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The Economics of Counterfeit Trade

Governments, Consumers, Pirates and Intellectual Property Rights

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Preface

The expansion of world trade has brought with it an explosive growth in counterfeit merchandise. Estimates put the world total for counterfeit products at about one half trillion dollars annually, although it is impossible to accurately determine the true size of the counterfeit market. What is known is that this illicit trade has infected nearly every industry from pharmaceuticals to aircraft parts. Software and music piracy are easy targets widely reported in the media. In 2007, the Business Software Alliance (BSA) estimated that 38% of personal computer software installed worldwide was illegal and the losses to the software industry were $48 billion worldwide. The Recording Industry Association of America (RIAA) reported a 58% increase in the seizures of counterfeit CDs. Overall, a wide range of industries agree that there is a severe problem with the protection of intellectual property rights (IPR) throughout the world, yet there have been virtually no attempts to describe all aspects of the problem.

This work aims to give the most complete description of various characteristics of the IPR environment in a global context. We believe a holistic understanding of the problem must include consumer complicity to purchase counterfeit products, tactics of the counterfeiters (pirates) as well as actions (or inaction) by home and host governments, and the role of international organizations and industry alliances. This book establishes the full environmental aspects of piracy, describes successful anti-counterfeiting actions and then prescribes measures IPR owners should take to protect their intellectual property.

While there have been many articles in the popular and business press that focus on counterfeit trade, there have been only a small number of books published on the subject that address the predicament facing nearly every industry in a dispassionate, intellectual manner. We believe this book fulfills a unique need for a thorough review of all aspects of the IPR problem.

This book is not targeted at consumers although we hope they will find it enlightening. This is a research-based book that can serve as the basis for further inquiries by academics, institutional researchers, and professionals in the international business and legal communities. We believe it should be a useful reference for government officials, managers, and law professionals who are combating counterfeiting as part of their everyday responsibilities in countries throughout the world.

This work is a result of our continuing interest in the subject of counterfeit products. Extensive travel to China and other countries or just walking the streets of New York reminds us that this is a pervasive problem. For about 10 years each of us has been working on various aspects of the problem and we have each published journal articles and delivered conference presentations based on the research we have been doing over that period. We would be remiss if we did not thank Victor Cordell for stimulating our interest in the subject and contributing to our early publications. In addition we would like to recognize the involvement of John Peters whose facility with statistics has been invaluable. Finally, we are grateful for the assistance of Stephen Stumpf, Fred J. Springer Chair in Business Leadership, for sponsoring the funding of research and conference presentations through the Villanova School of Business. Overall, it is evident from the preceding remarks and forthcoming acknowledgments that this book is a result of the inspiration and support of many colleagues. Nevertheless we accept complete responsibility for the text including any errors that may have inadvertently occurred.

September 2008

Peggy Chaudhry
Alan Zimmerman

Dedication by the Authors

Dr. Peggy Chaudhry
I would like to devote the book to my family. I want to recognize my husband, Sohail for his endless encouragement of my research endeavors. I sincerely acknowledge my parents, Dave and Evelyn, who always supported my career aspirations. Finally, I thank my children, Matt and Aeysha for giving me the motivation to succeed.

Dr. Alan Zimmerman
This book is dedicated to my family whose interest and help has been invaluable. First to my wife Lori for her unstinting encouragement. Also to the next generation: Craig, Dan, Howie, Karen and Matt and their respective partners. And the next: Alex, Abby, Emma, Hannah, Luke, Natalie, Owen, Phoebe, Sophia and Samantha. With this collective intelligence we can solve any problem.

Acknowledgments by the Authors

Dr. Peggy Chaudhry
I would like to express my gratitude to Alan Zimmerman, my co-author, who is an outstanding scholar and colleague—we successfully merged our vision for this book. I sincerely thank Jeffrey Snyder, Partner at Crowell & Moring, and Francis Sweeney, President, TDK USA, for their willingness to counsel me on the legal and global business realities of protecting intellectual property rights. Next, I give special thanks to my academic co-authors, Stephen Stumpf and Michael Walsh, who have been exceptional researchers on IP issues. Thanks to my sister, Anne Cadd for assisting us with graphic designs. I appreciate my reference librarian, Daniel Overfield, for his zealous aptitude to assist me with the research required for this book. I am grateful to Dean Danko, Associate Dean Ron Hill, and Kevin Clark, my chair, of the Villanova School of Business for instilling a research-centered culture that gave me the necessary support to focus on the book. I want to thank my assistant, Pat Cunningham for her exceptional support. Finally, I must bestow gratitude to former graduate and undergraduate students for expressing such enthusiastic interest in my intellectual property research—I have learned from you also.

Dr. Alan Zimmerman

First I would like to acknowledge my dedicated co-author, Peggy Chaudhry, no doubt one of the leading scholars in this field, who made this process so pleasant. We have been working for several years on this important problem and have always helped each other do better work. Special thanks to Adam Grabowski, my undergraduate research assistant whose dogged determination helped unearth many interesting sources. Thanks to Jean Como of the SEEK program at the College of Staten Island for providing me with such an excellent researcher. I am also grateful to Siân Croxon, Partner at DLA Piper UK LLP, who so generously gave of her time to improve this work. Special recognition goes to Wilma Jones and her staff at the CSI library, especially Lisa Holland who worked very hard on finding the most obscure references. I would also like to acknowledge Laura Nowak, chair of the Business Department at City University of New York -- College of Staten Island and my other colleagues in the department for their encouragement. Thanks also to my current and past students at the college who have shown consistent interest in the counterfeit goods problem.

Contents

Chapter 1
Introduction

1.1 Overview

The desire to own a prestigious brand seems to have spread across the world. But multiple factors conspire to prevent most consumers from acquiring a real Prada handbag or Rolex watch. Many search for black-market vendors in places like Chinatown in New York City, venturing like Toth (2007) down dodgy alleys into dingy basements to find fakes at nearly unbelievable prices. Others find counterfeit look-alikes on the Internet when entering the word "replica" in Google yields nearly 14 million hits. (Replica is the code word on the Internet for counterfeit product.) On the web, it is easy to buy lookalike Rolex watches, Armani sunglasses, Guerlain perfume or the ubiquitous Vuitton handbags complete with phony logo. But things may be changing. On 1 July 2008 a French court ruled that eBay was to pay the owner of the Vuitton brand, LVMH, some €40 million ($63 million) for failing to prevent counterfeit products being sold over its website (Tait, 2008). On the other hand just two weeks later a New York court ruled against Tiffany & Co. in a similar case. This decision essentially frees eBay from responsibility for assuring that products offered on its site are not counterfeits (Stone, 2008).

But counterfeit products are not limited to designer perfumes, handbags and other highly visible consumer items. Software, DVDs and music are vulnerable to copying. Microsoft claims up to 40% of its software is pirated on a global basis (Anti-counterfeiting amendments, 2004). There is also a large market for phony pharmaceuticals and the results have been catastrophic in various countries. The World Health Organization (2006) estimates the sale of counterfeit drugs at approximately $40 billion per year now and growing to $75 billion by 2010. Industrial products are not immune to piracy. The Organization for Economic Cooperation and Development [OECD] (2007c) reports that more products than ever are being counterfeited and the types are expanding. Some authors have identified counterfeit sewer pumps, aircraft bolts and helicopter blades creating major problems for purchasers (Hopkins, Kontnik, & Turnage, 2003; Naim, 2005).

Product counterfeiting is a major problem for brand owners in nearly every country. Many stakeholders are injured by the widespread availability of pirated products. The beneficiaries of these products on the one hand are innocent consumers

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who can show off their Rolex or Prada to their friends, even though the movement of counterfeits into non-traditional goods, such as pharmaceuticals, can place an unsuspecting consumer at risk. On the other hand beneficiaries also include some very nasty terrorists.

While there have been innumerable articles in the popular and business press focusing on counterfeit trade, there are only a handful of books and research articles published on the subject and far fewer that address the counterfeit predicament in a dispassionate, intellectual manner. This book examines the full scope of the problem. We believe the book fulfills a unique need for a thorough review of all aspects of the world intellectual property rights (IPR) situation and is the first work based on extensive research, both secondary and primary.

1.2 Definitions

According to the World Intellectual Property Organization (WIPO) intellectual property "refers to creations of the mind: inventions, literary and artistic works, and symbols, names, images, and designs used in commerce" (World Intellectual Property Organization [WIPO], (2007a). For clarity it is important to provide definitions of particular forms of IPR: copyrights, patents and trademarks.

The US Department of State issued a glossary of intellectual property terms in January 2006. Following are the definitions provided in this glossary (United States State Department, 2006).

Copyright: "an exclusive right granted or conferred by the government on the creator of a work to exclude others from reproducing it, adapting it, distributing it to the public, performing it in public, or displaying it in public. Copyright does not protect an abstract idea; it protects only the concrete form of expression in a work. To be valid a copyrighted work must have originality and possess a modicum of creativity." WIPO (2007a) details the kinds of endeavors covered by copyright: "literary works such as novels, poems, plays, reference works, newspapers and computer programs; databases; and films, musical compositions, and choreography; artistic works such as paintings, drawings, photographs and sculpture; architecture; and advertisements, maps and technical drawings."

Patent: "(in the United States) a grant by the federal government to an inventor of the right to exclude others from making, using, or selling the invention. There are three different kinds of patents in the United States: a utility patent on the functional aspects of products and processes; a design patent on the ornamental design of useful objects; and a plant patent on a new variety of living plant…Once the patent expires, the public is entitled to make and use the invention and is entitled to a full and complete disclosure of how to do so." WIPO (2007a) simply says: a patent is "an exclusive right granted for an invention, which is a product or a process that provides, in general, a new way of doing something, or offers a new technical solution to a problem." Their definition goes on to say that the protection for the invention to the owner of the patent is granted for a limited period, generally 20 years.

Trademark: The United States Trademark Act (Title 15, US Code) (n.d.) gives a succinct legal definition, "the term 'trademark' includes any word, name, symbol, or device, or any combination thereof used by a person, or which a person has a bona fide intention to use in commerce … to identify and distinguish his or her goods, including a unique product, from those manufactured or sold by others and to indicate the source of the goods, even if that source is unknown."

The US Code also identifies trademark counterfeiting as the act of producing, selling or distributing a product with "a spurious mark which is identical to or substantially indistinguishable from a registered mark." Also included as trademark counterfeiting is trademark infringement which means using marks "likely to cause confusion, or to cause mistake or to deceive" (Abbott & Sporn, 2002; United States Trademark Act, n.d.). The US State Department defines counterfeiting as "the act of producing or selling a product containing a sham mark that is an intentional and calculated reproduction of the genuine mark," and defines piracy as "the act of exact, unauthorized, and illegal reproduction on a commercial scale of a copyrighted work or of a trademarked product" (United States State Department, 2006).

In this book, the definition given by Cordell, Wongtada, and Kieschnick (1996) will be used: "Any unauthorized manufacturing of goods whose special characteristics are protected as intellectual property rights (trademarks, patents and copyrights) constitutes product counterfeiting."

A distinction between "knockoffs," gray goods and counterfeit goods must be made. Knockoff products may seem the same as branded products, but they do not abuse the copyrights, patents or trademarks (intellectual property) of any manufacturer. Gray goods are products which are offered by the owner of the intellectual property. These products are genuine and legitimate, but have found their way into unintended markets through channel diversion. For example, in India, there is currently a thriving grey market of Apple products. An authorized iPod dealer charges $440 for a 30-GB video iPod, but the gray marketer is able to offer the same product for $280 because it has been smuggled into the country from various locations such as Singapore and Dubai. Gray markets are created because of product pricing differentials used by international marketers to meet the needs of particular markets. When a product is shipped, without authorization from the manufacturer, from a low-price market to high-price market, the gray goods problem rears its head. While gray goods are a distribution channel problem for international managers, they are not the subject of this book.

1.3 Roadmap of the Book

Chapter 2 reviews the growth of counterfeit trade, beginning with the history of counterfeiting which stretches back 2,000 years or more to the development of early marks used to identify manufacturers. Next, the chapter identifies the stakeholders who are harmed by counterfeit product. Later on, an attempt is made to identify the actual size of the counterfeit product market. Numbers once developed have been

repeated incessantly yet a careful examination shows that no estimate of the size of this problem can be made with confidence. Customs seizures of counterfeit product account for an extremely small percentage of the estimated market. A summary of the reasons for the growth in product counterfeiting follows.

Chapter 3 focuses on the main sources of counterfeit goods. While OECD (2007a) data identifies almost 150 countries as sources for these products, a few nations provide most of the pirated products. China is by far the leading exporter while Russia, as well as some other Asian and Latin American nations are also big offenders. The so-called BRIC countries (Brazil, Russia, India and China) are often mentioned as the key countries for counterfeit product trade. In this chapter specific descriptions are provided about particular countries based on the findings from various information sources. Finally, notorious extra-country markets and those within countries are identified.

Chapter 4 offers a conceptual framework developed by the authors for the IPR environment. As determinant items it includes the level of consumer complicity, the level of pirate activity, and the level of host country enforcement. These major forces create the IPR environment in a particular market. Once a firm determines how risky that environment is, it can take action to combat IPR problems. These actions are directed at consumers, distribution channels, host governments, international organizations, and pirates. Some actions are also company internal. The remainder of this chapter describes and evaluates each of these potential actions and describes primary research, conducted by the authors, of the perceptions of managers related to the IPR environment in particular markets. Here we find that managers do not change their strategy in high versus low complicity markets. On the other hand where managers perceived high levels of piracy and/or a low level of enforcement of IPR rights they change their strategy. One very interesting finding from this chapter is that managers do not change their plans for future commitments in markets where the IPR environment is not ideal. The strategic importance of a particular country, not the IPR environment, is uppermost in their minds when making future investment plans for particular markets.

In Chapter 5 consumer complicity is examined in more depth. It is obvious that consumers' willingness to purchase counterfeit product is a critical factor in the growth of this illicit trade. The authors provide primary research describing intrinsic and extrinsic determinants affecting consumers' willingness to buy counterfeit product.

Chapter 6 uses social marketing concepts as a basis for examining anti-counterfeiting marketing techniques and provides several examples of the various approaches recommended in the social marketing literature adapted to educating consumers about pirated product. This chapter provides a number of illustrations of actual advertisements and also describes the blogs rebutting anti-counterfeiting advertising. It is not clear whether these anti-counterfeiting marketing techniques have a measurable effect on consumer attitudes toward counterfeit product. Previous research conducted by the authors reveals that managers tend to see educating the consumer as relatively ineffective.

The next chapter (Chapter 7) looks at IPR enforcement in the EU and the US. The complex array of US agencies involved in protecting IPR is described as well

as the many directives established by the EU governing some aspect of IPR. The new US program called STOP! *(exclamation point included)* is detailed and a diagram showing the major players in US IPR enforcement is incorporated. The nine EU directives are described in detail in this chapter as well. The relatively new US–EU action strategy for the enforcement of the IPR is explained to outline one of the new co-sponsored strategic anti-counterfeiting measures. As described later in the book, the enforcement of strong anti-counterfeit legislation is seen by managers as the key to improving the IPR environment. It is not clear how effective these initiatives have been.

Chapter 8 describes the plethora of organizations focusing on some aspect of intellectual property rights. This is in essence a directory of the many multilateral organizations as well as business associations looking at the IPR problem. These institutions range from the World Trade Organization's TRIPS to the OECD to the IACC, the BSA and the IFPI. Each of these agencies has some interest in IPR issues and this chapter describes the particular focus of each organization.

In Chapter 9 special attention is given to the People's Republic of China. As noted China is a leading exporter of counterfeit product and the growth of these exports has kept pace with the rapid development of the Chinese economy. This chapter quickly reviews China's economic intensification and estimates the size of the counterfeit product market in China. In discussing the history of IPR in this country, the chapter describes the reasons for the lack of Chinese consumer and business manager concern for the concept of intellectual property rights. While many new laws have been written to protect patents, trademarks and copyrights, enforcement is spotty at best. This chapter reveals the reasons for the poor enforcement and describes the actions taken by some firms to protect their own IPR in this hostile country environment.

The use of the Internet to distribute pirated products is the focus of Chapter 10. Here we see that the Internet has actually become one of the largest suppliers of counterfeit product, nearly equaling China and Italy as a source. As described in the opening of this chapter, eBay has provided a convenient venue for the sale of phony product and was only recently called to task for its lack of policing the fake items sold on its site. Here again the problem of consumer complicity is critical since a large percentage of consumers do not see purchasing counterfeit product on Internet auction sites or downloading copied music or software as harmful. This chapter also describes several operations conducted by the US government which attempted to punish copyright infringement. Efforts to precisely measure the size of the Internet piracy market have not been successful. It appears that Internet piracy will continue to grow.

Chapter 11 strengthens the idea that IPR owners must enforce their own property rights. As we have seen, despite the best efforts of many government and nongovernment institutions, piracy continues to grow. This chapter reviews the multitude of advice given by various researchers and authors, nearly all of which is not based upon primary research with managers. A summary of all the earlier recommendations is given. Here a description of some of the most interesting technological approaches to fighting piracy is included. The chapter then reports results from primary research conducted by the authors describing managers'

perceptions of the least effective and most effective actions used to fight pirates. Finally the chapter recommends a seven-point action program based upon this research that any firm can use to fight counterfeiting of its products.

The final chapter summarizes the earlier chapters and looks to the future of the counterfeit goods problem. This chapter reviews the thinking of some observers regarding the expected developments in the world IPR environment and closes with thoughts from the authors that includes a succinct list of challenging research questions which remain to be addressed.

Chapter 2
The Global Growth of Counterfeit Trade

2.1 Introduction

Product counterfeiting is a well-known problem, one that has been with us for a very long time. Trademarks go back to ancient times and where there are trademarks counterfeiting soon follows. Recently more attention is being paid to fighting the problem. It would seem the first logical step would be to determine the size of the counterfeit market. But this is more difficult than it appears to be. First, no direct measurement of counterfeit trade can be undertaken, since by definition this is an illegal activity. Customs seizures are such a small percentage of overall trade that it is impossible to draw conclusions from them. Many organizations have attempted to estimate the size of the counterfeit market and each of these attempts exhibits major flaws. This chapter examines the history of counterfeiting, reviews the attempts at measurement, describes the products most often counterfeited and the constituencies hurt by the practice. Finally the chapter describes the seven major drivers of the growth in counterfeit trade.

2.2 History of Counterfeiting

Counterfeiting has been with us for at least 2,000 years. Pliny the elder described counterfeit coins as popular collector's items for Romans (Barry, 2007). The counterfeiting of coinage was part of the normal exchanges involving smuggling, minting privileges, alchemy and foreign trade in Genoa in the sixteenth and seventeenth centuries. Goldsmiths, soldiers, bankers, convicts on galleys and even priests were involved in developing counterfeit coinage. A most famous example of counterfeiting occurred in Renaissance France when, over a 10-year period, supporters of the Pope directed parallel minting to undermine official coinage issued by a Protestant king. Since "official counterfeiting" was reserved for princes the penalties for doing this were rather severe and included being boiled alive (Gillard, 1990; Grendi, 1994).

But product counterfeiting may even be older. Babylonian and Egyptian priests placed inscriptions from earlier civilizations on monuments to increase their proceeds

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and legitimacy (Hopkins, Kontnik, & Turnage, 2003). The advent of trademarks used to identify manufacturers of particular products certainly created the opportunity for counterfeiting. Some form of trademark has probably been in use since ancient times. Marked pottery appeared in China 4,000–5,000 years ago and Greek vases identified both the maker and also the wholesaler of the item. Merchant's marks appeared in about the tenth century. These were used to prove ownership of goods. In Japan lumber was marked when tied onto a raft before being sent down river (Ono, 1999).

Roman builders indicated the maker of bricks and tiles by stamping an identifying mark on them. Marcus Sestius, a Roman wine merchant, apparently lost a large shipment of branded wine jars when his ship went down off the coast of Marseilles probably in about 230 BC (Rokicki, 1987). During the first three centuries of the Roman Empire oil lamps were made using the FORTIS brand-name. Many artifacts with this name have been found which may indicate widespread product copying at the time (Winterfeldt, Dow, & Albertson, 2002). Pliny also warned of counterfeit opals made of glass (Sidebotham, 1986). While there is no record of legal enforcement of trademarks during Roman times it appears that the Romans punished abuses through their commercial institutions (Paster, 1969).

During the Middle Ages guilds required craftsmen and merchants to affix marks which distinguished their products from low-quality imitations. The main function of these marks was to assign responsibility for inferior products (Ono, 1999). By the thirteenth century trademarks were common in England. In fact a compulsory marking law required that a baker puts his mark on every loaf of bread and goldsmiths were required to place marks on their work. During this time trademark infringement became a crime and in some cases rather draconian capital punishment was applied to abusers (Abbott & Sporn, 2002). Stolte (1998) identifies the earliest trademark infringement action in England, Sandforth's Case, heard in 1584. The plaintiff had manufactured woolen clothing marked with the letters J. G. and a sign called a tucker's handle. The defendant had made similar clothing which were "ill, insufficient and unmerchantable; and deceitfully marked…J.G."

In the Aztec Empire some dishonest dealers sold counterfeit cacao beans. Honest sellers divided beans into piles according to their origin. But the counterfeiters used artificial coloring to sell inferior beans or even disguised worthless amaranth dough or avocado seeds with cacao hulls (Rust, 1999). Fifteenth century Chinese painters accommodated forgeries by other artists (Alford, 1995). In the seventeenth century Domingo Navarette, a Spanish priest, noted the Chinese ability to copy products. He complained that the Chinese had "imitated to perfection whatsoever they have seen brought out of Europe" (*The Economist* 2003).

Product counterfeiting came to the attention of the US government more than 100 years ago. Curtis (1889), reporting for the government, wrote "the superiority of American [cotton] goods is so great that the Manchester [England] mills send few goods to South America that do not bear forged American trademarks." In his report, Curtis quotes a member of the New York law firm of Smith, Hogg and Gardner as having recovered damages and costs in Manchester (UK) "although we have great difficulty in definitely locating the forgeries."

Of course the United States has not been innocent of piracy. It has been claimed with some accuracy that the Industrial Revolution in the United States began with significant help from an industrial spy, Samuel Slater. The English textile industry grew rapidly based on the invention of the water spinning frame by Richard Arkwright. The British wanted to be sure that this invention never reached America since it was the world's largest exporter of cotton but had no manufacturing industry of its own. By 1774 it was illegal for an English textile worker to share technological information or to leave the country. Slater, born in England in 1768, started as an apprentice in a cotton mill owned by a former partner of Arkwright and eventually became a supervisor. In America both state governments and entrepreneurs were offering rewards for machines like Arkwright's. After reading in a Philadelphia newspaper of a £100 bounty paid to the designer of an inferior cloth-making machine, Slater came to New York in 1789. He was able to reconstruct the entire mill from memory and eventually, with the support of a Rhode Island merchant, built the first water-powered cotton spinning mill in America. (BBC, n.d.; PBS, n.d.). Although creating a system of patents and copyrights was a priority for George Washington, the Patent Act of 1793 did not provide protection for foreign inventors. This meant that an American could copy any product patented in a foreign country and then apply for a US patent (Choate, 2005). In the country's infancy product copying as well as literary piracy were common. Charles Dickens, visiting the United States in 1842, was irate when he found many pirated copies of his novels in Boston bookstores. In nineteenth century America it was common to find counterfeit foreign wines, gloves and thread (Mihm, 2007).

2.3 Measuring the Counterfeit Market

Attempting to measure the effects of counterfeiting is extremely difficult. Discovering and measuring output is a real challenge. As we will see below, there is a great deal of variation in the estimate of the damages caused by counterfeit products. This is understandable given the illegal nature of this activity. Only surrogate indicators such as seizures by police or customs authorities are available. In addition, there is no agreement on factors that should be considered when calculating the scale of counterfeiting. Should the calculation include sales lost by specific brands and at what prices, damage to brand equity, total sales of counterfeits, or some combination of these factors (Green & Smith, 2002)? In a recent study the OECD (2007b) states "the overall degree to which products are being counterfeited and pirated is unknown, and there do not appear to be any methodologies that could be employed to develop an acceptable overall estimate."

The existence of a large counterfeit market takes its toll in many ways. The harmed constituents are identified in Fig. 2.1. Obviously consumers may be harmed by using inferior products. This harm can be as minimal as the loss of a few dollars or disappointing product performance or as important as serious damage to physical well-being. The World Health Organization [WHO] (2006) estimates that between

Fig. 2.1 Damage from counterfeit goods market (diagram and this section based on Globerman, 1988; Hopkins et al., 2003; OECD, 2007b, 2007c; Sridhar, 2007)

10% and 30% of medicines on sale in developing countries are counterfeit. Recent bad news coming from China makes the problem of counterfeit goods a matter of life and death. In less than a week cough syrup containing ethylene glycol was identified as responsible for the deaths of hundreds of people in Panama and the Dominican Republic, toothpaste tainted with the same chemical had been found on three continents (Castle, 2007) and a cell phone exploded killing a 22-year-old man in western China. Phone manufacturers Motorola and Nokia blamed counterfeit batteries (Barboza, 2007). These episodes followed the tainted pet food problem which surfaced in the United States in the spring and summer of 2007.

Home countries of firms suffering from imitated products lose exports, taxes and other revenues as well as employment. Even host countries (here identified as the source of the counterfeit goods) while they may experience some short-term gains in consumer welfare will probably eventually suffer a reduction in foreign direct investment since firms may fear their products may be copied once they are manufactured or introduced into a particular market. In addition these host countries may experience a growth in the underground economy, less legitimate employment, more employment at substandard wages and reduced competitiveness because of a heavy reliance on counterfeit products. There is some evidence that exports will be reduced from countries that are known for substandard goods particularly in pharmaceutical products (OECD, 2007c). Host countries also incur a loss of tax revenues and additional costs for anti-counterfeiting activities. In some cases corruption is more widespread with the growth of a large counterfeit market.

Both home and host countries may also suffer from environmental effects first from the waste of destroying pirated goods and second because substandard products may have negative effects. For instance, the use of counterfeit fertilizers caused serious damage and destruction of harvests in large areas in China, Russia, the Ukraine and Italy. Various effects of pirated products can cause risks to public health and even loss of confidence in the governments themselves.

For purposes of this book the losses to the owners of the intellectual property interests us the most. Obviously these firms may suffer loss of revenues from royalties, sales and profits as well as increased costs for policing and fighting pirates. These costs may reduce organizational growth. In addition they may suffer from declining customer loyalty through brand dilution. Because of widespread copying, some firms may cut their investments in research and development thereby decreasing innovation. Smaller firms face displacement of management time from growing the business to fighting the counterfeiters. Legitimate wholesalers and retailers are also harmed by counterfeit goods. First they lose revenue to the fakes. But these channel members may also be put in a difficult position when consumers ask for repairs or replacement of counterfeit products. The end result may be a loss of confidence in these middlemen and ultimately in the brand. One additional cost must be considered. Counterfeiting is a major funding source for organized crime and terrorist organizations like Hezbollah and those who perpetrated the Madrid train bombings in 2004 (Anti-counterfeiting amendments, 2004; "Counterfeit goods linked," 2007).

At an Eastern Economic Association Conference, an economist even questioned the idea that there *were* losses associated with counterfeiting. Her point was that consumers who buy fakes are a market segment that purchases counterfeit because of their inability to afford the genuine product. Therefore, buyers in that class do not really represent lost sales. Those consumers would not have bought the genuine product anyway. Recently *The Economist* ("Look for the silver lining," 2008) advised brand holders to "look for the silver lining" of piracy. Companies can find out which songs are most popular by determining those most often shared on peer-to-peer networks. Or a software firm may establish itself as the standard since the initially used pirated software creates a future market for the real thing. But even this article advises that IPR owners should fight for their rights even if sometimes they can use the counterfeit product to their advantage. As we have seen, getting an accurate measurement of counterfeit goods is difficult as well as controversial.

2.4 The Growth of the Counterfeit Goods Market

There is no doubt the counterfeit market is growing but it is not clear what the real magnitude is. In 1982 the International Trade Commission estimated the worldwide sales of counterfeit goods at $5.5 billion (Abbott & Sporn, 2002). Since that time many estimates of world counterfeit goods markets have been

made. In 1984 the International Anti-Counterfeiting Coalition estimated the worldwide market at $25–30 billion (Stern, 1985). By 1996 the *Economist* ("Not real, but," 1996) even found a source that gauged the market at $1 trillion. In 2001 the International Chamber of Commerce estimated that 5–7% of world trade was in counterfeit goods and that the counterfeit market was worth $350 billion. This 5–7% figure initially was used by the Chamber in 1997 which even then called the percentage only a "general assumption" (Bialik, 2007). As the OECD report (2007b) politely puts it "the metrics underlying the ICC estimates are not clear." The OECD report says that the ICC estimates "reflect judgments that are not supported by clear data." In 2006, the US government estimated the global market value of the counterfeit industry at $500 billion with a growth rate of 1,700% over the past 10 years (Chaudhry, 2006). World estimates seem to have coalesced around $500–600 billion annually (International AntiCounterfeiting Coalition [IACC], 2007; Punch, 2005). This estimate includes all forms of intellectual property rights violations involving products and services and sales within and across country borders. The OECD (2007b) puts the worldwide volume of tangible counterfeit *products* at about $200 billion, an amount larger than the GDPs of 150 countries. However even the OECD estimates are based on incomplete information. The OECD (2007c) itself says, "available information on counterfeiting and piracy falls far short of what is needed for robust analysis and policymaking" and the organization makes a series of detailed recommendations for the improvement of data collection. According to Bialik (2007) the OECD's estimate was originally extrapolated from customs seizures based on reports from 45 countries who responded to requests for data with enough information to be useful for analysis.

The amount of counterfeit product intercepted by Customs Services around the world is a tiny percentage of the overall estimate of the worldwide counterfeit goods market. The OECD (2007c) gives the value of seizures by Customs Services in 35 countries reporting this particular data at about $769 million in 2005, representing 0.01% of total imports for these countries. Nevertheless, the received data were extrapolated to the non-responding countries. Researchers used a factor of 5% for frequently pirated goods in countries where there are a large number of pirates. Using this factor, researchers calculated a total of $100 billion then doubled that number to account for "statistical variability in their model" (Bialik, 2007). Yet searching "OECD counterfeit goods report" on Google results in 1,320,000 hits, most of which are unquestioningly repeating the $200 billion figure. Organizations as diverse as the *BBC* and the *Sydney Morning Herald* include this figure prominently in their stories. Another example of this may be found in an organization called Havocscope. This organization puts forth a global estimate for counterfeit and piracy of $527 billion (Havocscope, 2007) and estimates the total availability of counterfeit products in the United States at $290 billion. However even a cursory review of this organization's website reveals problems with the numbers. Estimates are developed from published resources such as newspapers and government studies. The organization also states that "the manner in which the original source determined the figure is not always

available" and "the numbers will include a high level of uncertainty. A majority of the figures will be based on estimates and will be difficult to verify."

In Canada the cost of counterfeiting was estimated at $30 billion annually. This figure, used repeatedly by many, including US Ambassador David Wilkins in a March 2007 speech, originated with the Royal Canadian Mounted Police (RCMP) in 2005. Careful research by Professor Geist (2007) of the University of Ottawa Law Faculty revealed that the $30-billion number was derived from two main sources: an IACC claim that 20% of the Canadian market is made up of counterfeit product and an estimate that 3–4% of Canadian two-way trade consists of counterfeit product given by the chief economist for the Canadian Manufacturing and Exporters Association in 2005. The recent OECD estimate placing the cost of global counterfeiting at $200 billion certainly calls into doubt the formerly accepted $30 billion Canadian figure.

Researching the size of the counterfeit market reveals that the same numbers from very few sources are repeated over and over. In truth it is virtually impossible to determine the real size of the worldwide counterfeit product market. But despite the uncertainty of measurement methods, it appears that product counterfeiting is significant and growing. (S. Croxon, personal interview, October 19, 2007; IACC, 2007; United Nations Economic Commission for Europe [UNECE], 2007; United States Immigration and Customs Enforcement [ICE], 2007).

2.5 Effects on the US

There is some confusion as to the true effect of counterfeit product upon US firms. As long ago as 1994 estimates of US losses stood at $200 billion per year (Nill & Shultz, 1996). The US Customs service recently estimated that the US economy was losing between $200 and $250 billion per year and a total of 750,000 American jobs because of product counterfeiting (ICE, 2007). It is not clear whether these figures are meant to refer to lost sales on a worldwide or domestic basis. Since many US firms achieve up to 50% of their sales in overseas markets it seems reasonable to believe that this figure most likely includes all worldwide sales. Certainly in order to agree with the OECD estimate of $200 billion on a worldwide basis, the effect on US markets would have to be far smaller.

Over the years US Customs has generally increased the number and amount of counterfeit product seizures. Figure 2.2 shows the dollar volume of seizures made from 1994 through 2006.

In 1994 US Customs seized about $38 million worth of counterfeit products. Seizures increased to $99 million in 1999 and then declined in 2000 and 2001 only recovering to $99 million once again in 2002. Customs made record seizures of counterfeit product in 2006, confiscating nearly 15,000 different shipments valued at about $155 million. This compares favorably with the 8,000 seizures with a value of $93 million made in 2005. But a recent study by the US Government Accountability Office [GAO] (2007) suggests that the percentage of the US market

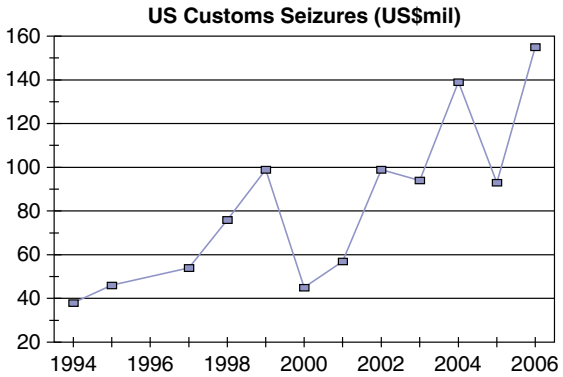

Fig. 2.2 US customs seizures (US $ mil)

accounted for by counterfeit product may be much smaller than has been previously thought. Inspecting 287,000 randomly selected shipments from 2000 to 2005 the GAO found counterfeiting violations in only 0.06%. The GAO also stated that customs seizures in 2005 amounted to only 0.0017% of the value of goods in product categories likely to be subject to counterfeit, for the total of about $93 million. The GAO analyzed all products imported into the United States had developed a list of IP-related product categories. For 2005 imports of these products totaled approximately $555 billion. This list was based on products where IP-related seizures had been made over the last 5 years. It hardly seems possible that the US level of counterfeit goods would reach nearly 40% of all imported IP-related products which would be the case if the $200 billion figure is used.

Until recently, the number of seizures varied less than the dollar value. In 1997 customs stopped 1,943 shipments of pirated goods. This increased to more than 3,000 in 1998 and moved steadily up to over 8,000 in 2005. This can clearly be seen in Fig. 2.3.

The GAO study raises questions about the usability of the customs seizure data as an indicator of the size and growth of the counterfeit market. First it appears that enforcement varies widely between ports with some ports finding 100 times the amount of counterfeit products as other ports. Only 10 ports accounted for a quarter of seizure value and 84% of penalty cases since 2001. The pressure to move product through ports and airports is very high especially since imports have grown from about $1.2 trillion in 2001 to about $1.7 trillion in 2005, and shipments filed with customs up are about 25% over the same period. In fact the number of seizures has increased because of the focus on smaller value shipments, while the jump in value is partially accounted for by one large seizure of 77 cargo containers of fake Nike Air Jordan shoes with a value of about $19 million, representing about 12% of total domestic seizure value in 2006 (GAO, 2007).

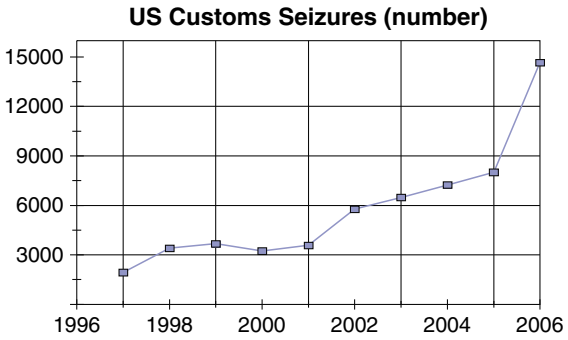

Fig. 2.3 US customs seizures (number). Source: US Customs and Border Protection, L.A. Strategic Trade Center

2.6 Products Counterfeited

Products that are most vulnerable to product counterfeiting fall into four categories according to Jacobs, Coskun, and Jedlik (2001):

- Highly visible, high volume, low tech products with well-known brand names such as toothpaste and chocolate
- High-priced, high-tech products such as computer games, CDs, DVDs, auto and airplane parts
- Exclusive prestige products such as clothing, apparel and perfume
- Intensive R&D, high-tech products such as pharmaceuticals and some industrial products

More contemporary research indicates that the types of products being counterfeited are expanding. The OECD (2007f) finds a shift from high-value luxury items to common products and an expansion of the range of pirated luxury products. Their list of products subject to intellectual property infringement includes all the product types identified by Jacobs et al. but also chemicals and pesticides, electrical components, food and drink and agricultural products, tobacco products, furniture, sporting goods and a variety of other items including qualification certificates. In the OECD study (2007c) 13 countries reported that the scope of products counterfeited was expanding rapidly and 16 other countries said the range was expanding steadily.

Naim (2005) also supplies an exhaustive list. He identifies the Chery QQ, made in China, as an automobile which has the look and feel of the Chevrolet Spark. He also describes forgeries of American-made sewer pumps and Italian valves. Hopkins et al. (2003) tell of counterfeit aircraft bolts as well as helicopter blades.

In the US, types of products seized vary from year to year but wearing apparel and footwear have often topped the list since 1982 (Stern, 1985). The Customs Service (2005) reported that wearing apparel, handbags, and wallets accounted for

Table 2.1 FY 2006 top IPR commodities seized

Commodity	Domestic value	Percent of total
Footwear	$ 63,445,619	41
Wearing apparel	$ 24,320,976	16
Handbags/wallets/backpacks	$ 14,750,201	9
Computers/hardware	$ 14,287,989	9
Consumer electronics	$ 7,057,034	5
Media	$ 6,965,156	4
Headwear	$ 3,257,963	2
Health Care	$ 3,092,919	2
Watches/parts	$2,832,364	2
Pharmaceuticals	$2,298,694	1
All other commodities	$13,060,321	8
Total FY 06 domestic value	$155,369,236	
Number of seizures	14,675	

Source: US Customs and Border Protection, L.A. Strategic Trade Center

about a third of the seizures. In 2006, these products accounted for about 25% of seizures, while footwear accounted for 41% of confiscated products and climbed into first place. In previous years, media (motion pictures on video or DVD, computer software and music), cigarettes and consumer electronics accounted for a much larger share of customs seizures. Table 2.1 describes the latest US government seizures.

Recent data from the European Union (European Commission, 2008) show similar patterns. While footwear is not accounted for in a separate category, 64% of the counterfeit product cases registered by Customs in EU member countries related to clothing and accessories. Included in this category, 25% of the cases concerned ready-to-wear clothing, and 26% accessories such as handbags and sunglasses. Watches and jewelry accounted for 12% of cases while CDs and DVDs accounted for 6%. Other commodities also added up to 6%. As in the US, medicines accounted for 1% of these cases.

Software is particularly vulnerable to copying. In testimony given to a U.S. House of Representatives' subcommittee, a senior manager of Microsoft in charge of fighting counterfeits stated that 25% of software used in the United States and 40% used worldwide is pirated. In parts of Asia the piracy rates reach 90%. Such widespread copying amounts to $13 billion in annual losses from counterfeiting for the software industry. Microsoft alone claims annual seizures of nearly $2 billion in counterfeit products (Anti-counterfeiting amendments, 2004). The FBI, in a joint effort with Chinese authorities, recently arrested 25 people and seized more than $500 million worth of counterfeit Microsoft and Symantec software being produced in China and distributed throughout the world (Barboza & Lohr, 2007).

The sales of counterfeit drugs amounts to nearly $40 billion and will be rising to $75 billion by 2010 (WHO, 2008). Counterfeit drugs take a heavy toll. A healthy 22-year-old Argentinean woman was given iron injections to cure her mild anemia.

In December 2004 she died of liver failure after receiving these injections. It was determined that she had been given a toxic counterfeit but the authorities were unable to determine the source of the product because of falsified paperwork. A recall was begun but the fragmented distribution system made it impossible to recall all of the harmful product. In May 2005 another woman died (WHO, 2006).

2.7 Large and Small Firms Affected

Both large and small firms are fighting against unauthorized copying of their products. An example on the smaller end is Heelys, a rapidly growing firm based in Carrollton, Texas. The company manufactures the popular sneakers that incorporate wheels in the heel. The product has taken off with sales increasing over 250% from first-quarter 2006 to first-quarter 2007. With the tremendous growth, total sales for fiscal 2006 reached about $188 million. Heelys employs less than 50 people, and had arranged for manufacture of their products in an exclusive relationship with a firm in South Korea. Substantial growth required that they add suppliers, so the product is now made in China as well. As small as the company is, with limited sales of about $17 million outside the United States, Heelys faces challenges to its patents and intellectual property. For example, one Korean firm was selling a one-wheel roller shoe called "Heatys" (Heelys, Inc., 2007a, 2007b; D. J. Phillips, 2007). Since 2002 Heelys has been fighting counterfeits in China. Despite a ruling from the Chinese government that two factories were violating Heelys' patents, a year passed before the government took action. Moreover, this delay was followed by minimal corrective action, amounting to confiscation of just a few cases of counterfeit shoes and a promise not to make any more copies (Yung, 2006).

At the other end of the scale lies Starbucks, a firm with more than $8.5 billion in sales and nearly 146,000 employees. Starbucks has been fighting to protect its trademark around the world. In Russia the firm regained its right to use its brand after a favorable ruling against a "trademark squatter." Anyone visiting Shanghai will see not only a number of Starbucks locations, but also copycats of every kind. One Shanghai coffee house was using the name Xingbake, a clever knockoff of the Starbucks name. In Pinyin "xing" means star, and "bake," pronounced bah-kuh, sounds like bucks. Thus, the coffee house name replicated the Starbucks brand name using a combination of Chinese characters and sound. Starbucks sued in 2003, asserting that its trademark had been registered in China since 1996. In early 2006, a Shanghai court ordered Xingbake Café to discontinue the use of their version of the Starbucks name, and required that it pay Starbuck's 500,000 Yuan, equivalent to about $62,000, in damages. This was the first ruling of its kind under a 2001 Chinese law (Noon, 2006). Few firms have been successful in legal proceedings in China. The Walt Disney Co. was the first to receive damages when a Beijing Court ruled in 1999 against Chinese companies for their production of children's books based on Disney's animated films. Disney received a $77,000 judgment (Faison, 1995). Nike, a $30 billion firm, has also been fighting counterfeits for years. Last

year, the German customs department seized what could have been the largest cache of counterfeit goods - one million pairs of phony Nike sneakers, in a total of 117 shipping containers worth nearly $500 million ("Counterfeit Sneakers," 2006). After breaking up a large counterfeit market for their products in the Ukraine, Procter & Gamble found that 43% of hair care products and 23% of laundry products branded with their name were actually counterfeit (UNECE, 2007).

A particularly brazen case of counterfeiting was discovered in early 2006. Managers at the Tokyo headquarters of NEC learned that pirated keyboards, CDs and DVDs were on sale in Beijing and Hong Kong. All the products were branded NEC. After a 2-year investigation in cooperation with governments in China, Taiwan, and Japan, the company discovered that pirates were attempting to set up a complete company bearing the NEC brand. This operation included the involvement of more than 50 electronics factories in China, Hong Kong and Taiwan. Some of the factories even had phony NEC signs out front and used official looking packaging, as well as warranty and service documents. The pirates manufactured a range of fifty products to imitate the company's entire product portfolio. Some of the factories had official-looking documents which they insisted gave them a license to manufacture NEC goods (Lague, 2006).

Fig. 2.4 Reasons for the growth of counterfeit goods trade

2.8 Reasons for the Growth of Counterfeit Goods

A number of reasons have been given for the growth in the counterfeit goods market. These driving forces are shown in Fig. 2.4. (Diagram and this section adapted from our primary research and Harvey, 1987; Hopkins et al., 2003; Jacobs et al., 2001; Morris & Stevens, 2007; Naim, 2005; Nill & Shultz, 1996; OECD, 2007c; Parloff, 2006; Punch, 2005; Stern, 1985; Thomas, 2007; "Why fakes booming," 2008).

There are seven major driving forces behind the worldwide growth of counterfeit goods. These can be identified as: low cost high technology which results in low investment and high profits; globalization and lower trade barriers; consumer complicity; expansion of channels and markets; powerful worldwide brands; weak international and national enforcement and finally high tariffs and taxes. Each of these is explored in the following sections.

2.8.1 Low Cost High Technology = Low Investment, High Profits

Pirates avoid all the usual costs related to creating and marketing a product, including research and development, advertising, quality control, acceptable minimum wages and warranty service. Without all the start-up costs and benefiting from sharply reduced overhead costs, counterfeiting is vastly profitable.

Many products can be manufactured with easily purchased high technology equipment that is widely available at reasonable prices. And technological developments in modeling, printing and scanning make it easy to make convincing copies through reverse engineering. According to a recent Fortune article, manufacturers themselves have shared technology and know-how including designs, molds, specifications and trade secrets with various subsidiaries, licensees, contractors and subcontractors in markets all across the world and therefore "it's extremely hard to police global supply chains, and IP is leaking out through 1,000 cracks" (Parloff, 2006).

