

PIRACY:
A GENERAL VIEW OF THE PROBLEM
WITH SPECIAL FOCUS ON
THE BRAZILIAN CASE

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“Fighting and winning all battles is not the supreme glory; the supreme glory consists in breaking the enemy’s resistance without fighting.”

(Sun Tsu - The Art of War)

I – INTRODUCTION

Why Piracy?

Choosing a theme for a study is not an easy task. Although there is a wide list of procedures that should be followed when producing a scholastic work, we opted to follow a simple “three step” method.

First, we found it is necessary to consider the **relevance** of the subject, that is, if somebody else besides the writer is interested in what he has to say.

Second, we considered the **applicability** of the study. Whether the chosen subject is going to produce practical results or, at least, enlighten the way for further solutions.

Last but not least, and something very important to be taken into account, is the **amount of data** the writer possesses on the subject of his studies, so as to allow him to cover all important points of his topic and also give support for his affirmatives and conclusion.

Once the theme is chosen, the writer has also to define a method of study. In other words, he will have to choose his approach, the way he is going to look into the proposed problem.

With that in mind, and considering the growing concern of the International Community with the piracy issue, since it causes nefarious results for the world economic and social order, we chose to develop a study on this subject, giving emphasis on the Brazilian situation.

As Carlos Vasconcellos brilliantly puts it in his article¹, “piracy is just the most visible aspect of a far more complex situation, involving tax evasion, fraud, organized crime, unfair competition and informal economy”.

When the State lacks strategies and adequate tactics to fight crime, it enables criminals to its practice, almost like “an invitation” to make easy money without any legal consequences, thus increasing the power of those criminal organizations. *That explains the importance of discussing the piracy issue as a way to try to find a solution to control this activity.*

The longer it takes to find solutions, the stronger criminal organizations get. And it is not uncommon, throughout the world, to find members of the “pirate business” financing political campaigns, in order to elect people connected to their organizations to occupy important positions in all three levels of Government, that is, in the Executive, Legislative and Judiciary.

Some of the negative results caused by piracy on the State economy pointed out by the Brazilian Parliamentary Inquiry Commission - PIC² report were the increase in crime rates, reduction in the amount of tax collection, a loss for the legal economic activities,

¹Carlos Vasconcellos - “Piracy, the tip of the iceberg”, february, 2003 – www.amcham.com.br.

²PIC - Parliamentary Inquiry Commission (Comissão Parlamentar de Inquérito) – pg. 25.

increase in unemployment rates and, in the specific case of intellectual property rights, the terrible effects on the production and dissemination of the national culture.

Although we agree with this affirmation, in our opinion other important variables should be added to this equation and looked into carefully, since they are some of the causes of piracy, as for instance, existent poverty, corruption in all three Powers of each level of the Government (federal, state and local) and political interests of influential groups.

But, what exactly is “*piracy*”? According to the Oxford Advanced Learner’s Dictionary, besides the traditional definition for **piracy**, “*robbery by pirates*”, we will also find “*illegal copying or broadcasting*”.

So, if somebody records a CD of his favorite songs, using his own CD recorder, bought legally at a store, all taxes paid, is this person practicing an act of piracy?

Since the definition for **piracy** is very short and summarized, in order to answer this question we should seek for the concept of **pirate**, finding, among others, that it is a “*person who copies illegally something protected by copyright, especially in order to sell it*”.

Well, in this case, once the person is not going *to sell* the CD, he can make several copies of it and distribute, for free, to his family members and friends, and he won’t be practicing an act of piracy, right? Not quite. First of all, in order to copy somebody’s work it is necessary the author’s authorization, otherwise the copy is illegal (see segment II).

In reality, “piracy is nothing more than a set of illegal situations, involving people and companies practicing a numerous variety of crimes”³ and not, as people would tend to think at first, one single illegal act. So, “piracy” and “pirate” are words that will always be related to the idea of *robbery* and *trade of illegal goods*, in other words, outlawed activities.

Nevertheless, the modern usage of the word seems to emphasize the idea of *financial loss* for the victims and a *bleeding of the State resources*. This way, maybe recording songs from several different singers or groups in one CD for private purposes is not an act of piracy, because there won’t be any significative financial loss for those singers or groups (i.e that won’t cause any harm to their intellectual property rights) and neither for the State. Sometimes, it can even work as free advertisement for those artists, helping them to become more popular, specially if they are at the beginning of their careers.

But it’s important to mention that, once somebody buys a CD, he can listen to it as many times as he wants. He can also lend it to any friends or relatives he wishes, without any problems. This is so because Compact Discs do not need a licence for usage.

Software, on the other hand, cannot be lent freely. Every software receives a licence number, and it is only supposed to be used the way the licence allows it to. Thus, copying a software “*for a friend*” could be classified as an act of piracy.

Why? Because now we are facing a *property* problem. So, before entering into the discussion of our main subject, we found necessary to clarify certain points related to the intellectual property issue.

³ PIC report pag 26 and 27.

