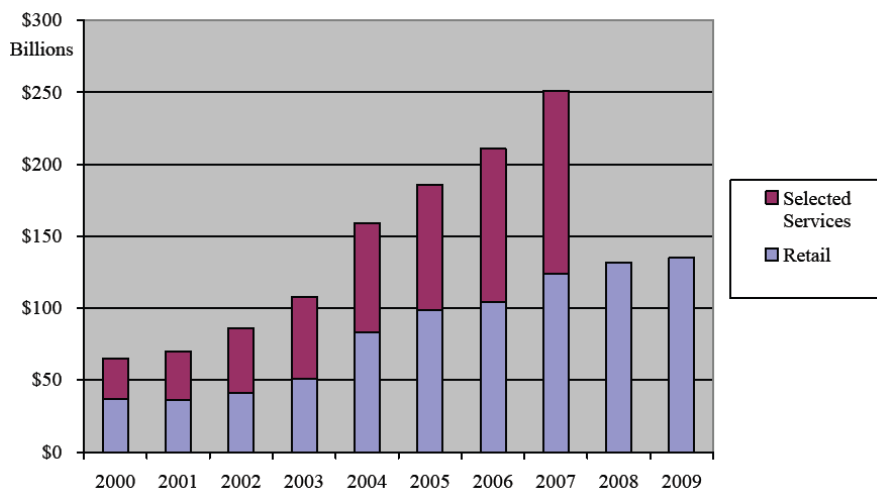


Figure 5. U.S. B2C E-Commerce Sales 2000-2009

Source: U.S. Census Bureau, E-Stats

With regard to U.S. B2C e-commerce, online retail sales of clothing, footwear, and accessories comprise the largest share, followed by other merchandise, computer hardware, and electronics and appliances, making up 15, 14, 13 and 9 percent, respectively (see figure 6).

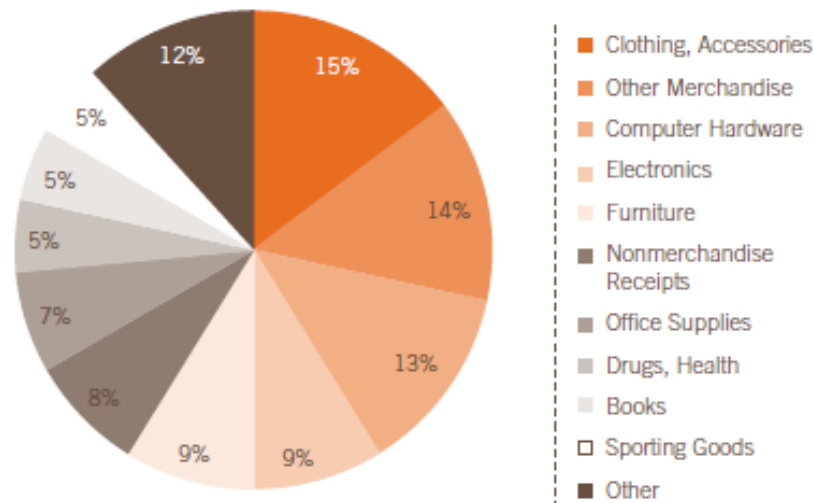


Figure 6. Percentage of e-commerce sales in U.S. by industry category, 2007

Source: U.S. Census Bureau, 2009

### **Online retailing in Europe**

According to Eurostat, the European Union's (EU) statistical information service, the percent of individuals aged 16 to 74 in the EU27 that bought or ordered goods or services for private use rose to 37 percent in 2009 from 20 percent in 2004. The United Kingdom had the highest percentage of online shoppers in 2009, with 66 percent of individuals aged 16 to 74 shopping online.

The distribution of online retail sales throughout the European Union appears similar to that of the United States, although because Eurostat and the U.S. Department of Commerce break down retail sales into slightly different categories, an exact comparison is not possible. That being said, clothes and accessories account for the largest percentage of sales in both the United States and Europe, followed by film and music in the EU. (Within the United States, film and music fall into the "other merchandise" category which is also second.) EU consumers purchase more books online, whereas in the United States consumers spend a greater share on electronic products.