One example of the rapid reduction in cost for technology is computer equipment, which formerly was priced out of the grasp of most pirates, and is now available at a fraction of the cost. Doms (2003) shows the cost of computer equipment declining between 14% and 17% annually from 1991 to 2000. This makes copying of DVDs and CDs quite simple and inexpensive. This computer equipment, combined with high quality digital printers, also makes it easy to imitate genuine trademarks and packaging. In the fashion industry pirates can buy one copy of a genuine product, take it apart and using scanning equipment, develop patterns which allow them to make almost perfect fakes. Counterfeiters have also improved their ability to reproduce holograms and other sophisticated genuine identifying marks. Searching the Internet will give a pirate many sources for manufacturing equipment. Purchasing software to help in manufacturing is also easy with some of it even available on the counterfeit market. Since manufacturing is driven by software, getting the right CD allows pirates to make a clone that looks right but uses lower grade materials. The decline in the cost of communications is also a boon to pirates. For instance, Doms

(2003) estimates the cost of cell phones fell an average of 17% from 1983 to 1997. The Internet also allows pirates to keep in contact with their distribution outlets at very low cost and with high security.

Of course, the lowest investment of all is faced by subcontractors who engage in "split runs," a term used by Chris Israel, US Coordinator for International Intellectual Property Enforcement. This means making legitimate products under contract to brand holders by day and then either high quality overruns or poor quality imitations by night after the official shutdown of the factory. These so-called "third shift" products, even if they are indistinguishable from genuine products, are still counterfeit by our definition and have been found to be so in some courts.

2.8.2 Globalization and Lower Trade Barriers

The rapid growth of world trade through the opening of markets, coupled with the reduction of barriers to financial and merchandise flows has certainly opened opportunities for product pirates. The sheer volume of imports in many countries makes it almost impossible for Customs Services to interdict phony products. According to United Nations Conference on Trade and Development [UNCTAD] (2006) 10,000 containers per day arrive at the major port in Thailand and over 63,000 per day in Singapore. The advent of NAFTA and the closer cooperation within the European Union means fewer checks on products flowing across borders. Just since 1999, according to the World Trade Organization (2007), annual world trade in goods and services has doubled from less than $6 trillion in 1999 to nearly $12 trillion in 2006 (Fig. 2.5).

During the same time, the average tariff applied to imports by developing countries declined from 16.5% in 1996 to 10.9% in 2005 and in the most developed countries the average tariff declined from 5.3% to 3.4% over the same period (World Bank, 2005).

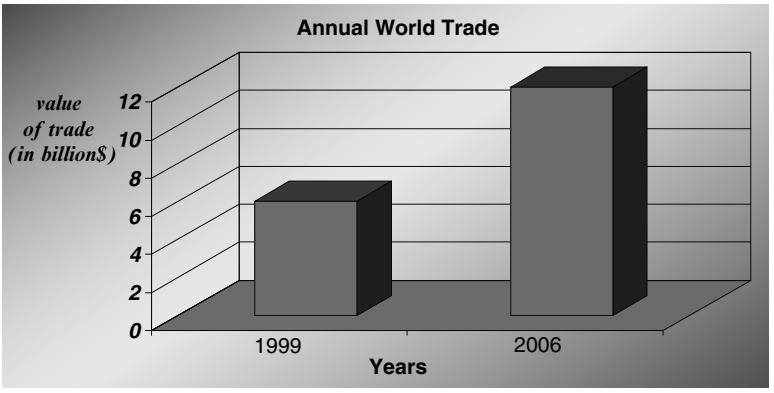

Fig. 2.5 Annual world trade. Source: World Trade Organization

The OECD reports that free trade zones and free ports are attractive to counterfeiters. The zones are used in three different ways. First, products are shipped into the free-trade areas and then re-exported. This allows the pirates to engage in "origin laundering" whereby the true origin of these products is obscured or erased by moving them to a number of ports and sometimes altering the documentation accompanying the shipments. Second, unfinished products may be shipped to these free-trade areas for further processing including adding counterfeit trademarks or labels or repackaging. Finally, free-trade areas are used for manufacturing pirate goods.

A recent seizure revealed that large amounts of counterfeit drugs were supplied through a complex arrangement using a free-trade zone known as Jebel Ali in Dubai, United Arab Emirates (UAE). The drugs were originally manufactured in China sent through Hong Kong to the free-trade zone in Dubai to Britain then the Bahamas and finally back to Britain where the products were mailed to customers with UK postage. They were sold on an Internet site which made American customers believe they were buying medicines from a Canadian website. Jebel Ali is the biggest and oldest free-trade zone in Dubai, housing some 6,000 companies. The sheer size of this free-trade area makes it extremely difficult to track down counterfeit product. In addition there is a "murky line of authority" for rooting out counterfeits there. A third of all counterfeit drugs confiscated in Europe in 2006 came through the UAE (Bogdanich, 2007).

The free flow of financial resources has also been helpful to counterfeiters since it is relatively easy for them to launder profits from pirate operations and to move investment and therefore production from one country to another. Exchange controls have been reduced or eliminated in most countries. The growing wire transfer industry including Western Union and even the expanding use of ATM cards make it easier for counterfeiters to move their funds to the most advantageous markets.

2.8.3 Consumer Complicity

There is a great deal of evidence to suggest that consumers are all too willing to purchase counterfeit products even when they know the products are fake. Tom, Garibaldi, Zeng, and Pilcher (1998) found that consumers purchase counterfeit goods for a variety of reasons, including a perception of the counterfeit to be as good as the authentic version; support of the counterfeit market as a means of expressing anti-big-business sentiment; and lax attitudes about the legal protection of intellectual property.

Studies of consumers in the UK completed by the Anti-Counterfeiting Group found that about a third of the public would knowingly purchase counterfeit goods if the price and quality were right (Anti-counterfeiting group [ACG], 2003). Clothing and footwear were the fake products most frequently knowingly purchased by these consumers.

Table 2.2 Product attributes used to determine authenticity

Product attribute	Importance in determining product authenticity (% choosing)
Price	88
Point of purchase	88
Slight difference in brand name	75
Packaging	56
Quality	50
Warranty	38
Anti-counterfeiting label	31

Research completed by the authors revealed that, in markets where a firm was experiencing the most difficult counterfeit problems, over two-thirds of managers interviewed believed that consumers were willing to purchase a counterfeit good.

We asked managers to rate the importance of specific product attributes that might be used by a consumer to determine whether a good was counterfeit or legitimate (Table 2.2).

According to the managers we surveyed, consumers are fairly sophisticated. They can tell by price and by where they purchase the product whether it is legitimate or counterfeit. In any event consumers are quite willing to purchase counterfeits.

This important subject is reviewed in depth in Chapter 5.

2.8.4 Expansion of Channels and Markets

With the growth of world trade, manufacturers have penetrated many markets which they were unable to serve only a few years ago. The emergence of an affluent class in countries like China and India offers huge new markets for products with well-known global brands.

Counterfeiters have three major distribution outlets to customers: established retail shops, informal channels such as "flea markets," sidewalk vendors and clandestine shops and of course the Internet.

While it is difficult for pirates to gain any real market share in well-established retail outlets, research suggests that the sale of counterfeit product through this channel is increasing. Some counterfeit product may be found on supermarket shelves. In these cases it is most likely that the retailer is not aware that the products are illegitimate.

A more common distribution method for fake products is through informal channels. A walk along Canal Street in New York City, Santee Alley in Los Angeles or Nanjing Lu in Shanghai will reveal a number of street vendors selling every kind of pirated product. Flea markets around the world feature branded products at impossible prices. On a recent trip to Shanghai one of the authors was able to spot fake Callaway golf clubs right next to counterfeit Docker shorts, being sold openly

all in the same market. Toth (2007) describes a harrowing experience searching for counterfeit handbags in New York's Chinatown, being admitted to back room and basement "retail outlets."

In the case of auto or aircraft parts, health and beauty aids, pharmaceuticals and even wearing apparel, the sheer complexity of distribution makes it easy for counterfeiters to intervene at some step to substitute copies for the real thing.

The Internet has provided an outstanding opportunity for pirated product. This channel allows a producer of counterfeit products to reach a nearly unlimited worldwide audience with his offers. According to *The Economist* (2003) $25 billion in counterfeit goods is traded online annually. Virtually every type of product is now sold across the Internet and consumers have gained more confidence when using this channel. One brazen site claiming to sell "replicas" is called canyouseethedifference.com. It features knock-off Rolex watches, Gucci handbags and Tiffany earrings. Photos of the real products are positioned next to the fakes with the question posed by the site itself: "can you see the difference?"

The OECD (2007) gives five major reasons for pirates' attraction to the Internet:

- Anonymity – it is easy for counterfeiters to conceal their true identities and lower the risk of detection.
- Flexibility – pirates can easily establish an online site then take it down or move it within 24–48 hours to markets where IPR enforcement is weak.
- Market size – the sheer number of e-commerce sites and listings makes it very difficult for IPR owners and enforcement agencies to find and take action against pirates.
- Market reach – the Internet allows sellers to reach a huge global audience at low cost 24 hours a day.
- Deception – widely available software and images on the Internet make it easy for pirates to create "clone" websites that look almost exactly like the brand holders' official sites.

Auction sites like eBay are popular venues for counterfeit product. eBay claims to host 50 million listings at any given time. They say infringing product available on their site accounts for only 0.01% of total listings, although they do acknowledge that there has been a growth in the number of counterfeit products. Other sources claim the percentage of fake items offered on eBay ranges from 50% to 75% (S. Croxon, personal interview, October 19, 2007). One way to measure this is to look at the number of designer items for sale on sites like eBay. The truth is major designers rarely sell their products across the Internet nor do they license others to sell online. The inability of buyers to look carefully at these items makes it easy to sell fakes. Tiffany & Co. filed suit against eBay claiming that only 5% of Tiffany items for sale on the auction site were genuine (Punch, 2007). Tiffany also claims that eBay has a financial interest in looking the other way when it comes to counterfeit products sold on their site.

Counterfeit drugs are an especially troubling aspect of Internet sales. Some Internet pharmacies are legitimate but there are many which provide prescription drugs just for

the asking. In many cases these drugs are counterfeit. They may not produce the curative effects of the real thing or in the worst case they may do untold harm.

2.8.5 *Powerful Worldwide Brands*

Manufacturers have spent literally billions of dollars promoting their brands around the world. As a result more people know these names than ever before. According to Interbrand, the world's most valuable brand is Coca-Cola worth over $65 billion, not far behind were Microsoft, IBM and GE each of which is worth over $50 billion. In the $30 billion range are Toyota, Intel, McDonald's and Disney. Marlboro, ranked 14th, Gillette (16) and Louis Vuitton (17) are each worth over $20 billion. Each of these brands has been subject to extensive counterfeiting as have Gucci (46), Chanel (58), Gap (61), Rolex (71) and Hermes (73) ("Best global brands," 2007). Globalization has made it possible to develop truly global brands. Consumers in Shanghai, London, Mumbai and Moscow are now completely familiar with these brands. As described above these consumers want these brands but many cannot afford to purchase the legitimate items. This has given rise to suppliers who fill the need for products with famous brands at much lower prices.

2.8.6 *Weak International and National Enforcement*

The risk of starting a counterfeit products business is rather low in many countries for one very good reason: weak enforcement of intellectual property regulations.

US laws such as the Tariff Act of 1930, the Lanham Act, the Trademark Counterfeiting Act of 1984, and the Stop Counterfeiting in Manufactured Goods Act of 2006 are all designed to provide some form of legal recourse for the owners of intellectual property through civil and criminal law penalties in the United States. In addition, the NAFTA treaty, The Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) in the World Trade Organization (WTO), and the Scrivener regulations of the European Union are international measures implemented to encourage protection of intellectual property rights. For a detailed discussion of these multilateral trade agreements, see Chaudhry and Walsh (1995, 1996).

Although there are a number of national laws and international agreements designed to protect intellectual property rights, according to Chaudhry and Walsh (1996), "legal remedies available to the victims of counterfeited or pirated goods historically have been inadequate." For example, in Friedland (1998), the Deputy Attorney General leading Mexico's anti-counterfeiting program states, "Although in Mexico, laws protecting patent holders have been strengthened, piracy continues to cost foreign companies hundreds of millions of dollars annually." The profits of Mexican pirates are much larger than any fines they may face, as is the case in many

other countries. Moreover, an overwhelming majority of those arrested for patent infringements are never indicted. Naim (2005) attributes the lack of enforcement to government fiscal restraint imposed by the demands of the global capital markets. Since investors are "turned off" by large government deficits, these governments have had to cut funding to law enforcement. In addition these governments cannot compensate their civil servants adequately leaving them no alternative but to accept bribes from counterfeiters and to limit their enforcement activities. The extreme example of this is the so-called "failed state," where criminal elements can capture the government.

The descriptions in an earlier part of this chapter of the problems faced by Heelys, Disney and Starbucks in China and the paltry fines levied on the pirates reinforce the idea that the rewards of counterfeiting far outweigh the potential penalties.

2.8.7 High Tariffs and Taxes

We have seen how lowering trade barriers has increased trade, creating opportunities for counterfeit product to be made in one country and exported to others. At the same time, while it may seem counterintuitive, high tariffs and taxes can create opportunities for counterfeiters as well. These extra costs price consumers out of certain markets especially in less developed countries. In the case of disease-curing drugs, consumers may be aware that products are available and they are obviously highly motivated to get these products. Where governments have placed artificial price controls or import duties on these drugs counterfeiters may step in to supply the demand, offering far less effective or even dangerous products at affordable prices. According to Morris and Stevens (2007) combined total duties and taxes on retail medicines in 11 developing countries in 2003 ranged from 24% in Mexico to 55% in India. Many high-tariff countries have a serious problem with counterfeit medicines and the authors state "it is unlikely that this is entirely coincidental."

The same logic may be applied to branded luxury goods where extensive advertising and highly visible retail outlets create demand but high prices deter most consumers from purchasing the products. This umbrella is one counterfeiters will most happily step under where investment is minimal and rewards are significant.

2.9 Conclusions

Although product counterfeiting is certainly not a new phenomenon, much more attention is being paid to it in recent years. As we have seen counterfeit products may go back more than 2,000 years and punishment for infringement at least 700 years. Products which can be classified as counterfeit are those made without authorization from the owners of intellectual property rights (trademarks and patents and copyrights) associated with those products.

The measurement of the counterfeit market is fraught with difficulty. Given the illegal nature of the activity no direct measurement is possible. Compounding the problem is defining what exactly is being measured. Is it sales lost and should it be calculated based on current retail prices? Or should damage to brand equity be added? Those making the estimates, such as the OECD and the International Trade Commission, readily admit their methodologies leave much to be desired. Nevertheless the global value of counterfeit products at $200 billion seems to have gained acceptance. Some see the number as much higher and claim that 5–7% of world trade is in counterfeit. Since the actual seizures by Customs agencies around the world represent approximately 1/10 of 1% of total imports, one must say the true number is not known with any confidence today.

Products counterfeited at one time were limited to high-priced, high tech, highly visible branded products and intensive R&D products. But today nearly every consumer and industrial product is subject to counterfeiting. The existence of a counterfeit goods market damages consumers as well as home and host countries, the owners of the intellectual property both large and small and their associated wholesalers and retailers. There is evidence that organized crime and terrorist organizations are using the proceeds from counterfeit products to finance their activities. As we have seen, counterfeit drugs exact a tragic toll upon the often uneducated users. There are seven main drivers of the growth of counterfeit goods, many associated with the reduction in the cost of high technology and the increasing openness provided by globalization. The Internet has afforded counterfeiters a nearly unlimited market, low-cost communications and the means for avoiding detection. Weak enforcement of both national and international intellectual property protections has made counterfeiting a low risk market entry strategy.

Chapter 3
The Supply of Counterfeit Trade: The Problem Countries

3.1 Introduction

The supply of counterfeit product seems almost inexhaustible. Nearly every nation has a piracy problem since, according to OECD studies, counterfeit product has been shipped from about 150 countries. Without doubt China is the world's largest supplier of counterfeit products. Statistics from both the EU and the US make this abundantly clear. It is such an important source we have devoted a special chapter to it later in the book. The United States Trade Representative (USTR) is responsible for developing an annual review of various countries' intellectual property environments. The latest report identifies 43 countries for special attention, special markets within these countries and areas where no government has sway such as Ciudad Del Este at the border of Brazil, Paraguay and Argentina. This chapter identifies the most important sources for counterfeit product and details the IPR environments in these countries.

3.2 The Leading Sources of Counterfeit Goods

According to the OECD (2007a) counterfeiting is taking place in just about all economies. Their data show counterfeit products intercepted from nearly 150 economies including 27 of the OECD's 30 member countries.

The OECD (2007c) looked at the sources of counterfeit product in two different ways: first by summarizing reports of interceptions of fake product and second, reviewing reports by industry sectors. On the first list China is cited most often, followed by Hong Kong and Thailand. By sector, China again leads, mentioned as a source for counterfeit product in all 12 industry sectors reviewed. Second was Russia mentioned in eight of the sectors followed by India (7), Thailand (7), Taiwan (6), Turkey (6) and the Ukraine (6).

Naim (2005) also identifies China as the world's biggest exporter of counterfeit products. He names Taiwan, Vietnam, the Philippines, Malaysia, Russia and the former Soviet Republics as other leading sources of counterfeit product. Hopkins,

P. Chaudhry and A. Zimmerman, *The Economics of Counterfeit Trade*,
DOI-10.1007/978-3-540-77835-6_3, © Springer-Verlag Berlin Heidelberg 2009

Kontnik, and Turnage (2003) also cite China as well as Taiwan, Korea and Thailand as sources for many counterfeit branded goods. Naim points out that some countries have developed counterfeit good specialties such as optical discs in the Ukraine, software in Russia and cigarettes in Paraguay.

The Motion Picture Association of America (MPAA) (Worldwide Study…, 2007) estimates that 93% of the potential market for the film industry in China is lost to piracy. Other markets where a large percentage is taken up by pirates are: Russia (81%), Hungary (73%), Poland (66%), Thailand (62%), Mexico (62%), and Taiwan (51%).

Each year the USTR is required to develop a report detailing the adequacy and effectiveness of IPR protection in about 80 countries. The USTR must "identify those countries that deny adequate and effective protection for IPR or deny fair and equitable market access for persons that rely on intellectual property protection" (United States Trade Representative [USTR], 2007c, p. 17).

Some have questioned the USTR methodology. The introduction of the 1998 Annual Review and the required unilateral retaliatory trade action violates international law according to Rosenthal (1998). The organization has a small staff of about 200 plus about two dozen "temporary detailees" yet is asked to coordinate and implement US trade policy, leading 19 federal agencies and offices in complex regional and bilateral negotiations as well as the multilateral negotiations with the World Trade Organization (GAO, 2005). According to interviews conducted by Mertha (2005), this small staff necessarily, and in fact by statute, relies upon submissions from US commercial interests, especially trade associations, who feel most affected by IPR violations. He concludes "this approach is suboptimal at best and unbiased information is often difficult to obtain." The USTR and therefore US trade policy responds to "the squeaky wheel." This is reflected as we shall see in the heavy influence of large pharmaceutical firms in the country assessments below.

The USTR has three list levels: Priority Watch List, Watch List and Priority Foreign Country. For 2007, the countries listed in Table 3.1 have been placed on the Priority Watch List. These countries are given special focus concerning particular problem areas (USTR, 2007c).

The European Union has also identified the most important sources for counterfeit according to the number of cases brought to their attention in 2005 (Table 3.2).

China leads by a wide margin as the most important source for IPR violations with 79% of the cases. Second is the UAE at only 5%, followed by very small percentages from India, Algeria, Hong Kong, Egypt, Turkey and Iran.

Table 3.1 USTR priority watch list

Priority watch list 2007	
China	Russia
Argentina	Chile
Egypt	India
Israel	Lebanon
Thailand	Turkey
Ukraine	Venezuela

Source: USTR (2007c)

Table 3.2 Origin of counterfeit goods seized in the EU

Country	Percent of goods seized
China	79
UAE	5
India	1
Algeria	1
Hong Kong	1
Egypt	1
Turkey	1
Iran	1
Others	10

Source: Summary of community customs activities on counterfeit and piracy, 2006, p. 4

In research conducted by the authors, respondents were asked to identify two countries where their firms experienced the highest level of product counterfeiting. The top markets named were Brazil, China, Germany, Japan, Mexico, the Philippines, South Korea, Taiwan, Thailand, Turkey, the United States and Venezuela. The managerial responses compiled from our study also identified four countries where consumers are particularly willing to *purchase* counterfeit products: China, Taiwan, United States and Mexico.

While these managers selected several countries which appear on the Priority Watch List and on the EU List, they also pinpoint some countries that do not, reemphasizing the widespread nature of this problem.

One country is designated by the USTR a Priority Foreign Country, receiving special attention: Paraguay. An additional 30 countries have been placed on a lower category list, called the Watch List, indicating less egregious product piracy problems, by the USTR (2007c): Belarus, Belize, Bolivia, Brazil, Canada, Colombia, Costa Rica, Dominican Republic, Ecuador, Guatemala, Hungary, Indonesia, Italy, Jamaica, Korea, Kuwait, Lithuania, Malaysia, Mexico, Pakistan, Peru, Philippines, Poland, Romania, Saudi Arabia, Taiwan, Tajikistan, Turkmenistan, Uzbekistan, and Vietnam.

For 2007 the USTR removed Belize and Brazil from the Priority Watch List. Each has been moved to the less strenuous Watch List because of improved IPR enforcement efforts. Bulgaria, Croatia, the European Union, Latvia and the Bahamas were all removed from the Watch List mainly because of improved IPR enforcement.

3.2.1 US Customs Seizures

Although US Customs seizure statistics fluctuate, there is one consistency in the data (Fig. 3.1). Since 1998, China has accounted for the largest percentage of counterfeit products seized, ranging from a low of 16% in fiscal year 1999 to a high of 81% in

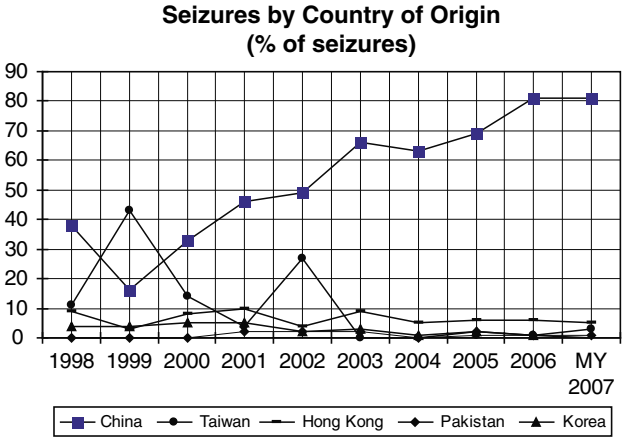

Fig. 3.1 Seizures by country of origin. Source: US Customs and Border Protection, L.A. Strategic Trade Center

Table 3.3 Top trading partners for IPR seizures, FY 2006

Trading partner	Domestic value ($)	Percent of total
China	125,595,844	81
Hong Kong	9,389,464	6
Taiwan	1,843,764	1
Pakistan	1,838,815	1
Korea	1,810,140	1
Singapore	1,198,735	Less than 1
Malaysia	1,174,071	Less than 1
Indonesia	983,425	Less than 1
India	832,541	Less than 1
Mexico	535,826	Less than 1
All others	10,166,611	7

Source: United States Customs and Border Protection (2007)

fiscal year 2006 and maintaining that share through midyear of fiscal year 2007 (United States Customs and Border Protection, 2007).

Taiwan which had accounted for more than 40% of seizures in 1999 has seen its share decline considerably to only about 2.5% for midyear 2007. Hong Kong has been a consistent source of counterfeit product with the share of fakes confiscated from this country ranging from 10% in fiscal 2001 to about 5% for midyear 2007. In most other years Hong Kong's share has ranged from 5% to 9%.

Table 3.3 shows the most important sources for counterfeit product for the latest full year according to the US Customs Service.

Several countries appear on all the lists above: China, Thailand, Taiwan, Hong Kong and Mexico. But many others seem to have major problems in the IPR area. In the next sections we will examine particular locations.

3.3 Specific Countries

The most important source for counterfeit products is the People's Republic of China, according to every governmental organization and researcher who has studied the problem. In Chapter 9, we have devoted a separate discussion to the special case of China. The OECD (2007d) examined 15 country's intellectual property situations looking at the legal and regulatory framework, enforcement, program evaluation, international cooperation, awareness, and recent policy developments. While the report does not provide an assessment of the IPR environment in any particular market, it does address a number of the countries where problems have been identified including Brazil, China, India, Israel and Russia.

3.3.1 Russia

Russia has been on the Priority Watch List for many years and continues on the list for 2007. According to the latest USTR report (2007c), US copyright holders suffered more than $2 billion in damages in the country in 2006 because of copyright piracy.

In terms of IP compliance, the main issue that governs Russia is its expected accession to the WTO at the end of 2008 that will require the country to eventually comply with the TRIPS accord. Russia is a member state of the WIPO.

Pletneva (2007) estimates that Russia ranks second only to China as a counterfeit producer. The total of industry losses from counterfeit production was estimated at 708 billion rubles in 2005. Fifty-three percent of Russians purchased counterfeit goods during the past year. Russian consumers believed food products, medicines, clothing and alcohol products were most frequently falsified (Fig. 3.2).

One major problem is optical discs which are copied and exported. According to the (EU trade.ec, 2006) there is a large overcapacity for DVD production including

Fig. 3.2 Falsified Russian Nike product

more than 30 optical disc manufacturing facilities, in excess of Russian market requirements. Most of these facilities are known to be producing pirate product. According to the International Federation of the Phonographic Industry (IFPI), multiple raids have been carried out by the Ministry of the Interior (MOI). In September 2006 a plant in Tver was invaded. Five operating replication lines and two new DVD lines were seized along with 70,000 suspect DVDs (International Federation of the Phonographic Industry [IFPI], 2007a). More recently Moscow's economic IPR crime police seized 2.1 million discs in a warehouse, indicating the large scale of piracy in Russia (IFPI, 2007b). In fall 2007 the MOI announced Operation Counterfeit, a nationwide effort against music and DVD pirates. A total of nearly 30,000 premises were visited and authorities seized 3.7 million discs (IFPI, 2007c).

Large crop protection manufacturers have developed an alliance to fight counterfeit products. According to DuPont ("DuPont fights," 2007) trade in fake crop protection products has been expanding causing approximately €40–50 million in damage to agricultural products.

Morris and Stevens (2007) claim that counterfeit medicines make up 5–10% of the total Russian market. According to the USTR (2007c), prosecution of IP cases "remains sporadic and inadequate." The EU cites insufficient commitment from authorities and that seized pirate product often reappears on the market. Despite the many police raids, there is widespread corruption and under-resourcing of the IPR enforcement agencies. The EU also finds fault with the courts and prosecution authorities (trade.ec, 2006). Since Russia has ambitions to join the WTO, US authorities are putting pressure on the government to fully implement commitments to IPR protection. While a new commercial law was passed in 2006 there remain some concerns regarding consistency with international agreements and the WTO, especially the TRIPS agreement.

The "IPR Toolkit" for Russia may be found at http://moscow.usembassy.gov/ipr-toolkit.html. This link provides an overview of IP issues in Russia, and specific links to copyright, patents, trademarks, enforcement options and market-entry planning. The overview contains the link for the Russian Federal Service for Intellectual Property, Patents and Trademarks (Rospatent) at http://www.fips.ru/rospatent/index.htm. The site is in Russian and we cannot further expand on the resources given at this link.

Copyright is regulated by the Russian Authors' Association at http://rao.ru/orao/ and the site is in Russian. For a quick synopsis of the legal structures that govern copyright, such as Article 7.1, the Law on Copyright and Neighboring Rights of 1993, consult the US Embassy at http://moscow.usembassy.gov/ipr-copyright.html. The Russian government provides criminal, civil or administrative penalties against IP infringement, but, again the problem centers on enforcement. According to the US government, the main drawbacks of prosecution in Russia center on obtaining evidence, slow court decisions, proving damages, and executing a judgment in civil cases (http://moscow.usembassy.gov/ipr-enforcement.html). A table explaining the legal systems that govern IP protection in Russia, such as the Law on Commercial Secrets, is given at http://moscow.usembassy.gov/ipr-overview.html.

The US Chamber of Commerce offers another snapshot of IPR in Russia with links to the Russian State DUMA Expert IPR Working Group, the Russian Federal Institute of Intellectual Property, the Russian Chamber of Commerce and Industry, the Russian Organization of Small and Medium Businesses, and the Russian Auto Industry Anti-Counterfeiting site at www.thetruecosts.org/portal/truecosts/international/russia.htm. US Country Commercial Guides offer practical advice on "Protecting Your Intellectual Property" and recommend seeking assistance from these Russian agencies (to name just a few): the Russian Anti-Piracy Organization (RAPO), the Russian Anti-Software Piracy Association and the Association of Branded Goods Manufacturers in Russia (RusBrand).

A final noteworthy anti-piracy site is the No Fakes program sponsored by the Nordic-Russian project, "Enhancing intellectual property rights competence and cooperation in St. Petersburg, Finland, Denmark and Sweden," established by the Nordic Council of Ministers (www.norden.ru). The Russian site for this program is www.nofake.org/konkurs.php. A recent social marketing campaign to raise anti-piracy awareness among Russian youth created an anti-piracy poster competition with the winning poster to be displayed on the streets of St. Petersburg. The goal is to promote the use of legal audiovisual materials. The homepage for the Russian No Fakes program is illustrated in Fig. 3.3.

Fig. 3.3 No fakes anti-piracy program (source: www.nofake.org)

3.3.2 Argentina

Argentina has been a focus of the USTR since 1997, when the US government, reacting to the country's pharmaceutical patent law, suspended half the benefits to Argentina under the general system of preferences (Benson, 2004). In 1999 the United States filed a case with the WTO related to Argentine regulations for pharmaceutical products, agricultural chemicals and certain matters related to patents. Although progress was made in joint meetings between the US and Argentina, the country was placed on the Priority Watch List in 2002 (USTR, 2002a). At that time the USTR claimed that counterfeit products were available virtually everywhere and unlicensed software was widely used in business and even in government. Enforcement against IPR violators was weak and penalties were inconsistently applied.

Argentina remains on the Priority Watch List in 2007 despite some improvements in intellectual property protection. The USTR (2007c) continued to have concerns with pharmaceuticals and reported that music piracy in Argentina worsened in 2005 and that counterfeiting continued in entertainment and business software as well as book publishing (USTR, 2006). The EU also cites Argentina as a country where protection of intellectual property is problematic. A large backlog in the Argentinean patent office as well as unresponsive authorities indicate a lack of concern for the protection of IPR. The EU authorities list CDs, DVDs and software, textiles, spare parts, toys, pharmaceuticals and agrochemical products as problem areas (trade.ec, 2006).

The IFPI (2007a) describes a raid on the La Salada market (see Notorious Markets below) which shut down an enterprise providing everything necessary to start a pirate CD/DVD business. This raid and related invasions confiscated at least 40,000 counterfeit CDs and DVDs. At about the same time Argentine customs crushed 500,000 counterfeit discs in the city of Puerto Iguazu, the largest destruction of counterfeit discs in the history of the country. A later report (IFPI, 2007b) describes 20 raids carried out in Buenos Aires on secret disk duplication centers. A total of 67 burners and more than 22,000 pirate disks were seized.

3.3.3 Chile

Chile was placed on the USTR's Priority Watch List after an "out of cycle" review in January 2007. The USTR (2007c) sees similar problems in Chile and Argentina, namely inadequate protection for data used to obtain marketing approvals for pharmaceuticals and poor coordination between the health and patent authorities allowing approvals for patent-infringing drugs. The EU (trade.ec, 2006) sees piracy of books, music, films, and software as well as problems in the furniture, electronics and cosmetics industries. The IFPI (2007b) describes a seizure by Chilean customs officers of CDs smuggled in a fuel tank of an automobile which yielded 2,000 pirate CDs. While Chile is the only South American country to have an IPR agreement with the US and the EU, again the EU and the USTR cite weak

enforcement and low levels of penalties that do not have the required deterrent effect on IPR violators.

3.3.4 Egypt

Egypt has appeared on the USTR Priority Watch List for more than 5 years (USTR, 2002a). The USTR (2007c) uses the same language the agency uses for many countries to place Egypt on the Priority Watch List for 2007, pointing especially to the ability for patent-infringing drugs to be produced, a large backlog in patent applications, and a weak judicial system. Egypt is also a venue for trans-shipment of counterfeit product. Although the government had made some improvements in its IP protection and enforcement, there are a number of actions the USTR recommends the country undertake including ratifying and implementing the WIPO Internet treaties. Here again the USTR recommends Egypt insure that courts impose sentences which will deter copyright and trademark infringement.

3.3.5 India

Although India is a signatory country to the Paris Convention, the Berne Convention, Patent Cooperation Treaty, the TRIPS accord in the WTO and a member of the WIPO, India has been on the USTR Priority Watch List for at least 5 years (USTR, 2002a). The country remains on this list for 2007 because of weak copyright laws and poor IPR enforcement. According to the USTR (2007c) "piracy of copyrighted works remains rampant in India." As in the other BRIC countries, there is large-scale infringement in such sectors as software and optical media. The IFPI (2007a) describes a raid by Indian police on a factory in West Delhi which confiscated more than 90,000 CDs and related production machinery.

India is a center for counterfeit pharmaceuticals (Morris and Stevens (2007). One government study showed that 9% of all drugs tested in India were substandard. Naim (2005) describes India's generic pharmaceutical manufacturers' ability to reverse-engineer drugs patented in other countries. Until the end of 2004 India's patent regulations related only to processes not to products. This created the opportunity for rapid expansion of generic drug manufacturers ("TRIPS, AIDS," 2007). India's pharmaceutical industry ranks fourth in the world by volume but 13th by value, indicating the predominance of generics in the market ("Few Indian firms," 2007). With their accession to the WTO and as a signatory to TRIPS, India was given a 5-year transition to help the country conform to TRIPS. This ended on January 1, 2005 and India passed new laws to come into compliance with the WTO ("TRIPS AIDS," 2007). Because India is the primary supplier of cheap generic drugs to the rest of the world, many organizations including Doctors Without Borders applauded a recent Indian court decision which went against Novartis

related to granting patents for incremental developments (Silverman, 2007). Indian patent legislation does not allow "evergreening," slightly modifying drugs whose patents are about to expire in order to extend their patent monopoly (Gentleman, 2007). At issue is how much leeway WTO members have in deciding whether an invention is patentable or not. There are many parties who will continue to be interested in what the future holds for the Indian pharmaceutical industry. Naim (2005) believes generic drugmakers' experience with knockoffs allowed these firms to develop scientific skills and they are now "warming to patent protection."

The US government recommends India develop an effective disk licensing system, implement the WIPO Internet treaties, strengthen border enforcement, improve police action and judicial dispositions for IPR violations and establish prison sentences which would have a deterrent effect (USTR, 2007c).

The US Country Commercial Guide reinforces the idea that the current legal system in India does not protect IP and enforcement is a problem. This report claims that there have been few copyright convictions stemming from successful raids in India. Overall, there are problems with confiscation, leaks of information, court delays and lack of trained officials to protect IP (India Country Commercial Guide, 2008, p. 13).

The US Embassy toolkit for India is at http://newdelhi.usembassy.gov/ipr.html and gives very general information on copyright protection, market entry planning, infringements and enforcement mechanisms and the like. The Indian agencies suggested are its Copyright Office (http://copyright.gov.in/) and the Central Board of Excise and Customs (www.cbec.gov.in). Both of these websites provide an English version to navigate for possible resources. For example, copyright studies that focus on movies, sound recordings, software and literary works are provided at the Copyright Office site. A guidebook to the copyright act and general copyright information is also available. The site is designed to educate practitioners about the IP environment in India. Links to related industries, such as the Indian Music Industry (a counterpart to the RIAA) are provided in English. A very interactive website for the Indian Performing Rights Society Limited (www.iprs.org) is a noteworthy source for copyright issues in this sector in India.

3.3.6 Israel

Israel has appeared on the USTR Priority Watch List for more than 5 years (USTR, 2002a). The main complaint in 2002 was access by generic pharmaceutical makers to confidential test data of US "innovator firms" used to gain marketing approval. Although the country does not appear on any EU or US customs seizure lists as a key supplier of counterfeit product, the USTR (2007c) continues to cite as the reason for its placement on the Priority Watch List the same inadequacy in Israeli patent law related to pharmaceuticals. The IFPI (2007a) details a surveillance operation culminating in a raid on a facility producing pirate music products. A number of discs as well as equipment were confiscated. The USTR does see

positive steps toward addressing US concerns and urges the government to improve IPR protection "that reflects its status as a partner in the US-Israel FTA and its objective of becoming a member of the OECD."

3.3.7 Lebanon

Although Lebanon is not cited as a problem by the EU, the country has a long history with the US Trade Representative, having been on the Priority Watch List for more than 5 years (USTR, 2002a). The IFPI (2007b) continues to cite cable piracy as a reason for this country's placement on the list. In 2006 the USTR reported that over 80% of Lebanon's cable subscribers were viewing pirated content, one of the highest rates in the world. The IFPI (2007b) describes two instances of large numbers of counterfeit optical discs containing music, films and software being destroyed during 2007 by Lebanese authorities. Local IFPI officials complemented the Cyber Crime and IPR Unit who are working in difficult circumstances. While the US government has recognized some positive initiatives started by Lebanon, these were interrupted by political unrest. Since Lebanon has ambitions to join the WTO they will need to improve IPR protection in the near future.

3.3.8 Thailand

According to Hopkins et al. (2003), "Thailand has long been a haven for piracy in Southeast Asia." But the country had not been on the USTR Priority Watch List. Instead Thailand had been on the less rigorous Watch List since 1993 ("Government has," 2007). Although the USTR saw some encouraging improvements in IPR protection during 2005, piracy and counterfeiting rates were seen as too high and enforcement actions required strengthening (USTR, 2006). For 2007 Thailand was placed on the Priority Watch List. For Thailand this would mean a loss of privileges under the Generalized System of Preferences (GSP) which gives Thailand and other countries much lower tariffs than they would otherwise experience. About 1,000 Thai products obtained GSP privileges in 2006 saving producers about $4.25 billion ("Government has," 2007). The USTR cited deterioration in the protection and enforcement of IPR. A major ongoing concern is pirate production at optical disc factories mentioned in both the 2006 and 2007 reports. The USTR (2007c) also cited book piracy, cable and signal theft, entertainment and business software piracy, copying of trademarked apparel and footwear as reasons for placing Thailand on the more rigorous list. A September 19 military coup is thought in Thailand to have something to do with "the downgrade" (FTA Watch, 2007).

For the EU, Thailand provided the second-highest percentage of cases by origin of goods (see Table 3.2). The EU Summary Report also cites pirated music, movies, TV shows and software as well as games, books, textiles, clothing, footwear, pharmaceutical

products and jewelry as problem areas. The EU also recognized progress in IPR protection by the Thai government but believes the situation "has not substantially improved" (trade.ec, 2006).

According to the World Health Organization (WHO, 2003), in Thailand approximately 8.5% of the total pharmaceutical market is accounted for by substandard medicines. But the case is somewhat more complicated regarding pharmaceuticals. The Ministry of Public Health had issued Compulsory Licenses (CLs) on HIV and heart disease drugs believing they were within their rights under the WTO to allow copies of the medicines even though the patents are held by American firms ("Government has," 2007). A CL is a government license that allows someone other than the patent holder to copy patented or copyrighted products. In the case of a severe health emergency, CLs are allowed and royalties do not have to be paid to the original patent holder ("TRIPS AIDS," 2007). The USTR (2007c) cited the issuance of these CLs as "further indications of a weakening of respect for patents." It is believed in Thailand that since the country is relatively small and does not have the leverage of China or India, the USTR action expresses the revenge of large US pharmaceutical companies ("Government has," 2007).

3.3.9 Turkey

Turkey has been on the USTR Priority Watch List for several years (USTR, 2006USTR, 2007c). Once again the USTR mentions the commercial use of pharmaceutical data used to gain marketing approval. The other major product areas seen as problems are: book and software piracy in both business and government. The US government also recommends increased judicial efficiency and a reduction in court case backlogs. The EU (trade.ec, 2006) sees wider counterfeit problems, mentioning music and film, tobacco, toys, textiles, footwear, sports equipment, pharmaceuticals, electronics, watches, luxury items, toys and condoms and infringements of designs as well. The EU report describes insufficient commitment from government and a low level of consciousness of the importance of IPR protection. Although significant fines and prison sentences exist in the law they are rarely applied. On the other hand the IFPI (2007b) describes antipiracy operations in nearly 50 cities resulting in the seizure of 100,000 counterfeit CDs, 350,000 pirated DVDs and considerable equipment. A pirate cassette plant was shut down in Ankara last July and new antipiracy operations are taking place in the west and south of Turkey.

3.3.10 Ukraine

Ukraine had been upgraded in 2006 from the Priority Foreign Country List on which it had been placed in 2001. At that time the US withdrew Ukraine's benefits under GSP and imposed sanctions on their exports valued at $75 million in January

2002. Along with the upgrading the US terminated the trade sanctions. Ukraine took major steps to combat counterfeit optical disc production and improved its IPR enforcement efforts in 2005 (USTR, 2006). Although it is no longer a major producer of pirated optical discs, it remains a trans-shipment point for these discs produced in Russia (USTR, 2007c). The IFPI (2007a) describes ongoing efforts by the Economic Crime Police against music and movie pirates. Public destruction of seized discs took place in Kiev.

The EU (trade.ec, 2006) mentions copyright violations in music, film, video, software and books as well as television and cable piracy. The organization also mentions patent infringements for pharmaceuticals and machinery and "bad faith domain name registrations."

Although both the EU and the USTR applaud improvements in Ukrainian IPR protection, both recommend improved border enforcement and deterrent criminal penalties for piracy.

3.3.11 Venezuela

Venezuela, the last country on the USTR's (2007c) Priority Watch List, has been on this list for the last few years. The language used by the USTR in 2007 is the same as that used in 2006, namely that Venezuela has made "minimal progress in strengthening its weak IPR regime." The country has not issued a patent to a foreign pharmaceutical producer since 2003 and does not protect against unfair commercial use of data used to gain drug marketing approval. The country withdrew from the Andean community in April 2006 and the USTR is concerned about Venezuela's ability to meet its international IPR obligations. US copyright holders have had good experience with Venezuela's customs and tax authorities but there is a lack of overall IPR enforcement.

3.3.12 Paraguay

Paraguay is a unique case. The IFPI (2007a) claims the rate of counterfeit activity in Paraguay continues to be one of the highest in the world. It has been a Priority Foreign Country since January 1998 (USTR, 2002a). This level requires more attention from the USTR than the Priority Watch List. It should be noted that at this point there is only one country on that list. The EU (trade.ec, 2006) calls Paraguay "a notorious entry point for IPR infringing goods into Latin America." The EU report describes extensive piracy in music, films, software and books and claims infringement levels in music and software are the highest in the region and among the highest in the world. The EU also identifies counterfeiting of trademarked products, mainly imports of luxury items like clothing, jewelry, sunglasses and electronics. Paraguay is also the home to a local pharmaceutical industry which is copying foreign drugs.

As described in Sect. 3.5 below, Paraguay is the home of the infamous Ciudad del Este, a kind of Wild West for counterfeit product. A comprehensive memorandum of understanding (MOU) on the protection of intellectual property was signed by the US and Paraguayan governments in 1998 and the country has been under special monitoring since. This MOU expired at the end of 2007. Although the USTR notes some efforts to improve the IPR environment, the country has major problems in providing effective IPR protection. Areas needing improvement include: "porous borders," ineffective prosecutions, lack of consistent deterrent sentences and unfair use of data generated to obtain marketing approval for pharmaceuticals. The USTR (2007c) also notes the passage of a 2005 law that weakens patent protection. The EU (trade.ec, 2006) also calls for improved border enforcement and effective, deterrent criminal penalties as well as the reduction of delays for registration of patents and trademarks.

3.3.13 Mexico

Mexico is classified on a lower level by the USTR (2007c) – the Watch List. One major problem in this country is counterfeit pharmaceuticals. Morris and Stevens (2007) claim that Mexico "is a major global source of counterfeit medicines" with sales of $650 million per year or about 10% of drug sales in the country. Since the prices for pharmaceuticals are between 72% and 104% higher in the US than in Mexico, it is not surprising that many US citizens patronize *farmacias* just over the border either personally or through the Internet (Hopkins et al., 2003). This is an ideal place for distributing genuine as well as counterfeit medicines. Factories in Mexico get raw materials from India in order to make and package diluted medicines which can look like the real thing. They sell these counterfeits primarily to Americans (Naim, 2005). The USTR (2007c) reports a recent increase in counterfeit pharmaceuticals.

The USTR sees some improvements in IPR enforcement by Mexican authorities but points to the ability of local firms to gain access to pharmaceutical data used to obtain approvals for drugs. In its Foreign Trade Barriers Report, the US trade Representative claims "the extent of IPR violations in Mexico remains dramatic," despite extensive IPR laws and an increase in the number of seizures and arrests. The report estimates that pirated products take 65% of the total music market, 64% of the business software market, 62% of the motion picture market and 75% of the entertainment software market (USTR, 2007a). Though Mexico established the Mexican Institute of Industrial Property in 1994 to fight counterfeiting and to comply with NAFTA, the country is still seen as one of the largest pirate markets in the world. The Ford Motor Co. found counterfeit autoparts makers in Mexico in 2001 (Hopkins et al., 2003). The IFPI (2007a) reports major raids, one netting over 800,000 CD-Rs and 600,000 DVDs and another 185,000 CD-Rs. Searches in the Tepito district found another 300,000 recorded CD-Rs as well as related equipment. The USTR (2007c) wants to see aggressive prosecution, imposition of deterrent levels of penalties, improved cooperation between federal, state and local authorities, enforcement by customs as well as legislation to fully implement the WIPO Internet treaties.

3.3.14 Brazil

Brazil continues to be listed by the USTR on its Watch List for IP infringement. Brazil is a signatory country to the Paris, Bern, and Universal Copyright conventions, the TRIPS agreement in the WTO, and the Patent Cooperation Treaty. Brazil is also a member state of the WIPO. Thus, in terms of supranational protection and recent national legislation, Brazil is an advocate of IP protections. However, once again, the key issue is enforcement of IPR in the Brazilian marketplace. A detailed overview of Brazil's IP environment is given in the 2006 US government report, "Marketing Products & Services & IPR Issues."