II – THE INTELLECTUAL PROPERTY ISSUE

2.1 – Concept and importance

The World Intellectual Property Organization – WIPO, a Specialized Agency that is part of the Economic and Social Council of the United Nations with headquarters in Geneva, understands that intellectual property should include rights such as: literary, artistic and scientific works; inventions; scientific discoveries; industrial design; trademarks; radio transmission, artist’s performance; or any other rights that result from intellectual activity in the industrial, scientific, literary or artistic areas⁴.

In reality, we can understand intellectual property as a set of co-related rights, including industrial property (patents, trademark and trade secrets) and copyright (see segment 2.2).

One of the reasons for protecting Intellectual Property is, of course, its importance for the economy. Trademarks and patents (royalties) are, sometimes, more valuable than the Company’s production itself.

How much does the trade mark “COKE” cost? This is a classical exemple, because everybody knows that this trademark alone is worth a lot more than all the assets the Coca Cola Company has.

Another reason for protecting Intellectual Property is the fact that the reward for any intellectual creation is the *money* one earns from it. A financial reward works as an incentive to new creations. If there are no guarantees that one’s effort is going to be properly rewarded, there will be no stimulus for technological, scientific, cultural and commercial growth⁵.

Everybody has already heard that “*money makes the world go round*”⁶, so it won’t be a surprise for anybody the affirmation that companies only spend money when they expect this money to return - and with a profit!

In other words, if intellectual property is not protected, and consequently the return of investments guaranteed, there will be no incentive for companies to keep investing millionaire sums of money in research.

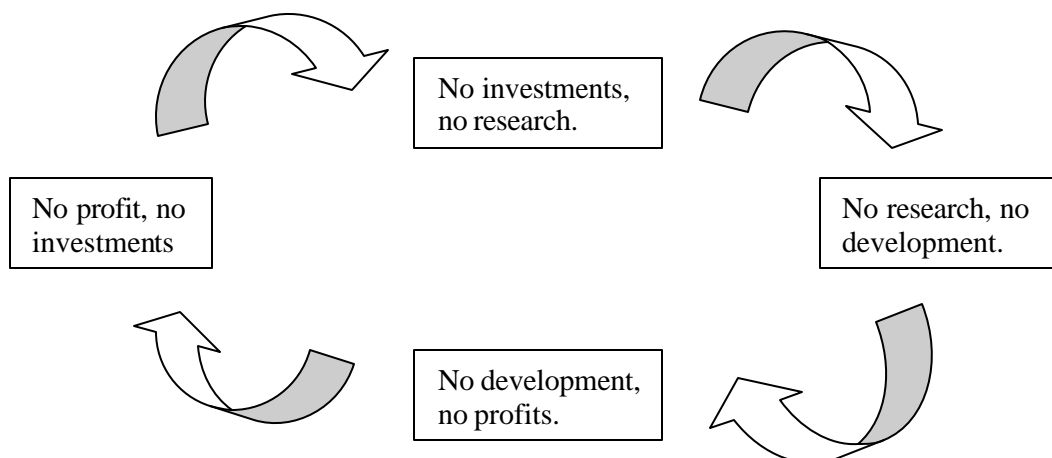
The same happens with investments in the phonographic industry. Due to piracy, their estimate profit is way bellow expectation, making companies reduce investments and, consequently, reduce the creation of new products and artists (see segment V).

We would end up in a vicious circle, as shown bellow, having stagnation as a result.

⁴ Notes taken from a class on Intellectual Property, given by Mr. Markus Wolff. This class was part of a week course on piracy combat, held at the Ministério da Fazenda building in Rio de Janeiro, from July 26th to the 30th, 2004. This course was given mainly to Brazilian Customs Officers, coordinated by the Fundação Casa de Rui Barbosa (MINC), with the support of the Instituto Nacional da Propriedade Industrial – INPI.

⁵ Idem number 4.

⁶ Song from the movie “Cabaret”, starring Lisa Minelli.



So, when a patent, a trademark or anything protected by copyright suffers any act of piracy, the whole society loses.

2.2 – How Intellectual Property is divided:

In Brazil, intellectual property includes two areas of “rights”. The first one is related to *copyright* and the second to *industrial property*, which includes *patents* and *trademarks*. In the United States, there are four main types of intellectual property: *patents*, *trademarks*, *copyrights* and most recently, *trade secrets*.

Even though there are great differences between the legal systems adopted by those two countries, we found that as far as intellectual property goes, they are very much alike. That is, both countries regulate this issue in a rather close way.

a) Industrial property

Under industrial property we are going to exam basically *patents* and *trademarks*. We chose not to include the study of *trade secrets* in this paper since they are not a major issue in terms of piracy.

The word “PATENT” has its origin in Latin, and nowadays it is defined as **a privilege granted by the State to a person, group of people or company, called the patentee**, that gives the sole right to make, use, sell or import the patented invention for a limited period of time⁷, thus preventing other people or companies from exploring the invention during that determined period of time.

In order to be granted the privilege, the patentee must proceede a full disclosure of his invention, this way, when the term is expired, the invention falls into public domain, that is, anyone can explore it.

⁷ US PATENT LAW RESEARCH GUIDE – Legal Research guide series – specialized research guide # 2 - The GWU Law School – Jacob Burns Law Library; OXFORD Advanced Learner's dictionary and notes taken from a class on intellectual property (footnote # 4).