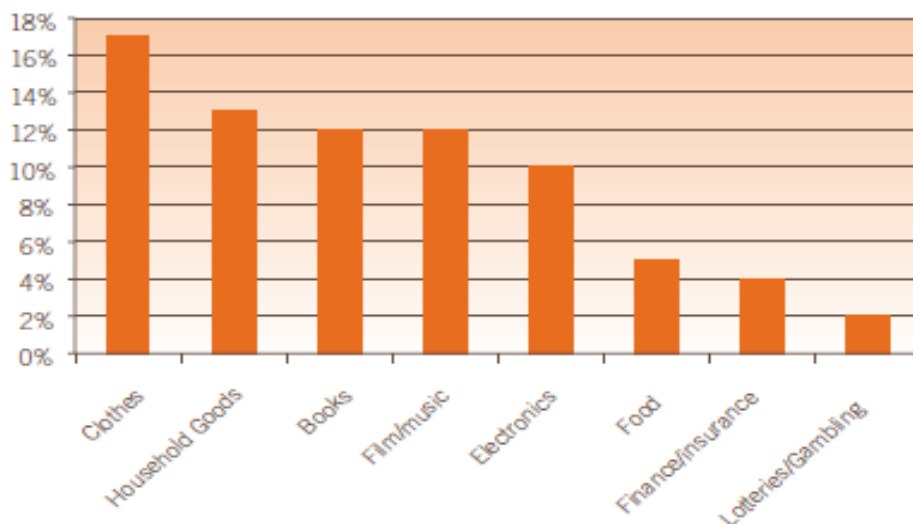


Figure 7. Percent of sales through e-commerce in the EU by product category, 2009

Source: EuroStat 2009

B2C e-commerce in Europe grew by 37 percent from 2006 to 2007 to reach \$197 billion, or 1.3 percent of European GDP, and is expected to reach \$407 billion by 2011. B2C e-commerce exists to differing degrees across Europe. For example, although the United Kingdom, Germany, and France account for less than 60 percent of European Union GDP, they make up 72 percent of European B2C e-commerce (which accounts for

0.9 percent of EU GDP). In the United Kingdom, consumers spend on average \$2,200 per year on e-commerce, compared to \$990 in Germany, \$850 in France, and \$1,100 in the United States.

### Online retailing in Asia

The Asia-Pacific region is a tale of two B2C e-commerce markets. Japan and South Korea are the stable growth markets for the foreseeable future. But China and India, with exploding middle classes, increased infrastructure investments and more online shoppers, are where growth is accelerating. According to Analysis International, a Chinese based e-marketing firm, total e-trade increased by over 100 percent in 2008.

In china the apparel industry generated total revenues of 84.9 billion \$ in 2008, with a CAGR of 7.9% for the period 2004-2008. Total B2C ecommerce sales in Japan, China, South Korea and India in 2010 is \$115 billion. And B2C ecommerce for china in 2010 is \$18 billion where as in the year 2006 it was only \$2.5 billion. In china Online fashion retailing gets a share of 10% of the whole internet retailing and the total revenue of the online apparel industry is around 2.5 billion \$ in 2009.

The Japanese apparel retail industry shrank by 0.8% in 2008 and reached a value of \$79.8 billion. However, this reduction is not going to stop according to market specialists. In 2013, The Japanese retail industry is forecast to have a value of \$76 billion a decrease of 4.8% since 2008.

### Future forecast

In 2013, the global online retailing sector is forecast to have a value of \$613.3 billion, an increase of 88.6% since 2008 with the predicted compound annual growth rate of the sector to be 13.5%. The revenue forecast of online fashion retailing is: (considering apparel accounts for 15.8% of the online retailing.)

Table 4. Value Forecast of Global Online Clothing Sales 2013

Year	\$ billion	% Growth
2008	52.1	13.6 %
2009	56.8	9.3 %
2010	65.4	15.1 %
2011	75.3	15.1 %
2012	86.2	14.5 %
2013	98.1	13.9 %

Source: Data Monitor Research Store, 2009

According to Forrester research USA will have revenue \$229.1 by the end of year 2013 for online retail sales and 8% share of the total retail sales in volume.



\*Retail does not include auto, travel, and prescription drugs.  
Source: Forrester Research Internet Shopping Model, 12/08 (US)

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Source: Forrester Research, Inc.

Figure 8. US Online Retail Sales Will Grow At A CAGR Of 10% Through 2013<sup>4</sup>

<sup>4</sup> The figure is extracted from US Online Retail Forecast, 2008 To 2013, updated March 2009 by Patti Freeman Evans for eBusiness & Channel Strategy Professionals

If we consider apparel then the revenue for USA will be as follows:

Table 5. US B2C E-Commerce Apparel Sales (billions)

	2010	2011	2012	2013
Apparel	\$38.4	\$42.7	\$46.9	\$51.1

Source: Data Monitor Research Store, 2009

## CONCLUSION

Online retailing is at the beginning of the way and still it has a lot to go forward. After passing a decline in “new economy” now online retailing has grown strongly and as discussed it will continually expand its attitudes in business area (<http://www.oecd.org/sti/ict/broadband>). Nevertheless the situation which is forecasted for economy is not very far from current situation; therefore the competition for online retailers will be a challenge while half of population around the world will access to the globalized network. Comparing to the European and American Companies, Asian companies are still too young to figure out their success and mature European and American market can be a pathfinder to guide the young Asian market. For online retailing there are still lots of barriers which should be cleared such as secure payments, infrastructures and broadband connections. B2C online retailing especially in Asia can be a subject for study in future as the Asian countries are growing rapidly. When shortcomings in these countries especially China and India vanished from the development of e-commerce, their young companies can also be best practices and optimistically can expect, new success factors will be introduced in future from Asia's side.

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