One practitioner-oriented website that will give a manager a synopsis of the IPR environment for Brazil is called the "IPR Toolkit" and is located at http://www.embaixada-americana.org.br/. This US Embassy site provides a succinct overview of the places to register patents, trademarks and copyrights. The web page also summarizes current IP legislation in Brazil, such as biosecurity that will govern genetically modified organisms. In addition to US and International agencies listed at this site (such as the USTR and WTO), links to Brazilian Non-Government Organizations and Brazilian author's associations are given.

The Brazil Against Piracy Council (under the Brazilian Ministry of Justice) has developed a website (www.mj.gov.br/combatepirataria) that is replete with IP information in Portuguese. A quick click on its "Pirata: tô fora!" link and the following anti-piracy message (Fig. 3.4) are revealed with rap-like music chanting the slogan – Pirata: tô fora! Só uso original (Piracy: Count me out! I only use originals).

Brazil's Institute of Industrial Property (INPI) oversees industrial property rights, such as trademark registration, and is governed by the Ministry of Development, Industry, and Commerce. The agency's website in Portuguese is at http://www.inpi.gov.br/.

Fig. 3.4 Anti-piracy slogan in Brazil (source: www.mj.gov.br/comatepirataria)

3.4 Notorious Markets

Within specific countries particular marketplaces have been identified as centers for counterfeit product. The most infamous are detailed below (USTR, 2006USTR, 2007c):

- Beijing's Silk Street Market – also known as Xiushui Market, has been described as the third best-known tourist destination in Beijing after the Forbidden City and the Great Wall (Zhu, 2005). It has also been called "the single biggest symbol of China's IP enforcement problems" (USTR, 2006). It was established in 1985 near foreign embassies and luxury hotels. Local authorities never promised to close down this market as they did Shanghai's Xiangyang. In mid-2005 Gucci, Chanel, Burberry, Prada and Louis Vuitton sued the landlord, Beijing Xiushui Haosen Clothing Company Ltd., for selling counterfeit products. Six large boxes containing hundreds of items marked with well-known brands were brought to court (Zhu, 2005). In 2005, Beijing Number Two Intermediate People's Court found in favor of the rights holders and the high court of Beijing recently upheld that decision (USTR, 2006). Although a Memorandum of Understanding has been executed with the landlords in June 2006 violations continue with counterfeit goods in certain categories ranging up to 100% (USTR, 2007c).
- Brazilian markets – in Brazil, markets identified by the USTR (2006) are Stand Center, "25 de Marco" Shopping Center and Promocenters in Sao Paulo. Brazilian authorities say they will continue raids on these huge centers for counterfeit product.
- Harco Glodok – located in Jakarta, one of the largest markets for fake product, specifically pirated optical discs. Organized criminal gangs keep IPR enforcement at a low level.
- La Salada – located in Buenos Aires, Argentina, it is the largest illegal market in Latin America, selling approximately $9 million in merchandise per day. It is one of more than 40 markets in the city, nearly all dedicated to selling pirated goods. Approximately 6,000 vendors sell products to 20,000 customers every-day. Hundreds of buses arrive every week from remote areas in Buenos Aires province or even from neighboring countries. Because of organized gangs there is little IPR enforcement. According to Sardon (2007) various law enforcement groups pass the responsibility to each other and political will is lacking to do something about the trade in illegal goods.
- Mexican markets – seven locations are identified by the USTR in Mexico: Tepito, Plaza Meave, Eje Central, Lomas Verdes and Pericoapa Bazaar in Mexico City; CAPFU in Puebla and San Juan de Dios in Guadalajara as important markets for pirated goods. Some raids by police had taken place and sometimes have been met with violent resistance.
- Moscow markets – the USTR has identified several markets in and around Moscow as "notorious." This includes Gorbushka, Tsaritsino and Mitino. Closures at Gorbushka resulted in vendors moving to the nearby Rubin Trade Center. Tsaritsino and Mitino are newer markets on the outskirts of Moscow. There have

been some sporadic police raids on these markets. Some improvement has been noted at the Rubin Trade Center.

- Panthip Plaza – this Bangkok location is also well known for pirated movies on optical discs. Despite the installation of closed-circuit cameras, trade in pirated product continues.
- Quiapo – in Manila, there are a number of street stalls in this area selling counterfeit goods. Multiple raids took place in 2006.
- Xiangyang – this market in Shanghai had been the subject of scrutiny from US as well as Shanghai municipal government authorities. The local authorities repeatedly promised to take action against this market and finally in June 2006 it was closed and vendors scattered around the city.
- Yiwu – both Hopkins et al. (2003) and the USTR identify Yiwu, a city about five hours from Shanghai as a key counterfeit market. In fact Hopkins et al. call this "counterfeit central," where customers can buy fake Gillette razor blades, Safeguard soap, Skippy peanut butter, Budweiser beer, Duracell batteries, Marlboro cigarettes and Tide detergent just to name a few. According to the USTR there are more than 400,000 different items for sale at this market, mostly in the form of bulk quantities of small consumer goods. Local officials have promised to improve IPR enforcement.

3.5 Extra-Country

Ciudad del Este, a city at the border of Brazil, Paraguay and Argentina is said to be the largest illicit market in the Western Hemisphere. Some have compared it to the famous Cantina at Mos Eisley seen in Star Wars IV, where shady characters of every description are in evidence. The USTR (2006) identifies this tri-border region as a "hotbed of piracy and counterfeiting of all kinds of products," with a total trade of approximately $12 billion per year. Naim (2005) calls Ciudad del Este "a crossroads for virtually every illicit trade, including counterfeit software and electronics, smuggled imported goods and reportedly weapons." The city is located just over the Brazilian– Paraguayan border and goods are smuggled out of Paraguay into Brazil, Argentina and eventually the US over a single bridge crossed by 25,000 people each day. With widespread corruption in the government, no immigration or customs checks take place.

CBS found one seller offering a thousand copies of Microsoft Windows XP priced at $15 and pirated CDs for one dollar each. An investigator for Motorola found fake cellphone parts including batteries which may overheat and explode. The city's 55 banks serve to recycle profits not only from counterfeit products but also from illicit drugs. Investigators are concerned that a large number of Middle Eastern immigrants in the area are sending vast sums to terrorist organizations like Hamas and Hezbollah. Hezbollah is not considered a terrorist organization in Paraguay so no action against this has been taken by the local government (CBS News, 2006; CNBC, 2007).

3.6 Conclusions

Counterfeit product is produced in nearly every country in the world. The OECD identified pirated product shipments from nearly 150 nations. Looking at many sources including the USTR, the EU, the MPAA and IFPI as well as a number of researchers on the problem, it is possible to identify the most important sources for these products. The primary source in nearly every product category is the People's Republic of China which accounted for 81% of US Customs seizures of IPR-violating product in 2006.

Other leading countries housing producers of fakes are: Russia, Argentina, Chile, Egypt, India, Israel, Lebanon, Thailand, Turkey, Ukraine, Venezuela, Brazil, Paraguay and Mexico. Research conducted by the authors confirms these markets as leading problem areas. The United States is a primary consumer of counterfeit product but a smaller center for production.

Major problem areas include CDs and DVDs, software and pharmaceuticals as well as books, clothing, footwear and jewelry. Some controversy centers around generic copies of important drugs. The USTR identifies ready access by others to test data required for approvals from pharmaceutical patent holders as an important problem in nearly every country on the Priority Watch List. Some health authorities believe they are able to produce generics without violating their international obligations but it is apparent that large pharmaceutical companies do not agree.

Some particular areas within these countries have been identified as hotbeds of counterfeit product. These range from Beijing's Silk Street Market to Gorbushka in Moscow to La Salada in Buenos Aires. Perhaps the most notorious center for counterfeit product is Ciudad del Este, on the border of Brazil, Paraguay and Argentina. Paraguay in fact has held a special place for monitoring by the USTR since 1998.

The specific reviews of each of these major havens for pirates reinforces the conclusion that weak enforcement, sometimes abetted by corruption, allows counterfeiters to flourish in particular areas. The ability to sell and ship product throughout the world facilitated by globalization means producers can locate in the most accommodating markets anywhere in the world.

Chapter 4
Modeling the Intellectual Property Rights Environment

4.1 Introduction

The study of the global protection of intellectual property rights environment is an important issue, but, the need to develop a theoretical framework is acute. Several descriptive studies of the business problem have been conducted, but, few offer a conceptual framework that tests a model by way of managerial perceptions. In this chapter, a detailed discussion of the results of the research of Chaudhry, Zimmerman, Peters and Cordell (2008 and 2009) is given to present a framework and statistical measures to accept (or reject) the proposed model of the IPR environment. First, general research questions and a model of the intellectual property rights environment are given. Second, a synopsis is given of the variables used in the model, such as the level of consumer complicity, pirate activity, and host country enforcement of intellectual property rights. Third, a brief discussion of the study design to capture managerial perceptions to test this model follows. Fourth, an in-depth discussion of managerial assessment of the variables presented in the model is given with detailed statistical results that either support (or refute) the model proposed in Fig. 4.1. Several of the topics presented in this model are further discussed in other chapters of the book. In Chapter 3 an outline of the source countries of counterfeit trade and the problem of enforcement of intellectual property rights was given. In Chapters 5 and 6, consumer complicity to purchase counterfeits and plausible social marketing anti-counterfeiting measures is debated. In Chapter 11, detailed recommendations for managers to combat this illicit trade are addressed.

4.2 Proposed Framework

Chaudhry et al. (2008) assert that the three distinct areas that shape a country's IPR environment are the level of consumer complicity to use counterfeit goods, the indigenous pirate activity to supply the fake products, and the host country enforcement measures. This IPR environment then stimulates the anti-piracy actions that companies employ to target consumers, distribution channels, host governments, international

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organizations and pirates. A succinct review of the three key areas that determine the IPR environment follows.

4.2.1 Level of Consumer Complicity

Cultural differences can account for the popularity of counterfeiting. According to the *Journal of Commerce* ("Intricacies of," 1999), Intellectual Property Rights (IPR) is a Western concept. IPR infringement is not seen as a morally wrong practice in China. In India, counterfeit drug makers argue against the government that saving lives takes precedence over profits-driven incentives for drug investors (McNeil, 2000). It is apparent that the willingness of the consumer to purchase a counterfeit product/service is a major factor of the intellectual property rights environment.

The overall acceptance of non-deceptive purchases of counterfeit goods will significantly affect the intellectual property environment and the subsequent level of future investment. Chaudhry et al. (2008) expected managers to decrease their level of market commitment in terms of future investments and increase the frequency of anti-counterfeiting tactics in highly complicit markets.

Muncy and Vitell were leaders in developing a scale that measures consumer ethics (see Muncy & Vitell, 1992; Vitell & Muncy, 1992) regarding their dubious behavior resulting in a four-dimensional belief: (1) actively benefiting from illegal activities, (2) passively benefiting, (3) actively benefiting from deceptive (or questionable, but legal) practices, and (4) no harm/no foul activities. The literature yields various studies that investigate a segment of the intellectual property rights dilemma facing managers. Later, Vitell and Muncy (2005) expanded their consumer ethics scale to include three new items: downloading/buying counterfeit goods, recycling/environment and doing the right thing/do good. In this study, the researchers' looked at respondents' belief about whether "downloading music from the Internet instead of buying it" and "buying counterfeit goods instead of buying the original manufactured brands" were unethical.

The level of consumer complicity towards counterfeit product usage has been examined in an ethical framework (e.g., moral judgment) and is usually product-specific (e.g., software piracy) (see Al-Rafee & Cronan, 2006; Chiu et al., 2007; Cronan & Al-Rafee, 2008; Goles et al., 2008; Gupta et al., 2004; Kini et al., 2004, Shang et al. 2008, Wee, Tan, & Cheok, 1995). Al-Rafee and Cronan (2006) model that the attitude of a person who engages in digital piracy is a function of his or her moral judgment, individual attributes, affective beliefs, cognitive beliefs, perceived importance and subjective norms. Cronan and Al-Rafee (2008) later refined their model to investigate intention to pirate (the dependent variable) if a function of attitude, subjective norms, perceived behavioral control, past piracy behavior, and moral obligation.

Goles et al. (2008) examined the determinants of a consumer attitude towards softlifting (software piracy) and modeled intention to softlift (the dependent variable) as a function of attitude towards softlifting (past behavior, perceived usefulness, awareness of the law, personal moral obligation, risk-taking personal identify, legal

personal identify and technical personal identity. Gupta et al. (2004) speculated that the decision to pirate (or not to pirate) was based on ethical considerations, economic issues (e.g., perception of industry loss due to piracy), legal implications, consumer behavior (e.g., frequency of softlifting), accessibility and demographics.

Chaudhry and Stumpf (2008) suggest that consumer complicity for counterfeit usage is a result of demographics, espoused values (relativism, idealism, collectivism), attitudes towards counterfeits (ethical concerns, quality of the counterfeit, previous use of counterfeits), actions to reduce product counterfeiting (product and social marketing anti-piracy tactics), and the shopping experience (e.g., hedonic behavior resulting from engaging in an illicit act-Babin et al. 1994).

Overall, the literature is addressing the specific role of consumer complicity, but does not offer a holistic perspective of the IPR environment.

4.2.2 Level of Pirate Activity

Recent research and current events reveal problems that companies may experience with organized crime and/or legitimate dealers in the distribution channel. Initially, the counterfeit market evokes the image of a person selling fake Kate Spade handbags on Canal Street in New York City or the savvy Chinese hawking look-alike North Face jackets in the infamous Silk Street of Beijing. *The Economist* describes pirate activity as "[U]ntil the 1980s, counterfeiting was a relatively small-scale business, restricted mainly to copying luxury fashion items, such as watches and leather goods, in limited quantities. But in the 1990s it was transformed into a much bigger, broader industry, with large-scale production and distribution of false versions of such everyday items as biscuits and shampoo" ("Stepping up the war," 2003). There have been few studies that actually attempt to determine the "level of pirate activity" facing managers in the IPR environment. It is obvious that there exist both domestic and international pirates that infiltrate a country's market in order to distribute counterfeit goods in both the physical and virtual marketplace. However, actually attempting to measure the activities of this illicit trade is problematic and a succinct discussion of the pirates follows.

Naim (2005) describes the thriving "shadow world global economy," illustrating that pirates are "organized" and have a large profit motive to continue their lucrative business. Naim describes this overt market as, "some of the physical marketplaces can even be looked up in tourist guides to the world's great cities: Silk Street in Beijing, Charoen Krung Road in Bangkok, and Canal Street in New York City. Factories in the Philippines or China that produce licensed manufactured goods may run unauthorized second shifts with shoddy components" (T. Gross, 2005, ¶ 5). Even the Chinese government became concerned about pirates making profits from its 2008 Beijing Olympic logo, a "red running man," and enforced stiffer penalties for selling this type of counterfeit merchandise. The monetary incentive of the Chinese government to protect its Olympic logo is strong, since it was estimated that the Greek government made $883 million from the sale of buying rights and licensing of its logo for the 2004 Olympic games (Fowler, 2005).

Kahn (2002) reports several different strategies that New Balance employed to deter a licensee, Horace Chang, from selling "unauthorized" shoes in international markets. The main concern regarding Chang's unauthorized selling is attributed to brand dilution, since several of the New Balance shoes started appearing in discount stores for $20 as opposed to the legitimate retail price of $60. Stephen Vickers, President of International Risk states, "[A]s more companies move to take advantage of China's low-cost labor and high-quality manufacturing, many are finding that they pay a steep price for doing so. Ten years ago it was just knockoffs… [T]he number one problem is collusion between your own staff and the manufacturer" (Kahn, p. A1).

Green and Smith (2002) discuss an interesting longitudinal case study of counterfeit marketing of premium imported Scotch whisky in Thailand. The company (ISD) knew that it was losing about 40% of its sales to counterfeiters and was facing brand dilution from reported deaths attributed to the consumption of the dangerous counterfeit whiskey. In addition, the company was aware that its legitimate channel members were actively purchasing the counterfeit whiskey to reap a higher profit. Finally, the counterfeiters were extremely "organized" through family crime syndicates in the Chinese Triad groups.

In this case, the company operating in Thailand engaged in the anti-counterfeiting strategies of identifying and punishing retail outlets; destroying the production facilities of pirates; protecting the CEO with security guards; converting pirates into legitimate businesses; lobbying for stricter penalties in the Thai legal system; obtaining local police support for sting operations; securing Thai government official assistance; and hiring a "dream team" of former Scotland Yard and British military commandos to lead the operation. The success of using both these covert and overt anti-counterfeiting strategies is demonstrated by the company's ability to decrease the counterfeiter's market share from an estimated 55% of the company's sales in 1986, to 10% in 1989, and further to 1% in 1991 (Green and Smith, 2002, p. 102). Through these strategies, the company regained consumer brand confidence, as well as market share lost to illegitimate sellers.

Overall, the level of organized pirate activity in the country market where a firm is experiencing the most significant piracy should shape the IPR environment. In addition, one would anticipate that the firm would increase the number of anti-counterfeiting tactics targeted within this country market as a result of formidable competition from the organized pirates.

4.2.3 Level of Host Country Enforcement

US laws such as the Tariff Act of 1930, the Lanham Act, the Trademark Counterfeiting Act of 1984, and the Stop Counterfeiting in Manufactured Goods Act of 2006 are all designed to provide some form of legal recourse for the firm through civil and criminal law penalties in the United States. In addition, the NAFTA treaty, The Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) in the World Trade Organization (WTO), and the Scrivener regulations of the European Union are international measures implemented to encourage

protection of intellectual property rights. For a detailed discussion of these multilateral trade agreements, see Chaudhry and Walsh (1995 and 1996).

In 1997, Ginarte and Park developed a quantitative index of IPR for 60 countries that asserts that the protection of patents is a function of five variables: coverage, participation in international patent agreements, provisions for loss of protection, enforcement mechanism and duration (p. 52). Within each of these five categories, a value from 0 to 1 is assigned in order to give the IPR index value (i.e., a summation of each category would range from 0 to 5). The researchers' expected that there was a strong correlation between safeguarding a country's IPR environment and increasing its economic growth. At the time of their study (1997) the top-ranked countries for the IPR index were: Austria (3.53), Belgium (3.48), France (3.48), Israel (3.53) and US (3.52). Some of the lowest indices were reported in Guatemala (1.15), India (1.39), Indonesia (0.33), Mexico (1.30) and Nicaragua (0.94) (p. 53). The researchers' conclude that the mere codification of IPR laws would not stimulate economic growth, but that the increased investment, especially in research and development that rely on strong IPR protection, enhances a country's growth potential.

The Index of Economic Freedom (IF) is another metric used to rank countries based on ten economic freedoms, such as trade freedom, investment freedom, and property rights that yield an overall score from 0 to 100 (Index of Economic Freedom, 2008). The top ten countries based on the IF for 2008 were Hong Kong (90.25), Singapore (87.38), Ireland (82.35), Australia (82), US (80.56), New Zealand (80.25), Canada (80.18), Chile (79.79), Switzerland (79.72) and the UK (79.55). Each of these countries scored the identical rating for property rights – 90.

Overall, one would expect to find a positive correlation between the level of host country enforcement of intellectual property rights and the IPR environment. This should also lead to a reduced number of anti-counterfeiting measures employed in markets where host country enforcement is on the rise.

4.2.4 IPR Actions Targeted at Consumers, Distribution Channels, Host Governments, International Organizations and Pirates

Because of the inability of governments to protect IPR throughout the world, many firms are becoming independently proactive. Many measures have been proposed to counter the growing problem of counterfeiting, and research has offered various recommendations to firms, ranging from the development of better relations with the distribution channel, encouraging consumer distinction between a genuine product and its fake counterpart, emphasizing the truly prestigious image portrayed by purchasing a genuine product, and stressing potential embarrassment associated with owning a counterfeit product (Wee et al., 1995). Also noteworthy is the implementation of new and clever packaging and marking of products, including special spouts to discourage bottle refills; the use of holograms, covert chemical fingerprints and other hidden markers (Colvin, 1999); and even the use of DNA as an

identification marker in the textile industry (Chaudhry and Walsh, 1996). Lobbying host government and international organizations for increased protection of IPR is another tactic. A concise discussion of anti-counterfeiting strategies targeted at consumers is given in both Chapters 5 and 6. Insight into both traditional and novel anti-counterfeiting tactics that target other stakeholders, such as the company's distribution channel and its adversary - the pirates are found in Chapter 11. A succinct discussion of the international organizations that safeguard IPR is found in Chapter 8.

4.2.5 The Model

Chaudhry, Cordell, and Zimmerman (2005) developed a comprehensive model and subsequent research inquiries to provide a framework for debate regarding the following questions:

1. How does the level of consumer complicity, pirate activity and host country enforcement affect the perceived risk of the intellectual property rights environment?
2. Based on this managerial perception of IPR environment, how does this moderate the company's anti-counterfeiting actions targeted at consumers, distribution channels, host governments, international organizations and pirates?
3. Finally, how does this affect a firm's future market commitment?

Figure 4.1 illustrates the conceptual framework developed to provide a holistic view of an IPR environment that is shaped by the "level of consumer complicity," the "level

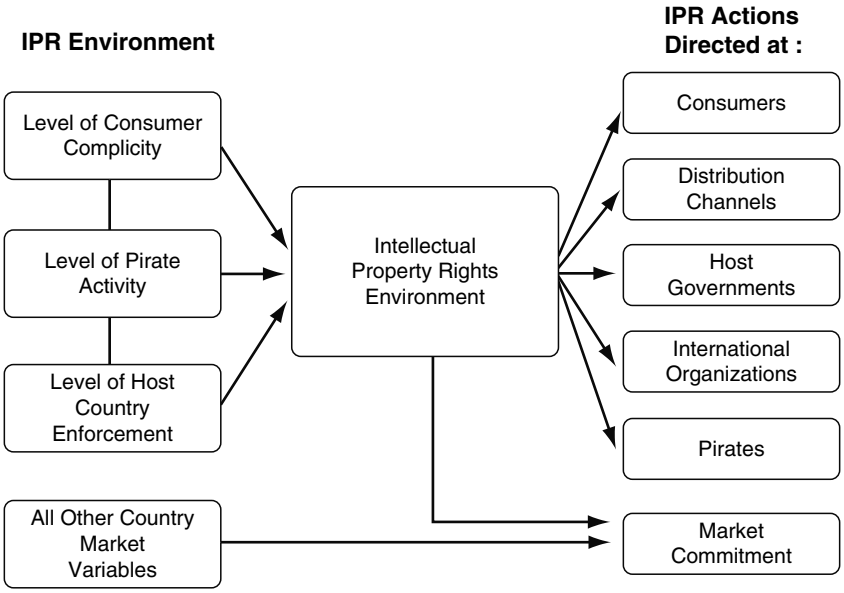

Fig. 4.1 Conceptual framework of the IPR environment

of organized pirates," and the "level of host country enforcement." This managerial perception of the IPR environment in each country will influence and elicit a strategic response in terms of the frequency of company actions targeted at consumers, distribution channels, host governments, international organizations, and pirates.

4.3 The Research Study

The research conducted by Chaudhry et al., (2008) was an exploratory study of managerial perceptions of the perceived risk of the intellectual property rights environment, obtained through assessing the use of anti-counterfeiting tactics in response to the level of consumer complicity, the degree of organized pirates, and host country enforcement. Overall, the researchers had wanted to test through statistical measures their preconceived expectations of managerial perceptions concerning the future level of market commitment in high-risk IPR markets, and the effectiveness of anti-counterfeiting tactics in a country where a firm experiences a high-level of counterfeit activity. This study sought to confirm the credibility of our assumptions regarding the intellectual property rights environment through the analysis of panel data from a variety of firms in different industries. This is an appropriate method of data collection for investigating the perceptions of managers regarding a future event, such as the perceived risk of investments in markets with high piracy rates (for example, see the literature on "scenario analysis" beginning with Leidecker and Bruno, 1984).

The panel data consists of 29 managerial reports from executives located in the United States. Securing managers to participate in an in-depth interview on country conditions for this panel data was an arduous process. Based on this experience, we can attest that the lack of empirical analysis on anti-counterfeiting strategies results in part from a lack of cooperation, since many firms that we contacted were not willing to disclose their strategic vision, since they considered their anti-counterfeiting tactics proprietary information. Therefore, this panel data is used to create and explore a conceptual framework by defining the variables that constitute the intellectual property rights environment [that is, level of consumer complicity, pirate activity and host country enforcement], how these variables affect the perceived risk of market commitment, and the firm's subsequent anti-counterfeiting action. The literature is replete with models and information on what factors influence the market commitment of the firm, such as economic conditions, political risk, currency fluctuations, trade barriers and the like. However, this exploratory research will establish whether a high-risk intellectual property rights environment significantly affects the firm's market commitment.

Although time-consuming and typically involving very few participants, panel data captures the prevalent managerial perceptions of a phenomenon, such as whether a firm's anti-counterfeiting tactics directed at consumers have decreased the level of consumer complicity to purchase fake goods. Given the lack of statistical analysis on managerial perception of the growing counterfeiting problem, we believe that this study, as an initial exploratory analysis, is a substantial contributor to a critical global business topic.

The managers interviewed in this study had several years of relevant work experience and the majority of the respondents had worked for more than 10 years in international business. Thirteen of the managers had worked for a company that had sold its product outside of the United States for more than 12 years, the average sales outside of the United States by these companies at 30%. The majority of the firms reported annual sales of less than $1 billion per year, while a few companies were in the $1–5 billion range. One participant reported annual sales over $5 billion. The managers represent a cross-section of various industries which encompass battery manufacturing; apparel; contact lens solution; computers; sunglasses; videos and CDs.

The respondents were asked to identify two countries where their firms experienced the highest level of product counterfeiting. The top markets for counterfeit goods were reportedly Brazil, China, Germany, Japan, Mexico, the Philippines, South Korea, Taiwan, Thailand, Turkey, the United States and Venezuela. These results are similar to that of the 2006 Special 301 Report issued by the Office of the US Trade Representative, which identified several of these countries as having weak IPR enforcement and protection. As mentioned in Chapter 3, the Special 301 Report also sets out "significant concerns" for the protection of intellectual property rights for the trading partners of Argentina, Belize, Brazil, Egypt, India, Indonesia, Israel, Lebanon, Paraguay, Turkey, Ukraine, and Venezuela (United States Trade Representative, 2006, ¶ 6).

4.4 Assessment of Managerial Perceptions

4.4.1 Examining the Role of Consumer Complicity

The four main country markets that managers rated highly regarding level of consumer complicity were China, Taiwan, the United States and Mexico. Over two-thirds of managers interviewed perceived that, in the market where the firm was experiencing the most difficult counterfeit problem, consumers were willing to purchase a counterfeit good.

To test our research question, an analysis of variance (ANOVA) was conducted to measure the extent to which a high level of consumer complicity to purchase counterfeits in a given country market deters a firm from future investment in that market. Again, the expectation was to discover that in high consumer complicit markets like China, firms would be unwilling to expand their current level of market commitment with future investment engagements. Respondents were asked to rate the "level of consumer complicity" on a scale of 1 (very unwilling to purchase counterfeits) to 5 (very willing to purchase counterfeits) for the main country, where they experienced counterfeits. We correlated this response with the respondents view of future investment decisions in this country on a scale of 5 (very high future investments) to 1 (very low future investments), and the perceived strategic importance of this country market on a scale of 5 (very important) to 1 (very unimportant). Table 4.1 reveals the results of the ANOVA below.

Table 4.1 Comparison of the level of consumer complicity to the level of market commitment and strategic importance

Group	Market commitment	Strategic importance
High consumer complicit markets	3.500	3.857
Low consumer complicit markets	1.833	3.333
F-statistic/p-value	10.328/p=0.005*	0.592/p= 0.452

*$p < 0.01$

Testing the null hypothesis that the level of market commitment is the same for the two groups at a 1% level of significance, Table 4.1 shows that one can reject the hypothesis that firms in both high and low complicit markets will make the same investment decisions. Thus, our assumption that firms will avoid markets with a high level of consumer complicity to purchase counterfeits is *not* supported and the ANOVA implies that managers plan to make significantly more future investments in markets where there is a higher level of consumer complicity. Table 4.1 indicates that the higher the number, the more future investment planned. Thus, it appears that the managers of companies operating in a highly complicit market, such as China, feel that the strategic importance of this market outweighs the intellectual property rights infringements, and will continue to invest in the market. This idea is further supported by the fact that the managers rated both high- and low-complicit markets relatively the same in terms of the strategic importance of each country market and that the counterfeit problem does not outweigh the future significance of maintaining a presence in one of these country markets.

The managers were asked to rate the frequency of anti-counterfeiting actions implemented in an attempt to reduce counterfeiting of their product in the country market. The specific tactics designated in the survey included the use of special packaging; educating channel members; lobbying for more effective intellectual property laws in the United States; lobbying for more effective laws in the foreign country; participating in organizations, such as the IACC; creating a company enforcement team to pursue pirates; and developing internal company strategies, such as educating employees on the product counterfeiting problem.

To test whether the degree of anti-counterfeiting actions changed in complicit markets, an ANOVA analysis was conducted to see if the "frequency of anti-counterfeiting actions" varied as a function of whether the market was complicit or non-complicit. To analyze this inquiry, a composite score of all of the seven anti-counterfeiting tactics listed in the survey was developed (see Table 4.2). Thus, a company with a high frequency (scale item=5) of all of these seven strategies would have a score of 35 (7× 5). Then, a comparison between complicit and non-complicit consumer markets in terms of frequency of use of these distinct strategies was analyzed. Table 4.3 illustrates that, using a composite score; there are no visible tactical differences between firms operating in a complicit versus non-complicit market.

There is simply no statistical evidence that supports that firms use more anti-counterfeiting tactics in highly complicit markets. However, each anti-counterfeiting

Table 4.2 Comparison of means on frequency of use of anti-counterfeiting tactics between firms operating in complicit vs. non-complicit foreign markets

Anti-counterfeiting tactic	High complicit vs. low complicit consumer markets	Mean	F-statistic/ p-value
Actions directed at consumers	High complicit	2.929	0.688/p=0.418
	Low complicit	2.167	
Actions directed at channel members	High complicit	3.143	0.336/p=0.569
	Low complicit	2.667	
Lobbying US government	High complicit	2.615	0.061/p=0.807
	Low complicit	2.833	
Lobbying foreign government	High complicit	2.154	0.169/p=0.686
	Low complicit	1.833	
Participating in international organizations	High complicit	3.538	0.1246/p=0.280
	Low complicit	2.667	
Actions directed at pirates	High complicit	3.583	1.098/p=0.310
	Low complicit	2.500	
Actions directed at educating employees	High complicit	3.077	0.007/p=0.936
	Low complicit	3.000	

*p>0.10 for all items

Table 4.3 Comparison of complicit vs. non-complicit consumer markets and frequency of anti-counterfeiting tactics used in the foreign market

	Mean of actions
High complicit markets	19.400
Low complicit markets	17.667
F-statistic/p-value	0.187/p=0.672*

*p>0.10

tactic was examined to see if there was a strong correlation between the implementation of any one strategy, such as using special advertising or labeling, to deter the purchase of counterfeits, and market complicity.

As indicated in Table 4.3, the managers responses did not indicate any statistical significance of anti-counterfeiting efforts as a variable dependent on market complicity (tested at the p=10%). So, overall, contrary to our expectations, the level of market complicity does not affect the frequency of the company's anti-counterfeiting efforts in that market. It is evident from this analysis that firms are employing various anti-counterfeiting tactics regardless of whether the managers perceive a high degree of consumer complicity in their most important markets. Overall, the firms are using a uniform, standardized strategy to protect intellectual property in the global marketplace. It is interesting to note that they are not varying the level of "actions directed at consumers" in highly complicit markets.

In Chapter 5, a more detailed discussion of consumer complicity is given. In Chapter 6, an in-depth review of anti-counterfeiting strategies to decrease demand for fake goods, specifically whether companies can use novel social marketing techniques to change the consumer behavior towards purchasing illicit products is provided.

4.4.2 Evaluating the Effect of Indigenous Pirate Activity

As suggested previously, we expected the level of pirate activity to negatively impact the level of market commitment and/or increase the use of anti-counterfeiting strategies employed by the firm in a particular country market. An ANOVA was conducted to test these expectations and respondents were asked to rate the "level of counterfeiting activity" on a scale of 1 (very insignificant) to 5 (very significant) for the country in which the firm primarily experienced counterfeits. We correlated this response with the respondents' view of future investment decisions in this country on a scale of 5 (very high future investments) to 1 (very low future investments), and the perceived strategic importance of this country market on a scale of 5 (very important) to 1 (very unimportant). Again, we expected to find that markets with a formidable level of pirate activity, such as China, would lower the willingness to further expand market commitment through future investment in that market. We also wanted to see if there existed a correlation between the strategic importance of the market and the incidence of indigenous pirates in the foreign market. Table 4.4 reveals the results of the ANOVA.

The results in Table 4.4 indicate that the managers did not vary the level of firm commitment nor the perceived ranking of strategic importance of the foreign market based on the expected level of pirate activities in the host country market, thus negating our expectations. However, a test of the frequency of counterfeiting tactics related to the level of piracy in the foreign market was conducted to discern whether the frequency of anti-counterfeiting actions varied between markets with a large number of indigenous pirates and low-piracy markets. A composite score of all of the seven anti-counterfeiting tactics listed in the survey was developed, thus, a company with a high frequency (scale item = 5) of all of these seven strategies would have a score of 35 (7×5). Then, a comparison of the difference between high piracy and low piracy markets in terms of frequency of use of these distinct strategies was analyzed. Table 4.5 indicates that there is a difference between the two groups at the 1% level of confidence in terms of the number of actions employed in a high-piracy environment.

To further understand the alleged difference in tactical maneuvers in markets with a high level of indigenous pirates, we conducted an ANOVA for each tactic. As indicated in Table 4.6, three stratagems, actions directed at the US and foreign governments, and local pirates, are significantly different at the 1% level of signifi-

Table 4.4 Analysis of variance for level of piracy in foreign market compared to the level of market commitment and strategic importance

Group	Market commitment	Strategic importance
High piracy markets	3.222	3.778
Low piracy markets	3.000	3.182
F-statistic/p-value	0.112/0.742	0.807/0.381*

*$p > 0.10$

Table 4.5 Comparison of high vs. low piracy markets and frequency of anti-counterfeiting tactics used in the foreign market

Group	Mean of actions
High piracy markets	22.4286
Low piracy markets	11.7273
F-statistic/p-value	17.500/0.001*

*$p < 0.01$

Table 4.6 Comparison of means on frequency of use of anti-counterfeiting tactics between firms operating in high-piracy vs. low-piracy foreign environments

Anti-counterfeiting tactic	High vs. low-piracy environment	Mean	F-statistic/p-value
Actions directed at consumers	High-piracy	2.556	0.337/0.569
	Low-piracy	2.091	
Actions directed at channel members	High-piracy	3.444	0.674/0.422
	Low-piracy	2.818	
Lobbying US government	High-piracy	3.250	12.538/0.003***
	Low-piracy	0.818	
Lobbying foreign government	High-piracy	2.750	17.216/0.001***
	Low-piracy	0.545	
Participating in international organizations	High-piracy	3.889	6.278/0.022**
	Low-piracy	2.273	
Actions directed at pirates	High-piracy	4.125	19.183/0.000***
	Low-piracy	1.091	
Actions directed at educating employees	High-piracy	3.444	3.072/0.097*
	Low-piracy	2.091	

*$p < 0.10$; **$p < 0.05$, ***$p < 0.01$

cance between the two groups of high- vs. low-piracy markets. If we expand our level of significance to the 5% and 10% level, we can add two more strategies, participating in international organizations, such as the International Anti-Counterfeiting Coalition (IACC), and educating the company's employees to deter the pirates. In sharp contrast to the analysis of consumer complicit markets, there is a proven statistical difference between the two groups, that is, high- vs. low-piracy markets, regarding "actions directed at pirates."

4.4.3 Judging the Influence of Host Country IPR Enforcement

The lack of legal enforcement of intellectual property rights has been well cited in the literature (for example, see Chaudhry and Walsh 1995 and 1996). However, the empirical measurement of managerial perceptions of this enforcement issue rarely goes beyond descriptive statistics of the types of strategies used by firms to combat counterfeits. In this study, an assessment of the influence of the degree of intellectual

property rights enforcement on a manager's decision to increase the firm's level of market commitment and effectively employ anti-counterfeiting tactics was conducted.

In the interview, the mangers were asked two questions related to the level of host country enforcement of IPR: (1) How protective are the laws that cover intellectual property rights in this country? (2) How effective do you feel the enforcement of intellectual property rights laws are in this country? The scale used for the first question ranged from 5 = very protective to 1 = very unprotective. The scale for the second question ranged from 5 = very effective to 1 = very ineffective. The logic behind these questions was to correlate the legislation in a country market with the effectiveness of such legislation to enforce a company's intellectual property rights. A composite score of both of these questions was conducted by way of ANOVA to determine whether a low-level of intellectual property rights enforcement in a country market would deter the firm's future investments or perceived level of strategic importance of the host country. Table 4.7 reveals that both the company's investment strategy and its rating of the host country's strategic importance were not influenced by the level of enforcement of IPR. In fact, one can draw an analogy between the findings related to consumer complicity and enforcement of IPR. In both cases, our findings were contrary to our expected results. The firms were still willing to expand their level of market commitment in highly complicit markets and markets with a low-level of intellectual property rights protection. Again, this emphasizes the fact that strategic importance of the markets in this study outweighs potential negatives associated with counterfeit products.

Finally, a test was done to see if the number of anti-counterfeiting tactics implemented in the market where the firm was experiencing the highest level of counterfeits varied as a function of perceived level of legal enforcement of intellectual property rights. An ANOVA was conducted to further understand how the legal framework governing the protection of IPR in a host country environment affects the frequency of anti-counterfeiting strategies directed at consumers, pirates, channel members and the like. In order to test this assumption through statistical analysis, a composite score of all seven of the categories of company actions, such as "actions directed at consumers," was calculated, and a comparison of the use of these strategies in environments of high- vs. low-level of legal protection was conducted.

Table 4.7 Analysis of variance for level of enforcement of IPR compared to the level of market commitment and strategic importance

Group	Market commitment	Strategic importance
High-level of enforcement of IPR	3.400	3.700
Low-level of enforcement of IPR	2.889	2.700
F-statistic/p-value	$0.771/p=0.392$	$2.356/p=0.142^{*}$

$^{*}p>0.10$

Table 4.8 illustrates that there is a noteworthy difference between countries of high- vs. low-level of IPR protection, in terms of the company's frequency of use of anti-counterfeiting strategies at the 1% level of significance. However, the research finding is exactly the *opposite* of what we had expected and the frequency of anti-counterfeiting actions was greater in a country where the level of local law enforcement was higher, *not* lower. The researchers' assume that a manager will use more anti-counterfeiting actions when he or she perceives a weak legal environment. On the contrary, the firm will use fewer tactics in an environment where the manager does not foresee the legal support to enforce its anti-piracy stratagems.

Given our unexpected statistical results for this research question, the importance of each individual tactic was further investigated through the ANOVA in Table 4.9. There was an important finding in terms of actions directed at consumers and pirates at the 1% level of significance. To reinforce our previous assertion, managers will aggressively pursue the counterfeiters and consumers in a supportive legal environment. There was nominal support for actions directed at lobbying foreign governments and educating the company's employees at the 10% level of significance.

Table 4.8 Analysis of variance for level of enforcement of IPR and company actions taken against counterfeit goods

Group	Composite actions mean
High IPR protection in local laws	22.750
Low IPR protection in local laws	13.111
F-statistic/p-value	$9.334/p=0.008^{*}$

$^{*}p<0.01$

Table 4.9 Comparison of means on frequency of use of anti-counterfeiting tactics between firms operating in high-legal protection vs. low-legal protection foreign environments

Anti-counterfeiting tactic	High vs. low-legal protection in the legal environment	Mean	F-statistic/p-value
Actions directed at consumers	High-legal protection	3.700	$20.979/0.000^{**}$
	Low-legal protection	1.100	
Actions directed at channel members	High-legal protection	3.900	1.200/0.288
	Low-legal protection	3.300	
Lobbying US government	High-legal protection	2.556	2.426/0.138
	Low-legal protection	1.300	
Lobbying foreign government	High-legal protection	2.444	$3.720/0.071^{*}$
	Low-legal protection	1.100	
Participating in international organizations	High-legal protection	3.222	0.015/0.903
	Low-legal protection	3.300	
Actions directed at pirates	High-legal protection	4.333	$11.888/0.003^{**}$
	Low-legal protection	1.778	
Actions directed at educating employees	High-legal protection	3.700	$3.095/0.064^{*}$
	Low-legal protection	2.100	

$^{*}p< 0.10$; $^{**}p< 0.01$

4.5 Managerial Insights Regarding the IPR Environment: Key Findings

One of the major findings of the research presented in this chapter (Chaudhry et al., 2008) was that managerial implementation of anti-counterfeiting strategies targeted at the consumer of fake goods was not influenced by market complicity. Overall, the test results found that there were no tactical differences between firms operating in a complicit vs. a non-complicit market. The researchers' had anticipated that firms would employ a multi-domestic anti-counterfeiting strategy approach to curtail the consumer purchase of counterfeit goods in highly complicit markets and expected to find more consumer-directed tactics used in these markets, such as special advertising and labeling techniques like holograms. However, the researchers' found no statistical evidence that would support this assertion and discovered that none of the seven tactics designed to bolster the protection of intellectual property rights were significantly different in markets of high vs. low complicity. The researchers' conclude that companies are using various anti-counterfeiting tactics in country markets, regardless of whether the managers perceive a high degree of consumer complicity. Firms are using a uniform, standardized strategy to protect intellectual property in the global marketplace in terms of special packaging/advertising, warning channel members, devising actions against pirates, and the like.

In sharp contrast to the analysis of consumer complicit markets, there was a difference in anti-counterfeiting stratagems directed at pirates in terms of the level of counterfeiting activity in the country where the firm was experiencing the highest level of illicit trade. In markets where managers perceived a high-level of piracy, firms were more likely to employ tailor-made actions designed to combat the pirates in that foreign market. In addition, the companies were more likely to use lobbying tactics targeted at both the foreign government and US government to alleviate the problem of this type of crime. In addition, the firm was more likely to participate in an international organization, such as the World Trade Organization (WTO). This topic is further addressed in both Chapters 8 and 11.

Overall, the study discussed in this chapter revealed a strong indication that managers do not perceive curbing the demand side – consumer complicity – as an effective way to remedy the problem. That is, consumer complicity is not regarded as an actionable item warranting significant management behavior. However, the managers did view deterring the pirates to be an actionable item warranting proactive behavior. Overall, the respondents were more likely to use the following tactics: lobbying the US government, lobbying the host country government, participating with international organizations, using company enforcement teams to curtail indigenous pirates, and educating their employees about the counterfeit problem.

The researchers' compared the use of anti-counterfeiting tactics in markets where managers perceived a high- vs. low-level of legal protection in the host country to analyze whether there was a difference between these two distinct types of markets. We expected to see a higher number of tactics used in markets where there was a

low-level of enforcement of the company's intellectual property rights. However, contrary to prediction, the study results supported that the managers employed more anti-counterfeiting stratagems in a country where the level of local law enforcement was higher, *not* lower. Thus, we conclude that a manager believes employing several anti-counterfeiting measures in a country with a low-level of enforcement is futile. Firms anticipate the detriment of weak international litigation in an unprotective legal environment to yield a negative outcome.

In the model (refer to Fig. 4.1) we expected that the level of consumer complicity, level of pirate activity, and the level of host country enforcement would influence the future level of market commitment made by the firm in the country where the company was experiencing the highest degree of counterfeit activity. For example, in 2005, the *Business Software Alliance* estimated that software piracy rates in Vietnam, the Ukraine, and China were 92%, 91%, and 90%, respectively (Business Software Alliance, 2004). Thus, one would question whether firms such as Microsoft would increase the level of market commitment in this type of marketplace.

The findings were mixed in terms of supporting this assumption about a firm's behavior in markets that have a high-degree of counterfeit trade. First, the study results support that in markets where there is a higher level of consumer complicity, the managers planned to make significantly more investments in the future. Conversely, the presence of a high degree of pirates did not change the level of the company's commitment to future investments, nor its perception of the country's ranking of strategic importance. Likewise, the investment strategy of the firm was not altered based on whether the manager faced a high- or low-level of enforcement of its intellectual property rights in a given market. Thus, the suggested negative linkage between the IPR environment and the level of market commitment could not be statistically supported in this study. In fact, the results are just the opposite. Managers were willing to increase their investments in markets where they experienced a high level of consumer complicity, pirate activity, and a low-level of intellectual property rights enforcement. Consequently, this study shows that despite a weak IPR environment, a market may be perceived as strategically important and a market deserving of future commitment and investment.

4.6 Conclusions

In this chapter, a concise summary of the results of an exploratory analysis based on 29 managerial reports of the IPR model (refer back to Fig. 4.1) was given. Given the small sample size, the researchers' cannot support or refute the proposed framework – this is the task of future work using a larger number of respondents. However, the valid contribution of this exploratory study centers on the fact that many of the results of this study were not expected and several of the researchers' assumptions were not supported. Thus, future studies must be conducted to build on this initial empirical analysis of managerial response to the IPR environment.