In Brazil, as well as in the U.S., the duration of the privilege varies according to the type of patent the patentee has. For the Brazilian law this period of time ranges from 15 to 20 years, while in the United States we can have a 14 year term from the issue date for design patents, for example, while utility and plant patents have presently a 20 year term from the application filing date⁸.

In both countries patents are regulated by federal law, which sets the conditions for patentability and the legal consequences of its violation. This protection is important since “patents serve the dual purpose of encouraging public disclosure of technology and providing an incentive for innovation”⁹ (see also segment IV).

Patents are not a recent issue. As a matter of fact, the first known patent law was passed in Venice in 1474. Another classical document related to patents is the American Patent Act of 1790, passed just a few years after the declaration of independence of that country. The current American law is the Patent Act of 1952. In Brazil, the first law on patents was an 1809 Act, which granted, in case the inventor registered his invention at the “*Real Junta de Comércio*”, a fourteen year privilege over that invention. The current Brazilian law for patents is Law # 9279, passed on may 14, 1996.

Interesting thing to mention is the fact that Brazil was one of the founding members of the 1883 Paris Convention, which is one of the main international agreement on industrial property, and although it has suffered a number of alterations it is still in usage, having nowadays 168 country members¹⁰.

Trademarks, on the other hand, are even older than patents. In India, over 3,000 years ago artisans already “signed” their artistic creations by placing their *marks* on the products before sending them to Persia.

The Romans, in order to avoid illegal usage of names and marks by unauthorized people, passed specific laws regulating those issues. But it was during the middle age, when trading became more intense, that laws regulating marks were passed all over Europe¹¹.

A trademark is any distinctive design or name, used to identify a manufacturer’s good. It is something *we can see* on a product or service, in order to differ it from other products or services. In a certain way, the trademark gives each product or service its own “identity”, connecting certain qualities to its image.

Therefore, when a copy of a famous product is sold in the pirate market, this somehow devaluates the trademark, causing a sharp depreciation of the company’s products, especially if they are luxurious items, because keeping an image of quality and luxury requires a certain pattern and exclusivity, not suitable to a pirate market.

⁸ US PATENT LAW RESEARCH GUIDE – Legal Research guide series – specialized research guide # 2 - The GWU Law School – Jacob Burns Law Library – pg 1.

⁹ Idem number 8 – pg 2.

¹⁰ Idem number 4.

¹¹ Idem number 4.

b) Copyright

We can understand Copyright as being the exclusive legal right an author has over his intellectual creation. He can print, publish, sell, broadcast, perform, film or record an original work or any part of it.

Differently from the patents that demand a proper legal procedure to be granted, there are no special procedures for copyright. Once the author creates something, it is automatically protected by copyright laws. Those “creations” are not necessarily printed materials but also “computer programs, photographs, sculpture, choreography, and musical recordings”¹². In any case, “*copyright laws protect only the tangible expression of an idea*”. Ideas, concepts, principles, discoveries, procedures and systems do not qualify for copyright protection, although they may be protected as trade secrets or patents”¹³..

As far as international copyright protection goes, each country has its own national laws. Therefore, the duration of this “right” varies from country to country. In Brazil, for instance, copyright expires 70 years after the death of the author, counting from the following year of his death, while in the United States it expires 50 years after the death of the author.

In relation to the software industry, although they are also protected by copyright, in Brazil they are ruled under a specific law, so the term is different, that is, for software copyright expires in 50 years counted from January, 1st of the following year of the software release.

The two most important international agreements protecting intellectual property are the World Intellectual Property Organization’s **Copyright Treaty** and the World Trade Organization’s **Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPs)**, and Brazil, as well as the United States, has signed both.

Among the types of intellectual property, copyright seems to be the most important one due to the amount of money involved, since it comprises the piracy problems in the software, music and movie industries (see segment V). However, it is important to notice that piracy affects not only copyrights over whatever work is recorded, but also the rights over the manufacturing of the means where that work is recorded (the patent).

III – PIRACY: A VERY PROFITABLE BUSINESS

3.1 – Counterfeit goods, illegal products, stolen goods and smuggling: concepts and differences

Smuggling is not necessarily an act of piracy. Buying and selling stolen goods may not have anything to do with pirate markets. Illegal goods are not necessarily pirate products. So, what are exactly those things? In order to understand what an act of piracy is, it is also necessary to understand the differences of some important terms commonly used when we talk about piracy.

¹² The Digital Millennium Copyright Act – Edward H. Freeman – September/October 2002.

¹³ Idem number 12

To counterfeit is to copy or imitate in order to deceive, so counterfeit goods are goods that although carry the name of famous or important brands are not the real thing, that is, they were not produced by those who own that brand. Counterfeit products are usually produced with rather inferior materials, so they do not last long, and are usually inefficient. We can say that all counterfeit goods are pirate products. As an example we can mention the recent seizure and destruction of a counterfeited cargo of Victor Hugo's purses done by the Brazilian customs at the International Airport of Rio de Janeiro.

If we consider the illegal market as a genus, the pirate market would be one of its species. Illegal products are the ones forbidden by law. It does not matter who produced the goods. They are not allowed to be sold in the market. An illegal product is not necessarily a pirate product, and a good example we can give is *drugs*.

Sometimes goods that were produced legally and were supposed to supply the legal market are stolen by criminals, who will try to resell the goods back into the market for a smaller price. Unfortunately this type of crime is very common in Brazil, as it is in many other countries, and it is known as cargo theft. In this case, the products are not pirate, although the act of stealing cargo is.

To smuggle, on the other hand, is to get goods secretly and illegally into or out of a country, especially without paying customs duty¹⁴. So, smuggled goods can be counterfeit or not, legal or not. The main point here is *to cross a border with hidden goods*, no matter which goods. For this reason, smuggling can be associated to piracy in most cases, specially if the goods are counterfeited and the main objective is reselling these goods, but since smuggling, by definition, is not necessarily related to reselling products it sometimes will not be considered piracy. In other words, the smuggler can be smuggling things he bought legally in country "A" to country "B" for his own benefit, and the only thing this smuggler aims is to avoid the payment of customs duty. So here smuggling is not an act of piracy, just a bad example of citizenship.

3.2 – Most frequent complaints against piracy acts:

Complaints against piracy may vary according to the area affected by the pirate market, although there are some common complaints made by all industries.

When we consider the pharmacy industry, the main concern is with the irreparable damages caused on the consumer's health, since fake medicine do not have all the active principles the real medicine has, thus besides not healing it could make it too late for finding a cure for the problem.

For the automobile industry we face a serious problem of safety, once the fake car parts sold in the pirate market are made of inferior materials and are not submitted to a quality control program. These products, besides not lasting as long as the original ones, are very likely to cause car accidents. It is interesting to point out that although it is a fake product the difference in price from the real product is not very big. A recent magazine article has shown that for AC DELCO Brake Pads there is a difference of US\$ 10 in price between the real pads

¹⁴ Oxford Advanced Learner's dictionary – Fourth edition - 1989

(US\$ 100) and the fake ones (US\$ 90) ¹⁵. This can mislead consumers to think that they are purchasing real products instead of fake ones.

When the difference in price is very big, chances are that the consumers will figure out that the product has little probability of being original, since nobody expects to pay US\$ 5.00 for a Victor Hugo's purse!

If the fake product is fuel, the life-span and efficiency of the car motor can be seriously compromised. In this case, there will be no concerns with safety, just a **financial loss** for the consumer that will have to either fix or change his car engine, and of course, **environmental problems** once the changed fuel is more likely to pollute the air than the original one.

Unfair competition is a common complaint among all industries. Since the pirate products do not pay taxes, use inferior quality materials and do not spend money on research these products always have a price advantage over regular products, and that can cause **bankruptcies**, **unemployment** and shun new investors, once the market becomes not attractive for new investments.

Another common complaint has to do with **intellectual property**. Nowadays it has been the primary concern of Governments and industries in respect to piracy. Both because of the great amount of money involved and the fact that the disrespect for those rights undermines the stimulus to invest in research and in culture. In order for industries to invest in research or take risks in producing new artists there must be a minimum probability of profit in that market, otherwise again there will not be no reasons for investing.

And, of course, there are complaints from the Government, since piracy reduces the amount of revenue generated by tax collection, increases unemployment rates, overloads the welfare system (see segment 4.2) and helps to develop an underground economy that can bring serious consequences for the State economy (see segment 3.3).

3.3 – Piracy and the underground economy

First of all it is important to make a distinction between piracy market, that also operates in the underground economy, from the “invisible economy” represented by the unemployed population in search of means of surviving without a regular job or the low income population trying to get some extra “bucks” through undeclared second jobs. This segment of the population that makes money by selling handmade objects, such as pottery and jewelry, or doing all sorts of odd jobs are not related to the piracy problem.

For this study we have considered as underground, informal or shadow economy all “activities, both legal and illegal, (...) that take place “off the books”, out of the gaze of taxmen and government statisticians”¹⁶. We also considered any “unreported income from the production of legal goods and services, either from monetary or barter transactions”¹⁷.

¹⁵ Business Week – February 7, 2005 – Cover story - pg 62.

¹⁶ IMF Economic Issues # 30 – “Hiding in the shadows: The growth of the underground economy” -

¹⁷ Same as number 16.

Although it is very difficult to estimate the size of the shadow economy, “researchers have focused on a sample of 84 countries, using a variety of estimation methods”¹⁸, and have come to the conclusion that shadow economy although bigger in the developing countries has been growing rapidly in most transition and OECD countries¹⁹.