First, it is possible that other factors in addition to the level of consumer complicity, pirate activity and host country enforcement determine the intellectual property rights environment of a particular country market. The exact relationships between the IPR environment, the level of the firm's market commitment and subsequent IPR actions targeted at consumers, distribution channels, host country government, international organizations and pirates are all fertile areas that need to be explored across country markets using a larger number of managerial respondents to garner the validity of the model proposed in this chapter. In Chapter 5, an overview of research that attempts to capture the essence of consumer complicity to purchase fake goods is debated. Chapter 6 draws from the social marketing literature to provide a unique discussion of plausible anti-counterfeiting techniques targeted to change a consumer's behavior, such as using a "fear of prosecution" in advertisements to diminish demand for counterfeits. Finally, Chapter 11 extends the initial discussion of anti-counterfeiting tactics presented in this chapter through an overview of both traditional and novel anti-counterfeiting stratagems for firms to employ in the global marketplace.

Chapter 5
The Demand for Counterfeit Trade: Consumer Complicity

5.1 Introduction

There is a need for business managers, policymakers, and other constituents to start focusing on the demand side of the counterfeit problem. Articles in the academic literature and business and trade publications have addressed various anti-counterfeiting tactics, the type of organized piracy activities and the level of international and host country enforcement to protect a company's intellectual property rights. Some research has been conducted on measuring the "demand side" of the problem, i.e., the willingness of consumers to purchase counterfeit goods. The research that has been done has relied on convenience samples of consumers within single country markets, such as Germany or Hong Kong. Very few empirical studies have been conducted to explain this consumer behavior across country markets. Imagine the insights we might gain by examining consumer attitudes and purchase behavior for counterfeit goods.

Several articles in the academic literature have addressed the supply side of counterfeits by assessing the level of pirate activity (e.g., Green and Smith, 2002), and the level of international and host country enforcement of intellectual property rights (e.g., Chaudhry, 2006; Chaudhry, Cordell & Zimmerman, 2005; Chaudhry & Walsh, 1995, 1996). Wee et al. (2005) looked at the non-price determinants of intention to purchase counterfeit consumer goods and described the lack of demand side research as a major problem and suggested that more consumer behavior concepts need to be investigated in order to better understand what motivates a consumer to purchase illicit goods beyond the low-price incentive. Again, most of the empirical studies have focused on the supply dimension of the counterfeiting problem, such as, how do we stop Chinese pirates from producing counterfeits? Thus, in order to stamp out the growth of counterfeit trade, a more concerted effort must be undertaken to discourage consumer willingness to buy fake goods.

In this chapter, we propose a conceptual framework to better understand the various components that affect a consumer's willingness to purchase counterfeit goods. We assert that consumer complicity to purchase counterfeit goods is a function of both *intrinsic* (demographics, attitude towards counterfeits, cultural value and ethical perspective) and *extrinsic* (social marketing communications, shopping

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experience and product attributes) determinants. These are all key variables that enhance the global demand for counterfeit goods. Most of the measurement of consumer demand has been conducted in the software and music industry. In addition, there is a heavy reliance on data provided by both the Business Software Alliance and the Motion Picture Association to highlight global piracy rates. In Chapter 6, we highlight various anti-piracy marketing techniques designed to reduce this demand for illicit goods. In Chapter 10, we provide a detailed discussion of Internet piracy to further underscore consumer complicity to purchase (or simply acquire) counterfeit goods by way of this virtual distribution channel.

5.2 Measuring the Demand for Counterfeit Goods

In 2004, a report prepared by The Anti-Counterfeiting Group campaigning against the trade in fakes studied consumer attitudes toward counterfeit products by interviewing 929 respondents in the United Kingdom. Analysis of these interviews revealed that about 33% (of respondents) would knowingly purchase counterfeit goods if the price and quality of the goods was right; 29% see no harm in product counterfeiting as long as the products do not put the purchaser at risk; 59% are aware that counterfeiting can damage the economic well-being of businesses; and 67% feel that the British government should do more to tackle the problem of counterfeiting (Anti-counterfeiting group, 2003).

The demand side for counterfeit software is increasing and Fig. 5.1 clearly shows that markets are literally lost to pirates in Central/Eastern Europe, Latin America and the Middle East/Africa. The Business Software Alliance (BSA) determines the values in Fig. 5.1 by estimating how much packaged software was

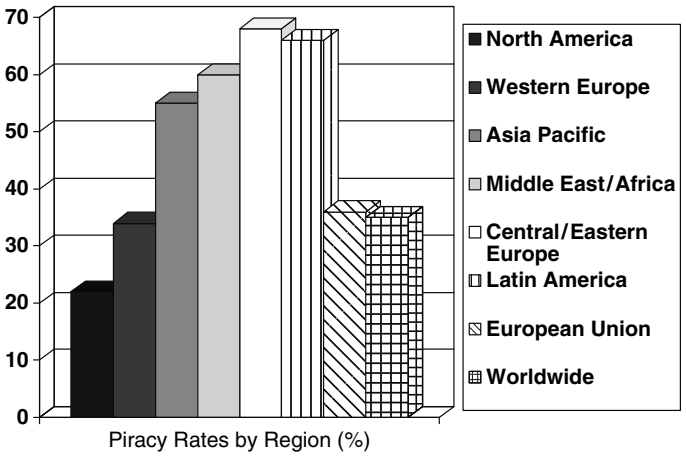

Fig. 5.1 Software piracy rate by region. Source: Business Software Alliance (2006a, p. 7)

used in 2006 and comparing this figure with how much packaged software was paid for in 2006 to formulate piracy rates for each region. Thus, the piracy rate represents the percentage of total software installed that was pirated. The regional effects of consumer demand for counterfeit software is a result of many factors that include the strength of intellectual property rights protection, the supply of counterfeits, and cultural differences that affect demand of the fake goods. This report also indicates that a manager must not generalize a country's piracy rate since the incidence of piracy can vary by city, region or industry within each national market.

The BSA cautions that some of the lower software piracy rates in the US, Sweden, United Kingdom, Denmark, and Germany are misleading since these are large markets for software vendors and losing a 22% share to pirates in the United States resulted in an estimated $8.204 billion loss in 2006. However, the 2006 losses in the Middle East/Africa were $1.997 billion (Business Software Alliance, 2007, p. 7). Thus, a more accurate way of determining the significance of piracy is to estimate the lost revenues per market. Table 5.1 clearly reveals that no country, whether developed or developing, is immune to consumer demand for pirated software.

The Microsoft Corporation has established worldwide piracy sites for several countries to counter consumer complicity by educating the consumer in his/her local language about the types of counterfeits and how to anonymously report them (Microsoft, 2006). As mentioned previously, a major problem centers on decreasing the consumer demand for counterfeit goods. Solomon (2005) reports that in conjunction with severe penalties for selling a counterfeit 2008 Olympic product in China, the consumer in China is less likely to purchase a fake Olympic item due to nationalistic pride–the feeling that his or her country owns the 2008 Olympic logo. Thus, both government policymakers and managers need to work together to

Table 5.1 Ranking by 2006 PC software piracy losses (countries with $200 million or more)

Country	$M	Country	$M
US	7,289	Poland	484
China	5,429	South Korea	440
France	2,676	Thailand	421
Russia	2,197	Netherlands	419
Japan	1,781	Indonesia	350
UK	1,670	Ukraine	337
Germany	1,642	Switzerland	324
Italy	1,403	Turkey	314
India	1,275	Sweden	313
Brazil	1,148	Venezuela	307
Spain	865	Argentina	303
Canada	784	Malaysia	289
Mexico	748	South Africa	225
Australia	515	Belgium	222

Source: Business Software Alliance (2007, p. 8)

Table 5.2 Percent of total market lost to piracy

Country	Percent	Country	Percent
China	90	Mexico	61
Russia	79	Taiwan	54
Thailand	79	Spain	32
Hungary	76	India	29
Poland	65	Italy	25

Source: Motion Picture Associatoin (2005)

change the attitudes of consumers, developing a negative connotation for the purchase of counterfeit goods that will decrease the demand for these products.

In 2005, the Motion Picture Association (MPA) published a study on piracy among its members and reported the following (Motion Picture Association, 2005, p. 4):

- The major US motion picture studios lost $6.1 billion in 2005 to piracy worldwide.
- Eighty percent of those losses resulted from piracy overseas, 20% from piracy in the US.
- Sixty-two percent of the $6.1 billion loss results from piracy of hard goods such as DVDs, 38% from Internet piracy.
- Piracy rates are highest in China (90%), Russia (79%) and Thailand (79%).
- The worldwide motion picture industry, including foreign and domestic producers, distributors, theaters, video stores and pay-per-view operators, lost $18.2 billion in 2005 as a result of piracy.
- The typical pirate is age 16–24 and male.

Table 5.2 lists the top piracy rates from the MPA study to provide an overall estimate of the percentage of the potential market that is lost to counterfeits. The estimate for the US market is 7%.

5.3 Conceptual Model of Consumer Complicity to Purchase Fake Goods

Chaudhry and Stumpf (2007) at the Villanova School of Business developed a conceptual model to represent the factors that influence the demand side of the counterfeit goods problem, i.e., the willingness of consumers to buy counterfeit goods. As hypothesized by these researchers, consumer complicity to purchase counterfeit goods is a function of both *intrinsic* (demographics, attitude towards counterfeits, cultural values and ethical perspective) and *extrinsic* (social marketing communications, shopping experience, and product attributes) determinants. This model is depicted in Fig. 5.2.

The acceptance of non-deceptive purchases of counterfeit goods on the part of consumers significantly affects the intellectual property environment. Gaining a better understanding of the factors underlying this acceptance and how these factors

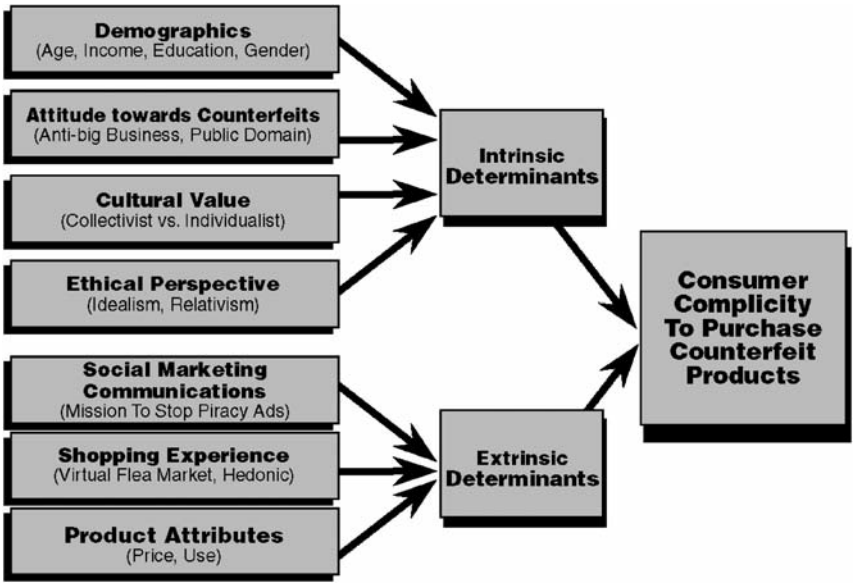

Fig. 5.2 Conceptual model of consumer complicity. Source: Chaudhry and Stumpf (2007)

vary from country to country will help managers deal more effectively with the global problem of counterfeiting.

5.4 Marketing Variables that Influence Consumer Complicity

Table 5.3 lists the variables included in the conceptual framework that influence the consumers' complicity to buy fake goods (Chaudhry & Stumpf, 2007). Each dimension is fully explained in the pages that follow. Applicable findings from previous research studies are also provided.

5.4.1 Demographics of Consumers

Some studies have addressed whether demographic variables influence consumer complicity to buy fake goods. Nia and Zaichkowsky (2000) examined gender, age, ethnicity, occupation, level of income and previous ownership of counterfeits to discern whether counterfeits devalue the ownership of luxury brands. Prendergast, Chuen, and Phau (2002) examined similar demographics, but also addressed "high" vs. "low" spenders on pirated goods. As shown in Table 5.4, this study revealed several noteworthy differences between high and low spenders in Hong Kong.

Table 5.3 Variables that induce consumer complicity to purchase counterfeit goods

Intrinsic determinants	Extrinsic determinants
Demographics of consumer	*Product attributes*
Age, income, level of education, gender, and the like	Image / perceived fashion content
High vs. low spenders of counterfeit goods	Price, quality, performance
Level of disposable income	Investment-at-risk
Other psychographic variables (e.g., risk-taker)	Purpose (personal use vs. gift)
Attitude towards counterfeiting	*Shopping experience*
Anti-big business sentiment	Location (e.g., Internet, flea market)
Social benefit of dissemination	Situation (e.g., holiday trip in China)
Attitude of counterfeits in a product category (movies vs. pharmaceuticals)	Ease of accessing counterfeits (e.g., Internet downloads)
Cultural values	*Social marketing communications*
Individualism vs. collectivism	Effectiveness of anti-piracy ads
Ethical perspective	
Attitude towards morality and lawfulness	
Idealism vs. relativism	

Source: Chaudhry and Stumpf (2008)

Table 5.4 Demographic profile of pirated video CD (VCD) and clothing buyers

	Pirated VCD		*Pirated brands of clothing*	
	High spenders	Low spenders	High spenders	Low spenders
Age	25–34	19–24	25–34	19–24
Occupation	White collar	Student	White collar	Blue collar
Education	Secondary	Secondary	Tertiary	Secondary
Monthly income	HK $10–19K	HK $1,999 or below	HK $10–19K	HK $1,999 or below

Source: Prendergast et al. (2002)

Table 5.5 Attitudinal comparison of high and low spenders on pirated VCDs

Decision criteria	High spenders (n = 8)	Low spenders (n = 62)	p-value	Two-tail significance
Price	6.42	5.97	0.062	0.076
Quality	5.55	5.02	0.781	0.034*
Large supply	4.00	3.19	0.562	0.020*
Wide variety	4.95	4.37	0.086	0.089
After-sales service	3.03	2.82	0.222	0.572
Supported by VCD machines	5.11	5.21	0.544	0.736
Original VCD is not published	3.53	3.63	0.403	0.797
Friends' or family opinion	3.18	2.77	0.704	0.184
Popularity	4.03	3.47	0.303	0.175
Ethical issue	1.84	1.87	0.881	0.815
Legal issue	2.37	2.47	0.667	0.738

Note: Table shows mean scores on a 1-to-7 scale, where "1" equals "unimportant" and "7" equals "important." An asterisk (*) indicates the difference in the mean scores is statistically significant at $p = 0.05$. Source: Prendergast et al. (2002)

Prendergast et al. (2002) also examined attitudinal differences between high and low spenders. As shown in Table 5.5 their findings suggest that compared to low spenders, high spenders on pirated VCDs place greater importance on quality and large supply in their purchasing decisions. However, both groups are similarly indifferent when it comes to the ethical and legal issues involved in purchasing fake goods.

Wee, Tan, and Cheok (1995) included age, household income, and education, and they expected to find that the frequency to buy counterfeit goods would vary across respondents in term of age, level of education, and income. Overall, the researchers' felt that wisdom comes with age, judgment with more education, and the higher purchasing power related to increased income would co-variate with other non-price determinants of consumer complicity to buy fake products. However, in this study the researchers reveal that only "attitude towards counterfeiting" appeared in the majority of their models as an explanatory variable in terms of predicting a willingness to purchase counterfeit, and "age" could not be used as a segmentation variable. For one product, purchasing pirated software, one demographic variable, "educational attainment," was determined to be a significant factor. The other important variables explaining intentions to purchase counterfeit software were: product quality, attitude towards counterfeiting, and purpose of the purchase. In summary, the authors concluded that the higher the level of education for the respondents, the increased likelihood of purchasing counterfeit software.

5.4.2 Attitude Towards Counterfeiting

Previous studies have supported the fact that consumers generally see purchasing a counterfeit good as a victimless crime. As mentioned in Chapter 2, Tom, Garibaldi, Zeng, and Pilcher (1998) supported that consumers are willing to purchase counterfeit goods for a variety of reasons. In a recent study, the researchers developed a list of attitude statements to determine consumer demand for pirated goods, statements such as, "counterfeit products do not hurt the US economy," "people who buy counterfeit products are committing a crime," and "I buy counterfeit products because the prices of designer products are unfair and gouge." In the study's major findings, the researchers' discovered a halo/horn effect that discriminated between the mind-set of consumers who had previously purchased a fake product and those participants who had never bought a counterfeit good. One of their key findings was that consumers believe that the quality of a fake is similar to the genuine product.

In one study addressing the cultural determinants of intentions to purchase counterfeits, Schuchert-Güler and Martin (2003) verified that German consumers "on holiday" were more than willing to purchase counterfeits as gifts. In fact, they make the point that the "mood" of the consumer on holiday, such as sense of adventure, does increase their willingness to purchase fakes as souvenirs.

5.4.3 Cultural Values

Cultural differences in attitudes and values also contribute to consumer complicity to purchase counterfeit goods. The concept of collectivism has been shown in recent studies to provide an explanatory cultural variable of the distinction between eastern and western cultures regarding a consumer's willingness to purchase of fakes. Husted (2000) and Marron and Steel (2000) clarified that a collectivist culture has a major role in determining the ethical decision-making in the purchase of a counterfeit good. In other studies, such as Swinyard, Rinne, and Kau (1990) the cultural roots in collectivism have a significant impact on the attitudes toward, and purchasing decisions for, counterfeit software. Wang, Zhang, Zang, and Ouyang (2005) use the Chinese proverb, "He that shares is to be rewarded; he that does not, condemned," to illustrate how cultural beliefs can shape the individual attitude toward buying counterfeit software. The cultural variable of collectivism can be an explanatory variable in the purchasing of counterfeit products.

5.4.4 Ethical Perspective

In 1980, Donelson Forsyth in his "Taxonomy of Ethical Ideologies," developed an Ethics Perception Questionnaire (EPQ) that consists of ten statements designed to measure the assumption that desirable results can be obtained if the right action is taken, that is idealism. For example, one of the statements is "[A] person should make certain that their actions never intentionally harm another even to a small degree." Treise, Weigold, Conna, and Garrison (1994) later used the scale to investigate the ethics in advertising in terms of idealism with successful results. The other part of the EPQ relativism measures "the degree to which a person's moral philosophy assumes that the proprietary of actions should be judged on the basis of the context of time, culture and place rather than some set of universal moral rules" (Bruner, James, & Hensel, 2001, p. 233). One of the ten statements used to judge the degree of relativism is "[W]hat is ethical varies from one situation and society to another." This dichotomy of ethical perspectives, that is, idealism vs. relativism, may be a useful way to discern whether this type of intrinsic value influences consumer complicity.

5.4.5 Product Attributes

The major product attributes that affect the purchase of counterfeit goods are: image or perceived fashion content, price, quality, performance, investment-at-risk and purpose of purchase. For example, Wee et al. (1995) conducted a self-administered questionnaire to a convenience sample of both Singaporean undergraduates and working adults to discover non-price determinants of intention to purchase counterfeit goods of literature, computer software, leather wallets/purses and watches. Wee et al.

discovered that product attribute variables in particular, appearance, image, purpose and perceived quality generally explain intention of consumers to purchase counterfeit products. This research also established that the product attributes that affect the intention to purchase counterfeits varies by product category.

In addition to these attributes, Prendergast et al. (2002) examined the traits that might enable a consumer to distinguish between a counterfeit vs. real good. This research, the results of which are summarized in Table 5.6, confirm that a lower price, the nature of the buying location, and poor packaging tend to be the best proxies for identifying a fake Video CD (VCD). It is interesting to observe that according to this study the presence of the original logo on the packaging does not play a large role in discriminating between the original and pirated good. It is also worth pointing out that this study does not even mention other anti-counterfeiting labeling tactics, such as placing a hologram on products, which are commonly employed today.

Table 5.6 Consumer identification methods for counterfeit goods

Method to identify	Pirated VCD (%)	Pirated brands of clothing (%)
Lower price	87	92
Buying location	73	74
Poor packaging	65	N/A
Poor printing on VCD	51	N/A
Original VCD is not available	38	N/A
Different design from originals	N/A	43
Different material from originals	N/A	25
Without original logo	24	14
Friends' or family members' opinion	7	5
Others	2	0

Source: Prendergast et al. (2002)

5.4.6 Shopping Experience

Overall, it is clear that the supply of counterfeits is prevalent in many countries. Thus, in order to understand consumer complicity, the shopping environment is a major factor that must be considered. For example, consumers seem more tolerant of buying fake goods in certain shopping environments, such as in a flea market or a known counterfeit shopping district, such as the Patpong market stalls in Bangkok, Thailand. A virtual counterfeit shopping environment is readily available on the Internet. Take the Replica Center which blatantly informs consumers where they can purchase a fake Swiss Rolex watch, and provides customer satisfaction reviews and testimonials for the illicit dealers. The following testimonial at the Replica Center website touts the site's ability to help a consumer distinguish so-called good fake dealers from the dishonest sellers, he/she writes, "Great info, I learned a lot

from the articles and it really helped me decide where to purchase a Rolex copy. Without your site I would've been really confused by all the stuff people are saying. But now I know how to differentiate a liar from an honest dealer. Thanks!! G. Steins, Irvine, CA" (http://www.replicacenter.com).

The research by Schuchert-Güler and Martin (2003) referred to earlier also examined the impact of shopping environment on German consumers' purchase of counterfeit goods. This study defined the "shopping environment" and its sample as German residents abroad and/or on holiday that purchase counterfeits as gifts and/or souvenirs. The researchers' supported previous studies on the relevance of non-price determinants in influencing consumer complicity. These researchers' uncovered that, for consumers who do not live near flourishing counterfeit markets in their home markets, such as German consumers, that the people of these countries actively engage in counterfeit purchases in a hedonic type of shopping behavior. Overall, the researchers discovered that it is simply an adventure to be a player in the fake trade at the plethora of possible counterfeit markets as they travel the globe.

5.4.7 Social Marketing Communications

Some of the major social marketing anti-counterfeiting advertisement tactics currently used by various industry associations, such as the Motion Picture Association, the Business Software Alliance, and the Recording Industry Association of America are using role models to persuade the consumer not to purchase counterfeits, instilling a fear of prosecution, implying a negative association of fake goods by way of linkages to organized crime, and using peer pressure to decrease demand for counterfeit goods.

In 2005, the famous actors, Jackie Chan and Arnold Schwarzenegger, launched a "Fakes Cost More" global ad campaign to effectively use a role model to deter consumer complicity to purchase counterfeits ("Message from Jackie," 2006). The International Trademark Association organized a skit that shows Chan breaking up an organized counterfeit sales operation. He can also be seen smashing designer watches and using a chainsaw to destroy a street vendor's display of counterfeit bags and clothes. Figure 5.3 depicts an ad campaign in Hong Kong that shows Jackie Chan and Arnold Schwarzenegger riding their motorcycles through a dangerous highway scene on a "Mission to Stop Piracy" (2006) and each actor warns the consumer to stop supporting criminals through the purchase of fake products. The Intellectual Property Department of the Government of Hong Kong Special Administrative Region actually provides web casts of their anti-counterfeiting skits at http://www.ip-video.gov.hk/eng/api/api_cat.htm. Whether this new anti-counterfeiting technique, that is, using famous movie stars to denounce fake goods, will effectively deter consumer complicity in the Asian markets remains to be seen.

The recent "Disney Magical Journey" consumer-loyalty campaign in China was designed to help the company educate the Chinese consumer about the real vs. fake product (Fig. 5.4). In order to enter a contest for free DVDs, televisions, and trips to Hong Kong Disneyland, the Chinese consumer had to attach an authentic red hologram from a Disney product to his or her entry form. The company's television

Fig. 5.3 Mission to stop piracy ad campaign. Source: http://www.ip-video.gov.hk/eng/api/api_cat.htm

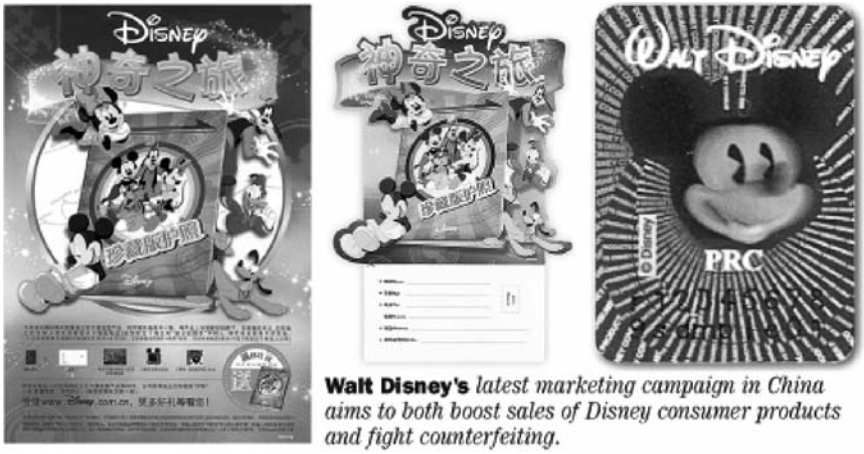

Fig. 5.4 Disney magical journey anti-counterfeiting promotional campaign. Source: Fowler (2006, p. B3)

show in China, the Dragon Club, educates young Chinese viewers about how to locate the red hologram of Mickey Mouse and reinforces the firm's promotion with statements like, "As long as you buy the original products, you will get…a chance to win big prizes" (Fowler, 2006, p. B3). This innovative anti-counterfeiting tactic has been successful in educating the Chinese and has resulted in some consumers calling the firm to report stores selling Disney merchandise without the hologram.

We discuss more social marketing campaigns using various anti-counterfeiting messages designed to change consumer behavior towards purchasing counterfeits in Chapter 6.

5.5 Conclusions

In this chapter, we have presented a conceptual framework that includes both intrinsic and extrinsic determinants of consumer complicity. Each dimension, such as demographic variables and shopping environment was described to provide a better understanding of the main concepts influencing a consumer's behavior to engage in illicit trade. Applicable findings from previous research studies were given to show the earlier studies on consumer complicity.

As previously illustrated in the Business Software Alliance piracy data, no country is immune to software piracy by its population and we observe consumers in both developed markets (e.g., the US, Canada and France) and developing markets (e.g., Indonesia, Turkey and Malaysia) engaging in the illegal act of counterfeit trade. We understand the difficulties associated with the accurate measurement of the demand of counterfeit trade and realize that the longitudinal data provided on a yearly basis from the Business Software Alliance on country piracy rates is a guesstimate of the revenues lost to the counterfeit trade. The 2005 piracy study of the Motion Picture Association was highly criticized as overstating the industry losses to garner stronger intellectual property rights protection in the United States. In January 2008, the Business Software Alliance issued a succinct report on *The Economic Benefits of Lowering PC Software Piracy*, that claims reducing its piracy rate in any given country will "create high-paying jobs, increase tax revenues, expand economies, and fuel competitiveness" (Business Software Alliance, 2008b, p. 1). Thus, even a ten-point reduction in a country's estimated piracy rate will yield substantial savings to both the firm and the country.

In Chapter 6, we investigate the novel anti-piracy marketing techniques that have recently been developed to educate the consumer about counterfeit trade. In Chapter 10, we discuss consumer complicity in context of Internet piracy that has created a lucrative virtual marketplace for counterfeit trade.

Chapter 6
The Use of Anti-piracy Marketing Techniques to Educate the Consumer

6.1 Introduction

Overall, the key advertisements that are being developed for anti-piracy campaigns fall under the domain of social marketing concepts. In *Social Marketing: Improving the Quality of Life*, Kotler, Roberto and Lee (2002) provide this definition:

> Social marketing is the use of marketing principles and techniques to influence a target audience to voluntarily accept, reject, modify, or abandon a behavior for the benefit of individuals, groups, or society as a whole (p. 5).

Currently, the ideas of social marketing are exemplified by ad campaigns that attempt to decrease the public consumption of cigarettes and/or alcohol. For example, Fig. 6.1 shows the negative connotation of "Joe Chemo" used to provide a strong visual association of cigarettes and imminent death. However, social marketing techniques can also be used to reinforce positive behavior, such as recycling plastic goods. The main goals of a social marketing campaign are to act as a change agent to make the target audience alter his/her behavior. Thus, to protect the firm's intellectual property rights, a firm must develop a reasonable advertisement that will appeal to the target market and change its behavior.

In this chapter, we will give a brief overview of social marketing concepts, suggest an agenda to change the public perception of piracy and illustrate several anti-counterfeiting advertisements that use messages that employ role models, peer pressure, education, fear, quality of the product, negative association to suppliers of fake goods (e.g., terrorists) and reward / whistle blowing to alter target audience behavior. We also discuss the rebuttals to these advertisements that are found in various "bottom-up" media outlets, such as blogs on the Internet and YouTube.com.

6.2 Overview of Social Marketing Concepts

Andreasen (2005) in *Social Marketing in the Twenty-first Century*, outlines the three distinct plans that shape how a society accepts (or rejects) social issues in terms of a *public agenda*, *media agenda* and *policy agenda*. A brief discussion of

P. Chaudhry and A. Zimmerman, *The Economics of Counterfeit Trade*,
DOI-10.1007/978-3-540-77835-6_6, © Springer-Verlag Berlin Heidelberg 2009

Fig. 6.1 Anti-tobacco ad campaign. Source: "Joe Chemo" (n.d.)

each type of agenda as it relates to influencing the general public's perception to safeguard the protection of intellectual property rights follows.

6.2.1 Public Agenda

The public agenda is a metric that centers on the public's perceptions of the issues that are important and are reflected through polls. A review of two distinct polls centered on piracy reveals that firms may have a difficult task of convincing consumers that there should be zero tolerance of this type of theft. The first, conducted by the IPSOS News Center questioned 1,500 professionals in accounting, architecture, engineering, financial services and graphic design. One of their main results was that almost one in four of the participants had violated some form of intellectual property rights in their workplace (Gross, 2004). Other key findings of the study involved a sense of personal risk (45% of respondents felt they could be fired or reprimanded for using counterfeit software) and justified ownership of illegal copies due to cost savings, and the sentiment that larger firms could afford to pay the software firms the innovation reward (e.g., the David vs. Goliath logic that bigger firms should pay and smaller companies can use pirated products at a lesser cost). So, even in the work environment, opinion polls have found a mixed review of the reasons to support (or reject) intellectual property rights.

Another study was conducted by the Gallup Poll News Service of 1,304 US adults in 2005 to discern their opinion of counterfeit trade (Stewart, 2005a). The study found that the main reasons for purchasing fake goods centered on "easily available" (78%), "buy same quality at better price" (73%), and "genuine product is priced too high" (68%). Figure 6.2 reveals the major findings of this study for the perceived "reasons for piracy and counterfeiting."

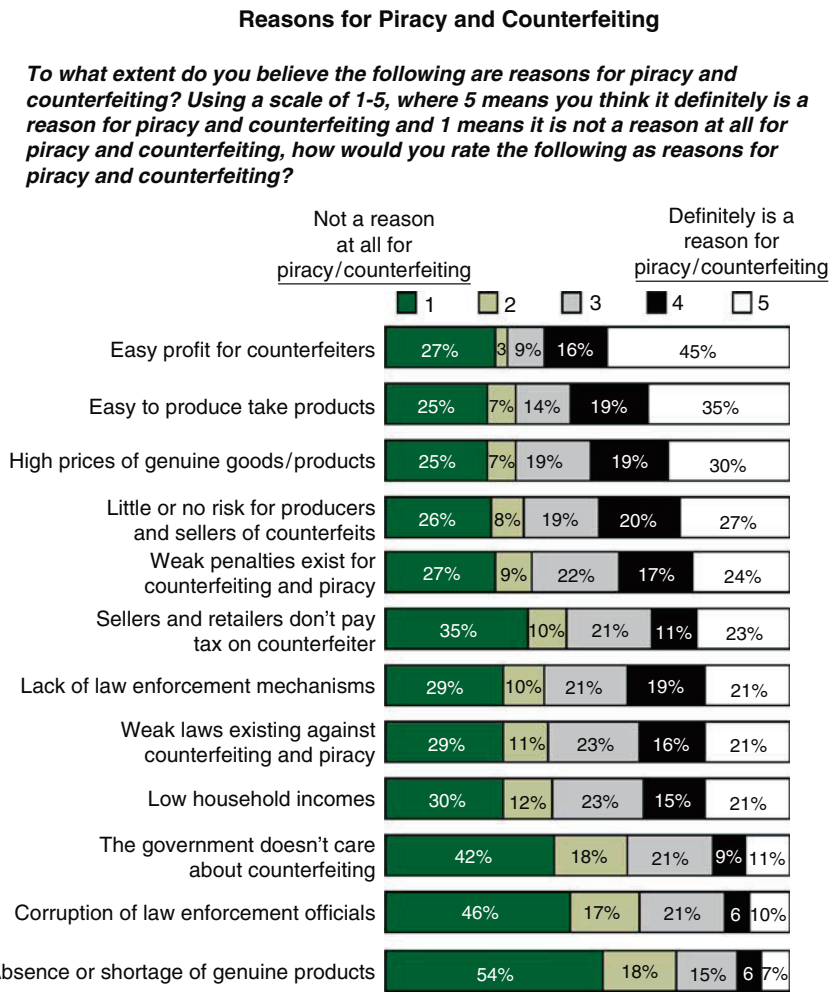

Fig. 6.2 Public opinion of counterfeit trade. Source: Stewart (2005a, p. 2)

Another important segment of the public agenda is cyberspace, especially the plethora of blogs that both support and refute the protection of intellectual property rights. Baker and Green (2008) stress the importance of this Internet information channel to shape public opinion. For example, the explosion of information at YouTube, Twitter, Wikipedia, Spam Blogs, Facebook/MySpace, and iTunes are just a few illustrations of potential "bottom-up media" that can become a global source of information. Just go to Google and type "anti-piracy advertisements" and 374,000 hits will appear in 2.4 seconds. Examples of information in Google range

from the annual piracy reports of the Business Software Alliance, an anti-piracy commercial posted in YouTube (see "Anti-Piracy ad," n.d.), a plethora of postings that comment on the anti-piracy advertisements (e.g., CommercialIHate.com) and blogs that support piracy (e.g., Hungus, 2008).

6.2.2 Media Agenda

The media has given limited coverage to the problem of counterfeit trade in newspapers, television and talk shows. The 2005 book by Naim, *Illicit: How Smugglers, Traffickers and Copycats are Hijacking the Global Economy* did receive a fair amount of media attention, including an interview on National Public Radio, especially since Naim provides linkages of counterfeit trade to organized crime and terrorism. There are sporadic articles found in various outlets, but, in our opinion, the coverage does not put the issue of counterfeit trade at the forefront. In the academic literature, the situation is even bleaker and both theoretical and empirical studies on the subject of managerial tactics designed to curb the counterfeit trade are very few in number.

6.2.3 Policy Agenda

It is hard to estimate the policy agenda on counterfeit trade in the US and its trading partners that is supported by legislation, administration and trade policy and the like. As reported in various chapters of this book, there has been increased legislation (e.g., the Digital Millennium Copyright Act and the EU Intellectual Property Rights Directive), administration (e.g., the StopFakes program in the US) and trade measures (e.g., the priority watch list of the USTR) established by various policy makers to curb the trade in fakes. The movement of counterfeit trade into more non-traditional products, such as pharmaceuticals, auto and airlines parts, and foodstuffs will only strengthen the policy agenda on counterfeit trade. Specific policy measures are explained in further detail in Chapters 7 and 10.

6.3 Setting an Agenda to Change the Public Judgment of Counterfeit Trade

Yankelovich (1992) created a seven-stage process that can guide managers on moving an item of concern, such as the protection of their intellectual property rights, from the public's initial awareness of the problem to making an ethical and emotional judgment on the illegitimacy of counterfeit trade. In Table 6.1, we use Yankelovich's framework in context of establishing an agenda to change consumer behavior relative to purchasing fake goods.

Table 6.1 Stages in the agenda-setting procedure

Stage 1: Dawning awareness.	Alerting the public about the problem. For example, the Business Software Alliance consistently posts its annual studies on the Internet. Jackie Chan and Arnold Schwarzenegger also used an advertising campaign, "Mission to Stop Piracy" to educate a Chinese audience about the dark side of piracy, such as its linkage to organized crime
Stage 2: Greater urgency.	Raising apprehension about the lack of intellectual property rights protection, such as the Motion Picture Association's advertisement "You can click but you can't hide" to garner more personal implications, such as the fear of prosecution from illegal downloads
Stage 3: Discovering the choices.	At this point, policymakers and/or managers can use "trial balloons" to educate the consumer
Stage 4: Wishful thinking.	A stage where the public thinks it can have it all - both great innovation and fake goods at lower prices
Stage 5: Weighing the choices.	After being exposed to the different information tactics in Stages 1–4, the public is engaged and a consumer can now evaluate the personal implications of the issue. For example, a college student can debate whether downloading illegal music is worth losing his/her Internet access at the university
Stage 6: Taking a stand intellectually.	A point where the "public" will accept a course of action, such as, a strong desire to protect intellectual property rights. However, emotionally, some members of the population will still be able to rationalize that a few songs obtained at limewire.com is acceptable because it fits their beliefs that the music industry is price-gouging consumers
Stage 7: Making a responsible judgment morally and emotionally.	The ultimate goals of any agenda are to sway public judgment on an issue to circumvent the "fuzzy thinking" that surrounds their moral and emotional feelings about upholding intellectual property rights

Source: Adapted from Yankelovich (1992, pp. 102–106)

Based on our 20-year experience of studying and reporting on the protection of intellectual property rights, we would argue that in terms of Yankelovich's framework, the current public judgment of a university age population (18–22) in the US would usually not surpass Stage 5. This opinion is based on many lectures to university students where the topic of intellectual property rights protection is addressed and the overall sentiment of the students in the class is either (1) starting to be aware of the ad messages designed to persuade them to purchase legal versions of the goods (i.e., Stage 1); (2) exhibiting *wishful thinking* in terms of not seeing the seriousness of the problem - if they can still download novel, creative music for their iPods on the Internet, why should they pay for them? (i.e., Stage 4) and/or (3) realizing the *choices* since the university will punish them for illegally downloading digital media. For example, the punishment can be a black-out to the university's email system for a couple of weeks - an acute punishment given the student's heavy reliance on his/her jane.doe@college.edu personal account for course materials that are delivered via class email distribution lists only (i.e., Stage 5). However, we realize that future empirical studies will give practitioners and policymakers a better understanding of the level of public judgment on the protection intellectual property rights in terms of influencing the public opinion discussed in Table 6.1.

6.4 Anti-Counterfeiting Advertisements

Kotler et al. (2002) offer a comprehensive overview of the role of designing persuasive communications to change the public's behavior in context of social marketing techniques. The authors' give a compelling example of how to create a media campaign that centers on the prevention of youth consumption of tobacco. Using similar concepts, Table 6.2 illustrates a plausible framework for setting a message execution strategy for an anti-piracy campaign.

Table 6.2 Creative summary for a youth anti-piracy campaign

Key message: Don't download digital media without payment
Target audience: Lower school and middle school students who are just starting to own a personal computer with an Internet connection
Communication objectives:
To know: Downloading without payment is illegal

To believe:
(1) Firms will prosecute violators - it is a crime
(2) Firms are losing money that will prevent new movies/music/etc. to be created - the innovation penalty is *real*
(3) The links to organized crime/terrorism are true

To do: Refuse to illegally download
Benefits to promise:
You will support innovative firms, such as Apple, by purchasing music at iTunes

Supports to promise:
(1) Testimonials from target audience (e.g., a young adult convicted of illegal downloads)
(2) Testimonials from role models (e.g., Hollywood actors and/or animated characters with a high affinity to the targeted age group)
(3) Testimonials from an average person (e.g., animation artists that worked on the film *Shrek*)
(4) Graphic visuals that show negative association to counterfeit trade (e.g., possible links to terrorism and/or organized crime)
(5) Real data about the trade in fakes (e.g., statistics that really illustrate the effect of counterfeit trade on innovation - such as the reduced number of blockbuster movies due to lost revenues)
(6) Reinforce the negative stigma of consumer complicity to purchase fakes by drawing parallels to other types of crime, such as shoplifting

Openings:
(1) Listening to the radio
(2) Watching television, previews in DVD
(3) Surfing the Internet
(4) Talking with friends
(5) Listening to a class discussion

Positioning:
People who illegally download are stealing and hurting more than big business and highly-paid actors - reinforce that the average person loses his/her innovation reward. Draw analogies to other crime - can you justify shoplifting? If not, why is stealing through the Internet a victimless crime? It's not worth the risk of prosecution, support of organized crime, the loss of jobs by "real people" (the animation artist for Shrek) and the like.

Source: Adapted from Kotler et al. (2002)

6.4.1 Previous Advertisements

The owners of intellectual property rights have been providing various "trial balloons" of advertisements that center on role models, peer pressure, education, fear, negative association to terrorism, communism and/or organized crime, and whistle-blowing/reward schemes. In this section, we explore various advertisements that provide this type of appeal to the consumer. First, a quick look at previous anti-counterfeit ad copy from earlier time frames (circa 1980s) is given to show how messages have evolved during the past three decades.

Figure 6.3 uses many deterrents to get a person to change his/her behavior towards fake games. The basic ad concepts are peer pressure, fear of prosecution,

Fig. 6.3 Anti-piracy ad, circa 1980s. Source: Holtzman (n.d.)

negative association to pirates, whistle-blowing, and a reward all in the short story being told through the cartoon published in the United Kingdom. Figure 6.4 uses a more visual appeal and focuses on the reward/whistle-blowing of software piracy in India.

6.4.2 Role Models

Some firms have used the concept of a role model to persuade consumers to stop pirating and/or purchasing fake goods. One recent example is the "Mission to Stop Piracy" campaign initiated in 2005 in the Asian market featuring Jackie Chan and Arnold Schwarzenegger in various media spots to denounce piracy. In Fig. 6.5, the Hong Kong Economic and Trade office shows the two Hollywood film stars in their "no piracy" t-shirts. The media blitz even included a webcast of Jackie and Arnold acting out their mission to stop piracy on motorcycles in a scene that links the piracy trade to organized crime. The Intellectual Property Department of the Hong Kong Special Administrative Region provided the webcast in English and three Chinese dialects.

Fig. 6.4 Anti-piracy ad, circa 1990s. Source: Business Software Alliance (n.d.)

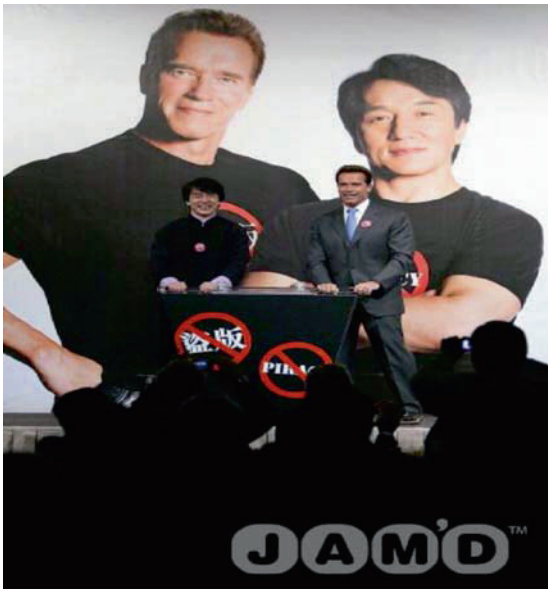

Fig. 6.5 Arnold Schwarzenegger and Jackie Chan's "Mission to Stop Piracy." Source: www.hketo.ca/news/press-releases-2005/November-18-2005_jacky.jpg

An animated role model has also been used in anti-piracy ad campaigns to change the public's opinion about fake goods. In 2007, the Walt Disney Company even ran a preview for its hit movie, *Ratatouille* that informed the audience in the theater about the negative aspects of purchasing a pirate movie. Figure 6.6 illustrates a very creative

Fig. 6.6 Puss in Boots of Shrek in anti-piracy ad. Source: http://activereload.net/assets/2007/5/23/anti-piracy-measure.jpg

appeal given at a website that uses "Puss in Boots" the animated co-star of the popular Shrek movies to "please do not pirate our application" in jargon. Ironically, this anti-piracy appeal actually violates the intellectual property of the creators of *Shrek*, DreamWorks Animation, since we are assuming that copyright permission was not given to the creators of this anti-piracy ad for the application website.

6.4.3 Peer Pressure

A novel anti-piracy ad campaign for the Dubai, United Arab Emirates market based on peer pressure is in Fig. 6.7. The ad caption reads: "Stop uploading. Stop downloading. Stop copying. Stop lending. Stop borrowing. Stop promoting. Stop dealing. Stop recording. Stop sharing. Stop selling. Stop buying. True fans don't steal. Piracy. It stops when you do."

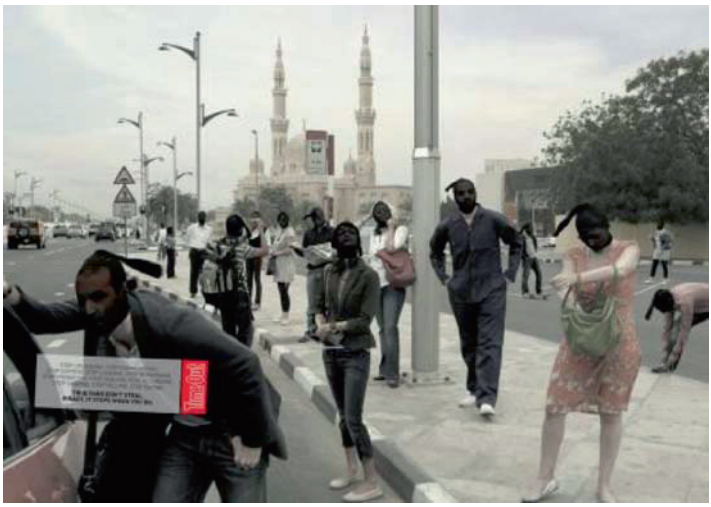

Fig. 6.7 Peer pressure. Source: http://www.crookedbrains.net/2008/03/ads-using-bus-stops.html

6.4.4 Education

The Boy Scouts of America trains youth in various areas, ranging from camping to citizenship in the world. A scout will earn a merit badge, such as citizenship in the nation once he has completed the learning requirements associated with this particular topic. In 2006, the Motion Picture Association of America partnered with this youth organization in Los Angeles, California to offer the Respect Copyrights

Fig. 6.8 The "respect copyrights" Boy Scouts of America patch. Source: Billet (2006)

patch (not a merit badge) to members of its organization to educate themselves on peer-to-peer websites and possible illegal downloading behavior. The patch is shown in Fig. 6.8.