We can have an idea of the size of the shadow economy by analysing the number of people working in the shadow labor market. In Brazil, from July of 2003 to July of 2004 the regular labor market grew 2.4%, while the informal labor market grew 9.6%²⁰. According to the economist José Pastore 60% of the Brazilian workers are informal, which means that they do not have any kind of labor insurance, they are not protected by labor legislation, they do not pay contribution to the national social security system (although they are entitled to retirement at the age of 65 receiving a minimum wage as a benefit). In terms of numbers, the chart below gives a good idea of the situation:

Formal workers	31.7 million
Informal workers	47.5 million
Unemployed	8.5 million
TOTAL	87.7 million

Obviously piracy is not *the only responsible factor* for that increase in informal labor market nor for the development of shadow economy. There are other problems related to labor legislation, tax policy, social security payments, corruption, etc, that escapes the objective of our work, and for that reason will not be discussed. But the fact is that part of the underground economy growth *really is* a result of piracy acts.

Any illegal activity finds in the underground economy a fertile field for development, and it is not different for the “piracy industry”. As we have already said, unfair competition practiced by pirates can be responsible for taking regular companies out of business, thus leading to unemployment. Part of those employees who had been laid off, if they do not find a new job, will most certainly end up as cheap labor force for the pirate market.

So, since the piracy business helps increasing the informal economy, the important question to point out is if this growth in the informal economy is bad for a country. There are two different points of view.

For the first one “shadow economy depresses the growth of GDP, this way, by shrinking the shadow economy it will cause an increase in tax revenues, stimulating a rise in public spending, especially on infrastructure and services that support production expansion, leading to a rise in the overall economic growth rate”²¹. This way, for this first group shadow economy growth is bad for the economic growth of a country.

“The contrary view is that the informal sector is more competitive and efficient than the formal sector, and thus that an increase in the shadow economy will stimulate overall economic growth”²².

¹⁸ Same as number 16.

¹⁹ OECD countries – countries members of the Organization for Economic Cooperation and Development.

²⁰ Source: ETCO news 12/22/2004 – <http://www.etc.org.br/noticia.php?id=89>.

²¹ IMF Economic Issues # 30 – pg 10.

²² IMF Economic Issues # 30 – pg 10.

We find that a growth in the underground economy is a signal that something in that economy is not working properly. We are aware that “empirical studies have shown that at least two thirds of the income earned in the shadow economy is quickly spent in the official economy”²³, and if it is so, there will be a raise in consumer spending and an increase in indirect tax revenues, which will have a positive effect on economic growth.

But, in our opinion, the first view is more accurate in its analysis. We think that the largest the informal market is, the weakest the country’s economy gets. But more than that, shadow economy reduces the State revenues, and consequently reduces the quality and quantity of public services and goods the State can offer.

As mentioned before, a growth in the shadow economy is a signal that things must be changed in the formal economy. By producing those changes, it will become more attractive for the “underground businessmen” to bring their business to the formal economy. Unnecessary to say that we are considering businesses that although informal are *legal*. Pirate businesses are to be eliminated, which will also cause a reduction in the underground economy. This way, by reducing the informal market, we are likely to promote economic growth.

IV – PIRACY IN BRAZIL

4.1 – What is happening in Brazil: A systematic view of the problem

Carlos Vasconcelos in an article written in february of 2003, mentioned that according to the Trade Federation of the state of São Paulo piracy has moved around US\$ 20 billion a year in Brazil, which means it was the world fourth greater consumer of pirate products²⁴. In a most recent article Roberto Giannetti da Fonseca²⁵ mentions that according to UNAFISCO (National Union of the Federal Tax Auditors) piracy is responsible for an annual movement of R\$ 63 billion (around US\$ 23 billion) in the Brazilian economy. Considering that the Brazilian GDP in 2003 was around US\$ 506 billion and in 2004 it was around US\$ 604 billion, this amount of money represents 3.95% (= 20/506) of 2003 GDP and 3.80% (= 23/604) of 2004 GDP. This large amount of money, plus the fact that it means R\$ 27,8 billion (around US\$ 10 billion) in tax evasion²⁶, is more than sufficient to make us understand the importance of this subject.

At first we could say that piracy is just a matter of *profits* (for the bad guys) and *losses* (for the good guys), a problem related to *economics*. But giving it a closer look, we come to the conclusion that it is much more than that. It is a battle for controlling information technology and patent secrets. It is a battle for code breakings. It is a battle between governmental enforcement organs and the organized crime groups. It is a battle between formal and informal economy. And it is one of the consequences of social discrepancies and poverty.

²³ IMF Economic Issues # 30 – pg 10.

²⁴ Vasconcelos, Carlos – 2003 – “Piracy, the tip of the iceberg”.

²⁵ “Quando o barato sai caro” – 2005.

²⁶ Source: UNAFISCO – Federal Tax Auditors’ National Union, in Roberto Giannetti da Fonseca “Quando o barato sai caro”.

Piracy has many faces. It varies among regions, countries and cities. It varies according to the average price of the original goods, the average income of consumers. It varies according to cultural differences and to the toughness of intellectual property protection in that given market, as well as the strength of law enforcement.

For this reason, we usually tend to analyse the piracy problem as scattered cells, each cell corresponding to a type of product/industry that has been affected by piracy acts or one of their consequences. However, when it comes to finding a solution for the problem the answer is often only one: to harden laws and grant more severe punishments.

In relation to the protection of intellectual property and all crimes connected to piracy, the Brazilian legislation is considered to be very good, but criminal enforcement has been pointed out as the most serious deficiency in this process. The reason for this deficiency can be related to the still insufficient number of customs and police officers considering the great size of the country.