We illustrate several more education anti-piracy initiatives targeted at youth groups by the BSA, IFPI, MPA and RIAA in Chapter 8.

6.4.5 Fear

The concept of fear can be employed to give various types of messages to convince a consumer to stop using fake goods. In the 2005 Gallup poll of 1,304 adults, respondents were asked, "Do you believe counterfeiting and piracy laws should be stricter, left as they are, or made less strict?" Of the respondents who had not purchased any counterfeit goods, they felt that the laws should be stricter (72%), left as they are (23%), or less strict (3%). Of the respondents who had bought a fake product, their opinion still supported stricter laws (58%), left as they are (33%), or less strict (8%) (Stewart, 2005a). Reinforcing fear through potential legal

prosecution is a viable strategy and both Figs. 6.9 and 6.10 show this type of advertisement developed by the Motion Picture Association and the Business Software Alliance respectively.

Like the "Joe Chemo" advertisement shown in Fig. 6.1 managers can persuade consumers to stop purchasing non-traditional goods, such as counterfeit pharmaceuticals through fear of their health and/or possible death. According to the World Health Organization (WHO), the Center for Medicines in the Public Interest estimates that counterfeit global drug sales will reach $75 billion in 2010, an increase of more than 90% from 2005 figures (WHO, 2008, ¶ 8). An advertisement developed by the WHO is shown in Fig. 6.11 to deliver a different type of fear message – untimely death due to counterfeit drugs.

6.4.6 Quality of the Product

A negative association of inferior or cheaper quality has been used by some companies to persuade the consumer to denounce counterfeit goods. Figure 6.12 gives an example from the www.piracyisacrime.com source that provides an overall message that questions the risk of purchase of the counterfeit item.

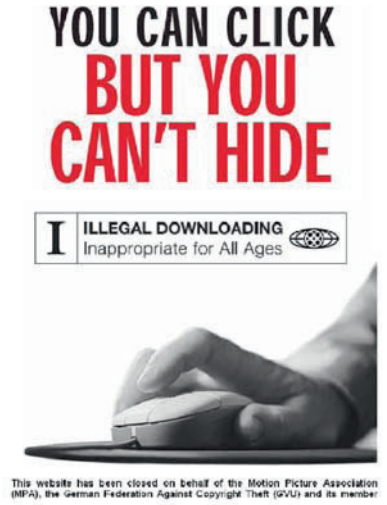

Fig. 6.9 Fear of legal prosecution. Source: MPA (2007)

Fig. 6.10 Fear of legal prosecution. Source: Business Software Alliance (n.d.)

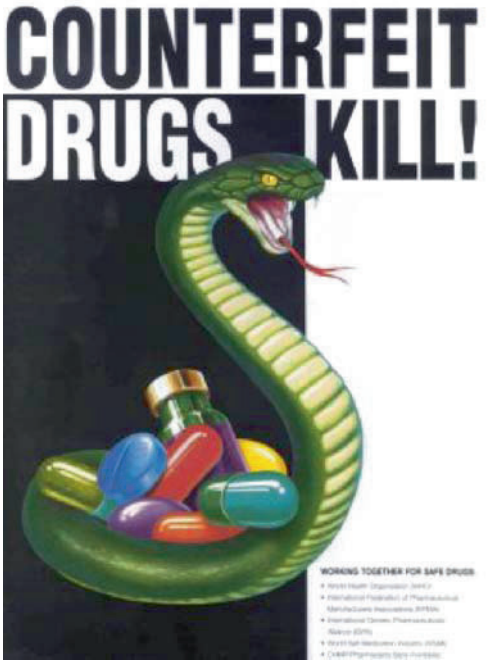

Fig. 6.11 Fear of death. Source: World Health Organization (n.d.)

Fig. 6.12 Inferior quality/risk of purchase. Source: www.piracyisacrime.com

6.4.7 Negative Association with Suppliers

The 2005 Gallup Poll News Service survey asked respondents, "In your opinion, which of the following groups are involved with producing or distributing imitation or counterfeit products?" The respondents associated these suppliers with importers (84%), organized crime (83%), exporters (72%), terrorist organizations (48%) and government officials (20%) (Stewart, 2005a). Thus, using ad copy like the message in Fig. 6.13 can reinforce this negative association. The Federation Against Copyright Theft (FACT) developed interesting messages for the United Kingdom that exploited the plausible linkage of terrorism to counterfeit trade. In the 2004 article, "British Filmmakers Seeking Crackdown on Piracy," the author highlights a study, "Film Theft in the UK," reporting many anti-counterfeiting tactics suggested by the UK Film Council. One of these targets public organizations in the UK to create campaigns that emphasize the risk of piracy by stressing the association between piracy and organized crime; the illegal aspects of piracy and file-sharing; the risk to the growth of inventiveness and culture in the UK; and the menace of unsuitable items becoming available to children and teenagers younger than 18 ("British filmmakers," 2004, ¶ 25).

Chris Stewart, a global brand manager, strongly asserts that the best anti-counterfeiting message targeted at the public will provide a negative association with the counterfeit industry. He suggests that the ad copy should develop awareness

Fig. 6.13 Negative association to terrorism. Source: http://newsimg.bbc.co.uk/media/images/40369000/jpg/_40369411_dvds3_203.jpg

Table 6.3 Business software alliance reward guidelines

Reward payment guidelines	
Settlement/damages paid by company ($)	Potential reward payment ($)
15,000–100,000	Up to 5,000
100,001–200,000	Up to 10,000
200,001–400,000	Up to 20,000
400,001–600,000	Up to 30,000
600,001–800,000	Up to 40,000
800,001–1,000,000	Up to 50,000
1,000,001–2,000,000	Up to 100,000
2,000,001–3,000,000	Up to 150,000
3,000,001–5,000,000	Up to 250,000
5,000,001–10,000,000	Up to 500,000
10,000,001–15,000,000	Up to 750,000
Over 15,000,000	Up to 1,000,000

Source: Business Software Alliance (n.d.)

among potential buyers that these sellers can be involved in either funding terrorist plots and/or organized crime (Stewart, 2005a).

6.4.8 Rewards Through Whistle Blowing

The Business Software Alliance actually provides a website for reporting piracy at https://reporting.bsa.org/usa/home.aspx or a toll free number at 888-No-Piracy. The amount of reward depends on the legal settlement. Table 6.3 shows the payout guidelines that the BSA allegedly will give a "piracy snitch" up to $1,000,000 in compensation.

One of the trade association ads targeted at the Indonesian public is given in Fig. 6.14. Fisher (2007a) claims that almost $22 million has been paid by the BSA in business settlements that were accused of owning pirated software. Thus, Fisher speculates whether the BSA has ever paid close to $1 million to a whistle-blower, but, the trade association will not comment on the actual amount given to people reporting piracy.

6.4.9 *Blog Rebuttals to Advertisements*

We cannot conclude the section on anti-piracy advertisements without highlighting the fact that the Internet is replete with rebuttals to some of the ad messages highlighted in the previous sections. As previously discussed, there are many sites in the "bottom-up media" that have their own advertisements that support piracy. Figure 6.15 refutes the original ad copy (refer back to Fig. 6.12) with an entirely different message (profanity included) to undermine the validity of the genuine message. In his blog article, "Anti piracy Ads are a Good Reason to Pirate Movies," the blogger states:

> There is quite possibly nothing more irritating and annoying to the honest movie fan than the dreaded unskippable anti-piracy ad that condescendingly tells you not to steal a movie

Fig. 6.14 Reward/whistle-blowing. Source: www.bsa.org

Fig. 6.15 Blog rebuttal to "quality of product" message. Source: (Hungus, 2008)

> that you've *just bought!* The great thing about pirated movies is that they don't feature these incredibly maddening ads, you just get the film. You pay for the movie, you get punished. (Hungus, 2008, ¶ 1)

Figure 6.16 is an open challenge from one blogger (www.boingboing.net) for companies to try to prosecute *everyone* in the general public who illegally downloads digital media. This blogger states:

> This website has been erected out of consumer outcry over the passing of sites that facilitate the downloading of perpetually copyrighted motion pictures. The unauthorized downloading of motion pictures denies thousands of dishonest, lazy executives of their crack smoking livelihood, and is the only way to bring an artistically bankrupt monopoly under control. Downloading movies without authorization violates laws distorted beyond their original intent, is not tangible theft, and is impossible to stop. You can't catch everyone. The only way to win is to stop waging war on your customers and accept the fact that we are in control, not you. You brought this on yourself. ("Angry remix," 2005, ¶ 1)

Clearly, these are just two extreme cases of pro-piracy sentiment found on the Internet, but, firms must use this type of consumer-driven media message to gauge whether their social marketing techniques have changed the public judgment on the future protection of intellectual property rights.

Fig. 6.16 Blog rebuttal to "fear of prosecution" message. Source: "Angry remix" (2005)

6.5 Conclusions

There has been growth of anti-piracy advertisement in the media. The ad copy used in this chapter was found in the "images" feature of the Google search engine to highlight the main messages used by various stakeholders to change a consumer's willingness to purchase counterfeits. The major themes currently employed are role models, peer pressure, education, fear, quality of the product, negative association to organized crime and/or terrorism and rewards given for whistle blowing. To our knowledge, there have been no studies that have addressed the effectiveness of these messages in deterring the growth of counterfeit trade. In fact, we found more "support for piracy" hits in Google and even rebuttals to anti-piracy ad campaigns to make us speculate about the efficacy of educating the consumer through these types of messages. Some studies have been conducted evaluating the effect of social marketing campaigns to deter both cigarette smoking and alcohol consumption. Furthermore, we know that it can take several years, if not decades, to change the cultural acceptance (or rejection of) a phenomenon like piracy. The key is for companies to actually test the salience of their advertisements to determine whether the message appeal actually *influences* the behavior of the targeted audience.

Chapter 7
Changing Trade Policy: The EU and US Bolster Protection of Intellectual Property Rights

7.1 Introduction

The recent bolstering of intellectual property rights protection through innovative trade initiatives such as the STOP! Program in the United States and the EU Enforcement Directive and Action Plan are examined in this chapter. This chapter is designed to provide a synopsis of the latest government policymakers' tactics designed to battle counterfeiters. The question of whether the STOP! Program in the United States, the novel directive in the EU on enforcement, and the imminent tactics of both the US and the EU targeted at "third countries" will reduce fakes is a matter for future assessment. However, previous studies have already established that *enforcement* of any type of government and/or multilateral agency sponsored anti-counterfeiting strategy remains a leading concern in the continuing battle to reduce the proliferation of fake goods.

7.2 US IPR Enforcement Initiatives

The advent of the Department of Homeland Security has changed the hierarchy of governance of intellectual property rights in the United States. This department now governs and/or is strategically aligned to several different agencies, such as the US Secret Service and Customs and Border Protection (i.e., US Customs). The US Secret Service was actually established in 1865 for the sole objective of suppressing one of the oldest forms of piracy: counterfeit currency. The British counterfeited the US currency during the American Revolution to make the local currency worthless and "not worth a Continental" was a common expression at the time (http://www.dhs.gov). Figure 7.1 is a schematic showing the various agencies governing the IPR environment in the US.

This diagram of US agencies is just the beginning of understanding the various layers of government sectors involved in the protection of intellectual property rights. A good example of the labyrinth of strategic alliances is the *Intellectual Property Rights Training Program Database* (http://www.training.ipr.gov) sponsored

P. Chaudhry and A. Zimmerman, *The Economics of Counterfeit Trade*,
DOI-10.1007/978-3-540-77835-6_7, © Springer-Verlag Berlin Heidelberg 2009

Fig. 7.1 Major players in US IPR enforcement

by the Bureau of Economic and Business Affairs within the US Department of State. The members of this program are: US Department of State; US Department of Commerce (includes the International Trade Administration and Commercial Law Development); the US Department of Justice (Office of Overseas Prosecutorial Development Assistance & Training, Criminal Division and Computer Crime and Intellectual Property Section, Criminal Division); US Department of Homeland Security (Bureau of Customs and Border Protection); Federal Bureau of Investigation; US Agency for International Development; Office of the US Trade Representative; US Patent and Trademark Office; and Copyright Office of the Library of Congress. To this list of government agencies, the following private sector organizations also provide IPR-related information programs, training and technical assistance to foreign officials and policy makers: Coalition of Intellectual Property Rights (CIPR); Interactive Digital Software Association (ISDA); International Anti-Counterfeiting Coalition (IACC); International Intellectual Property Alliance (IIPA); International Intellectual Property Right Institute (IIPI); and Pharmaceutical Research and Manufacturers of America (PhRMA).

The question becomes how many of the already established agencies will interface with the recent STOP! Program and the National Intellectual Property Rights Coordination Center in Washington, DC. The latest IPR center is supervised by the Immigration and Customs Enforcement (ICE) and is supposed to "coordinate a unified response regarding IPR enforcement issues through core staffing from ICE

and the FBI … particular emphasis is given to investigating major criminal organizations and those using the Internet to facilitate IPR crime" (http://www.ice.gov).

7.2.1 Strategy Targeting Organized Piracy

On October 4, 2004, several US government officials from the Department of Homeland Security, the US Trade Representative (USTR), the Department of Commerce, and the Department of Justice provided information on the new Strategy Targeting Organized Piracy (STOP!) in an effort to build anti-counterfeiting coalitions with governments and the private sectors in foreign markets. In a press release, (former) Commerce Secretary Donald L. Evans described the evolution of STOP! as:

> [W]e've been pushing the door closed on fakes for three years and today [2004]; we're working towards slamming it shut. Today's STOP! initiative allows us to leverage our experience and integrate government resources to better protect America's intellectual property in a systematic way…. Why now? We recognized, for some time, that we need to take intellectual property protection to the next level and STOP! is the weapon that will get us there. We're elevating our cooperation between the federal government, the private sector, and many of our trading partners in an aggressive, unified effort against piracy and intellectual property rights theft.
>
> (Evans, 2004)

The US State Department has allocated funds in Phase 1 and 2 of the STOP! program ($1.31 million and $1.19 million respectively) to assist projects to deter intellectual property theft in Brazil, Pakistan, Republic of Korea, Malaysia, Panama, and the like (Ereli, 2004). The main focus of each program is to train the indigenous police, prosecutors, and customs officials in each country/region in order to effectively investigate and prosecute infringements of intellectual property rights. However, a review of the monetary grants for each country/region questions whether this 'level of funding' is going to assist companies in reducing the trade in counterfeits. For example, the region of China / East-Asia Pacific receives the largest amount of funding of $210,000 while the Republic of Korea, Malaysia, and Panama were awarded $75,000 each. This is a paltry amount of funding when compared to the magnitude of losses of intellectual property rights in these countries and/or regions and in comparison to company-level funding of anti-counterfeiting tactics. For example, in 2003, LVMH Moet Hennessy Louis Vuitton SA spent an estimated $14.5 million to battle the pirates (Passariello, 2004). Thus, as illustrated in Table 7.1, managers must understand that this type of financial support from the State Department will not effectively deter the growth of counterfeits in the global marketplace.

In a 2004 report prepared by the United States Trade Representative office, agency officials outline the key elements of the STOP! Program as:

- Helping and empowering American businesses, investors and innovators, particularly small businesses, secure and enforce their rights in overseas markets
- Ensuring consumer safety by securing America's borders and marketplace from fakes
- Raising the stakes and making life more onerous for intellectual property thieves through new customs methods that increase costs to violators far beyond seizing

Table 7.1 Intellectual property training programs

Program	Level of Funding ($)
Tri-border initiative (Paraguay, Argentina and Brazil)	100,000
Brazil	100,000
China East-Asia Pacific	210,000
Pakistan	150,000
African Regional	150,000
US Government – DVD Industry	100,000
Republic of Korea	75,000
Malaysia	75,000
Panama	75,000
Interpol	150,000

Source: US Department of State, Bureau for International Narcotics and Law Enforcement Affairs, 2004

shipments and by naming and shaming global pirates and counterfeiting who are producing and trafficking in fakes
- Developing a "No Trade in Fakes" program in cooperation with the private sector to ensure that global supply chains are free of infringing goods
- Working to dismantle criminal enterprises that steal intellectual property using all appropriate criminal laws, and overhauling, updating and modernizing US intellectual property statutes
- Joining forces with like-minded trading partners concerned about the growing global IPR piracy problem, such as the European Commission, Japan, the United Kingdom and France who have all launched initiatives (United States Trade Representative, 2004, ¶ 4)

The US Department of Commerce will specifically establish a hotline that provides a one-stop-shop for businesses to protect their intellectual property at home and abroad - 1-866-999-HALT; build a bridge between companies and US Customs to block bogus goods at the border; develop a comprehensive web-based guide for American innovators and businesses on how to safeguard their ideas and innovations; and challenge industry leaders to develop voluntary guidelines/corporate compliance programs to ensure that their supply chains are free of trade in fakes ("Strategy targeting," 2004). Robert Zoellick, (former) US Trade Representative, began a "name and shame" tactic to identify firms that are producing and trafficking in fakes in the agency's Special 301 Report. Thus, the US government will start publishing an annual list of firms (not just countries) that are known to be supplying the counterfeit goods (United States State Department, 2004).

7.3 European Commission Taxation and Customs Union

On February 8, 2005 László Kovács, European Commissioner of Taxation and Customs Union, stated that, "counterfeiting undermines competitiveness, destroys jobs and threatens the health and security of citizens around the world. EU Customs

are in the forefront of this battle and, according to our understanding; seize more fakes than any other enforcement agency in the world" (Kovács, 2005, ¶ 1). Mr. Kovács also reported that his agency has seen a 900% increase in the number of cases of counterfeits in the past 4 years and that these seizures really represent just the "tip of the fake iceberg" that is estimated to be worth 400 billion Euros (Kovács, 2005). In 2004, the European Union (EU) had experienced rapid growth of counterfeits in the number of cases registered by product type and EU seizure data reveal dramatic percentage increases in the sectors of foodstuffs and alcohol (+197%), clothing (+102%), electrical equipment (+707%), and computer equipment (+899%) (European Commission, 2005c). In April 2004, in an effort to curb the problem of counterfeit cigarettes and the subsequent loss of significant government tax revenue in the EU (estimated at hundreds of millions of dollars per year in lost tax revenue), Philip Morris International, Inc. agreed to pay nearly $1 billion over a 12-year time frame to assist the EU government develop new procedures to curb the counterfeiting and smuggling of cigarettes in this region ("Philip Morris to back EU," 2004). For a detailed overview of US seizure data, refer back to Chapters 2 and 3.

The parallel agency to the US Customs and Border Protection is the European Commission's Taxation and Customs Union. The best place to keep up-to-date in government initiatives is at http://ec.europa.eu/taxation_customs/customs/customs_controls/counterfeit_piracy/index_en.htm (European Commission, 2005d). Various data are presented at this website in terms of both EU and specific Member States information regarding seizure data. In 2008, the EU reported that its 2007 seizure data comprised of two large categories: cigarettes (34%) and clothing (22%). The EU government also raised alarming statistics (compared to 2006 data) that seizures in personal care products (+264%), toys (+98%), foodstuffs (+62%), computer equipment (+62%) and medicines (+51%) had dramatically increased in a 1-year time frame.

7.4 IPR Enforcement Initiatives in the European Union

The EU currently has nine distinct directives that govern some aspect of intellectual property rights. As illustrated in Table 7.2, three of these directives specifically have power over the sectors of satellite and cable, computer programs and semiconductors.

For a more detailed synopsis of each of these directives, consult the European Commission website at http://www.europea.int or order the European Commission publication on EC Directives on Copyright and Related Rights at http://ec.europa.eu/internal_market/copyright/copyright-infso/copyright-infso_en.htm. For the purposes of this chapter, we would like to focus on the new directive related to set minimum enforcement standards in the EU that was adopted on April 29, 2004.

Table 7.2 List of EU directives on IPR

Name of directive	Brief description	Adoption date
Enforcement	Harmonizes enforcement procedures for member states	29.04.2004
Resale right	Resale rights for the benefit of the author of an original work of art	27.09.2001
Copyright in the information society	Harmonizes certain aspects of copyright and related rights in the information society	22.05.2001
Protection of databases	Legal protection of data bases	11.03.1996
Term of protection	Harmonizes the term of protection of copyright and certain related rights	29.10.1993
Satellite and cable	Coordination of certain rules concerning copyrights in this industry	27.09.1993
Rental right	Governance of rental right and lending rights related to copyright	19.11.1992
Protection of computer programs	Legal protection of computer programs	14.05.1991
Semiconductors	Legal protection of topographies of semiconductors products	16.12.1999

Source: http://www.europa.int, 2005

7.4.1 Retaliation: Understanding the New Enforcement Directive in the EU to Pursue Counterfeiters

Of the nine directives mentioned in the last section, the first directive governs the rental and lending rights related to copyright protection and was adopted into EU legislation in November 1992. Thus, in relative terms, this supranational government agency has just begun to develop and adopt EU-wide measures to protect a company's intellectual property rights. The current policy changes center on the new Enforcement Directive that was adopted on April 29, 2004 to establish minimum enforcement of intellectual property right standards in the EU.

The 10 new Member States which joined the EU on May 1, 2004 were Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia. Thus, one of the major reasons to adopt a directive on the enforcement of IPR in the EU was to strengthen the ability to fight the counterfeit traffickers in Member States with weak enforcement regimes. However, there was debate as to whether the new directive provided enough incentive for these ten Member States to protect intellectual property rights. Phillips, in his 2004 article on intellectual property enforcement describes the legal quagmire for protection of IPR in the EU as:

> [E]nlargement means that, with respect to pan-European IP rights such as the Community trade mark and the Community design, the same right may be the subject of dispute in up to 25 jurisdictions. If the IP right dispute involves a substantial number of jurisdictions, almost anything is preferable to litigating the same dispute simultaneously in a large number of different countries (sic) (p. 1).

Table 7.3 Synopsis of EU directive of IPR

Scope of directive	• Sets minimum standards for enforcement by reference to best practice in the member states • Applies to infringements of any IP rights arising from community or national law regardless of the degree of harmonization of the underlying rights • Three measures - relating to orders for the disclosure of certain types of evidence, orders for the disclosure of information, and freezing orders - apply only where the act of infringement is carried out on a commercial sale • Criminal sanctions are left up to the member states that must apply penalties that are "effective, dissuasive and proportionate"
Impact on member states	All member states will have to adapt their legislation to a greater or lesser degree to meet the new requirements in terms of: • Disclosure of evidence • Search and seizure orders • Seizure of infringing goods • Injunction against an intermediary • Freezing orders • Damages • Corrective measure • Cash alternative for innocent infringers

Source: Knapper (2004) and the Economist Intelligence Unit (2004)

The major provisions of the EU directive in terms of its 'scope' and 'impact on Member States' is summarized in Table 7.3 The directive *does not harmonize* but sets minimum standards for enforcement in current Member States. For a more detailed legal evaluation of the directive, review Knapper (2004) and European Commission (2004).

At a 2005 press conference in Brussels, Belgium, László Kovács, European Commissioner of Taxation and Customs Union outlined the leading tactics of the new Enforcement Directive for key players, such as business, EU Customs, and the international and national government policymakers. Basically, this directive will increase cooperation and information exchange in the business community to promote a better dialogue with key players such as shipping lines, express carriers, and airlines; to work with business to produce practical guides for customs and promote targeted actions in high risk areas; to establish regular meetings with business to focus on joint efforts; and to provide training for business on customs requirements. In addition, international actions would include using the customs co-operation agreements to create feedback systems to cut off counterfeiting at the source; and increased partnership with other international organizations such as the World Customs Organization and Interpol (Kovács, 2005).

In terms of the *scope* of this Enforcement Directive, the legislation sets minimum standards for enforcement by reference to best practice in the Member States; applies to infringements of any IPR arising from Community or national law regardless of the degree of harmonization of the underlying rights; establishes three measures – relating to orders for the disclosure of certain types of evidence,

orders for the disclosure of information, and freezing orders – that apply only where the act of infringement is carried out on a commercial sale; and appeals to the 25 Member States to develop criminal sanctions that must apply penalties that are "effective, dissuasive and proportionate" (European Commission, 2004). In terms of the impact of this new directive on the protection of intellectual property rights in each Member State, the national governments must adapt the legislation to a greater or lesser degree to meet the new requirements of the Enforcement Directive.

Knapper (2004) described the controversy that embroiled the adoption of this directive noted that the scope of the directive was too broad in terms of its application to consumer piracy, such as file-swapping; and for introducing criminal measures outside the jurisdiction of the European Commission. Again, this directive places the burden on each Member State to change its legislation in terms of enforcement mechanisms ranging from disclosure of evidence to damages. The Business Software Alliance (BSA), the International Federation of Phonographic Industry (IFPI), the Motion Picture Association, and the like, expressed a discouraged outlook regarding the level of protection given to intellectual property rights under this Directive and stated that the Directive does not give adequate protection since the measures proposed do not reach the level of protection offered in laws of certain Member States (International Federation of the Phonographic Industry, 2005). Therefore, whether this directive alleviates the piracy problem remains to be seen.

One of the major reasons to adopt a directive on the enforcement of IPR in the EU was to strengthen the ability to fight the counterfeit traffickers in Member States with weak enforcement regimes. According to the *Economist Intelligence Unit*, the enlargement of the EU in 2004 was one of the major reasons that the EU quickly adopted this new directive.

7.4.2 Seeking Retribution: The European Commission Develops Action Plan to Deter Pirates

In October 2005, the European Commission announced an Action Plan to further strengthen the level of intellectual property rights protection in the trade bloc. The policymakers were disturbed by recently released seizure data that reveals a significant growth in the counterfeit trade, an estimated increase of 1,000% from 1998 in terms of reported cases of pirated goods (European Commission, 2005c). In addition, the government decision-makers were concerned with the health and safety of consumers due to the consumption of fake foodstuffs, medicines, household items and car parts. Thus, the Commission's Action Plan includes the following proposed measures:

- A new business-customs working group to consider whether there is a need to refine EU anti-counterfeit legislation in order to increase protection for legitimate business while keeping down costs.
- A new Task Force of Member States' Customs experts with the task of improving anti-counterfeiting controls.

- The completion of an anti-counterfeiting risk management guide to be distributed to Member States as well as to our international partners.
- A new electronic system of secure, real-time transmission of information.
- A memorandun of understanding with major trade representatives such as airlines, shipping companies and express carriers with a view to improving information exchange and creating a better awareness of the risks posed by the traffic in fakes.
- With regard to reinforcing international co-operation, the Commission will, together with Member States, consider possible amendments to the World Trade Organization Intellectual Property Rights ("TRIPS") Agreement so that countries apply anti-counterfeiting controls not only on imports but also on exports, transit and transshipment movements (European Commission, 2005b, ¶ 3).

Immediately after this 2005 press release, Francis Moore, Regional Director of Europe for the IFPI, the organization representing the recording industry worldwide enthusiastically supported this Action Plan by stating that "it is a multi-pronged approach which for the first time is commensurate with the size of the problem. For the music industry, the pirate market is estimated to be worth $4.6 billion at pirate prices worldwide" (IFPI, 2005, ¶ 1). A current example of the potential for future multi-agency cooperation is the successful EU joint customs operation codenamed "FAKE." This sting operation was conducted during a 2-week period in May 2005 where counterfeit products of Chinese origin were monitored through 250 customs officers in the EU throughout the 25 Member States. The FAKE project was coordinated by both the European Anti-Fraud Office (OLAF) and the EU Taxation and Customs Union. This first joint operation was extremely successful in seizing counterfeit goods through the timely exchange of information between Customs Officials in order to detect fake products in commercial transactions entering the majority of the EU's borders ("International customs operation 'FAKE'," 2005).

7.4.3 EU–US Action Strategy for the Enforcement of Intellectual Property Rights

On June 21, 2006, at the US-EU Summit in Vienna, government officials endorsed the "EU-US Action Strategy for the Enforcement of Intellectual Property Rights." The main objectives of this joint effort were to curb the growth of counterfeit trade by way of promoting strict enforcement, strengthening bilateral cooperation; and fostering public-private partnerships to protect intellectual property. The United States Mission to the European Union summarizes the main points of this bilateral agreement in the key areas of *enforcement* and *public-private partnerships* as follows (US, EU Adopt Action Strategy for the Enforcement of Intellectual Property Rights, 2006):

1. Enforcement

   (a) Customs and Border Control

   Increase cooperation to strengthen border enforcement of IP rights, taking fully into account the five-point plan agreed in the framework of the Joint Customs

Cooperation Committee (JCCC) by exchanging IPR border enforcement practices and experiences; operational staff to jointly target and examine shipments; enforcement information on IPR seizures and trends enhancing targeting and controls for counterfeit goods posing health and safety or security risks is a priority for cooperation in this area.

(b) Bilateral measures

Step up our actions to encourage third countries to enforce IPR and to combat counterfeiting and piracy. This should be done inter alia through coordinated efforts that draw upon information from industry; coordinated messages on key enforcement issues and active complementing of each others' bilateral efforts working with third countries; and exchange of information about significant IP-related meetings and other events that provide opportunities to advance these objectives.

(c) Multilateral measures

Facilitate the ongoing OECD IP study by providing data and any other necessary and available resources, recognizing that current, independent and reliable information on the scope and effects of IP theft will shape a more compelling pro-IP enforcement message for consumers and governments worldwide. Support implementation of the 2005 G8 Leaders Statement on Reducing IPR Piracy and Counterfeiting through more effective enforcement, in particular in the area of the fight against criminal infringements of IP rights to reduce substantially global trade in pirated and counterfeit goods.

2. Promoting public-private partnership

Involve industry by providing information on IPR related meetings and activities in third countries, to launch joint public-private roundtable discussions in third countries, to assist small and medium sized enterprises with IPR protection and enforcement challenges in third countries; and to increase public awareness of the need to address IPR infringements at trade fairs and share ideas on ways to improve enforcement against such infringements, in cooperation with the interested parties.

The agreement also invites industry to enhance a public-private relationship by sharing information with government authorities; sharing IP strategies in terms of industry model to curb counterfeit trade; divulging enforcement problems in third countries; and giving government officials an idea of what type of public awareness programs have been designed to educate the consumer on the illicit trade. For a more detailed report of each measure, consult the United States Mission to the EU website at http://useu.usmission.gov.

7.4.4 Operation Infrastructure

In February 2008, both the EU and US authorities released the information that Operation Infrastructure was the first successful outcome of the new EU-US Action

Strategy ("United States Customs and Border Protection and European Commission Announce First Joint Operation Combating Counterfeit Goods," 2008). The CBP and the TAXUD selected semiconductors and computer networking equipment for their first joint IPR border enforcement action. These categories were selected since in addition to IPR infringement, the counterfeit goods in this area also represent safety and security risks. The US customs and Border Protection and the European Commission report that counterfeit hardware lacks the quality assurance and manufacturing standards of genuine hardware. As a result, there is a much higher failure rate for counterfeit hardware. Many counterfeit products fail on installation and more fail weeks or months after installation. Failures impose significant labor, equipment and lost productivity costs on individuals and organizations that depend on these networks ("U.S. Customs and Border Protection and European Union Announce Joint Operation in Combating Pirated Goods," 2008, ¶6).

Operation Infrastructure was a 2-month joint operation conducted in November and December 2007 that led to the seizure of over 360,000 illicit computer central processing chips and circuit boards that had been shipped from primarily China, Taiwan and Hong Kong. The fake merchandise contained the brand names of over 40 leading manufacturers in this sector, including Intel, Cisco, Philips Electronics, Siemens and the like. EU and US authorities in Operation Infrastructure worked closely with key airports in the US and EU and air freight operators, such as Federal Express, United Parcel Service, and DHL to detect the counterfeit merchandise (US, EU Team Up to Crack Down or Computer Counterteits, n.d.).

In February 2008, Mr. R. Verrue, Director General for Taxation and Customs at the European Commission, stated: "We will continue to build upon this operation and a growing cooperation with our US colleagues to combat the global trade in fake goods. The EU and US are fully committed to combating counterfeiting and piracy at home and abroad. In addition, this also shows that Customs administrations are prepared to tackle difficult enforcement challenges and issues, especially when the health and safety of our citizens is at stake" (United States Customs and Border Protection and European Commission Announce First Joint Operation Combating Counterfeit Goods," 2008, ¶ 2). CBP Assistant Commissioner Baldwin mirrored his counterparts comments by stating, "The success of Operation Infrastructure clearly demonstrates our commitment to jointly working with our European counterparts to stop the international flow of illicit goods, and protect our consumers and businesses from these harmful products" ("United States Customs and Border Protection and European Commission Announce First Joint Operation Combating Counterfeit Goods," 2008, ¶ 4).

7.4.5 EU Third-Country IPR Enforcement Strategy

In November 2004, the European Commission released its new tactics for enforcing intellectual property rights beyond its borders in "third countries." Pascal Lamy, the (former) EU Trade Commissioner states, "[P]iracy and counterfeiting continue to grow every year and have become industries, increasingly run by criminal organizations. This is a serious problem for us but also for third countries whose companies

are also suffering the consequences of violation of their intellectual property rights. Some of these fakes, like pharmaceuticals and foodstuffs constitute an outright danger to the public, while others undermine the survival of the EU's most innovative sectors, confronted with the misappropriation of their creations. Adopting new legislation on intellectual property is one thing. But devising the right tools to enforce it is another. This is now our priority…." (European Union, 2004).

In July 2003, the European Commission conducted a detailed survey that assessed the enforcement issues of intellectual property rights in third countries. The results of this study found the most difficult countries were China, Thailand, Ukraine, Russia, Indonesia, Brazil, Turkey and South Korea in terms of both the export and domestic consumption of counterfeit goods. The major tactics of this new trade strategy towards third-country IPR infringement is to:

- *Identify priority countries:* EU action will focus on the most problematic countries in terms of IPR violations. These countries will be identified according to a regular survey to be conducted by the Commission among all stakeholders.
- *Awareness raising:* Promote initiatives to raise public awareness about the impact of counterfeiting (e.g., loss of foreign investment and risks to health).
- *Political dialogue, incentives and technical cooperation:* Ensuring that technical assistance provided to third countries focuses on IPR enforcement, especially in priority countries. Exchanging ideas and information with other agencies, such as the World Intellectual Property Organization (WIPO), the US or Japan, with the aim of avoiding duplication of efforts and sharing best-practices.
- *IPR mechanisms in multilateral (including TRIPS), bi-regional and bilateral agreements:* Raising enforcement concerns in the framework, consulting trading partners in terms of an initiative with the WTO TRIPS Council, and the like.
- *Dispute settlement - sanctions:* Recall the possibility that right-holders have to make use of the Trade Barriers Regulation or of bilateral agreements, in cases of evidence of violations of TRIPS.
- *Creation of public-private partnerships:* supporting/participating in local IP networks established in relevant third countries, and the like (European Union, 2004).

Future research will have to examine whether these new strategies designed to strengthen EU intellectual property rights in countries such as China and the Ukraine are going to assist businesses fight the fakes in the global marketplace.

7.5 Conclusions

The primary purpose of this chapter was to provide a synopsis of the recent IPR initiatives designed by US and EU government officials. It is clear through the development of this chapter that a business manager simply does not have the time to sift through the labyrinth of information on this topic. For example, news on the recent FAKE sting operation in the EU was found imbedded at the Europa website

for the European Commission and was distributed by the EIU Newswire - the story was not published in more common business sources, such as *The Wall Street Journal* or the *Financial Times*. Therefore, both international and government policymakers, private trade consortiums, such as BSA, and companies must work to find a better way to disseminate information related to the protection of intellectual property rights to the global business community. One suggestion might be a global anti-counterfeiting blog. The main issue will be to find an agency that is willing to take ownership for this central blog. Suggestions would include the US Department of Commerce, the Business Software Alliance or the World Trade Organization.

Most of the current literature on counterfeits centers on the description of various anti-counterfeiting measures that are developed through international and national government agencies and businesses to deter pirates. There are a myriad of reports on IPR legislation in the past 15 years that range from a detailed review of the TRIPS agreement in the World Trade Organization to the current STOP! and Action Plan in the US and EU respectively. However, there have been few, if any, reports on whether this anti-counterfeiting legislation has effectively deterred the pirates.

Chapter 8
Government and Industry Led Operations to Curb Counterfeit Trade

8.1 Introduction

The purpose of this chapter is to give a succinct overview of the leading multilateral organizations and industry associations that safeguard intellectual property rights. First, a quick overview of the Trade-Related Aspects of Intellectual Property Rights (TRIPS) in the World Trade Organization (WTO), the World Intellectual Property Organization (WIPO), the IP related governance in the Organization for Economic Cooperation and Development (OECD), and the enforcement of IP through the International Criminal Police Organization (INTERPOL). These four international agencies were selected for illustration purposes and we realize that many more global organizations could have been selected for this chapter. Second, a description of some of the principal industry associations that have IP at the forefront of their mandates – the International AntiCounterfeiting Coalition (IACC), the Business Software Alliance (BSA), the Software Information Industry Association (SIIA), the Motion Picture Association of America (MPAA), the Recording Industry Association of America (RIAA) and the International Federation of Phonographic Industry (IFPI) are highlighted in this chapter. Again, these six associations were selected due to their high profile for collecting data on piracy in their respective market segments. There are many more trade associations that exist with strong linkages to IP protection.

The goal of this chapter is to provide as many resource links as possible to academics, managers, and public policy decision makers in order to guide their future IP agendas. This chapter is replete with websites that yield current information.

8.2 Multilateral Organizations that Govern IPR

The main multilateral decision making bodies that have a significant impact on dealing with global IP concerns are the WTO, the WIPO, and the OECD. A brief synopsis of each agency is given in the next section to provide a general overview. Several websites are listed to provide the means to educate the reader on the specific intricacies of each agency.

P. Chaudhry and A. Zimmerman, *The Economics of Counterfeit Trade*,
DOI-10.1007/978-3-540-77835-6_8, © Springer-Verlag Berlin Heidelberg 2009

8.2.1 World Trade Organization: TRIPS

Without question, one of the leading multilateral organizations for the protection of intellectual property rights is the TRIPS in the WTO. The TRIPS was negotiated in the Uruguay Round (1986–1994) and became the first agreement governing IP in this multilateral trade organization. The WTO commenced in 1995, as an outgrowth of its predecessor, the General Agreement on Tariffs and Trade (GATT) that was established in 1948. It is the main multilateral trade forum for member countries to negotiate trade liberalization and disputes. As of May 16, 2008, there are 152 members of the WTO ranging from Albania to Zimbabwe. Other countries, such as Azerbaijan, are categorized as "observer governments" and must start accession to the WTO within five years of reaching this status. With such a large membership, it is clear that the WTO is one of the largest forums for IP trade issues.

The specific details of the WTO are found at http://www.wto.org. A quick peruse of this website gives updated information on training sessions, such as the WTO-WIPO sponsored colloquium for teachers of intellectual property from developing countries, reports on intellectual property rights issues, and both generic and legal texts of the goals of TRIPS.

Overall, the TRIPS agreement recognizes these categories of intellectual property: copyright and related rights; trademarks, including service marks, geographical indications, industrial designs, patents, layout designs (topographies) of integrated circuits; and undisclosed information, including trade secrets. A good example of a geographical indication is wine produced in "Napa Valley" or the well-known "Champagne"–this is why similar products produced in other regions are called "sparkling wine" since the product does not originate in the Champagne region of France. Astra Zeneca's submission of data for FDA approval is an illustration of trade secrets that must be protected.

The TRIPS governs five main areas:

- How basic principles of the trading system and other international intellectual property agreements should be applied
- How to give adequate protection to intellectual property rights
- How countries should enforce those rights adequately in their own territories
- How to settle disputes on intellectual property between members of the WTO
- Special transitional arrangements during the period when the new system is being introduced (World Trade Organization, n.d.)

The most recent dispute within the TRIPS is the case filed by the US in April 2007 against China for consultations on the level of thresholds for criminal actions to be taken against acts of trademark counterfeiting and copyright piracy; the disposal of goods confiscated by the Chinese government; the range of criminal procedures and penalties for producing and distributing pirate goods; and the problem of the lack of observance of copyright and other IP for sound recordings that have no authorization to be distributed in China. Other third parties that have since joined the consultations with the US are Argentina,

Australia, Brazil, Canada, EU, India, Japan, Korea, Mexico, Taiwan, Thailand, and Turkey. Known as "DS362," it is currently in the dispute settlement process of the WTO and succinct summaries of this consultation can be viewed at its website.

The Doha round of trade negotiations is still in progress seven years after its initial meeting in Qatar in 2001. Several key issues, such as revising intellectual property and anti-dumping rules, are currently on the agenda. For example, in 2001, the Doha Declaration adopted an agenda related to the dissemination of medicine to developing countries – the key focus is how patents can exclude developing countries from principal pharmaceuticals that safeguard public health (for detailed discussions see http://www.ielrc.org/content/f0201.htm and http://www.who.int). However, on July 21, 2008, Williams reported in the *Financial Times* that this round was facing its "moment of truth" since many policymakers are cynical of whether the talks can move forward due to key political elections in the US and India and changes in the executive of the European Commission. Williams (2008) reports that the familiar stumbling blocks, such as farm trade, are an issue, but, other goals such as market access to developing countries by way of reduced tariffs are still a contentious concern. Williams prophecy about the tenuous situation in Geneva was upheld and the Doha round collapsed after 9 days of negotiation in Geneva on July 30, 2008 due to an impasse between the US, India, and China on opening up market access for farm trade in the developing world (Beattie and Williams, 2008).

8.2.2 World Intellectual Property Organization

The WIPO was established in 1967 and is the current agency in the United Nations that governs IP. There are currently 184 Member States ranging from Afghanistan to Zambia. The WIPO includes more member countries than the TRIPS accord within the WTO. An alliance between the WIPO and the WTO was forged in 1996 with an agreement between the two multilateral regimes; especially in the area of assisting developing countries achieve their TRIPS requirements by 2013. In addition to the WTO, the WIPO also works closely with other agencies, such as the World Health Organization (WHO), the International Labor Organization (ILO), and intergovernmental (IGOs) and non-governmental organizations (NGOs). Through the WIPO Academy, the agency continues to train various stakeholders' about the evolving IP environment with the assistance of academic institutions, such as Turin University's Master of Law (LL.M.) program.

In its 2008–2009 program and budget report, the WIPO outlined its five strategic goals as (World Intellectual Property Organization, n.d., ¶ 5):

- To promote an IP culture
- To integrate IP into national development policies and programs
- To develop international IP laws and standards
- To deliver quality services in global IP protection systems
- To increase the efficiency of WIPO's management and support processes

Fig. 8.1 WIPO social marketing webcasts. Source: World Intellectual Property Organization (n.d.)

In the WIPO's 2007 Annual Report, the Geneva based agency gives detailed information regarding its current endeavors to support IP through public outreach and communication, promoting the strategic use of IP for development, copyright in the digital environment, and the like. As discussed in Chapters 5 and 6, there is a need for policymakers to communicate to consumers a more holistic perspective of the damages to the IP industry. The WIPO has begun this effort through its public outreach campaign via the web, film and television, publicity events, seminars, and publications. One example of this type of social marketing is its "World Intellectual Property Day" on April 26, 2008 that sponsored events to raise public awareness of the benefits of IP, such as innovation rewards. Another example is the WIPO webcast on "Encouraging Creativity & Innovation" provided in multiple languages. Figure 8.1 shows a clip of this animated commercial. All of the WIPO webcasts can be viewed at http://www.wipo.int/multimedia/en/public_outreach/webcast/spots/index.html.

Similar to the TRIPS, the WIPO offers a dispute settlement to private parties by way of its "Arbitration and Mediation Center" that provides lists of arbitrators, mediators, and consultants from over 100 countries that will work under the WIPO rules to oversee a disagreement. A detailed overview of the WIPO's recent initiatives is beyond the scope of this chapter, however, their annual report, *World Intellectual Property Organization: An Overview 2007* can be obtained at http://www.wipo.int/export/sites/www/freepublications/en/general/1007/wipo_pub_1007.pdf.

8.2.3 Organization for Economic Cooperation and Development

The OECD is well known as a multilateral forum that consists of countries committed to a free market economy. The OECD was established in 1961 with a current membership of 30 countries and its secretariat in Paris, France. The OECD has listed six

overarching goals at its website that encompass supporting economic growth, boosting employment, raising living standards, maintaining financial stability, assisting non-members economic development, and assisting growth of international trade. The OECD is just another forum where governments can voice their public policy concerns and debate future domestic and international policy on an array of topics that includes the protection of intellectual property rights. The organization addresses issues related to IP under its Directorate for Science, Technology and Industry. A good way to keep updated on the various IP publications stemming from this part of the OECD is to bookmark their site at http://www.oecd.org. This website also highlights other recent reports, such as a conference on patent statistics sponsored by the European Patent Office and the OECD and another publication on "Broadband Development and Growth in OECD Countries."

The OECD is one of the largest sources of publications that cover subjects ranging from statistics and economic data to social changes - that can shape global policymaking decisions. The OECD recently issued a report, *The Economic Impact of Counterfeiting and Piracy 2007*, in June 2008. As discussed in Chap. 2, this report gives estimates of the size of the counterfeit market, the current IP environment (such as linkages to organized crime), the economic effects of piracy, suggestions for disseminating information on counterfeits, and an overview of government and industry initiatives. The report also gives specific attention to the audio and visual, automotive, electronic components, food and drink, pharmaceuticals and tobacco sectors affected by IP infringement. An Executive Summary of this 2008 publication can be obtained at http://www.oecd.org/dataoecd/21/20/40896133.pdf. There are currently 304 other OECD reports related to issues on the IPR environment, such as its 2005 publication of "Intellectual Property Rights."