Brazil has a **15,700 thousand kilometer dry border and a 7,300 kilometer coast** to be controlled. Just to have an idea of the size of the problem, the dry border dimension is **five times longer** than the Mexican – American border, and as Roberto G. da Fonseca²⁷ very properly puts it, if the North American Customs with all its technology and well trained officers is incapable of avoiding illegal aliens to get into the United States, needless to say how difficult it is for the Brazilian Customs to patrol and protect its border! “Most part of the pirate products consumed in Brazil is produced outside the country and smuggled either through one of the many ports or across the dry board with Paraguay or Bolivia”²⁸ (see segment V).

Another reason for the complaints about the enforcement problem is the long duration of processes in the Judiciary Branch. The Brazilian Judiciary System is considered to be very slow and since piracy cases are related to market and trading, which are very dynamic, the legal process must be faster in order to achieve the desirable results.

And, of course, the fact that society has a tendency to view piracy acts as minor crimes. Worse than that, the same citizens who defend a more effective governmental action against organized crime are the ones who buy products in the pirate market, helping this way the development of this practice.

By simply *not consuming* pirate products, citizens can unbalance the fight and break the pirate industry. But in order to do so, it would be necessary to change the common sense, through educational campaigns showing the negative effects of underground economy and the illegal market.

When we analyse the piracy problem in Brazil, it is important to keep in mind not only the size of the country and its enormous borders and coast line, but also the serious social and economic problems it faces. In 1993 Brazil had a total population of 154 million people of which 61 million (43,04%) was considered to be **under the poverty line**. This means almost half the population of the country! In 2002 things got a little “less worse”, but far from acceptable, since 31,27% of the population was still under poverty line. In round numbers:

²⁷ Source: Roberto Giannetti da Fonseca – “Quando o barato sai caro”.

²⁸ Roberto Giannetti da Fonseca – “Quando o barato sai caro”.

from a population of 176 million people, 52 million were considered worse than poor. Still one third of Brazil's population²⁹!

With an average income of R\$ 357.95³⁰, calculated for the year of 2002, the low income population finds in the pirate market a solution for their consumption problem. Once prices are often more affordable, low income people are able to buy not only electrical appliances and gadgets, but also clothes, shoes and a series of other articles that they would not have been able to had they headed for the formal market.

A great part of this low income population works in the informal market, which as we have mentioned before does not comprise *only* the pirate market, but also legal activities performed in an irregular way, in other words, activities that have nothing to do with criminal practice and just need to fulfill certain requirements to become "formal". Requirements that have not been fulfilled due to high cost, bureaucracy or any other minor problem.

The difficulty in combating piracy in Brazil is related to the difficulty in fighting poverty. The most efficient way to put an end to piracy is to eliminate the consumption of pirate products. If they do not sell, they do not make profits, therefore they go out of business. But convincing society that buying pirate products is wrong would only have positive results if people were able to afford these products in the formal market. This means that first it would be necessary to reduce (or eliminate) social distortion.

But it is not only the low income population who buys goods in the pirate market. A large section of the middle class is a customary consumer of certain pirate products, especially those related to intellectual property rights, as for instance, CD, DVD, PC or Playstation games, softwares, etc. And why is it so? Well, first because of the difference in price from the original and the pirate product that although working exactly like the original one costs 3, 4 or 5 times less (see chapter V). Having the industries reviewing their profit margin and lowering their prices would certainly help.

Another reason for this behavior is simply because of the easiness to find and buy pirate products on the streets. So, this availability in time tends to make this behavior looks "common" or "normal", as a part of our every day life, and society does not see a huge problem in consuming pirate problems. In this case we have just lack of information, and good educational campaigns along with strong enforcement by government authorities would be useful weapons against piracy.

It is true that several campaigns have already been released around the world, and some of them had relatively good results. We can see that because at the beginning, pirate products were a lot cheaper than the real ones therefore they were easily sold. Consumers would have the (wrong) impression that they were getting the same product for a much smaller price. Interesting to notice that the difference in prices has been dropping, and the reason, we believe, is because since there were many campaigns to fill society in on the hazardous effects of piracy, by approaching prices criminals can trick consumers, making them believe they are in for an excellent deal, instead of buying a counterfeit product.

²⁹ Source: IPEA –Research Institute of applied economics – www.ipea.gov.br.

³⁰ If we consider the average currency rate for 2002 as being R\$ 3.02 per dollar, we will have average income of US\$ 118.53. Source IPEA.

However, we find that there is a third factor that makes the middle class opt to buy pirate products rather than original ones, which is a general lack of trust in the Government. We explain: When we buy products we also pay taxes. Those taxes should be used by the Government to fulfill society's need for education, public health, public security, public transportation (and here we include good roads and streets), etc. If those issues are abandoned or overlooked by the Government, thus causing dissatisfaction to society to a point that society begins to wonder what good is to pay those taxes, there would be a great probability that more people will decide to buy the cheapest pirate goods instead of the legal products.