The role of the OECD is both similar, that is, in terms of fostering global policymaking on IP issues, and dissimilar to the WTO and WIPO since it does not provide a dispute settlement mechanism for IP trade disputes. However, given the prestige of this multi-country forum and its undeniable role in publishing leading works in IP, the OECD website should be consulted regularly by academics, policymakers, practitioners, and lawyers working in intellectual property concerns.

8.2.4 The International Criminal Police Organization

There may appear to be a disjunction between discussing multilateral trade policymaking agencies, such as the WTO, in the same category as an international police organization, INTERPOL. However, the various enforcement issues related to intellectual property are as important as keeping updated on the forums to discuss and negotiate IP. In October 2000, this global police organization added IP crime to its mandate and strongly recommended that various stakeholders keep current with the issues reported via INTERPOL at http://www.interpol.int. Under the section "Financial and high-tech crimes," INTERPOL identifies currency counterfeiting, intellectual property crime, and new technologies in its governance of deviant

transnational criminal behavior. The INTERPOL IP Crime Program faces the formidable challenge of combating multinational organized crime and the program goals are to (INTERPOL, n.d., ¶ 11):

- Develop strategies and programs to combat transnational organized criminal activity linked to IP infringement
- Develop the Database on International Intellectual Property (DIIP) Crime to improve the exchange of information and intelligence on transnational organized IP crime
- Raise awareness among policy makers, stakeholders and the public about the central role of organized criminals in transnational IP crime
- Increase national and regional law enforcement efforts to combat transnational organized IP crime
- Develop a systematic worldwide operational capability to facilitate and coordinate regional enforcement action against transnational IP crime
- Provide police with support and training on IP crime

As discussed in Chapter 6, the organization also supports raising public awareness of the level of organized crime associated with IP theft and maintains that the high profit/low risk incentives of product counterfeiting provide lucrative funding opportunities for terrorist organizations.

8.3 Industry Associations that Govern IPR

An overview of principal industry associations that are at the leading edge of global IP issues is given in this section. The IACC, BSA, SIIA, MPAA, RIAA, and IFPI were selected due to the industry sectors that they represent and the in-depth level of resources available at their websites. A concise review of each association follows.

8.3.1 International AntiCounterfeiting Coalition

The IACC was established in 1979 and is based in Washington, DC. This non-profit agency represents a cross-section of industry sectors that include pharmaceuticals, software, food, and autos. In one of our recent managerial studies, the respondents mentioned using this organization in their efforts to combat pirates. The IACC has a good website (http://www.iacc.org) and presents information on current media (e.g., the "Get Real" campaign), IACC conferences, college outreach programs (e.g., educating students on the real vs. fake product), and its infamous "counterfeit gallery." As shown in Fig. 8.2, the current counterfeit gallery offers an interactive quiz on the "real vs. fake" to educate the consumer. Once you have selected your "answer" another screen provides a detailed explanation for detecting counterfeits in a product category.

Fig. 8.2 Quiz on real vs. fake at the IACC. Source: http://www.iacc.org/gallery/index.php (n.d.)

The IACC site will also give access to other studies and links to other agencies involved in IP protection, such as the WIPO. The separate "resources and downloads" section includes the IACC White Paper (2005), recent US Trade Representative (USTR) special reports, and IACC testimony for the US-China dispute on IP in the WTO. In addition to representing a cross-section of brand owners (e.g., Apple and Motorola), the IACC also includes members from product security firms (e.g., Authentix), government agencies (e.g., Canada Border Services Agency), law firms (e.g., Arnold & Porter LLP), investigative agencies (e.g., Pinkerton Consulting) and industry associations (e.g., Automotive Aftermarket Industry Association). This inclusive membership truly makes the IACC a coalition that represents the viewpoints of many decision makers in the IP arena.

8.3.2 Business Software Alliance

The BSA proclaims itself as the "voice of the world's commercial software industry" and represents several of the leading names in the industry, such as Adobe, Apple, Cisco Systems, Dell, HP, IBM, Intel, McAfee, Microsoft, SAP, and Symantec.

The BSA offers a wealth of information related to IP issues in this sector at http://www.bsa.org. On the BSA homepage, a link to a "global anti-piracy portal" will send the reader to current "global piracy news," a general description of software piracy and statistics (piracy rates by region). The annual "Global Piracy Study" has been cited several times in various chapters and the BSA provides this information as a pdf file at its site.

The BSA provides a link to its "international policy portal" to provide information on IP protection, patent development, cyber crime, trade liberalization, and any evolving technology policy agendas. At this portal, a link to the current *Economist Intelligence Unit's* study, "The Means to Compete: Benchmarking IT Industry Competitiveness," is a quick download. A country menu is also furnished to give a direct link to the BSA homepage that presents policy issues in the native language of the country selected. Salient links, such as the 2006 IDC Chinese Economic Study are at this site in the local language. Figure 8.3 shows the BSA homepage for China.

The BSA supports an interactive website (http://www.cybertreehouse.com) for youth to access with links to "smart and uncool" (i.e., it is uncool to download software, movies, or games without paying for them) and other activities, such as games. This site is another excellent example of social marketing concepts being used to foster good cyber behavior in children. Overall, the BSA offers many valuable links and resources that will keep academics, managers and policymakers up-to-

Fig. 8.3 BSA global public policy page for China. Source: http://w3.bsa.org/china/(n.d.)

date on trends in this high growth sector. The coalition even offers quick fact sheets on software piracy, education, Internet piracy, online shopping, cyber security and public policy for a succinct synopsis of the current issues.

8.3.3 Software Information Industry Association

The SIIA is a major trade group that represents the software and digital content industry. As part of their objectives, the agency oversees issues related to IP and offers valuable information at its anti-piracy link at http://www.siia.net/piracy/. The SIIA provides a link to whistleblowers, gives education on software management, proclaims its "Certified Content Rights Manager" program will educate managers that oversee copyright issues in their firms, and suggests education materials. The *SIIA Anti-Piracy 2007 Year in Review* report (Software Information Industry Association, 2007) gives a succinct accounting of software piracy for professionals working in the field. The reports covers top titles pirated (e.g., Symantec Norton Anti-Virus and Adobe Acrobat), enforcement of Internet piracy - a key discussion on Internet auction sites, such as eBay, and a synopsis of the education programs.

Unlike the RIAA and IFPI sites, this site is designed for corporate clients and does not target consumers. Thus, it is an excellent resource for any firm that is trying to educate or supervise its workforce on IP-related issues. One can actually purchase posters to display in the firm ($2 each) at this trade association's website. Figure 8.4 depicts the SIIA "big elephant" ad that portrays illegal software sharing in an office environment.

8.3.4 Motion Picture Association of America

The MPAA and its international branch, the Motion Picture Association (MPA) are obvious advocates of IP issues related to film, video and television markets. This association also represents producers, distributors of media content and any future delivery system created (look at the iPhone). The trade association was established in 1922, but has evolved to embrace other current issues, such as IP protection of creative works. The MPA oversees the global aspect of the industry - films can now be launched in over 150 countries - the Disney launch of Ratatouille occurred simultaneously in multiple languages. In 2007, eleven blockbuster movies, such as Pirates of the Caribbean: At World's End ($653 million) and Harry Potter & The Order of the Phoenix ($645 million), surpassed $200 million in sales revenue at the global box office (*The Hollywood Reporter*, 2007).

At the MPAA homepage (http://www.mpaa.org) the association immediately provides salience to its problem of counterfeits with links to "movie thieves," "catching movie thieves," "what's legal and what isn't," and "MPAA education and outreach." The site provides a means to "whistleblow" on movie piracy and even

Fig. 8.4 SIIA ad campaign targets corporate America
Source: http://www.siia.net.

gives general definitions of "piracy and the law." The MPAA is definitely targeting youth in the US at these links and practitioners could use their examples to develop some of their own anti-piracy campaigns.

As discussed in Chapter 6, social marketing techniques to educate the consumer are being used by various stakeholders. The MPAA uses an article about "Lucky and Flo" in the Weekly Reader that is given to 5–7th grade children in 20,000 US schools to educate this age group about the validity of copyright protection (see Fig. 8.5). The campaign issues a curriculum that provides a teacher's manual, a workbook for the students and posters of the two dogs that are used to "sniff out" fake DVDs by US Customs.

The MPAA still links its 2005 Movie Piracy Study at http://www.mpaa.org/leksummaryMPA%20revised.pdf. The data given in this study were used widely in the press to highlight the growth of counterfeit trade. However, as will be discussed in detail in the chapter on Internet piracy (Chapter 10), there was controversy about the data collection for this study and the MPAA recently retracted its estimate of the size of the counterfeit movie market.

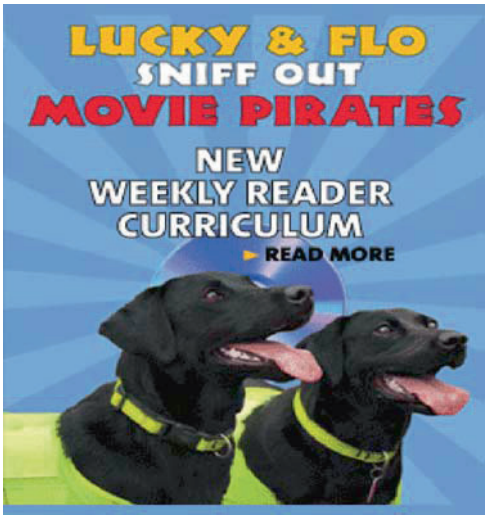

Fig. 8.5 MPAA anti-piracy campaign - Lucky and Flo. Source: http://www.mpaa.org/Issues_EduOutreach_Classroom.asp

8.3.5 Recording Industry Association of America

The RIAA is the trade representative of the music industry - the record firms that sell 90% of the legal sound recordings in the US. The agency is located in Washington, DC. and boasts a long list of members ranging from 112 Records and Daddy Yankee to Warner Brothers/Elektra. The Board of Directors consists of some of the largest names in the business - Virgin, EMI, SonyBMG, Universal Music Group, Warner Music Group, and Buena Vista Music.

The RIAA website (http://www.riaa.org) has piracy as its lead caption on the homepage with a box-out caption that reads, "Young People, Music & the Internet: A Guide for Parents & Teachers about Digital Music & Downloading," with a download option. This Childnet guide is extremely visually appealing and targets a much younger audience through the various social marketing techniques discussed in Chapter 6. The primary focus of this 2008 publication, "Young People, Music & the Internet," is education and possible peer pressure. The document provides "Q&A" scenarios, about the use of social networking sites, such as MySpace and Facebook, and cautions the reader about illegally posting material to these sites. The report draws a powerful analogy comparing music piracy to plagiarism with the visual illustrated in Fig. 8.6.

The guidebook also gives suggestions for both parents and teachers to foster IP concerns in these young consumers. For example, teachers have access to programs like Music Rules!, i-Safe IP Assembly Program & Online Curriculum, the Close Up Foundation's Face the Music High School Education Curriculum, and the

Fig. 8.6 Analogy between copyright and plagiarism. Source: http://www.riaa.org (n.d.)

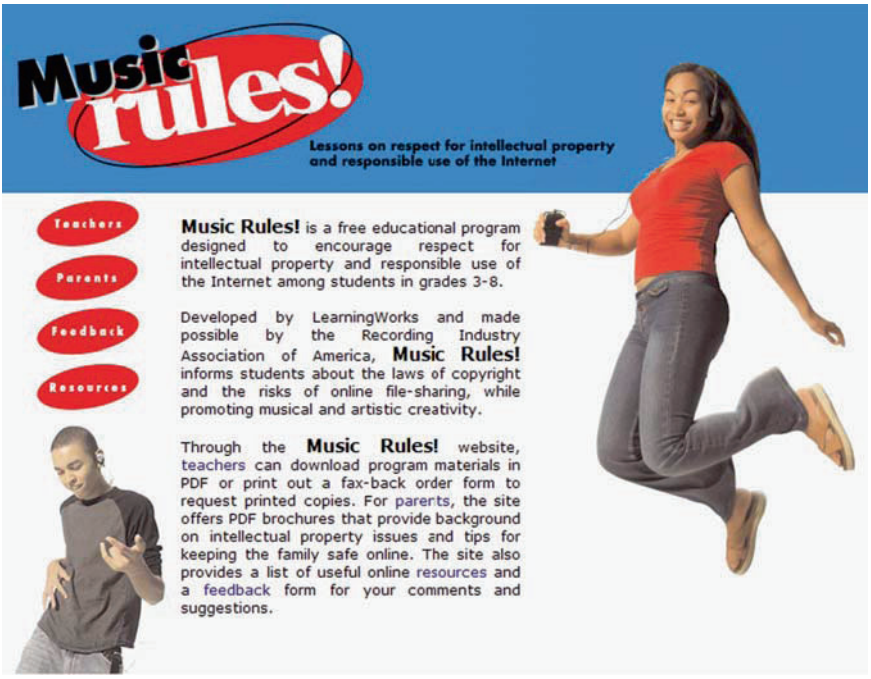

Fig. 8.7 Education of youth via Music Rules! Source: http://www.music-rules.com (n.d.)

Copyright Alliance's Educational Materials. Figure 8.7 illustrates the homepage for Music Rules! at http://www.music-rules.com.

The RIAA gives a consumer the opportunity to report piracy, educates him or her on the real vs. fake, and gives "consumer tips" on the counterfeit trade. Like the MPAA site, this information is targeted at consumers and not IP specialists. However, as mentioned above, this site includes a wealth of consumer-driven ideas to curb demand for fake goods.

8.3.6 International Federation of Phonographic Industry

The international counterpart to the RIAA is the IFPI with at least 1,400 members in 73 countries that represent the music industry. The website at http://www.ifpi.org immediately links to the Childnet report mentioned previously for the RIAA, "Young People, Music & the Internet." The association provides its own piracy reports (2000–2006 time frames) and pdf file downloads. The 2006 IFPI Piracy report covers a range of topics from physical and Internet piracy, pre-release piracy, enforcement issues, and priority (e.g., Brazil and Canada) and special focus (e.g., Bulgaria and Pakistan) countries. This report can be accessed at http://www.ifpi.org/content/library/piracy-report2006.pdf. The 2006 report is replete with salient information related to counterfeit trade in this sector and the IFPI cautions about the growth of fakes through other means, such as "digital stream ripping" and mobile phones. Basically, stream ripping allows someone to convert a radio or Internet webcast into a copy - that is, he or she can create a collection of songs in a MP3 format through these "free" channels. Bluetooth enables a consumer to transfer content to another phone and swap memory cards. The increased technology that gives the consumer distribution choices will also augment the growth of piracy. The concluding section of their web report offers a "call to governments" to ensure adequate criminal penalties for copyright crime, highlight the fact that music piracy is not a victimless crime, enforce the regulation of optical disc factories, educate the public about copyrights, and achieve cooperation from Internet service providers. We discuss these enforcement points in other chapters of the book.

The numerous IFPI resources available at its website can be viewed at http://www.ifpi.org/content/section_resources/. Another publication, "IFPI Digital Music Report," includes a separate section (4) on "Copyright Theft: The Impact and the Response," and can be downloaded at http://www.ifpi.org/content/library/DMR2008.pdf. Part of the report gives a current summary of the difficulties associated with "monetizing" digital music and reaffirms the RIAA study on increased counterfeit music being used in mobile phones. However, this report also claims that consumers have more choices for music at legal distributors, such as iTunes as opposed to the illegal site - LimeWire (www.limewire.com).

Both the RIAA and IFPI give similar types of information related to the global protection of the music industry. Each site offers clear information targeted at youth to protect the copyrights of the innovative industry that the national and international agencies represent.

8.4 Conclusions

The information available on the Internet is endless and several multilateral organizations, industry associations, and national decision-making bodies exist to support the protection of intellectual property rights. As discussed in Chapter 7, even trying to develop a roadmap of these agencies for the US market is a cumbersome task. In a previous chapter, we suggested a central blog to be developed where all current information related to IP could be posted - a sort of Wikipedia for IP - to allow many of us involved in the area to keep abreast of current IP initiatives. In this chapter, we included several examples of anti-piracy programs to complement our work in Chapters 5 and 6.

We have found social networking with other IP colleagues in the field, such as IP lawyers, to be productive, but, not a comprehensive way to stay current. In general, the main issue is the explosion of information available at various websites that can be channeled into moving IP into the forefront of public policy agendas and ultimately plausible enforcement of IP infringement.

In this chapter, we have tried to keep our resources aimed for a manager to better understand the issues. Several sources of information are available for the legal community and have merit also, but, were not included in this chapter. In addition, we did not offer a critique of the effectiveness of each IP related - agency nor possible bias of its data collection/resources posted at its website. These related issues are discussed in separate chapters of the book.

Chapter 9
The Special Case of China

9.1 Introduction

In 2007, the US Congress took the unusual step of writing a public letter to China's Vice Chairman Wu Yi during her visit to the US, saying in part:

> We… are particularly frustrated with China's inability to enforce intellectual property rights…As you know, the piracy rates in China remain virtually the highest in the world, at 85 to 95 percent of sales. Not only has China failed to make meaningful progress in this area, China has been sharply critical of the decision by the United States to file a WTO case to address the issue, claiming that the case "will adversely affect bilateral economic and trade ties." (House Committee on Ways and Means, 2007)

The problem of piracy in China remains daunting. Just about every product is being pirated, sold in country and exported. A full review of IPR conditions requires a look at the Chinese economy as well as Chinese history. For hundreds of years the Chinese economy experienced minimal growth and in fact from 1300 to 1950 per capita GDP decreased. Under the Communist regime economic conditions did not improve much and it was not until Deng Xiaoping took over that the so-called Chinese miracle began. Since 1978 annual GDP growth has exceeded 7%. Foreign direct investment (FDI) has been a major reason for this rapid growth and as a result exports have increased exponentially. With the growth of exports has come the growth of exported counterfeit product. China is the main source for pirated goods coming into the US and the EU. While it is virtually impossible to estimate the value of counterfeit product originating in China, it is evident that the total is significant and growing.

Looking at the history of IP in China, it is clear that Chinese political culture did not lend itself to the concept of ownership of intellectual property. Confucianism required control of information and a traditional Chinese belief is that inventions draw on past knowledge which belongs to all citizens. The basic beliefs of Communism dovetailed with these traditional attitudes. Censorship was more important than copyrights and inventions belonged to the state.

Over the last hundred years, under pressure from foreign powers, China has enacted a series of copyright, trademark and patent laws and at this point the laws appear to be

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adequate. The most recent problems come from weak enforcement. Mertha (2005) describes the "opaque" bureaucratic apparatus attempting to enforce these laws and shows how a combination of pressure at the national and local level results in both better laws and enforcement. Nevertheless firms doing business in China are dissatisfied with the level of IPR protection and in September 2007 the US government asked for a WTO panel to review China's legal regime related to copyrights and trademarks. Recent bad news from China including tainted medicines and pet food add urgency to solving this problem.

9.2 The Growth of the Chinese Economy

For centuries the Chinese economy was stagnant. According to Maddison (2001) total Chinese GDP in 1500 was about $62 billion in constant 1990 US dollars. This grew to about $230 billion by 1820 and only to $240 billion by 1950. Over the same period total GDP in Western Europe advanced from about $44 billion in the year 1500 to nearly $1.4 trillion in 1950. In China, per capita GDP actually fell from about $600 in 1300 to only $439 in 1950.

Overall total GDP did not improve much under Chairman Mao. In fact as Mao's biographer Philip Short understated, "economics was not Mao's strong point." Mao himself recognized his weakness in this area saying to businessmen in 1956, "I am an outsider in the field of economics" (Short, 2000, p. 439).

The advent of Deng Xiaoping as leader of the Communist Party drastically changed the economic fortunes of the People's Republic of China. His famous saying "whether a cat is black or white makes no difference, as long as it catches mice it is a good cat" (CNN, 1997) made possible the changes allowing the transition to what he called a "socialist market economy." From 1978 when Deng took power, the Chinese economy has grown rapidly. Much has been written about the Chinese "economic miracle." Looking at important indicators graphically gives a clear picture of this unprecedented growth.

As can be seen in the graph (Fig. 9.1), China's annual average GDP growth rate has exceeded 7% for the last 30 years. Wu (2000) reports Maddison's estimates of China's GDP growth at a little over 4% per year in the period 1952 through 1978 and 7.5% annually from 1978 through 1995. He states that even at this rate China's GDP may be underestimated by at least 10% of the official figures. One driving force for this rapid GDP growth has been FDI. FDI into China has continued to increase rapidly, rising to over $60 billion by 2006. The growth of FDI over the last 15 years is shown in Fig. 9.2. Chinese exports have also grown at a very rapid rate, approaching $1 trillion for 2006 as can be seen in Fig. 9.3.

For 2006 the World Bank (2006) places China's total GDP just behind Germany, fourth-largest in the world at $2.7 trillion. It may not be surprising that an economy growing in one generation from an eighteenth century level to a powerhouse

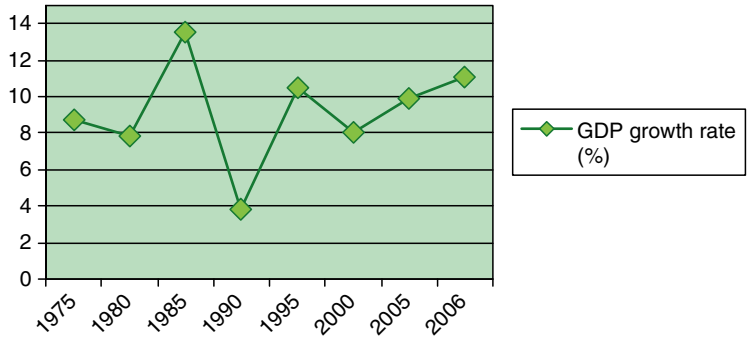

Fig. 9.1 China GDP growth rate. Source: The World Bank, National Bureau of Statistics

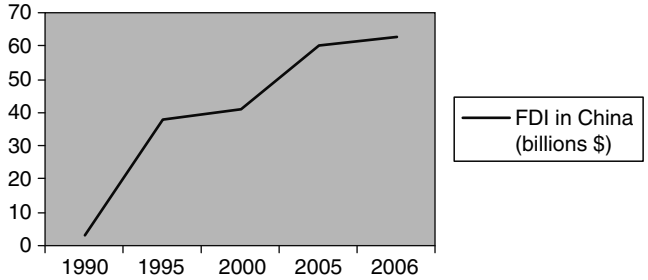

Fig. 9.2 China FDI. Source: United Nations Conference on Trade and Development (2007), Ministry of Commerce of the People's Republic of China (2006)

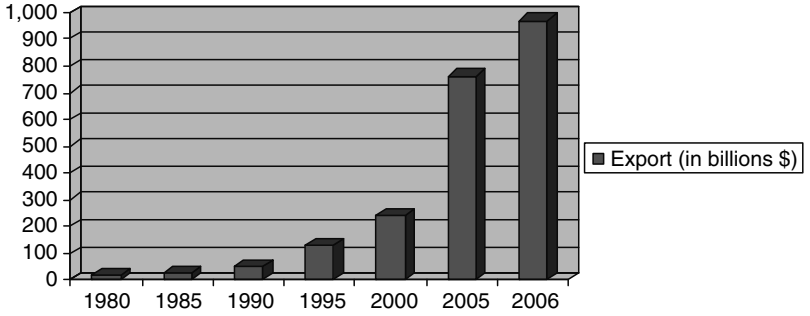

Fig. 9.3 Chinese exports. Source: United Nations, International Monetary Fund

with exports to virtually every other country has also become the chief source of counterfeit products.

Despite this, in our study of international managers, it was found that they plan to make investments in countries where the intellectual property environment is less than ideal. This is especially true for China where the strategic importance of the market outweighs any managerial trepidation regarding the lack of IPR protection.

9.3 Estimating the Size of the Chinese Counterfeit Market

As we have seen in Chapter 3, China is the most important source for counterfeit products intercepted by US Customs and Border Protection (2007) and reported by the EU Taxation and Customs Union (2007). More than four-fifths of counterfeit products seized in the US came from China and more than half of goods seized at EU borders in 2004 were counterfeit products from China. In addition the Organization for Economic Cooperation and Development [OECD] (2007c, 2007d) identifies China as a country where IPR problems persist. Naim (2005), and Hopkins, Kontnik, and Turnage (2003) cite China as the most important source for counterfeit product. As mentioned in Chapter 3, China remains on the USTR's Priority Watch List.

An amusing example of trademark infringement is seen in Fig. 9.4 - the invention of "W&Ws" copying M&Ms packaging in every detail.

It is virtually impossible to accurately estimate the value of counterfeit product originating in China but it is evident that counterfeit production has grown right along with the economy and exports. In 1998 a confidential report by the Chinese State Council stated that the country was "drowning in counterfeits" and placed the value of counterfeit production at $16 billion for 1998 (Hopkins et al., 2003).

Fig. 9.4 Trademark infringing W&Ws packaging. Source: USTR Reading Room

According to testimony by Professor D.C.K. Chow (2005), a later study by the same government agency placed the value at $19–24 billion by 2001. He estimated in 2005 counterfeit product accounted for approximately 8% of China's GDP, implying that the total of counterfeit products exceeded $150 billion.

Some estimates claim 60–70% of worldwide counterfeit goods are produced in China ("How to catch," 2006; Schwarz & Wong, 2006). Using the $200 billion estimate from the OECD (2007b) this would place the total value of counterfeit products from China between $120 and $140 billion annually, similar to the total based on Chow's estimate. Calculations completed by Havocscope (2007) conclude that the Chinese "illicit market" is the third largest in the world, valued at $79.5 billion. In 2002 a reporter for the *Christian Science Monitor* stated that the piracy industry produced something between $40 and $80 billion and directly or indirectly employed three to five million people (Marquand, 2002). He reports a common joke in China, "everything is fake but your mother." Pirated products include Budweiser beer, Gillette razor blades, Marlboro cigarettes, Yamaha motorcycles and Skippy peanut butter (Hopkins et al., 2003). In fact any product with a well-known brand is probably a victim of product counterfeiting in China.

The *Economist Intelligence Unit* (2007) ratings of the "degree of property rights protection" in China show no improvement from 1994 to 2005 (Fig. 9.5). The ratings show slow improvements expected over the next few years but remaining at a modest level for the foreseeable future. (The rating scale is 1–5 with 5 meaning the highest degree of protection.)

A survey of its members by the Quality Brands Protection Committee (QBPC, an organization of more than 150 IP holders in China), revealed that nearly 70% felt IP concerns were among the three most important operating issues facing their companies. Forty-one percent of members reported at least 11% of their products in the market were fakes and 13% of members said this figure was 51% or more (Quality Brands Protection Committee [QBPC], 2006). According to the United States Trade Representative [USTR] (2007b) in 2006, 85–93% of all copyrighted materials sold in China were pirated with very little improvement since 2005.

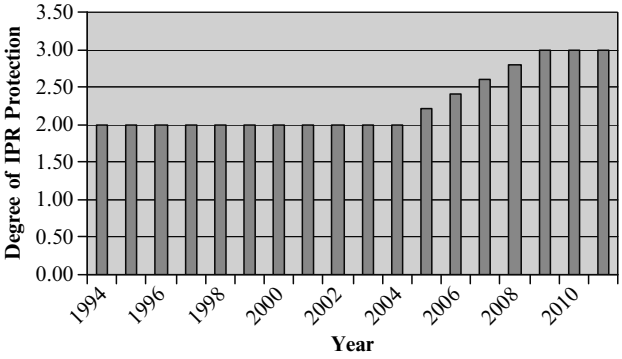

Fig. 9.5 Degree of IPR protection in China. Source: The Economist Intelligence Unit (2007)

The Motion Picture Association of America (2007) believes that 93% of the potential market for the film industry in the PRC is lost to piracy. An inspection by the China Healthcare Association revealed that "more than 25% of healthcare products in China were fakes" and between 200,000 and 300,000 Chinese die every year because of counterfeit or substandard medicine (Schwarz & Wong, 2006). The Software and Information Industry Association claims that nearly 100% of business software in China is pirated (Hopkins et al., 2003). At an intellectual property meeting called by the US Ambassador in Beijing, the US National Electrical Manufacturer's Association (NEMA) provided an extensive list of fake electrical products made in China and exported including batteries, smoke detectors, circuit breakers, wire/cable and relays. The association also reports counterfeit certification marks including those of Underwriters Laboratories and the Canadian Standards Association. False certification labels and substandard versions of these products are a threat to health and safety (National Electrical Manufacturer's Association, 2005). China has also been a major source of counterfeit cigarettes, producing 190 million annually (World Customs Organization, 2001). The International Anti-Counterfeiting Coalition (Quam, 2002) said "the trademark community confronts a market filled with counterfeit goods… affecting every conceivable product." They claim a wide range of products are subject to counterfeiting, from auto parts to industrial lubricants to chewing gum and razor blades. Naim (2005) reports that a Chinese expert on intellectual property had his IP books pirated and placed on the Internet.

An embarrassing moment occurred in 1998 when even the US Trade Representative, Charlene Barshefsky, brought back counterfeit products from China. Hers were "Beanie Babies," a popular toy ("Official chagrined," 1998). It is clear that there is widespread counterfeiting in the PRC of nearly every type of product. In addition, although the Chinese government has been taking more action against counterfeiters in recent years, the scope and size of the problem is extremely large and appears to be growing.

9.4 History of Intellectual Property in China

To understand the difficulties of protecting intellectual property, one must look back through history, not only to the Communist regimes of the People's Republic of China but even to the early dynasties. Alford (1995) contends:

> The most important factor in explaining the late appearance and relative insignificance of the idea of intellectual property in the Chinese world lies in… its political culture, and especially in the central importance to the state, for purposes of legitimation and power, of controlling the flow of ideas. A system of state determination of which ideas may or may not be disseminated is fundamentally incompatible with one of strong intellectual property rights in which individuals have the authority to determine how expressions of their ideas may be used and ready access to private legal remedies to vindicate such rights (Alford, p. 119).

He explains that a pillar of traditional Chinese belief is that individual inventions draw on past knowledge which belongs to all citizens. In addition Confucianism

requires the control of information. Contrary to conventional wisdom, copyright did not evolve in China with the invention of printing. Alford finds there was neither a "formal or informal counterpart to copyright or other major forms of intellectual property law in Imperial China (221 BCE to 1911 CE)." Alford dates the earliest efforts to regulate publication of particular works to 835 CE. These regulations were not designed to protect the property rights of authors but to ensure pre-publication review so that the state could prevent nonconforming ideas from being distributed. This emphasis was clearly in line with ancient Chinese precepts regarding the role of the state versus individuals. As Alford (1995) puts it, rulers were seen to be in a parent-like position and therefore it was their responsibility to "nurture the populace [and]… determine which knowledge warranted dissemination and which ought to be circumscribed in the best interests of the Commonwealth." On the other hand there was no sanction against the pirating of many more ordinary works. Until the twentieth century, there was far more interest in the control of publications than in trademarks or patents. The main interest was to prevent ordinary people from reproducing official symbols. While some guilds and clans used brand names and symbols there was widespread counterfeiting and copying of secret manufacturing processes. There was little intellectual property owners could do to put a stop to it.

In the late nineteenth century Western interest in intellectual property revived. The formation of the Paris convention in 1883 dealing with patents and trademarks and the Berne convention which addressed copyright in 1886 focused more attention on intellectual property within the country, even though China was not a party to either convention. Although negotiations with Chinese officials began, it took about 20 years for laws to be passed related to copyright, trademarks and patents. Even these were unsatisfactory to the treaty powers working in China and in 1924 the US Consul in Shanghai said there was "widespread unauthorized reproduction of foreign patented articles" (Alford, 1995, p. 43). In fact although the Chinese believed that economically successful countries had patent and trademark law, they did not easily understand the Western concept of intellectual property. In one case, the Jiangnan Bureau of Commerce issued patents to Chinese for imitation rather than innovation.

Although new, well designed laws were passed to protect intellectual property during the reign of the Nationalist Guomindang government in the 1920s and 1930s, there was little improvement in IPR protection since there were a few trained government people or judges who understood intellectual property. In addition the government continued to see the control of ideas as paramount.

When the Chinese Communists took over in 1949, they found a commonality with the Soviet approach toward intellectual property because it reflected traditional Chinese attitudes toward both inventions and the control of information. Mertha (2005) points out that inventors' rights touch on "the set of core assumptions that separate socialist from capitalist systems." Although laws were passed giving recognition and some monetary rewards to inventors and authors, apparently few took advantage of them. Instead, there was unauthorized copying and trademark use in the 1950s. A major problem was that there was neither basic contract law nor any effective legal redress. During the 1960s the minimal patent protection of the

earlier years was removed from the law and trademark guarantees were weakened. The intellectual property environment reached its low point during the Cultural Revolution where even the meager payments for inventions were eliminated. After the Cultural Revolution, starting in the mid-1970s, the Chinese moved to create new laws for patents and trademarks. This was difficult for China since these laws established new private ownership rights in an ostensibly Socialist country. Copyright law took an even more torturous path before being finally issued in 1990. Alford (1995) explains that this law allowed only limited payments and excluded "works prohibited by law to be published and disseminated," and that the copyright holder could not violate the Constitution and the law or infringe upon the "public interest," an obviously vague term.

Mertha (2005) describes in great detail the role of the United States in pushing China to enact IPR protections. From the time of normalizing relations with China in 1979, the US began negotiations aimed at convincing the Chinese to improve their patent, copyright and trademark laws. China agreed to protect foreign patents, copyrights and trademarks in the US–China bi-lateral trade agreement of 1979. As a result China issued new patent and trademark laws, and joined the Paris Convention. By 1984 the US Trade and Tariff Act included inadequate protection of intellectual property as one of the "unreasonable" practices of foreign governments and in 1988 a new US trade act provided for trade sanctions against countries who were abusing US firms' intellectual property. This law also established the annual report from the USTR on unfair trade practices and the "priority foreign country" designation for countries whose actions had an adverse impact on US products including failure to provide intellectual property protection. The US continued negotiations with China, pressing them to fulfill all the commitments in the 1979 agreements. The repression of Tiananmen Square put these negotiations on hold for more than a year. By late 1991 IPR issues became central to the negotiations between the US and China. Although agreements were reached in 1992, IPR violations continued at a high level in China. The US pressured China using the provisions of the 1988 Trade Act and issuing deadlines for changes in IPR protection. An important agreement was reached in 1995 but the US again found the Chinese enforcement of the 1995 agreement less than ideal and the United States threatened another set of trade sanctions in 1996. Negotiations have continued to this day although the tone since the late 1990s has been less confrontational.

According to the USTR (2007b) China has enacted a relatively good set of laws since its accession to the WTO when the country had to adopt the IP principles of the TRIPS accord. China is also a member of the WIPO, the Paris Convention, the Berne Convention, and the Madrid Protocol. But the USTR claims that enforcement has often been ineffective. Some contend that the tight control of information dissemination exacerbates the counterfeiting problem. Pang (2004) states that the Chinese government's insistence on "ideological purity" and resulting tight restrictions on film production and distribution only encourages cinema piracy. While the laws described above were improvements over those in the past there was a lack of provision for resolving disputes. The lack of enforcement and corrective mechanisms will be examined next.

(Much of the above section is based on Alford (1995) who provides a detailed and well reasoned discussion of intellectual property law and Chinese culture, and Mertha (2005) who provides a fascinating look at the workings of the Chinese bureaucracy as it relates to IPR.)

9.5 IPR Enforcement

As can be seen in Fig. 9.6, the *Economist Intelligence Unit* sees a significant risk in the legal and regulatory environment in the People's Republic of China.

A study conducted by one of the authors along with Professor Stephen Stumpf (Chaudhry & Stumpf, 2007) found that managers who had recently visited China identified weak enforcement of IPR and limited criminal and civil penalties as two of three important reasons that suppliers offer counterfeit goods. The most important reason was obvious - profitability.

Understanding the IPR environment in China requires a careful review of the enforcement of existing laws. Professor Chow (2005) identified two main barriers to effective enforcement - local protectionism and inadequate punishment. The protectionism comes about despite the best intentions of the central authorities because particular localities may benefit from counterfeiting. This activity provides jobs and generates revenue and may be vital to the local economy. He states "some local areas in China are entirely supported by the trade in counterfeit goods and

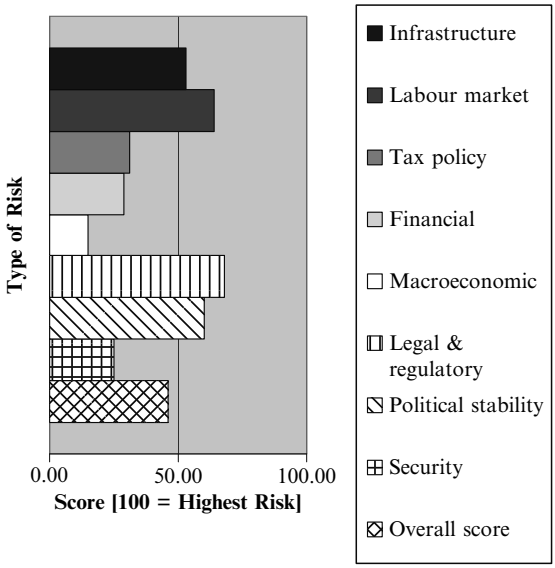

Fig. 9.6 Business operations risk in China. Source: The Economist Intelligence Unit (2007)

local residents are ready to use any means necessary to protect their illegal trade." Regarding inadequate punishment, he points out that there is enforcement activity but the fines and prosecutions are so minimal that they do not create a level of deterrence. As he puts it, "enforcement in China does not create fear in counterfeiters."

One author's conversation with a Chinese customs official reveals the attitude which has been prevalent in China. The official restated the opposition of the Chinese government toward fraudulent product, while acknowledging that many industries discourage "government interference." (It should be noted that Mertha, (2005) identifies the word interference as a euphemism for effective enforcement.) The official also noted that "it is unrealistic to expect the average citizen to think about the illegality of products" (Name Withheld, personal communication, July 9, 2002).

The national government seems to launch one program after another to put a stop to piracy. Recent efforts include at least seven campaigns such as Mountain Eagle, Sunshine and Blue Sky. In 2006, a nationwide IP complaint hotline was established. The deputy director of the IP Crimes Bureau claimed a 70% increase in criminal IP cases in 2005 and 167,000 cases of illegal production and trade in medicines and medical equipment (Schwarz & Wong, 2006). In the mid-1990s a campaign called "strike down fakes" was started. Local offices were established using personnel from the Administration for Industry and Commerce (AIC) and the Quality Technical Supervision Bureau (QTSB). Because of inter-agency conflict the system was ordered to be dismantled in 1998 but Mertha (2005) found that offices related to this effort still existed at the national and local level as of 2003. Operation Blue Sky was designed to help companies at trade fairs. The government has designated a week in April of each year to stress the importance of enforcing patents and copyrights ("Stopping Fakes," 2007). However these efforts have not had any measurable effect on the growth of counterfeit product in China. In some cases pirate factories were related to the Ministry of Electronics Industry and the People's Liberation Army (PLA) although interviews conducted by Mertha 2005 indicate that the press had overstated the role of the military. *The Economist* ("Long march," 2007) reports that by the late 1990s, the central government had changed its view about the PLA being involved in business. They were asked to give over these enterprises to civilians and the government made up for it by increasing budgets for the PLA.

In May 2005, Victoria Espinel, Assistant US Trade Representative (Acting) addressed the Committee on House Judiciary Subcommittee on Courts, The Internet, and Intellectual Property. In this statement, Ms. Espinel outlined a series of tactics to deal with the China problem ("Intellectual property theft in China and Russia," 2005). They included working with US industry and other stakeholders to enforce WTO procedures to bring China into compliance with its WTO TRIPS obligations; invoking the transparency provisions of the WTO TRIPS Agreement, which will require China to produce detailed documentation on certain aspects of IPR enforcement that affects US rights under the TRIPS Agreement; elevating China onto the Priority Watch List on the basis of serious concerns about China's compliance with its WTO TRIPS obligations and commitments China made to significantly reduce IPR infringement at the April 2004 US–China Joint Commission

on Commerce and Trade (JCCT); continuing to monitor China's commitments under US 1992 and 1995 bilateral agreements; and using the JCCT, including its IPR Working Group, to secure new, specific commitments to significantly improve IPR protection and the enforcement environment in China.

Despite promises made at meetings of the JCCT to increase the number of criminal prosecutions versus the number of administrative cases, the USTR (2007c) has yet to see a shift in emphasis toward criminal enforcement. The US government has identified several factors contributing to poor IPR enforcement in China: underutilization of criminal penalties, fines that are too low to provide a deterrent to counterfeiters and the lack of effectiveness of rules designed to promote the transfer of cases to criminal authorities.

Mertha (2005) states that "the bureaucratic apparatus charged with managing and enforcing intellectual property in China, particularly at the local level is… convoluted and opaque" (p. 3). His study involved numerous in-country interviews with various Chinese sources over a period of five years. Mertha makes a clear division between enforcement of copyrights and patents and trademarks. The success realized in each of these areas varies considerably partly because of the independence of the particular bureaucracy charged with enforcement and therefore its reliance on a superior agency for personnel and budgets. Success is also related to the type of external pressure from foreign governments and companies and the competition of particular bureaucracies with each other. The Chinese bureaucracies charged with implementing intellectual property policy are an excellent example of "fragmented authoritarianism," meaning that authority below the top of the Chinese political system is disjointed. Mertha (2005) identifies two dimensions of fragmentation - functional and geographic differences separating agencies. These differences allow agencies to effectively veto the implementation process.

An example of this fragmentation is described by Mertha (2005): the State Intellectual Property Office (SIPO), a bureaucracy established specifically to manage and coordinate the patent, copyright and trademark bureaucracy's IPR protection activities. He says, "[I]n reality SIPO is an organization largely adrift and often disconnected from the actual institutional and political arena in which… IPR protection and enforcement in China take place." Its predecessor was the China Patent Bureau, established in 1980. This agency was moved from one "host" organization to another over 13 years. While its technical abilities developed, it had no real political power. Eventually it was renamed SIPO but its political abilities remained relatively weak. In addition the relationships between the local patent bureaus and the national government agency create another level of confusion.

Although SIPO was to be the agency in charge of all intellectual property, the State Administration for Industry and Commerce (SAIC) is the national bureaucracy which manages the Trademark Office. According to Mertha (2005), the Trademark Office is "a cash cow for the SAIC" and therefore is highly resistant to a merger of that office into SIPO. The National Copyright Administration (NCA) also has not been moved under SIPO because of concerns about culture and propaganda. In the end, one of Mertha's interviews called SIPO "the Patent Bureau with a different name."

While the national SAIC and the local AICs are responsible for registering and enforcing trademarks, at the local level, the AICs are branches of local governments. They invest in creating markets, issue licenses to businesses and collect management fees from proprietors. This puts the AIC in a compromised position with counterfeiters from whom they are collecting large fees (A.T. Kearney Inc., 2005). Although the AIC is responsible for trademark enforcement, a competing agency, QTSB, saw an opportunity to expand its influence where the AICs were not vigorously protecting trademarks. The QTSB is formally responsible for product quality and consumer protection. But it has expanded its mandate by identifying counterfeit product as potentially harmful to consumers. The QTSB's actions have prodded the local AICs to take on more vigorous enforcement against pirates (Mertha, 2005).

Successful foreign companies have established alliances with various enforcement agencies on the local level. They have also used private investigation agencies and law firms who establish good relationships with particular local AIC or QTSB officials. Some of these agencies are foreign and others are Chinese owned. In fact some of them are essentially state owned or closely aligned with governmental agencies. One company includes on its staff former members of the Public Security Bureau, the AIC and the China Patent Bureau. Trademark agents also play an important role in fighting piracy by filling out a complaint letter which is similar to a search warrant in the United States. Because foreign firms can afford to pay larger fees than Chinese firms, much of the enforcement action is on behalf of these foreign IP holders. Mertha (2005) describes an anti-counterfeiting raid in which he was an eyewitness. This involved private investigators as well as AIC agents. After the raid the "sponsor" bought everyone dinner and an evening at a karaoke place. Mertha concludes that although enforcement actions are often quite different, common elements are important for success. First, private investigators lay the groundwork and absorb the costs while the officials provide authority and take credit for the raids. Second, either direct or indirect payments are expected as well as a symbolic giving of "face." This would be accomplished by publicly recognizing the important role of the official(s) in any actions taken. (In the Chinese culture the concept of "face" is quite important. Generally this means looking good, or not being humiliated, in the eyes of others. To give face at the simplest level would be to politely agree with someone publicly even if privately one disagrees. At a higher level it would require more effort. The more difficulties one need overcome to honor another person, the more face is given to that other person.) (Jieming, 2004).

According to Pfizer's Director of Global Security, the company is focusing on many levels to protect its intellectual property rights. In addition to working with law enforcement, Pfizer is organizing roundtable discussions and seminars with Chinese ministries to exchange information and experience related to fighting drug pirates (Schwarz & Wong, 2006).

Mertha (2005) concludes that top–down pressure on the national government can help to change policy but this must be combined with what he calls lateral pressure focused on the local level to improve enforcement. Alford (1995) advises that one must take into account the political culture in order to understand the difficulties of developing effective intellectual property law in China. He describes

the difficulties in "efforts to graft limbs grown in one setting onto trunks that have matured in another."

9.6 Recent Events

The chairman of the American Chamber of Commerce in Shanghai says, "intellectual property protection has made the transition from a lawyer's issue to a mainstream issue" (Associated Press, 2006). A spate of bad news coming from China suddenly made the problem of counterfeit goods a matter of life and death. Cough syrup containing ethylene glycol was identified as responsible for the deaths of hundreds of people in Panama and the Dominican Republic, toothpaste tainted with the same chemical had been found on three continents, and a cell phone exploded, killing a 22-year-old man in western China. Phone manufacturers Motorola and Nokia blamed counterfeit batteries. Preceding all three of these episodes was a problem with tainted pet food, which surfaced in the United States in the spring and summer of 2007.

The Chinese government took drastic action against one individual, Zheng Xiaoyu, former head of the State Food and Drug Administration. Xiaoyu was executed for taking bribes to approve untested medicine. Despite this draconian measure, the Chinese face daunting problems in regulating the safety of products, and struggle to enforce intellectual property rights. As we have seen, many different bureaucracies have been given responsibility for intellectual property. In the food and drug area alone, the Ministry of Health, the Ministry of Agriculture, the State Administration of Industry and Commerce and the General Administration of Quality Supervision, Inspection and Quarantine all have some role. Since each distinct government agency wishes to collect license fees and fines to supplement their budgets, inspectors are tempted to accept bribes to ignore violations (Barboza, 2007; Castle, 2007; Kahn, 2007a, 2007b).

Despite what the USTR calls "welcome progress" including completion of the accession to the WIPO Internet treaties, China remains on the USTR (2007c) Priority Watch List. The USTR identifies pirated optical discs, movies, music, books journals, business software and a wide variety of counterfeit goods including pharmaceuticals, electronics, batteries, auto parts, industrial equipment and toys as problem areas. The US government says that these pirated products "pose a direct threat to the health and safety of consumers in the United States, China and elsewhere."

In September 2007, the US government requested a WTO panel to hear a case related to "specific deficiencies in China's legal regime for protecting and enforcing copyrights and trademarks" (USTR (2007b). This followed three years of bilateral discussions and formal WTO consultations. In January, 2009 the panel agreed with many U.S. assertions.

According to the QBPC (2006) Annual Membership Survey, 44% of the 102 firms responding believed the Chinese government's commitment to addressing counterfeiting was excellent, good or satisfactory, but 44% rated it as only fair. Three quarters of the respondents wanted to see greater effort made in local IP enforcement. Eighty-five percent of those surveyed thought the Chinese government should increase enforcement of existing counterfeit laws, 64% recommended

"increased measures to prevent local protection [of the counterfeiters]" and just over half recommended increased legislation regarding counterfeiting.

The Economist Intelligence Unit ("How to catch," 2006) re-emphasizes the point made above - "intellectual property is still a very foreign concept in China." In their opinion, at the state level China's government seems to be aware of the importance of solving the piracy problem since this issue could have a negative effect on trade relations or investment. But "as is the case with so many problems in China, the farther you get from Beijing the more difficult it is to police."

Alford (1995) takes the broadest view of the problem. He believes the political culture in China is the greatest barrier to the growth of effective intellectual property protection. He explains that political liberalization and a greater commitment to "a rights-based legality" are needed to produce better IP protection. He recognizes that this is a difficult problem because political culture includes values and practices that are central to a nation's identity. Foreigners should not assume they have the capacity to change these values and practices. In short he believes that improvements in the protection of basic civil and political rights are a necessary precursor to improvements in protection of property rights.

9.7 Information Sources

The US government cautions future investors in China that the lure of lucrative Chinese government incentives and the 1.3-billion-consumer market size can easily be offset by the failure of the firm to investigate product standards (China's Compulsory Certification), legal issues, such as IP infringement, and securing local business partners (Doing Business in China, 2008, p. 3). This country report provides a separate section on "Protecting Your Intellectual Property" and links to the State Intellectual Property Office of the PRC (http://www.sipo.gov.cn/sipo2008/). Figure 9.7 shows the homepage for this important IP source. (Chinese and English versions are given.)

The US Embassy IPR Toolkit for China is http://beijing.usembassy-china.org.cn/ipr.html and can help the manager navigate several of the salient issues related to IP infringement. A comprehensive list of US Government agencies (e.g., STOP!), law firms (US, Chinese and International), industry organizations (e.g., IFPI) and international organizations (WTO, WIPO) are illustrated but with few links to Chinese agencies. A few sectors, such as agriculture, autos, pharmaceuticals and software are briefly addressed.

The Olympics and its Chinese logo, "the red running man" had put copyright protection at the forefront of the public agenda in China. On July 15, 2008, CRIEnglish.com reports a program designed to engage Chinese university students regarding the values of Olympic copyright protection through a competition, "National Debate Contest on Copyright Protection for University Students 2008." The contest was co-sponsored by the National Administration of Copyright and Beijing MLC Advertising Co. Ltd. to bring a better understanding of IP issues, such

Fig. 9.7 State Intellectual Property Office of the PRC. Source: http://www.sipo.gov.cn/sipo2008/

as internet piracy, to the forefront for this age segment in China ("University students debate for Olympic copyright protection," 2008).

9.8 Conclusions

Because of tainted medicines and pet food, the widespread availability of counterfeit product from China has finally reached the front pages. That China is the main global source of counterfeit goods is beyond dispute. The total of this counterfeit production and distribution is not clear but the value may easily be over $100 billion annually. Products counterfeited in China range from motion pictures to pharmaceuticals to cigarettes, including nearly every industrial and consumer product.

Looking at Chinese history explains the reasons for the difficulties both governments and manufacturers have encountered in trying to establish effective IPR protection. Traditional Chinese beliefs about the ownership of inventions and the need for controlling information from the earliest days of the nation through Mao's regime yield valuable insights. After more than 100 years and constant pressure from foreign governments, Chinese laws related to copyright, trademarks and patents are acceptable but enforcement leaves much to be desired. China's arcane bureaucracy makes it difficult even to understand how IPR laws are to be enforced. Despite nearly constant

national anti-piracy campaigns, functional and geographic fragmentation, protection of revenue sources at the local level and outright corruption leaves most of the counterfeit industry in place.

Establishing alliances with local enforcement agencies, using private investigation agencies or law firms while keeping pressure on at the national and international level provides some measure of success for some firms. But it appears there is a long way to go. As we have seen intellectual property is still a foreign concept in China. It may be that real change in China will not happen until there are major changes in the overall approach to individual rights.

Chapter 10
Internet Piracy: The Virtual Marketplace for Counterfeit Goods

10.1 Introduction

Business managers need to monitor several trends regarding the protection of a firm's intellectual property on the Internet. In this chapter, we examine that pirates on the virtual sea can be very sophisticated opponents, such as the Warez group, and that various stakeholders create the supply and demand for fake goods by way of a pyramid of Internet piracy. We provide a synopsis of recent US government sting operations with the assistance of other countries to target Internet piracy. Finally, we address the problem of educating the consumer that downloading music, software, movies and the like without compensation is *unethical*. This is a key issue in terms of decreasing the demand for counterfeit goods in the virtual marketplace where a consumer can exhibit a more rogue behavior with a limited fear of prosecution. As discussed in Chapter 6, social marketing tactics have been employed by both the Motion Picture Association (MPA) and the Recording Industry Association of America (RIAA) to educate the consumer about fake products.

10.2 The Growth of Counterfeits in the Virtual Marketplace

Passariello, in her article in the *The Wall Street Journal* reports the sale of counterfeits on the Internet is now the third largest market for the distribution of counterfeits, behind China and Italy, and companies such as Louis Vuitton (LVHM), Rolex, and Tiffany & Co. have sued eBay in order to provide more responsible selling at its Internet site (Passariello, 2004). On June 30, 2008, a French court ordered eBay to pay Louis Vuitton €40 million ($63 million) for failure to adequately protect counterfeit LMVH merchandise being sold at its Internet auction site (Waters, 2008b). However, an US court on July 14, 2008 did not uphold a similar decision for Tiffany against eBay. Judge Richard Sullivan did not believe that eBay should be held liable for contributory trademark infringement from fake goods being sold at its site (Waters, 2008a). Frederick Mostert recently commented on these two opposing court decisions and drew an interesting analogy to the railway vs. farmer court cases in a

P. Chaudhry and A. Zimmerman, *The Economics of Counterfeit Trade*,
DOI-10.1007/978-3-540-77835-6_10, © Springer-Verlag Berlin Heidelberg 2009

previous time where the legal system was tested for who would pay for a spark generated from a steam locomotive that would inflame nearby crops - the railway or the farmer? Thus, Mostert reasons that the solution is for the trademark owners and the Internet auction site to work together to solve the problem instead of using the court system to reason their polar positions (Mostert, 2008). A personal communication with Siân Croxon, Partner, DLA Piper UK LLP presented one solution as the automated software that is available to search and send notice and takedown letters to Internet auction sites. This software also helps a firm distinguish between the massive suppliers at Internet auction sites and the occasional seller (Croxon, personal interview, October 19, 2007). We discuss this further in Section 10.3.2.

The counterfeiters have attracted policymakers' attention in terms of health and safety concerns through the sale of fake pharmaceuticals, baby formula, airplane parts, and the like. Carol Matlack of *Business Week*, in her personal interview with Jean-René Fortou, former head of the International Chamber of Commerce, asked what attributed to the dramatic increase in government policy makers' attention to curb counterfeit trade. In response, Mr. Fortou claims that recent government policy changes are resulting from the rampant growth and scale of the piracy problem, especially since the illicit trade is related to organized crime. Mr. Fortou cites the alarming increase in counterfeit goods that pose a danger to public health and safety that change the perception of the problem previously associated with the luxury goods sector.

Buzzeo, in his 2005 article on counterfeit pharmaceuticals reports the success of the US Drug Enforcement Administration sting operation, Operation Cyber Chase that shut down 200 illegal e-pharmacies that were associated with a sophisticated black market industry. Overall, the increase of fake drugs is a result of large profit potential, anonymous distribution channels by way of the Internet, and price sensitive consumer demand. According to the Food and Drug Administration (FDA) official William Hubbard, "some experts are telling us it is more lucrative to sell a counterfeit drug than it is a narcotic such as heroin" (Buzzeo, 2005, p. A20).

As reported in Chapter 2, the problem of counterfeit trade is growing and the seizure statistics for the infringement of intellectual property rights (IPR) reveals a change in total domestic value of goods from $45,327,526 in 2000 to $155,369,236 in 2006 (US Customs and Border Protection, 2007). However, this data collected by the US Customs and Border Protection represents *physical goods* seized at some port of entry into the United States. Thus, the problem of counterfeit trade in a virtual marketplace, such as Internet auctions on eBay or peer-to-peer downloading, is an activity that many industry associations claim is growing, especially with Internet penetration expanding in many global markets.

The Internet World Stats estimates that there are 1,319,872,102 Internet consumers in the world (http://www.internetworldstats.com). This site categorizes markets with Internet penetration rates higher than 50% and those below 50% to get a better understanding of each country market. Currently, in terms of this metric, 676.6 million consumers are located in markets (43 countries) with greater than a 50% market penetration. But, 643.6 million consumers are found in low penetration markets with less than 50%. However, a world market Internet penetration rate is averaged to be around 20%. Table 10.1 shows the top 26 markets in terms of Internet penetration rates.

Table 10.1 2007 Global Internet Penetration Rates

Country	Penetration (% population)	Country	Penetration (% population)
Norway	88.0	Hong Kong	69.9
Netherlands	87.8	Falkland Islands	69.4
Iceland	85.4	Switzerland	69.2
New Zealand	77.7	Denmark	68.8
Sweden	77.3	Japan	68.7
Antigua and Barbados	76.3	Taiwan	67.4
Australia	75.9	Greenland	67.4
Portugal	73.1	UK	66.4
US	71.7	Canada	65.9
Faroe Islands	71.6	Germany	64.6
South Korea	71.2	Liechtenstein	64.2
Luxembourg	70.6	Bermuda	63.5

Source: http://www.internetworldstats.com (n.d.)

Fig. 10.1 Estimated losses on the Internet vs. hard goods. *Source*: The Cost of Movie Piracy (2005), p. 9

The problem of counterfeit trade in a virtual marketplace, such as Internet auctions on eBay or peer-to-peer downloading, is an activity that many industry associations claim is growing, especially with Internet penetration expanding in many global markets, so the question becomes how to measure this type of illegal trade via the Internet. Secondly, what strategies are companies using to deter this type of piracy? Horwich reports that the Motion Picture Association of America (MPAA) estimated that in 2005, $6.1 billion was lost to bootlegging, illegal copying, and Internet piracy (Horwich, 2006). Of this amount, the MPAA reports that $2.3 billion was attributed to online sales of fake movies. Agnew claims that films, such as "Star Wars: Episode III - Revenge of the Sith" have been taped on the day of its theatrical release and within hours uploaded on the Internet to a Warez site. In 2005, it was estimated that $18.2 billion of potential revenues for the motion picture industry was lost to piracy. Figure 10.1 reveals these approximate losses in terms of physical (hard goods) versus Internet piracy.

The statistical evidence prepared by LEK for the Motion Picture Association becomes even more interesting in terms of the estimated losses in specific countries.

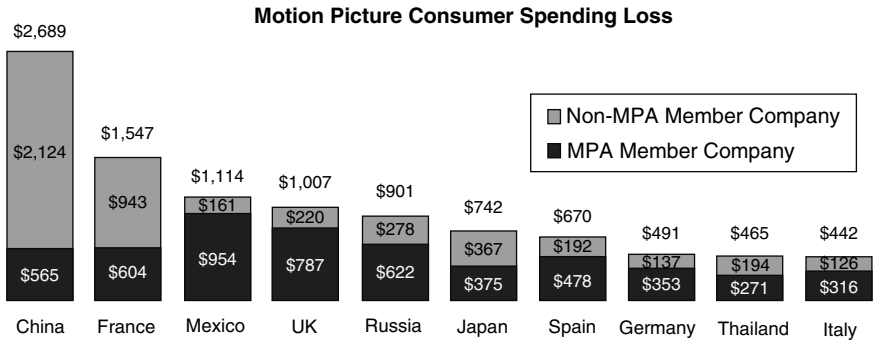

Fig. 10.2 Estimated lost sales revenues in the global marketplace. *Source*: The Cost of Movie Piracy (2005), p. 10

Figure 10.2 reveals that the largest markets for the industry to lose revenues are located in China, France and Mexico. Overall, this table represents a good mix of both developed and developing countries.

The *Business Software Alliance* (BSA) claims that the demand for counterfeit computer software will go up or down as a function of consumer education, law enforcement, the number of new users coming into the market, the ease of access to pirated software, and external factors such as political conditions. The industry alliance issues such as culture, institutional effectiveness, and even geography having an impact on the abilities of countries to reduce piracy (*Third Annual BSA,* 2006). Overall, the BSA forecasts that the increased use of the Internet, the proliferation of peer-to-peer networks, and the growth of broadband access will increase software piracy rates, especially in emerging markets, such as China, India and Russia.

We cannot conclude this section without a note on the difficulties presented in collecting precise statistics on this clandestine activity. There are several blogs on the Internet that claim that these statistics have been overexaggerated by various constituents, such as the Motion Picture Association, in order to effectively lobby legislators to protect their intellectual property. A debate on the accuracy of the various methods used to calculate counterfeit trade is presented in Chapter 2. However, an awareness of the inaccuracies involved in guesstimating the size of the problem is necessary.

10.3 Ethical Perceptions of Internet Piracy

Figure 10.3 illustrates that a recent study of 1,644 youth conducted for the BSA by Harris Interactive found that young people clearly viewed downloading music in cyberspace without payment (60%) less harmful than stealing from a store (92%).

The Vice-President of Public Affairs for the BSA, Diane Smiroldo, states that "[T]he discrepancy among youth in their decision-making between the real world from

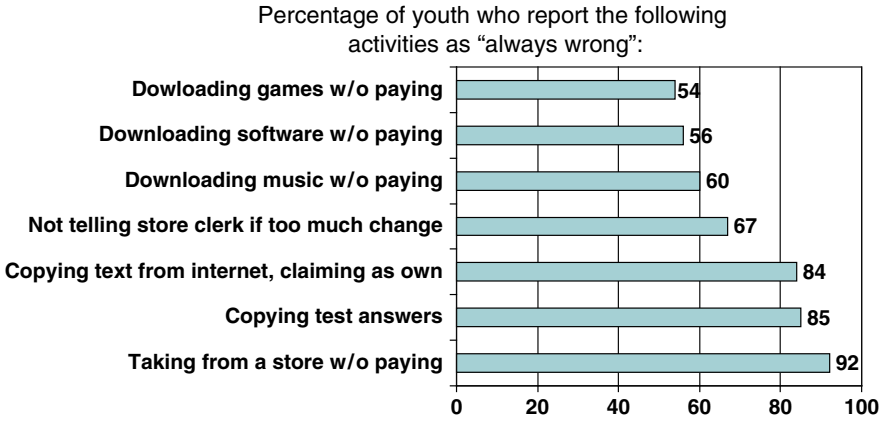

Fig. 10.3 Ethical perceptions of various forms of human actions. Source: http://www.bsa.org

Table 10.2 Propensity to download without paying for the good

What have you ever downloaded without paying for it?	% of all youth	% of 8–9 year olds	% of 10–12 year olds	% of 13–15 year olds	% of 16–18 year olds
Music	32	9	21	39	52
Games	25	22	23	27	27
Software	14	3	7	18	24
Movies	10	1	3	11	21
None of these	57	75	68	52	41

Source: http://www.cybertreehouse.com and http://www.bsa.org

the online world indicates an unrealistic view of the consequences of cyberspace. It underscores how important it is for parents and teachers to educate the new generation of cybercitizens about good ethical conduct and the proper use of resources in the digital world" (http://www.bsa.org). Table 10.2 reveals the high level of consumer complicity to download music, games, and the like without paying for the product.

As previously discussed in Chapters 5 and 6, companies are struggling with an effective way to decrease Internet piracy since the consumer demonstrates a more rogue behavior and erroneously misjudges his or her ability to be punished for this type of intellectual property theft. As outlined in Chapter 8, the RIAA, the MPA, and the IFPI have developed social marketing communications to target consumers who are at the bottom of the Internet piracy pyramid.

10.4 Pirates on the Virtual Sea

Geischen Consultancy ("Mid-year counterfeit," 2006) found in its *2006 Mid-Year Counterfeit & Piracy Report* that the most heavily counterfeited sectors in this year were entertainment and software ($256 million); clothing and accessories ($69 million),

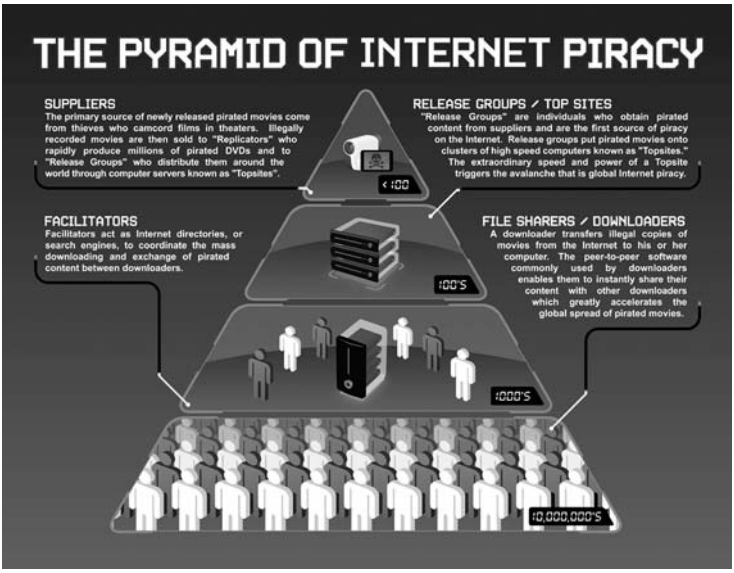

Fig. 10.4 The Pyramid of Internet piracy. *Source*: http://www.mpaa.org

drugs and medical ($15.8 million), food and alcohol ($1.7 million) and cigarettes and tobacco products ($276 million). It is well-known that the distribution channel for such items as fake clothes and accessories are street peddlers, flea market vendors, "fake purse parties" and discount outlets. However, we know that the virtual marketplace by way of the Internet poses an even more lucrative distribution channel for fake goods. Kupferschmid (2003) described the main type of Internet piracy as auction piracy (e.g., eBay), FTP piracy (e.g., hijacking a corporations FTP site to place illegal files in its directories), Peer-to-Peer Piracy (e.g., such as the infamous Napster case), Instant Messaging (e.g., sharing illegal software via buddy lists), and Internet Relay Chat (e.g., allows access by many users to large files in a main location with security of anonymous postings).

In Fig. 10.4, the Motion Picture Association portrays the "Pyramid of Internet Piracy," to gain a better understanding of how both suppliers (e.g. camcorders in movie theaters) and release groups, such as Warez, use "topsites" to start the chain of supply/demand for counterfeit movies on the Internet.

10.4.1 The Warez Scene

Warez is a generic term used to describe software that has been stripped of its copyright protection and placed on the Internet for downloading *without* financial compensation. Members of this illicit group can be the first-providers - the original source for the illegal trading and online distribution of pirated works. Once a

release group prepares a stolen work for distribution, the material is distributed in minutes to secure, top-level servers and made available to a select clientele. From there, within a matter of hours, the pirated works are illegally distributed throughout the world, ending up on public channels on IRC (Internet relay chat) and peer-to-peer file sharing networks accessible to anyone with Internet access. Since one release is duplicated, renamed, then re-uploaded to different sites, it can become impossible to trace the original file.

As was illustrated in Fig. 10.4, release groups are hierarchical, highly-structured organizations with leadership positions that control day-to-day operations, recruit new members, and manage the group's various computer archive sites. These groups exist solely to engage in piracy and compete with each other to be the first to place a newly pirated work onto the Internet, often before the work is legitimately available to the public. The groups employ highly sophisticated technological measures to shield their illegal activity from victims and law enforcement. Some Warez groups targeted by recent government-led sting operations, such as Site Down, include RiSCISO, Myth, Goodfellaz and the like (United States Department of Justice, 2005).

Software pirates generally exploit the international nature of the copyright issue to avoid law enforcement in specific countries. The production and/or distribution of Warez are illegal in most countries. Developed countries have loopholes in legislation that allow the Warez to continue. Moreover, it is typically overlooked in poorer developing countries with weak or nonexistent IP protection.

10.4.2 Internet Sites

A virtual counterfeit shopping environment is readily available on the Internet. Pirate Bay (PirateBay.org) in Sweden has drawn media attention as this site provides a "BitTorrent tracker" directory of music, movies, college textbooks, and the like to augment copyright infringement by giving the information for the buyer/seller exchange. In July 2008, the *New York Times* reported that the selling of scanned textbooks on PirateBay has a good target market of students ready to use illegal scanned copies of the book through this site, since the current prices of a college textbook can be over $200 (Stross, 2008). In February 2008, the Swedish government sought legal prosecution of the four men associated with PirateBay (Pfanner, 2008). The legal battle still ensues.

Industry watchdogs, such as the Software Information Industry Association, are constantly "trolling" Internet auction sites, such as eBay and Yahoo! to detect pirates and, for example, can use the "notice-and-takedown" process in the Digital Millennium Copyright Act (DMCA) or the Verified Rights Owner (VeRO) program in eBay to slow the growth of software piracy at this type of Internet auction site (Software Information Industry Association, 2005). eBay boasts that over 10,000 firms and individuals in such sectors as software, video games, music and luxury goods, protect their intellectual property through its VeRO program ("eBay protects," n.d.).

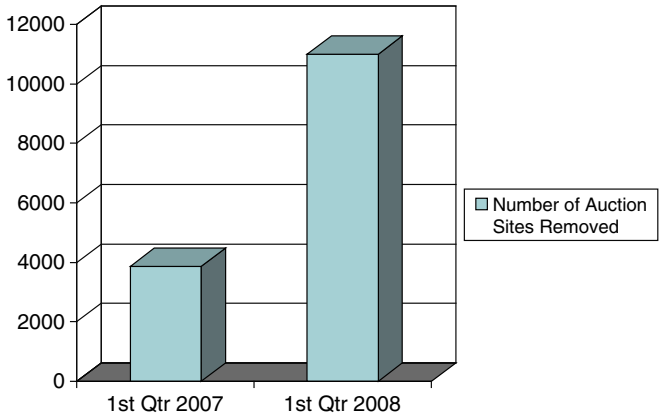

Fig. 10.5 Auction sites shut down for selling illegal software. *Source*: http://www.bsa.org, 2008

The BSA claims to have shut down an estimated 13,800 auction sites in 2007. The sites were selling more than 50,500 software products with an estimated value of $13.3 million. The majority of these auction sites (over 67%) were located at US websites. Figure 10.5 shows that the BSA had dramatically accelerated the number of shut downs in 2008 compared to the same time frame (first quarter) in 2007 (Business Software Alliance, 2008a).

In 2006, eleven persons were indicted on the premise of their involvement in an Atlanta-based generic drug scam on the Internet. This recent case is testimony to the fact that many consumers can "unknowingly" purchase counterfeit via the web. Indeed, in this situation, the customers actually thought they were purchasing prescription drugs such as Ambien, Xanax, Viagra, by way of a Canadian firm on the Internet. However, according to the indictment, the entire operation began in 2002 by Jared Wheat, principal owner of Hi-Tech Pharmaceuticals, who lured the Internet customers through "spam" and the drugs were allegedly manufactured in unsafe conditions in a house in Belize (United States Department of Justice, 2006).

The virtual distribution channel is obviously a problem, but, it also represents a *legitimate* way to do business. Some articles refer to the metamorphism of a legal distribution channel in the music industry to the *Steve Jobs Effect*. In other words, a new product, the iPod, created a consumer market to buy authentic music over the Internet. Grover, in his 2006 *Business Week* article reports the recent push of Hollywood to offset declining DVD sales and Internet piracy through Movielink, owned by five movie studios and CinemaNow, that distributes films from Sony, MGM and Lionsgate only. These two new services will release movies at the same time as their DVDs are available at Wal-Mart and Blockbuster thus creating a virtual distribution channel. The downloaded movies can be kept on PCs, but using digital rights management (DRM) techniques, the consumer will not be able to burn and copy to use in another device, such as a DVD player (Grover, 2006). The download restriction is to provide a different type of competition to the DVD market available through traditional outlets such as Wal-Mart. This new type of service also questions

the future validity of pay-for-TV services, like HBO or Showtime that rely on timing of releases to secure their customer. This new service for the movie industry is expected to initially lure technologically-savvy early adopters and possibly shoppers interested in older movies. However, the movie industry does not want to follow suit with the music industry and wait for piracy to delete their legitimate market share.

10.5 US Government-Led Sting Operations to Curb Internet Piracy

In June 2005, (former) US Attorney General Alberto R. Gonzales cautioned that the Department of Justice would be combating the top of the Internet piracy pyramid in an effort to dismantle these networks that feed the supply chain of illegal digital content on the web. In his statement, he boldly stated that, "we have shown that law enforcement can and will find - and we will prosecute - those who try to use the Internet to create piracy networks beyond the reach of law" (United States Department of Justice, 2005).

Several articles mention the paradox of enforcing IPR for tangible goods (for example, see Chaudhry, 2006; Chaudhry & Walsh, 1995, 1996), but relatively few studies address the ability of governments, firms, and individuals to enforce their IPR via the Internet. Some recent sting operations are briefly discussed below.

10.5.1 Operation Buccaneer

In October 2000, the US Customs Service in cooperation with its allies in Australia, Finland, Norway, Sweden and the United Kingdom, worked together under the codename Operation Buccaneer to commence a string of undercover operations designed to infiltrate the labyrinth of criminals that distribute software, games and movies over the Internet through the Warez scene by targeting such release groups as DrinkorDie, Razor1911, RiSCISO, Myth, and POPZ (United States Department of Justice, n.d.). As a result of this 14-month undercover operation, approximately 70 search warrants were executed worldwide in the initial phase of Operation Buccaneer, and it is notably the most significant law enforcement penetration to date of international organizations engaged in the criminal distribution of copyrighted material via the Internet.

The law enforcement officials seized several "Warez archive sites" that are described as highly-secured computers used to store massive quantities of pirated software, games and movies. Access to these sites is used as a reward for active Warez group members and as an incentive for them to continue their illegal activity. Many archive sites contain 2,000 GB or more of pirated software, equivalent to approximately 1.4 million 3.5 in. diskettes of copyrighted material (http://www.cybercrime.gov). Although there is not an exact measurement, the retail value of the pirated software, movies, games, and music seized during the course of Operation Buccaneer is estimated to be in the hundreds of millions of dollars.

In 2005, three men who were part of a huge network of Internet software pirates, known as DrinkorDie, were arraigned at the Old Bailey, England's most important crown court. Judge Paul Focke was quoted in a BBC News release, "Your motivation was not only the benefit of free access - it was to enhance your personal reputation" (BBC, 2005, ¶ 15). The infamous DrinkOrDie were simply a network of computer buffs that derived pleasure from cracking codes protecting copyrighted software such as Windows 95. One of their main goals was to share the material among themselves, with little profit-oriented motive - as is often the case.

10.5.2 Operation Digital Gridlock

Operation Digital Gridlock was a joint investigation conducted by the FBI, the US Attorney's Office for the District of Columbia, and the Department of Justice's Computer Crime and Intellectual Property Section. These joint prosecution maneuvers targeted illegal file-sharing of copyrighted materials over Direct Connect peer-to-peer networks that belonged to an online group of hubs known as The Underground Network. These networks required their users to share large quantities of computer files with other network users, all of whom could download each others' shared files. Four people were convicted. This was the first federal felony convictions for copyright piracy using peer-to-peer networks, all within about nine months of the original searches and seizures. The search warrants executed today are the result of Operation Digital Gridlock.

From August 2003 through August 2004, Tanner owned, maintained, operated, and moderated a Direct Connect hub named "Silent Echoes." According to court documents, the defendant's hub offered movies, computer software, computer games, and music in digital format. During the investigation, government agents downloaded from the hub numerous copyrighted works worth approximately $7,371. Agents estimated that on any one day, this hub shared an average of 6.72 terabytes of files, which is roughly equivalent in storage space to well over 6,000 movies in digital format (http://www.usdoj.org).

10.5.3 Operation Higher Education/Operation Fastlink

Higher Education is the largest component of the global law enforcement action known as Operation Fastlink, announced by the Department of Justice on April 22, 2004. Twelve nations participated in Higher Education; it ensued as an 18-month, multinational software piracy investigation. Three men were found guilty of assisting in the cracking, storing, and distributing of copyrighted material throughout the world.

Operation Fastlink is presently the largest global enforcement action ever undertaken against online piracy. It was the culmination of four separate undercover investigations simultaneously being conducted by the FBI, coordinated by the FBI Cyber Division, the US Department of Justice, and the Computer Crimes and Intellectual Property Section (CCIPS) of the Criminal Division. This operation focused on the highest levels

of release groups - the warez groups. The investigation has so far yielded searches and seizures of over 70 high-level targets that were conducted in Belgium, Denmark, France, Germany, Hungary, Israel, the Netherlands, Singapore, Spain, Sweden, the United States, as well as Great Britain and Northern Ireland.

The release groups targeted by Fastlink specialize in the distribution of all types of pirated works including utility and application software, movies, music and games. Among the groups targeted by Fastlink are well-known organizations such as Fairlight, Kalisto, Echelon, Class and Project X, all of which specialized in pirating computer games, and music release groups such as APC. The enforcement of Operation Fastlink seized over 200 computers - 30 computer servers that functioned as storage and distribution hubs were included. These servers collectively contain hundreds of thousands of pirated copies. As the investigation continues, additional targets will be identified and pursued, and actions as such are expected to dismantle many of these international Warez syndicates and significantly impact the illicit operations of others (http://www.linuxelectron.com, http://www.cybercrime.gov).

10.5.4 Operation Site Down

In June 2005, the Justice Department released a joint statement from the US Attorney General, Alberto R. Gonzales, the Acting Assistant General, John C. Richter of the Criminal Division and Assistant Director Louis M. Reigel of the FBI Cyber Division regarding a recent Internet piracy initiative, Operation Site Down, that worked jointly with the assistance of ten countries to further apprehend and prosecute the international pirates. In a 24 hour time frame, the agencies conducted over 70 searches in the US and 20 overseas to yield arrests of four individuals in the United States and other actions in Australia, Belgium, Canada, Denmark, France, Germany, Israel, the Netherlands, Portugal and the United Kingdom.

One of the main goals of this sting operation was to target the individuals and organizations of the Warez scene that release a myriad of software, movies, music and games from such sites as: RiSCISO, Myth, TDA, LND, and Goodfellaz. These sites are part of the distribution channel for other suppliers to obtain the counterfeit goods via the Internet and resell for a profit. For example, a spam email that advertises cheap software is often downloaded from one of these sites at the top of the Internet piracy pyramid and can actually bear the "signature mark" of the Warez group responsible for its release. This is a great example of where the "middleman" in the Internet pyramid has the profit incentive of this illicit trade (United States Department of Justice, 2005).

10.6 Enforcement Issues Related to Electronic Piracy

It can very difficult to convince consumers that Internet piracy negatively affects such giants as the motion picture industry. As discussed in Chapters 5 and 6, the consumer willingness to purchase counterfeits can center on an anti-big business

sentiment and many times the consumer describes a "Robin Hood" (Warez groups stealing from the rich to give to the poor) and/or "David vs. Goliath" (e.g., Internet piracy is a means to attack the price-gouging music, software, and movie industries) type of analogy to justify their actions of obtaining illegal goods. A quick search in Google using a search query of "internet piracy" produces more individual blogs that support Internet piracy than refutes its legitimacy.

The message that Internet piracy is hurting more than a "Goliath", such as Microsoft or highly-paid screen stars, such as Russell Crowe, is a message that needs to be given to the populous to change this sentiment. The following excerpt from a joint statement with the Directors Guild of America, the Writers Guild of America West, and the American Federation of Musicians, released after the *Metro-Goldwyn-Mayer Studios Inc. v. Grokster Ltd.* case was filed with the US Supreme Court in 2005 ("Internet piracy hurts individual creators, not just industries say the entertainment unions," 2005, ¶ 2):

> If the work of creators is not protected, and is used around the world without just payment, it is very likely that, in the end, neither the creator nor the copyright holder will be able to continue to make this work available. The losers will not only be those artists whose talent and hard work is the creative heart on each screen, TV and iPod; but also the very public that enjoys quality movies, music and television.

10.6.1 Digital Millennium Copyright Act

In October 1998, the DMCA was unanimously supported by the US Senate and signed into law by former President Bill Clinton. The four main provisions of this act are ("What are the DMCA's Anti-Circumvention Provisions?," 2008, ¶ 2):

1. A prohibition on circumventing access controls (commonly known as DRM)
2. An access control circumvention device ban (sometimes called the "trafficking" ban)
3. A copyright protection circumvention device ban
4. A prohibition on the removal of copyright management information

Basically, the DMCA makes it a crime to disable anti-piracy measures in goods, such as software; outlaws code-cracking devices; requires service providers to remove items from their websites if one suspects copyright infringement; and limits liabilities of nonprofit institutions of higher education. DRM allows the copyright holder to thwart access, copying, or conversion alteration by the consumer to other formats. Obviously, the advent of personal computers, the Internet, and file-sharing had made digital piracy more accessible to everyone. In the past, a counterfeit was a specialist in a certain skill-set, such as an artist creating the engraving to make fake currency. However, in today's environment, you are literally just a click away from some type of digital piracy.

The passage of the DMCA has been replete with controversy in terms of both consumer rights and skepticism surrounding the role of Internet service providers to police their sites for IPR violations. First, consumer advocates, such as the

Electronic Frontier Foundation (ETF) have expressed that technological locks inappropriately limit how the purchaser can play and view his or her CDs and DVDs. Secondly, there is a key provision of the DMCA called the safe harbor that protects Internet service providers from being liable for the activities of its users. In general, if a service provider qualifies for the safe harbor exemption, only the individual infringing customer is liable for monetary damages; the service provider's network through which they engaged in the alleged activities is not liable.

The "safe harbor" aspect of the DMCA has caused debate in various forms. Trevor Cloak in his 2007 article in the *Vanderbilt Law Review*, "The Digital Titanic: The Sinking of Youtube.com in the DMCAs Safe Harbor," provides an outstanding example of how the emergence of video-sharing Internet sites (VSIs), such as YouTube.com, to millions of savvy bloggers has created a significant challenge for any provider that allows this type of digital content. Cloak questions whether "given the current operational framework of video-sharing Internet sites, are owners of these sites liable for copyright infringement when copyright material is illegally posted by their users?" (Cloak, 2007, p. 1561). Cloak summarizes that many VSIs will be facing multimillion dollar, if not billion, law suits in the future due to copyright infringement. The two key questions are whether the VSIs receive financial benefits from the illegally posted copyright materials and whether the VSIs have the "right" and means to effectively control what their users post on the site.

Another dispute involving the DMCA centers on its ability to have copyright holders shut down websites if they *suspect* IPR violations. For example, in a case brought by InternetMovies.com to the District Court for the District of Hawaii, the firm asked the court to require that copyright holders need to provide some type of investigation and/or evidence before asking websites to be shut down. This request for proof of infringement was rejected by the court and a spokesperson for the firm commented that, "[T]his decision rules that the DMCA does not require a copyright holder to conduct an investigation to establish actual infringement prior to sending notice to an Internet Service Provider (ISP) requiring them to shut-down an allegedly infringing web site, or stopping service all together to an alleged violator ("Court confirms DMCA 'good faith' web site shut down rights," 2003, ¶ 3). The recent Tiffany and LVMH court decisions are clear examples of the legal quagmire facing firms that decide to litigate their IP rights.

As discussed in Chapter 7, in May 2001, the European Union passed the EU Copyright Directive, which addresses some of the same issues as the DMCA. However, in Europe, the issues related to the exemption from direct and indirect liability of Internet service providers is governed by the Electronic Commerce Directive.

10.6.2 No Electronic Theft Act (1997)

The No Electronic Theft Act (NET) is a critical form of anti-counterfeit enforcement, since it was mentioned that "Warez" scene infringements are often not motivated by profit-oriented incentives. The act posits that it is a federal crime to reproduce,

distribute, or share copies of electronic copyrighted works such as songs, movies, games, or software programs, even if the person copying or distributing the material acts without commercial purpose and/or receives no private financial gain.

Prior to the passage of this legislation, people who intentionally distributed copied software over the Internet did not face criminal penalties if they did not profit from their actions. As such, Warez scene involvement, driven by the mere incentive of cracking the code had flourished. The passing of the NET Act in 1997 established a penalty of up to 5 years in prison and a fine of up to $250,000 for electronic copyright infringement. If the defendant reproduces or distributes ten or more copyrighted works that have a total value of more than $2,500, he or she can be charged with a felony. Raising statutory damages in civil cases by 50%, the act was obviously targeting those involved in the Warez scene in order to enforce penalties for pirating, regardless of motive or gain ("Statutory damages for copyright infringement," n.d.).

10.6.3 College Opportunity and Affordability Act of 2007

Illegal downloading of online music, movies, software and the like has significantly increased on college campuses. Table 10.3 below notes the campuses with the highest

Table 10.3 US Universities linked to the highest piracy rates

1. Columbia University (1,198)
2. University of Pennsylvania (934)
3. Boston University (891)
4. University of California at Los Angeles (889)
5. Purdue University (873)
6. Vanderbilt University (860)
7. Duke University (813)
8. Rochester Institute of Technology (792)
9. University of Massachusetts (765)
10. University of Michigan (740)
11. University of California at Santa Cruz (714)
12. University of Southern California (704)
13. University of Nebraska at Lincoln (637)
14. North Carolina State University (636)
15. Iowa State University (586)
16. University of Chicago (575)
17. University of Rochester (562)
18. Ohio University (550)
19. University of Tennessee (527)
20. Michigan State University (506)
21. Virginia Polytechnic University (457)
22. Drexel University (455)
23. University of South Florida (447)
24. Stanford University (405)
25. University of California at Berkeley (398)

Source: http://www.arstechnica.com

rates of online movie piracy and provides the number of students identified as making unauthorized use of copyrighted materials - as was noted in 2007 by the MPAA.

Advanced computer networks are meant to allow optimal education and research at universities, but such lucrative Internet access is hindered by engagement in widespread downloading and distribution of illegal content. Moreover, this activity makes campus networks susceptible to viruses, costing the universities money and resources and exposing proprietary information. The college student fits the age segmentation of studies conducted to portray the typical Internet piracy consumer. For example, a study conducted for the MPA found that active downloaders in the US were in the 16–24 age groups (71%). The typical global pirate profile was 16–24 (39%), male (56%), and lived in an urban area (68%). This type of demographic information was solicited from 20,600 consumers using consumer research methods (e.g., focus groups, telephone survey, Internet surveys and personal interviews) in 22 countries (Motion Picture Associate of America, 2005).

Online piracy infractions are inevitably becoming heavily enforced. It is more widely upheld that any engagement is stealing. The RIAA is working to elicit compliance out of fear of prosecution. In other words, the RIAA intends to make users worldwide aware that online piracy of any sort is an actionable misdemeanor or felony and will be prosecuted accordingly. We have found that citing recent RIAA prosecutions in the media in terms of misdemeanors and the effect of a criminal record on a student's background check for future employment stimulates a better awareness of criminal penalties. In terms of recent legislation, the College Opportunity and Affordability Act of 2007 currently proposes an anti-piracy requirement that mandates universities to link their future funding with the "purchase of DRM-based, industry-sanctioned download services, and the deployment of network snoopware that spies on and disconnects students if found to be violating any copyright laws" ("Troubling 'digital theft prevention' requirements remain in higher education bill," n.d.).

The Curb Illegal Downloading on College Campuses Act was proposed in 2007. The legislation was officially accepted on February 7, 2008 and instituted provisions to increase federal funding for universities in an effort to fight peer-to-peer piracy. This legislation amends the Higher Education Act, a bill that supplies federal money to universities and allows this funding to be used for programs that reduce illegal downloading of copyrighted content. The goal of the bill is to free up university money that would otherwise be spent on added bandwidth costs. The universities can use the extra money to keep campuses secure from viruses that can find their way into user's computers through peer-to-peer programs ("Curb Illegal Funding on College Campuses," 2007). Whether this legislation will prove a successful enforcement mechanism for digital content theft on college campuses is to be determined in the future.

There was controversy about linking the amended Higher Education Act with piracy on college campuses. Jacobson in his 2008 article in eSchool News reported that many officials at universities claim that acting as the gatekeepers for illegal downloading on campus would be burdensome. In addition, some opposed the possible linkage of a student's financial aid to the university's ability to reduce intellectual property theft. Academic spokespersons further used the recent retraction made by the MPAA

that their lost revenue of 44% due to illegal downloading on US campuses was actually around 15% to question the magnitude of the problem. Basically, the university viewpoint was to challenge why millions of dollars must be spent on technologies aimed at reducing downloading for a relatively few number of students (Jacobson, 2008).

10.7 Conclusions

There have been many trends to both facilitate and hinder digital piracy in the past decade. Overall, the attempts to measure the size of the Internet piracy market are replete with guesstimates as to the actual revenue losses from this illicit trade. The common denominators to assist the growth of piracy in the global marketplace are that Internet penetrations rates are growing, the consumer is willing to download and/or purchase fake goods in cyberspace, and the Internet piracy pyramid remains intact to generate supply and/or demand. The main factors developed to impede this market are the various unilateral and multilateral enforcement tactics, such as Operation Buccaneer, and government legislation, such as the DMCA.

One can question how much enforcement is required to seriously demotivate the main actors in the Warez scene to stop feeding the Internet piracy pyramid. Overall, these groups are releasing the illicit products on the web as a matter of pride in an elaborate art of digital war with the copyright holders. Recent legislation, such as the safe harbor provision in the DCMA is being tested in the court systems in terms of the liabilities of both the VSIs and Internet auction sites. The recent polar opposite positions of the US and French courts on the liability of eBay for counterfeit merchandise being sold at its Internet auction site is just the beginning of the legal controversy on gauging contributory trademark infringement. Ironically, the entire topic of digital piracy places the current technology advances on the cusp of a paradox; on the one hand, the Internet has literally exploded with information to aid us in our insatiable appetite to purchase goods through the web. On the other hand, advances in technology and Internet access have created a dark side to cyberspace - the challenges of Internet piracy will continue into the foreseeable future.

Chapter 11
Managerial Counterattack: Traditional and Novel Anti-counterfeiting Strategies

11.1 Introduction

It is clear that governments alone cannot solve the counterfeit product problem. Owners of intellectual property (IP) must take action to protect their rights. There are a number of anti-counterfeiting strategies recommended by numerous researchers that target distribution channels, international organizations and pirates. There are also internal, company-based initiatives. But, few if any of these studies assess the effectiveness of the recommended anti-counterfeiting tactics. The authors have conducted in-depth interviews with US managers to measure their perceptions of the efficacy of various anti-counterfeiting tactics. Our research indicates that corporate managers believe registering trademarks and patents is a must. They also believe encouraging distributors to notify the manufacturer about counterfeits, and educating both employees and channel members about the counterfeit problem to be very effective ways to fight pirates. These managers also report that many other tactics are far less effective, for example an acquisition/joint venture with a counterfeiter, aggressively cutting prices, providing financial incentives for distributors to reject counterfeits or stressing the harmful effects of fake goods in consumer advertising.

In this chapter, we recommend a specific program firms can employ to protect their IP rights (IPR). The action program includes developing a company-wide IP protection strategy; managing the registration of all copyrights, trademarks and patents in key markets; establishing a brand integrity team; monitoring the marketing of fakes through a central information repository; developing a multipronged action plan; preparing to fight pirates through investigative work in conjunction with local law enforcement and a willingness to take legal action.

11.2 Firms must Act to Protect Their IP Rights

As we have seen, IPR enforcement varies widely from country to country. In China the concept of IPR protection is only slowly taking hold. We know that most consumers are fairly sophisticated decision makers. They can tell whether a product is legitimate

P. Chaudhry and A. Zimmerman, *The Economics of Counterfeit Trade*,
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or counterfeit by price and where they purchase the product. Despite such awareness, consumers are quite willing to purchase counterfeits for a variety of reasons. Furthermore, we find that managers plan to make investments in countries where the intellectual property environment is problematic.

With these facts as background, we have discovered that inadequate government protection of IPR throughout the world forces firms to act on their own. Overall, the problem is not a lack of existing legislation to protect a firm's intellectual property rights but the lack of enforcement. For example, there are 151 member countries of the World Trade Organization (WTO) that govern its TRIPS (Trade-Related Aspects of Intellectual Property Rights). Thus, several government policymakers have acknowledged the concept of intellectual property rights. However, this multilateral agreement does not guarantee enforcement of intellectual property rights. *The Financial Times* ("It is patently," 2005), questions whether the WTO and its TRIPS are providing adequate protection of IPR. Naim (2005), dealing with the widest range of illegal trafficking, suggests that governments focus on the most harmful kinds of illicit trade such as traffic in sex slaves, nuclear material or heroine. This places the illegal copying of products (which do not affect health and safety) at a much lower priority for government agencies.