If the Government begins to use the tax revenues in a wiser and more efficient way, benefiting society as a whole, it would be more likely that people would consider an act of citizenship to avoid the pirate market, and begin to feel proud of contributing to the development of the country through tax payments.

Any way it goes, in order to have successful results in the war against piracy, the problem should be viewed and treated as one. In other words, there is no singular solution for the problem, but a group of solutions that should be applied to the problem all together so as to work.

4.2 – Social and economic effects: How the State loses

The first thing that comes to our minds when considering what the State loses with piracy is certainly **money**, more specifically, *tax evasion*. And the reason is simple: Everybody knows that it is through taxes payment that the Government gets things done.

According to information gathered by the Brazilian Institute of Competitive Ethics (ETCO)³¹, tax evasion in the tobacco, beer, softdrinks and fuel industries alone has reached the sum of R\$ 6 billion, which in terms of dollars, depending on the currency rates used, means a sum around US\$ 2.3 billion.

That amount of money solely, again according to research done by ETCO, would be sufficient to double the annual budget for the Education or the Health Ministries, or build 500 thousand houses for the low income population. That amount of money could also provide a monthly basic food basket for 3.5 million families, or build 140 thousand new medical care centers, or 280 thousand classrooms. Anyway, it is clear that tax evasion reduces the possibility of improving welfare.

Since we are talking about tax evasion in an illegal market, it is very difficult, we would say *almost impossible*, to come up with precise numbers and amounts. Some estimatives were based on the market values of goods seized by government authorities, but that is just a small portion of the goods that circulate in the pirate market.

But tax evasion is not the only way the State loses. Unfair competition can cause a series of problems for industries, as for instance, bankruptcy of companies that operate in the legal market or an increase in sales losses. When sales decrease, and consequently profit diminishes, industries usually lay employees off. This act has effects in three fields: *in the market*, because there will be a reduction of consumption, since those unemployed workers

³¹ Instituto Brasileiro de Ética Concorrencial- ETCO – www.etico.org.br

will be more willing to save their money for a rainy day than to spend it; in *tax revenue*, once there will be a reduction in government's revenue as a result of a reduction in consumption and in sales, which will diminish the amount of sales and income taxes paid; and in *social security*, since the laid off employees would go under welfare programs (and overload the system) or move to informal jobs. Either way, there would be a *reduction in the number of formal jobs* and no contributions to the social security, although there would be costs.

High rates of piracy also discourage new investments, both domestic and foreign, making the country less interesting for new businesses once the profit expectation is reduced. This way, along with business the country will lose new job opportunities.

For a country where unemployment is a concern, losing new job opportunities can have abysmal consequences. Part of the unemployed people will turn to the underground economy, working at odd jobs that can be legal or illegal, but certainly will not contribute to the government's social security program. The problem with informal economy in relation to employment is that since there are no payments made towards the social security program, the cost of those underground employees will fall onto the shoulders of the employees that regularly contribute to the system.

In Brazil, even though there were no contributions made by those informal employees to the social security program, they are entitled to a minimum wage retirement pension after reaching a certain age. It is guaranteed by law!

So, when consumers decide to buy goods in the pirate market rather than at a regular store, there is a quadruple loss. *Consumers* lose because they are getting inferior quality products that will not last long and that can seriously harm their health. *Business owners* lose because they are not selling their products and their businesses are declining, forcing them to let employees go, or worse, they can go bankrupt. *Employees* lose because they end up without a job, or having to accept smaller wages in order to keep their jobs. And finally, *the State* loses. Not just because the products sold in the pirate market did not pay any taxes, which is a direct loss, but because the State would also have indirect losses.

As indirect loss we are considering every expenditure the Government will have derived from piracy. For example, the increase in violence as a result of the involvement of organized crime groups leading to an increase in expenditure on public security. Due to the *great profits* that can be illegally acquired together with the fact that, compared to other crimes like narcotics trafficking or arms dealing, *piracy is low-risk* since the chances of being caught are slim and penalties are still pretty light, piracy has called the attention of organized crime groups. The organized crime has facilitated large-scale manufacturing of pirate products, as well as their exportation and distribution to countries around the world.

Therefore, since organized crime is part of the piracy universe, it is not wrong to conclude that piracy accounts for an increase in violence and crime rates in the country. This fact leads to an increase in government's expenditures with police and public security.

Another example of indirect loss would be the increase in the amount of money the Government spends with the health system due to accidents caused by pirate car parts or due to health problems caused by fake medicines. But there are other indirect losses that have nothing to do with expenditure but with loss of future opportunity of growth, in other words,

not what the Government “looses” but what it does not “win”. We are talking about the new investments that will not be made in the country because of the high piracy rates.

Piracy makes it very difficult for local industries to develop, and the reason is simple: The pirate products cost usually 50% less than the original ones, sometimes even more. In order to develop, local industries have to invest in new technologies, researches, hire more high skilled employees, etc. All of this has a cost, and this cost would be covered by the profits acquired with sales. If consumers decide to buy pirate products and not the regular products, the industry will not have enough money to invest. It is the vicious circle we have already mentioned in segment 2.2 above.

Unnecessary to say that if industries do not develop we will not have economic growth, which will cause a negative effect on GDP.