11.3 Suggestions from Researchers and Authors

A large number of authors have recognized the product counterfeiting problem and have proposed solutions. A sampling of the most notable recommendations follows. More than 20 years ago Harvey (1987) described the types of configurations used by counterfeiters, the legislation relevant to combating the problem and the need for multinational corporations themselves to take on the fight against counterfeit products. Harvey described technology that could be used to brand products and recommended a three-step anti-counterfeiting program which he identified with three A's: Awareness, Action, and Assertion. His basic formula has been enhanced by later researchers.

Shultz and Saporito (1996) offered ten anti-counterfeiting strategies:

1. *Do nothing* – based on a cost-benefit analysis
2. *Co-opt offenders* – buy up the counterfeiting factories and make them legitimate
3. *Educate stakeholders* – convince governments to follow international rules
4. *Advertise* – to differentiate real from phony products
5. *Investigation and surveillance* – hire international investigators to find pirates
6. *High-tech labeling* – develop special high-tech labels
7. *Create a moving target* – improve performance, better the price/value offering or change the packaging or labeling of the legitimate product
8. *Legislation* – recommend changes in laws to better protect IPR
9. *Coalitions* – involvement with organizations that have similar IPR interests
10. *Cede the industry* – leave the market to the counterfeiters

Deng and Townsend (1996) also recommended a cost-benefit analysis of intellectual property protection actions. They go on to state that "the most common sources of IP losses are employees, as well as outside advisers such as bankers, lawyers, and consultants." These authors emphasize the need to limit exposure of valuable intellectual property to subcontractors and to identify in all agreements information that is considered secret. They also emphasize that a firm should develop a reputation with employees and competitors for vigorously enforcing its intellectual property rights.

Jacobs, Coskun, and Jedlik (2001) identified four different types of international piracy and seven "protective responses." These were summarized as: communication, legal, government, direct contact, labeling, strong proactive marketing, and piracy as promotion. Generally speaking these recommendations are slight variations of those already discussed.

11.3.1 Using Technology

New and clever packaging and marking of products is generally recommended, including special spouts which discourage refilling of bottles, the use of holograms and covert chemical fingerprints and other hidden markers, and even the use of DNA to give unique identification to textiles. In fact there are a number of firms which sell product identification technologies and the software used to track sales to contractors and through retailers. Hopkins, Kontnik, and Turnage (2003) provide an entire chapter describing anti-counterfeiting technology solutions. These technologies are designed to verify for consumers or IP owners that products are genuine. The techniques described can be overt such as a hologram, which is readable without any special device. Or they can be covert. Covert technologies do require some kind of reading device such as a decoder or lens. These technologies include "invisible" printing, RFID (radio-frequency identification) or various types of "taggants" which may be chemical or biological and are read only by special detectors. RFID is an identification method which stores and retrieves data using a device called an RFID tag. This tag is an object that can be applied to or incorporated into a product, for the purpose of identification. Some tags can be read from several meters away and even beyond the line of sight of the reading device.

An example of covert technology is the addition of minute levels of chemicals into fuels to prevent counterfeiting or dilution of the product. A subset of the covert approach is machine-readable technologies which allow high-speed authentication of a large number of products. An IPR protection website ("400 billion reasons," 2008) agrees with Hopkins et al. (2003) that a layered approach, a combination of overt and covert technology is the best way to protect IPR and this concept is used by many firms. Establishing a well-designed system based on the above technologies but adding serial number data and RFID allows a company to track and trace its product. This is useful for reducing counterfeiting as well as for combating gray market diversions.

A new California regulation, the ePedigree law, requires that, as of 1 January 2009, prescription drug manufacturers must be able to record the movement of every product from manufacturing to sale. This new law requires a unique serial number on the smallest retail unit. Although the law does not specify a method, RFID is considered superior to barcoding. RFID has a few advantages. First, a unique serial number is electronically written into a chip at the pharmaceutical plant. To copy that, a pirate would need to be able to make semiconductors rather than a simple photocopier which is all that is required for reproducing a bar code. Another major advantage is that the reader can penetrate sealed boxes and scan multiple labels in a very short time (Parkinson, 2008). The US Federal Drug Administration's Counterfeit Drug Task Force (2008) identified RFID as a technology with the capability of preventing counterfeiting. Newly available inexpensive scanners can read nearly-invisible bar codes printed with special inks (Hattersley 2006). Very sophisticated cryptographic memories embedded in a labeling device provide a very high level of authentication. This approach allows unique information to be transmitted for each transaction. According to the providers these product labels are "virtually impossible to clone or copy" (Asanghanwa, 2008). Microsoft installed pop-up notifications to identify non-genuine copies of Vista. One notice says, "This copy of Windows is not genuine. You may be the victim of software counterfeiting." Of course recommendations for removing these annoying notices were on the web almost immediately upon the release of Vista ("WGA notifications," n.d.).

11.3.2 Developing a Plan

In *Trademark Counterfeiting*, the extensive work by Abbott and Sporn (2002), Kolsun and Montan offer a 94-page chapter, "Building a Comprehensive Anti-counterfeiting Program." This very detailed section includes sample letters, reporting forms and even a suggested Freedom of Information Act request. The chapter describes the key components in an effective anti-piracy program: planning, legislation, enforcement, education/public relations and assessment. Since the authors are attorneys they focus on the role of the in-house counsel as the leader of the anti-counterfeiting program. But they also say it is vitally important that management and sales personnel be involved in the program. Others reinforce the idea that IP protection go beyond the corporate counsel's office. Speaking specifically about China, Firth (2006) says IP protection should be a key responsibility of the entire management team. In his view, developing an effective IP strategy requires that all company departments including production, human resources, sales, distribution and finance participate.

Hopkins et al. (2003) also support the idea that counterfeiting is not exclusively a matter for the lawyers in a firm. They too recommend a companywide task force supported by senior management and including representatives from brand management, marketing and public relations, manufacturing, purchasing/outsourcing/

supply chain management, packaging, sales, research and development, finance, security as well as the law department. In the case of very large organizations, they believe that both regional and national operating companies need to be involved. And they recommend consulting with important outside constituencies including law enforcement, industry associations, various service providers and lobbyists. They also show the return on investment for establishing a product security system. In their example a firm might realize $4.78 for each dollar spent on its prevention program.

11.3.3 Summarizing the Existing Literature

As is indicated from the discussion above, existing literature provides a variety of suggestions for combating counterfeit goods, starting with the development of a comprehensive plan and including tactics ranging from the development of better relations with the distribution channel to differentiating products based on quality and appearance or emphasizing a prestigious image.

In reviewing all the recommendations, the range of actions can be categorized according to the sector targeted: consumers, distribution channels, international organizations, host/home country governments and pirates, as well as company-based activities. Table 11.1 summarizes all of the frequently suggested tactics resulting from an in-depth review of existing literature.

11.4 Effectiveness of Recommended Actions

Green and Smith (2002) recommended more research into "topics related to counterfeiting and its prevention." They also reaffirm that little research has been done which describes companies' perceptions of counterfeiting and their actions to defend their brands. One of the major goals of our research has been to determine which actions were most useful when implemented by managers who were combating the counterfeit problem in terms of both frequency of use and effectiveness. Thus, we developed a questionnaire designed to gauge the strategies listed in Table 11.1 and responses were elicited from US international business managers.

11.4.1 Frequency of Actions Used

Our research reveals that managers most frequently combat the counterfeiting problem by attempting to educate channel members, for instance, warning distributors and retailers of possible damages from selling counterfeits. A second highly used tactic was lobbying international organizations for stronger protection against pirates. A third frequently used action was developing a company enforcement team.

Table 11.1 Frequently used actions to combat counterfeiting

Targeted at consumers	Targeted at host/home country governments
• Use special packaging and/or labeling • Stress harmful effects of the counterfeiting in advertising • Emphasize benefits of genuine product • Create strong brand image, exclusivity and superiority of luxury brands • Provide lists of legitimate channel members • Emphasize warranties and after-sale service • Offer site licenses • Offer reduced price, related product lines	• Register copyrights, trademarks and patents • Educate local law enforcement • Lobby for more stringent laws/enforcement • Seek assistance from tax authorities
Targeted at Distribution Channels	**Targeted at International Organizations**
• Educate channel members about counterfeits • Encourage distributors to notify manufacturer about counterfeit goods • Provide warnings to distributors/retailers • Give financial incentives to reject counterfeits • Solicit channel member suggestions to develop tactics • Use authenticating technology, such as RFID tags, holograms, DNA markers, invisible inks and dyes, taggants, i.e., biological or chemical markers • Monitor and investigate channel members • Surveillance of products in stores and Internet	• Monitor policy of UN/ECE Advisory Group • Participate in IACC actions • Use the TRIPS of WTO • Monitor the actions of the WIPO • Participate in multilateral organizations • Lobby for stronger global IPR protection
Targeted at Pirates	**Internal-company based**
• Obtain local police support • Warn counterfeiters of legal action • Institute civil and criminal actions • Injunctions against counterfeit goods • Develop supplier quality assurance program • Compartmentalize the outsourced production process • Monitor purchases of key components • Aggressively cut prices • Use covert actions	• Develop IP protection strategy • Establish brand integrity team • Develop company IP data gathering and monitoring system • Educate employees about IP protection strategy • Employ private investigators • Use acquisition and/or joint venture strategy • Establish factories in lower cost countries

Sources: Adapted from Bush, Bloch, and Dawson (1989), Chaudhry and Walsh (1996), Cordell, Wongtada, and Kieschnick (1996), Firth (2006) Globerman (1988), Green and Smith (2002), Harvey (1987), Hopkins et al. (2003), Kolsun and Montan (2002), Nia and Zaichkowsky (2000), Olsen and Granzin (1993), Parloff (2006), Philip Morris International, Inc. (2003), Wald and Holleran (2007), and Wee, Tan, and Cheok (1995).

Lastly, company-based tactics such as educating employees about copycats, implementing acquisition and joint venture strategies to minimize counterfeiting, and establishing factories in lower cost countries, were also often used by managers.

Managers were generally unlikely to target actions at consumers. As has been shown in Chapter 5, consumers are quite ready to acquire counterfeit products and most of the time fail to perceive the repercussions of their illicit behavior. Managers

in our studies also did not frequently lobby home or host governments. In our research, those who chose China as their number one problem country far more frequently developed company enforcement teams and lobbied the US government to fight counterfeit goods.

11.4.2 Effectiveness of Actions

The actions seen as most effective by the managers surveyed are shown in Table 11.2 below. Based on the sample of managers interviewed, the most effective action to take is basic – to register copyrights, trademarks and patents. In conjunction with that seemingly obvious, yet critical, suggestion is the importance of focusing attention on the distribution channel. Four of the ten most effective actions are directed at distribution. Such actions involve monitoring and investigating both retailers and distributors, having distributors notify the manufacturer upon identification of counterfeit goods in the marketplace, educating channel members about counterfeit products, and warning distributors and retailers about possible penalties. Managers also use local police and the legal system to fight against pirates, encouraging governments to enforce existing laws rather than lobbying for new ones. Information gathered from the managers polled highlights the importance of educating within the company and of monitoring information sources for anti-counterfeiting developments. Other strategies that rated somewhat effective include: participating in activities sponsored by the International Anti-Counterfeiting Coalition (IACC), heightening the awareness of local law enforcement officers, developing a company enforcement team, and lobbying for stronger global intellectual property protection.

Some actions were reported to be quite *ineffective*, and are listed in Table 11.3. The results of this survey clearly indicate that managerial opinion differed significantly from many of the suggestions put forth by previous authors (refer back to Table 11.1).

Table 11.2 Most effective anti-counterfeiting actions

IPR action	Directed at	Rating
Register trademarks/patents/copyrights	Governments	4.40
Encourage distributors to notify manufacturer	Distribution Channel	4.07
Educate employees about counterfeit goods	Company Internal	4.07
Educate channel members	Distribution Channel	3.93
Warn distributors and retailers about possible penalties	Distribution Channel	3.93
Obtain local police support	Pirates	3.87
Encourage enforcement of existing laws	Governments	3.80
Pursue injunctions against counterfeiters	Pirates	3.73
Monitor information sources for anti-counterfeiting developments	Company Internal	3.40
Monitor and investigate retailers and distributors	Distribution Channel	3.33

Key: Scale: 5 = very effective; 4 = somewhat effective; 3 = neither effective nor ineffective; 2 = somewhat ineffective; 1 = very ineffective; 0 = did not use

Table 11.3 Least effective anti-counterfeiting actions

IPR action	Directed at	Rating
Acquisition/joint venture with counterfeiter	Company Internal	0.36
Aggressively cut prices	Pirates	0.93
Provide financial incentives for distributors/ retailers to reject counterfeits	Distribution Channel	1.00
Offer site licenses (software)	Consumers	1.69
Stress the harmful effects of counterfeiting in advertisements	Consumers	2.13
Establish factories in lower-cost countries	Company Internal	2.27
Participate in multilateral negotiations	International Organizations	2.27
Solicit retailer/distributor suggestions for anti-counterfeiting tactics	Distribution Channel	2.33
Monitor the actions of the World Intellectual Property Organization (WIPO)	International Organizations	2.40
Implement surveillance program to check products in stores	Distribution Channel	2.47

Key: Scale: 5 = very effective; 4 = somewhat effective; 3 = neither effective nor ineffective; 2 = somewhat ineffective; 1 = very ineffective; 0 = did not use

These managers believe that forming joint ventures, making acquisitions of pirates, or aggressively cutting prices are highly ineffective strategies. Soliciting retailer/distributor suggestions, rewarding members of the distribution channel for rejecting counterfeits, and checking products in stores are also reportedly unsuccessful measures. Stressing harmful effects in advertising is also regarded as ineffective by the managerial respondents. Some international activities, such as monitoring the WIPO, also ranked poorly for effectiveness.

11.5 Organizing to Fight Counterfeit Product

In order to fight against counterfeit products a company must look at its entire supply chain. The *Economist Intelligence Unit* ("How to catch," 2006) puts it in a colorful way, "the problem…needs to be addressed along the entire slippery, serpentine global supply chain, through every jurisdictional loophole from manufacturing to retail sale." For example, after experiencing serious problems, New Balance is monitoring its supply chain carefully, checking out contractors, writing strong audit clauses into contracts and enforcing the contracts. It is also embedding encrypted information in security tags and monitoring the number of tags it gives to its suppliers (Parloff, 2006).

An illustrative example is provided by Wald and Holleran (2007). They describe the challenge faced by Johnson and Johnson's Medical Device and Diagnostics (MD&D) Business. At first managers believed they had a gray market problem and they began to investigate. Their findings indicated that counterfeit surgical mesh had found its way into their supply chain. With the help of Ernst & Young, the

company identified three factors which exacerbated the counterfeit problem: MD&D's business culture, business design and practices and finally information and reporting. The business culture was predicated on a highly decentralized model. This meant that each operating and regional company was dealing with counterfeiting alone using different brand protection policies and strategies. The business design meant no single person or group at MD&D was responsible for protecting their brands or products and there was no analysis of illegal global activities. There was no single supply chain strategy and an incomplete process for reviewing suppliers, manufacturers and distributors. In addition the business design did not allow for sharing of data. The lack of an effective information system meant the company could not be sure where the product was being used after flowing through the entire distribution channel.

To respond to these factors MD&D established a brand protection policy, developed an organization to address this issue across the entire business and created a market monitoring program. The policy addresses the protection of intellectual property, product protection, supply-chain standards, incident reporting and enforcement. The organization was charged with addressing accountability and includes a vice president and several senior executives. Possible counterfeiting incidents are investigated by operating companies but they also report findings to corporate security. This gives corporate executives a better idea of possible global problems. The company has also developed product protection plans for at-risk products that include overt and covert anti-counterfeiting technologies. As part of the market monitoring program, representatives of the company are buying products in markets and from the Internet. The net result of these actions is a much more effective anti-counterfeiting program.

Firth (2006) recommends 10 practical measures to protect IP in China:

1. Craft a corporate IP protection strategy
2. Employ legal measures
3. Control the production process
4. Focus on human resources
5. Be choosy when selecting suppliers and distributors
6. Keep a close eye on competitors
7. Take legal action
8. Conduct surveillance of suppliers and distributors
9. Control what walks out the door with departing staff
10. Advocate aggressively

Firth advises that when it comes to IP protection "much more than an ounce of prevention is necessary today." He recommends a thorough review and updating of all company operations and internal policies, the development of a corporate IP protection strategy and the use of offensive and defensive actions. The former include surveillance, education and legal activity while the latter encompasses registering patents and trademarks and regularly reviewing IP security. Lian Hoon Lim, a Hong Kong consultant for A.T. Kearney recommends a "portfolio approach" using a combination of secrecy, research about local partners, new technology and business strategies as well as legal enforcement of patent and trademark rights (Associated Press, 2006).

11.6 Recommended Action Program

First, it is clear that the problem of counterfeiting will pervade global markets for some time. While governments and international organizations are focusing some additional attention on IPR, the owners of intellectual property must take responsibility to act on their own. Success comes from taking this problem seriously, regardless of whether one is the CEO of a $50 billion corporation or President of a small startup. Based on our analysis of managerial perceptions of this global problem and information extracted from previous publications on this topic we strongly recommend managers construct an action plan based on the one described in Fig. 11.1. Of course the plan must be adapted so that it is relevant for a particular industry and a particular market. DNA tags will not be appropriate counter-measures for illegal downloading of music or movies. And urging the passage of new laws will not have much effect in China. Figure 11.1 is a base that managers can work from to develop their specific plan.

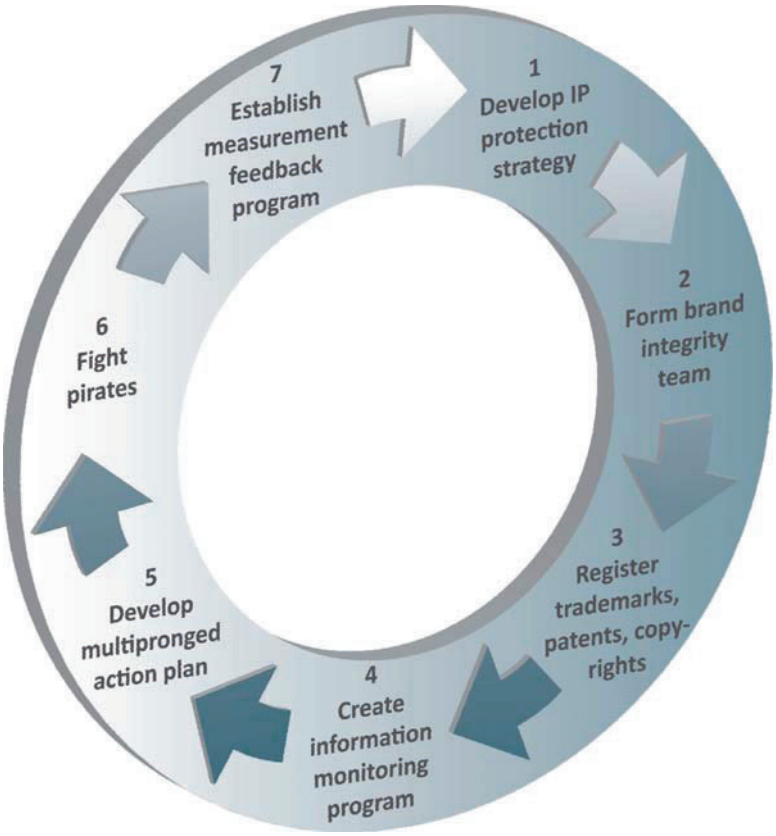

Fig. 11.1 Recommended action plan

1. *Develop IP protection strategy*. We have seen how important it is to have an overall strategy to protect valuable intellectual property rights. This is a key responsibility of top management and must involve many if not all of the company's functions. The policy should be clearly communicated throughout the organization and also to contractors, distributors, retailers as well as government officials. As recommended in the *China Business Review* ("Counterfeiting: Changes," 2006) employees must believe that there is no "good" counterfeiting. Especially in China, employees frequenting markets where counterfeit products are sold "perpetuates the [counterfeit] industry and sends a wrong message to PRC authorities." Before implementing the policy in every country, a cost-benefit analysis should be completed so that the proper controls can be put in place for distinct products in specific places. The company must establish a budget for protecting its intellectual property, for both the required human resources as well as the operating expenses. One knowledgeable attorney stressed the importance of a budget line for this program and employing a CFO who believes anti-counterfeiting activity is critical to the brand. To quote her, "the company must commit to the effort" (Croxon, personal interview, October 19, 2007).

2. *Establish a formal and/or informal brand integrity team*. Some firms have large sophisticated anti-piracy organizations. Microsoft has a 75-member team (Barboza & Lohr, 2007) that had been tracking a Chinese counterfeiting syndicate for more than six years before securing a particularly large seizure of counterfeit software. On the other hand, in July 2007, Heelys had just appointed a Vice President of International. Both the CEO and the new vice president must be involved in protecting Heelys intellectual property rights. Stopfakes.gov, a new website developed by the United States Patent & Trademark Office, is intended to help small businesses protect their rights ("Why Protect," 2007).

3. *Manage the registration of all copyrights, trademarks and patents in key markets*. This recommendation is a little more complicated than it seems. Although 171 countries belong to the Paris convention (World Intellectual Property Organization, n.d.a), all of which recognize patent claims made in a firm's home country, it is necessary to register patents in various jurisdictions. It is possible to obtain patent protection in all 27 member countries of the EU by filing one application. In addition, a firm can file a single application with the World International Property Organization (WIPO) and obtain trademark rights in each of the 72 countries which are members of the Madrid Protocol (Fenwick & West LLP, n.d.). According to the US Commercial Service (2008), no international copyright exists. The service recommends registration of copyrights in the US as well as any country where a firm will be doing business. WIPO provides lists of countries and their copyright rules. The company must set up a system to determine where its IP must be registered and when the registrations need to be renewed.

4. *Create a monitoring program to quickly funnel any information about counterfeits to a central information repository*. This program should review anti-counterfeiting developments in home and host markets, as well as those implemented by relevant

international organizations, such as the International Anti-counterfeiting Coalition (IACC). As was noted in our study, the IACC was perceived as the most effective international organization to monitor future anti-counterfeiting measures, as opposed to the TRIPS in the WTO. This information should be reviewed on a regular basis by top management to monitor conditions, and to adapt tactics to the latest pirate actions.

5. *Develop a multipronged action plan, with programs directed at employees, the distribution channel, local law enforcement and international organizations*. To reiterate, educating employees and channel members, as well as local law enforcement, is crucial. A presentation should be developed so that local management, marketing and sales people can inform various audiences of the threats that the counterfeit market presents. A firm should emphasize to distributors and retailers that it will take action to protect its intellectual property. Moreover, any actions taken should be widely publicized within the channel. The Motion Picture Association of America (MPAA) has this type of multipronged action plan, and its anti-counterfeiting tactics range from the publication of the "Top 25 University Piracy Schools" disclosing a "dishonor roll" of the number of students that have illegally used copyrighted materials (Fisher, 2007b), to commercials featuring Jackie Chan and Arnold Schwarzenegger riding motorcycles in their, "Mission to Stop Piracy" (Schmitz, 2005).

6. *Prepare to fight pirates by investigating retailers and distributors as well as manufacturing sources, pursuing injunctions and working with local law enforcement.* Educating the local police while building good relations will help pave the way for effective action when necessary (Croxon, personal interview, October 19, 2007). ISD, a marketer of premium imported Scotch whiskey, faced a major problem in Thailand after several deaths were attributed to the consumption of counterfeit whiskey marketed using their brand. The company employed multiple actions including identifying and punishing retail outlets, destroying the pirates' production facilities, lobbying for stricter penalties in the Thai legal system, and obtaining local police support for "sting" operations. ISD even hired a "dream team" of former Scotland Yard and British military commandos to lead their operations (Green & Smith, 2002). The cooperation pattern for law enforcement in China was discussed in depth in Chapter 9.

7. *Develop an evaluation and feedback system.* It is clear that fighting counterfeiters is a dynamic task. The strategies that work today may not work tomorrow. As long as there is demand, pirates will adapt to keep their operations going. The measurement of success should not solely be the number of seizures made at the minimum cost. Focusing only on seizures leads the firm toward easy targets such as warehouses while the source factories may be forgotten and the key players can continue undisturbed ("Counterfeiting: Changes," 2006). Hopkins et al. (2003) recommend that in addition to financial measurements, a company also look to non-financial measurements such as: brand degradation and recovery, public relations and government cooperation. While these items are difficult to

measure efforts should be made to assess success in each of these areas. Combining all financial and nonfinancial measurements will give management a clear idea of the success of the anti-counterfeiting program.

11.7 Conclusions

The problem of counterfeit goods has received an inordinate amount of attention. Governments and international organizations are mounting anti-piracy actions with regularity. Nevertheless, it is incumbent upon firm management to recognize the seriousness of this problem. Firms must take an active stance to prevail over an increasingly threatening intellectual property environment. A firm of any size can mount an effective anti-counterfeiting program.

In this chapter we have reported on the extensive advice given by many authors. While much of this advice is useful, very little is based upon primary research with the managers charged with the responsibility for protecting company IPR. This chapter summarizes all the suggestions made in Table 11.1 and then reports upon the effectiveness of the recommended actions. The managers we interviewed first recommend registering trademarks, patents and copyrights in all the relevant jurisdictions. The most effective actions seem to be those aimed at the distribution channel including asking distributors to notify the manufacturer of counterfeit product, educating and warning channel members about possible penalties and monitoring/investigating retailers and distributors. Also effective are educating employees, obtaining local police support and pursuing injunctions as well as setting up an information system. A critical step is to establish an overall IP strategy and plan involving many functional departments.

The least effective actions were often related to consumers such as advertising the harmful effects of counterfeiting. Acquiring or forming joint ventures with counterfeiters is seen as particularly ineffective as is cutting prices. The only international organization that has established a level of effectiveness with these respondents is the IACC.

Based on the findings of our studies as well as the recommendation of those involved in fighting pirates on a day-to-day basis we have developed a recommended action program. We believe this program can be instituted by large or small firms based on a careful cost-benefit analysis and will serve to measurably improve the effectiveness of company anti-counterfeiting actions.

Chapter 12
The Future: Will the Piracy Paradox Persist?

12.1 Introduction

The piracy paradox means that, although there has been great attention paid to fighting counterfeit goods by journalists, scholars, governments and associations, sales of pirated product continue to grow rapidly. Before looking at the future of this pernicious problem, it is important to review the past. As we have seen there have been any number of articles in the popular and business press focusing on counterfeit trade. In addition some books have been published reviewing the piracy problem. However few have addressed the issue using a comprehensive, research-based approach. This book has looked at the full scope of the counterfeit product problem, describing both historical and cultural origins for the growth of counterfeit product and recommending a specific corporate action program to protect a firm's IPR. This final chapter summarizes all the findings presented in this book, looks to the future and recommends areas for additional research.

12.2 The Growth of Counterfeit Trade

Product counterfeiting probably goes back many millennia. As soon as inventor's marks began to appear in China approximately 5,000 years ago, the opportunity for product counterfeiting was created. In the Aztec Empire pirates developed ways of selling inferior cacao beans. Based on archaeological findings, Roman Empire oil lamps marked FORTIS were probably copied more than 2,000 years ago. One of the earliest legal actions related to trademark infringement dates back to the late 1500s. The early history of the United States is replete with significant product copying including the first water-powered cotton spinning mill and unauthorized editions of Charles Dickens' novels.

As described extensively in Chapter 2 developing a reliable estimate of the size of the counterfeit market is nearly impossible. It does appear that this market has been growing rapidly. In 1982 worldwide annual sales of pirated product were

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estimated at only $5.5 billion. In 1984 this figure had grown to over $25 billion. Currently many sources believe the total is over $500 billion. A careful review of these calculations of the size of the counterfeit market, however seems to lead back to a few sources who themselves refer to their estimates as assumptions. Respected organizations who have attempted to develop a meaningful estimate of counterfeit product sales generally find it impossible. As we have seen the amount of counterfeit product intercepted by Customs Services around the world represents less than 1% of the very largest totals. The OECD estimated the volume of *tangible* counterfeit products at about $200 billion, larger than the GDPs of 150 countries and this number has been repeated by a large number of media outlets. Yet the OECD itself questions the reliability of its estimate.

A decade ago specific product categories were named most vulnerable to counterfeiting. These seemed to be highly visible brand name products, prestige products, high-tech products and pharmaceuticals. Recent research shows no product is immune to product piracy. A large percentage of computer software appears to be counterfeit. Pirated footwear, wearing apparel, handbags, computers, DVDs, software, music, cigarettes and consumer electronics are among the products most frequently seized by the US and EU Customs Services. Counterfeit drugs are particularly worrying since their use can result in unwarranted side effects or even death.

Many stakeholders are negatively affected by phony products including consumers, home and host country governments and workers, wholesalers and retailers and especially owners of the trademarks, copyrights and patents violated. Beneficiaries include satisfied consumers but also terrorists.

In Chapter 2 the driving forces for the growth of the counterfeit goods market have been described. These include: low-cost technology allowing small investment for sophisticated production equipment, globalization and the resulting lower trade barriers, consumer complicity, expansion of channels and markets especially the Internet, powerful worldwide brands, weak international and national enforcement, and high tariffs and taxes.

12.3 Source Countries

Although the OECD says that product counterfeiting takes place in just about all countries, China is the leading source of pirated product. About 80% of counterfeit product seized by Customs authorities in the US and the EU originates in China. Many other countries are named in various studies including Russia, India, Korea, Turkey and Taiwan. Some countries seem to specialize in particular products like software from Russia or cigarettes from Paraguay. The USTR singles out Paraguay for special attention and designates it a Priority Foreign Country. The agency has placed 12 countries on the Priority Watch List and another 30 on the Watch List. Chapter 3 includes detailed descriptions of the most important countries for counterfeit goods. In addition markets within countries such as Yiwu and Beijing's Silk Street Market in China and several locations in Brazil, Argentina, Mexico, Russia,

Thailand, the Philippines and Indonesia are described. One location, on the border of Brazil, Paraguay and Argentina, portrayed as the largest illicit market in the Western Hemisphere, is called Ciudad del Este.

12.4 The IPR Environment

This book has described the basic drivers of the intellectual property rights environment in a particular country. These include the level of consumer complicity, the level of pirate activity, and the level of host country enforcement. In our opinion, these three factors more than anything else work to determine the IPR atmosphere. As we have seen consumers are only too willing to purchase counterfeit product. The second factor relates to the capabilities of pirates in country. In some cases there may be a favorable business environment for the pirates, such as their known linkages to organized crime, to finance and support their illicit manufacturing and trafficking of fake goods. However, in a few countries, an atmosphere based on cultural taboos or other impediments may keep pirates from establishing a foothold. Looking at the final factor, it is clear that regulations alone, while important, cannot stop product counterfeiting. The most important factor here is local enforcement including suitable penalties for violation of IPR rights. Chapter 4 lays out this model and also describes research conducted by the authors investigating managerial insights into the efficacy of various anti-counterfeiting tactics and managers' willingness to make future commitments in protective versus non-protective IPR environments. Managers used tailor-made actions to combat pirates where counterfeiting activity was highest but did not change their strategies in markets where consumers were more complicit versus less complicit. Managers used more counterfeiting actions where local law enforcement was better but it appears they believe employing many measures where enforcement is low will not yield the required results. Our research also revealed that despite a poor IPR environment, especially in China, managers expected to increase their future investment commitment, indicating that the strategic importance of a particular market overwhelms IPR considerations.

12.5 Consumer Complicity

One of the key drivers of the IPR environment is consumer complicity. A very large percentage of consumers are willing to purchase pirated product. They perceive purchasing counterfeit product as a victimless crime. In fact some studies show that additional education makes consumers more likely to purchase counterfeit software. Attitudes vary by culture, for instance in China centuries of collectivism have a significant effect on attitudes toward the ownership of intellectual property and do not create a barrier to purchasing copied products. Research conducted by one author identified intrinsic as well as an extrinsic determinants of consumer complicity. Product attributes contribute to consumer willingness to purchase these products.

In particular appearance, image, purpose and the perceived quality have been found to affect the purchase intention of consumers. Consumers can often tell that products are not genuine. Major factors contributing to this recognition are low price, buying location and poor packaging or printing.

12.6 Anti-piracy Marketing Techniques

Advertising is being directed at consumers to try to alter their feelings about the acceptability of purchasing counterfeit product. Several of these ads are based on social marketing concepts. Chapter 6 reviews the bases of social marketing concepts and an agenda to change public judgment and recommends a communications framework for an antipiracy campaign. Here several advertisements are shown using various techniques including peer pressure, fear of prosecution, negative association to pirates, whistle-blowing and reward. Finally we include a discussion of "bottom-up" media outlets, such as blogs, that justify the use pirated product.

12.7 Actions by the EU and US Governments

The European Union and the US government are both taking the piracy problem seriously. This is the focus of Chapter 7. In the US, the Department of Homeland Security plays a major role in protecting IPR rights. Also involved are the US Department of State, the US Department of Commerce (International Trade Administration and Commercial Law Development), several divisions of the US Department of Justice, the FBI, and the US Agency for International Development, USTR, the US Patent and Trademark Office and the Copyright Office of the Library of Congress. The government recently began STOP! as an umbrella program designed to integrate the various government agencies involved with the anti-counterfeiting effort. It appears that the program may be underfunded and the effectiveness is questionable. As shown in Chapter 7, many of the new government-led initiatives have been established within the past 5 years and there is no empirical evidence that links these new agencies and/or legislation with a reduction in counterfeit trade. On the contrary, the estimates of illicit trade show double-digit (if not triple-digit) percent growth from year to year based on both US and EU seizure statistics.

The EU has nine directives in effect governing some aspect of intellectual property rights. The relative recency of the directive establishing minimum enforcement of IPR standards and the advent of 12 new member states since 2004 seems to mean there may be difficulties in implementation within the EU as well. It is expected that major differences in enforcement will prevail within the 27 member states. Recently the US and the EU agreed on a joint action strategy. Despite all this increased protection of intellectual property rights by way of both new government agencies and legislation, many observers believe IPR owners must continue to be vigilant in protecting their own rights through company-directed measures.

12.8 Government and Industry Led Operations

In addition to the many government agencies described in the US and the EU, there are a large number of multilateral organizations looking to help secure a better IPR environment. These include TRIPS, part of the World Trade Organization, WIPO from the UN, the World Health Organization, OECD and Interpol to name a few. However, as shown in Chapter 11 our research indicates managers do not see participating in these organizations as particularly effective. This leads us to speculate about the effectiveness of these multilateral agencies to prohibit the growth of the fake trade. It appears that there is a similarity here to our assertion about the Stop Fakes! and EU Enforcement Directive. The development of these supranational agencies has not diminished the escalation of counterfeits. In fact, we have seen a rise of fake product offerings in non-traditional goods, such as pharmaceuticals and cigarettes that shows not only growth in the trade, but also product diversification.

A number of business associations also address the IPR problem, for example the International Anti-Counterfeiting Coalition (IACC), the Business Software Alliance (BSA), the Motional Picture Association (MPA), the Recording Industry Association of America (RIAA) and the International Federation of Phonographic Industry - (IFPI). As described in Chapter 4, several managers in our research found the IACC somewhat effective. Several of our sources of information are these business associations since they provide a wealth of data. However, one must also recognize a possible bias in their data, as discussed in Chapter 10, regarding the overestimation of the size of the internet piracy market for the movie industry. In 2008, the MPA significantly decreased the estimated size of the market lost to counterfeits through the internet to appease criticism from several sources that questioned the validity of their data collection.

12.9 China

As we have seen China is the key supplier of counterfeit product. In this country just about every product is being pirated, sold and exported. Chapter 9 briefly reviews the unprecedented growth of the Chinese economy which has risen from subsistence and now stands fourth largest in the world. As might be expected with this rapid growth has come brisk increases in exports. And globalization has allowed a concomitant growth in exported counterfeit product.

To understand the attitudes toward intellectual property in this country, one needs to look at the history of China starting over 2000 years ago. Confucianism required the control of information and the idea that the best current inventions are based on shared work from the past. These basic cultural precepts dovetailed well with Communism and worked against respect for individual or firm intellectual property rights. Although China, reacting to heavy prodding from the United States, has enacted acceptable IPR legislation, enforcement continues to be a problem.

Many programs have been launched by the Chinese central government to stamp out piracy but the competing interests of local and national government agencies makes actual enforcement inconsistent. Once again we see firms must take their own initiatives to protect their valuable intellectual property.

12.10 The Internet

As previously stated the Internet is ideal for distributing pirated products. Some web suppliers are quite sophisticated. The Internet is seen as the third largest market for distributing counterfeit products of every kind from software and music to pharmaceuticals. Trading on this virtual marketplace of more than 1.3 billion consumers is by its nature unregulated. Here again, measuring the amount of counterfeit products sold is nearly impossible, although many industry associations say their members are feeling the effects of unauthorized Internet sales. The US government has launched a number of specialized operations aimed at reducing online piracy of products like computer games but consumers do not see the harm in downloading copyrighted material from the Internet. In some cases groups, such as the infamous Warez, release pirated products as a matter of pride, not for profits. This type of intrinsic motivation led to the passing of the No Electronic Theft (NET) Act in the United States. Under this new legislation, it became a federal crime to reproduce, distribute, or share copies of electronic copyrighted works such as songs, movies, games, or software programs, even if the person copying or distributing the material acts without commercial purpose and/or receives no private financial gain. The Digital Millenium Copyright Act is currently being tested in the US court system. In July 2008, a US Court found that eBay had not violated Tiffany's trademarks by failing to adequately police what is on sale on its website. But, just two weeks earlier, a French court fined EBay €40 million for failing to protect the IPR of Louis Vuitton. As discussed in Chapter 10, litigation has just started to test the enforcement of intellectual property rights in a virtual environment and the recent cases against eBay create more confusion. The probable future litigation against additional Internet-based firms like YouTube.com is inevitable. Overall, the Internet creates special problems for IPR managers.

12.11 Management Actions

Despite the actions of governments, multilateral organizations and associations, it is clear that owners of intellectual property must develop their own action plans to protect their rights. For more than 20 years much has been written about protecting IPR. Many authors have included very specific recommendations of actions firms should take to ensure their IPR is not being violated. The authors of this book have conducted research with corporate managers to see which of the recommended

actions are useful and which are ineffective. Based on this research, in Chapter 11 we have recommended a specific action plan for both large and small firms that can be used to fight counterfeiting of their product. The advent of very interesting technology, such as labels with unique cryptographic signatures will make unauthorized product copying much more difficult – we are no longer talking about the pirate's ability simply to make a fake hologram to mislead the consumer

The most effective anti-counterfeiting actions include first, registering trademarks and patents; urging distributors to notify manufacturers of pirated product; educating and warning distributors and retailers: pursuing injunctions against pirates: educating employees; encouraging enforcement and obtaining local police support; and setting up an information monitoring system to watch for signs of violations. The recommended seven-step plan begins with developing an IP protection strategy, then forming a brand integrity team which takes responsibility for registering trademarks, patents and copyrights, developing an information monitoring program and designing an action plan as well as a measurement and feedback mechanism.

12.12 Future Research

As we have established in previous chapters, several articles have been written about the continuing problem of counterfeit product but very few studies have been based on a carefully constructed research design with survey work (i.e., to measure managerial perceptions, consumer complicity behavior, and the like). Obviously it is quite difficult to conduct research about a subject where individuals are working outside the law to reap significant profits. The pirates are hardly willing to talk about their operations. On the other side, those charged with protecting corporate IPR are also reluctant to discuss their most successful strategies. In some of our survey work, managers simply stated that their firm's anti-counterfeiting tactics were proprietary. Thus, we found a paradox in our research efforts designed to increase the general knowledge of the effectiveness of an array of anti-fake techniques, since several firms were not willing to share their expertise. Other companies, in non-traditional counterfeit goods, such as pharmaceuticals, are struggling with the public relations issues that they face with the growth of counterfeit prescription drugs – the fear is brand dilution and/or switching if the populous is made more aware of the illicit trade in this industry. These are probably some of the reasons why insignificant research has been completed in this area. While more empirical research is required, the major barrier to replication of this type of study will be to garner a reasonable sample size to build on the results gathered. Nevertheless we present a number of open questions we believe may lend themselves to future research:

1. *The true size and growth of the counterfeit product market.* A coordinated effort based on more than hearsay or extrapolations from very small seizure statistics is required to establish a more reliable baseline to estimate the growth of counterfeit trade.

2. *The driving forces of the IPR environment.* It is possible that other factors in addition to the level of consumer complicity, pirate activity and host country enforcement determine the intellectual property rights environment of a particular country market. Thus, in our efforts to standardize a model that captures the main variables of a "global" IPR environment, we may be excluding other factors that correlate with this illicit trade, such as specific country's level of economic development and/or its inhabitants access to technology.

3. *The validity of the variables used in the IPR conceptual framework.* The exact relationships between the IPR environment, the level of the firm's market commitment and subsequent IPR actions targeted at consumers, distribution channels, home and host governments. We found mixed support for this model in our study discussed in Chapter 4. Thus, the model needs to be examined using more sophisticated hypothesis testing with a larger sample size to establish the scale items used in the model and their probable interrelationships.

4. *The context of measuring the protection of intellectual property rights.* The need for more specific market research that varies a study design by either product category (such as fake movies versus counterfeit pharmaceuticals), shopping environment (such as physical versus internet markets) and/or espoused values of the consumers willing to engage in the counterfeit trade (such as idealism versus relativism) is required to augment our understanding of the "context" that shapes the problem across country markets. For example, does the consumer feel more ethical concerns for a fake pharmaceutical available through the internet? If so, how can we shape that consumer behavior through social marketing communications?

5. *The need to establish whether market segmentation variables can profile a complicit consumer*. Previous research has established very weak linkages to demographic variables such as level of education, to predict a consumer's complicity to purchase counterfeit products. Even the motion picture industry has the broad market segment of male, aged 16–24 and living in an urban environment to profile its "typical" user of fake movies. In an age of "zip code" market segmentation and "mobile marketing" can we somehow find a way to develop better segmentation variables that will allow firms to target their actions in a more effective manner? Also, the majority of the current work in this area has been conducted via convenience samples in one country market - thus the question of how these variables change across country markets needs to be further addressed.

6. *The plausibility of social marketing campaigns to change consumer behavior in counterfeit goods.* The social marketing literature has been established in terms of decreasing consumption of cigarettes and alcohol and there are parallels that can be made between a "Joe Chemo" campaign and fake pharmaceuticals – the fear is the same – severe health risk.

7. *The effectiveness of multilateral and national agencies and the recent legislation designed to combat the growth of counterfeit trade.* The legal community is currently publishing articles that address probable litigation for such new legislation

as the Digital Millennium Copyright Act. However, there is a complete lack of pragmatic work that even questions the "cause and effect" relationship of the agencies and/or the legislation designed to deter pirates. For example, did the DMCA or NET Act established in the US really deter the Warez groups? Did the TRIPS within the WTO trickle down to grass roots enforcement of intellectual property rights at the country-specific level or does this type of supranational organization remain as the focal point of global policymakers alone?

12.13 The Outlook

Looking at the underlying reasons for the growth of counterfeit product sales around the world described in this book, it is difficult to envision a scenario which will negatively impact these driving forces. The price-performance ratio of technology continues to decline, meaning pirates can get the production and communications equipment they need at ever lower costs. Trade barriers continue to fall and it does not seem like the number of free trade zones and ports will be declining anytime soon. And the free flow of financial resources appears to be growing. Our research on consumer complicity reinforces the idea that consumers do not see much harm in purchasing counterfeit product. Advertising attempting to change this perception is judged relatively ineffective by managers involved in fighting the counterfeit problem. The Internet will continue to grow, and despite the recent French court finding against eBay, it is apparent that this medium seems almost ideally suited to the distribution of pirated product. The growth of relative affluence in newly-emerging countries like China and India will increase the demand for well-recognized brands. But many consumers will not be able to afford to purchase a legitimate product. This will also be a force for the continued increase in sales of counterfeit goods. Managers surveyed by the authors generally do not see international bodies as particularly effective in slowing down the growth of pirated product. In addition, enforcement of local laws is uneven at best. Since other considerations often are far more important in multilateral negotiations, the enforcement of IPR rights in many countries will probably not improve much. Judging by US history, it is possible that indigenous manufacturers will demand improved enforcement of IPR laws in these newly emerging markets and that could significantly slow local pirate activities.

The European Patent Office (EPO) has been conducting a project attempting to assess the future of intellectual property ("Inside Views," 2006). This organization established in 1973 includes 31 nations. The project is focused on the worldwide IP environment and is based on scenarios. The EPO project sees four basic driving forces affecting the IP environment over the next 15 years. The first is *society*, specifically how expectations and fears will affect political decisions related to intellectual property. The second major force is *accelerating technology*, which has been a blessing for developed countries but has placed major strains on developing countries. The third driver seen by the EPO relates to *innovation* and how the rights to new knowledge are protected. In this area the ongoing discussion centers on

balancing the needs of IPR owners against general economic welfare - thereby reducing the gap between "haves and have-nots" - this so-called "North–South" debate continues in the area of intellectual property rights. For example, digital rights management (DRM) technologies designed to prevent infringement of digital content have created a controversy, with some (Samuelson, 2003) claiming that the DRM mandates negatively affect competition and innovation. Finally the last force identified by the EPO is *geopolitics*, trying to see how a change within one country influences the rest of the world.

Based on the knowledge we have gathered for the creation of this book it is difficult to predict the future of the intellectual property rights environment. It only seems safe to say that vigilance on the part of IPR owners will be required for the foreseeable future - *the piracy paradox persists*.

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