Something very important, that really deserves to be mentioned because it has affected Brazil directly is an indirect loss not caused **by** piracy, but yet caused **because of** piracy. The World Trade Organization has established the principle of the Most Favourable Nation (MFN), which forbids discriminatory importation rules among its country members, except if those rules are based on a clause that guarantees preferable treatment to the developing countries. Based on this clause the United States has created a Generalized System of Preferences, which is a “duty free” program for 4.650 products of 144 countries³².

Brazil used to benefit from the GSP, but due to the complaints of the *Entertainment Software Association*, the *Business Software Alliance*, the *Recording Industry Association of America* and the *Motion Picture Association of America* before the **United States Senate Foreign Relations Committee** about the piracy problem in this country, Brazil was excluded from the program. Since october of 2004 the Brazilian Government has been trying to be accepted in the program again, once it is very important for the country’s economy and development, but the Office of the United States Trade Representative has recently released a note informing the decision of keeping Brazil out of the GSP.

We understand that those industries are loosing a lot of money because of piracy, but we have also shown *how much a country looses with piracy*. Brazil has not solved the problem not because the country and its population do not want to, but because it is a very complex problem that requires a number of “difficult to accomplish” measures, and also because the country has to face the limited economical resources available to finance this “war”.

Using the GSP as a “punishment” for a developing country because it was unable to solve a problem that affects nations worldwide will only worsen its economical problems, not help solving the piracy problem. And most unfair, the “punishment” will only hurt the formal section of the economy, this is to say, only the legal exporters will suffer, because it is their products that will loose the benefits from GSP, not the pirate goods. Finally, there will be less money for the State to finance the battle against piracy, therefore the “bad guys” with the best technology (a lot of) money can buy will go on getting profits from their pirate market, always many steps ahead of the Government authorities who struggle to catch them.

³² Jotabê Medeiros, O Estado de São Paulo – 01/05/2005 – “Pirataria do Brasil incomoda os americanos”.

Of course there are many other negative effects of piracy, not only the ones mentioned above. But those are the ones we considered most relevant, therefore important to be mentioned. One thing we ought to keep in mind though is that *when the State loses, society loses as a whole*.

4.3 – What is being done towards finding a solution for piracy in Brazil

On may 30th, 2003 the Brazilian Government, urged on by its citizens and by economical segments of society, constituted a CPI formed by twenty two congressmen and thirteen substitutes, whose objective was to investigate facts related to piracy of industrialized products and tax evasion.

Although that CPI did not have the power to judge nor establish penalties, from its efforts there has resulted thirty three search warrants for machinery and instruments used to counterfeit products, as well as several operations that seized a large number of goods that were object of smuggling or piracy acts³³.

From the 2nd to the 5th of september, 2003, the Brazilian Congress launched a very successful educational campaign entitled “I AM LEGAL”, where commonly sold pirate products were exposed to society, and it was explained to the population how those products get to the “stores”, the losses they cause to the State economy and the damages they can cause to consumers’ health³⁴.

Due to its peculiar characteristics, public authorities and private companies have been facing this problem as a real war, where each side organizes his own “army” to fight the day-by-day battle against piracy.

On november 25th, 2004 an operational agreement for international cooperation to fight piracy and cigarette smuggling was signed by representants of the countries members of MERCOSUL – Brazil, Argentina, Paraguay and Uruguay – and also from Bolivia, Peru and Chile³⁵. The goals will be defined and analyzed every semester by the assigned Ministers of those countries. A diagnosis of the situation in each country will be registered in the General Plan of Mutual Cooperation and Coordination for Regional Security.

The objective of the agreement was to establish common strategies for combating piracy and cigarette smuggling specially on the frontier zone. In order to do so, all the countries involved will share information obtained from their Intelligence Agencies, such as statistics on people involved (how often they were arrested and why), seizures, merchandises, lawsuits, types of crime and the instruments used for that practice, thus creating a cooperation among the Police and the Judiciary branch of each country.

A special emphasis will be given on the control of companies. Each country will be responsible for confirming all the information given by companies, including the information on its owners and CEO’s in order to avoid the creation of “ghost companies”. There will also be control of company stock, importation and exportation.

³³ CPI report, pgs. 22 and 23.

³⁴ CPI report, pg 28.

³⁵ www.mj.gov.br - news about Mercosul – november/2004.

Besides this agreement, the Brazilian Government has created the National Council for Piracy Combat and the Defense of Intellectual Property, which will also have the help of the private sector of society. This Council will be responsible for setting the ways of combating piracy and the resultant tax evasion, and also to fight crime against intellectual property. The idea is to have three “lines of attack”: The first one is educacional. Through educational campaigns society would become conscientious of the importance of this fight. The second line of action is to develop operations, nationally and internationally, against piracy. The international operations will follow the terms of the agreement mentioned above. The third action will depend on the help of the industries of the country, since the idea is to low the prices of certain products such as CD and DVD.

There has also been some participation of the private sector in the war against piracy. The AMCHAM - SP³⁶ has organized a working group of associated companies victims of piracy acts and unfair competition, to discuss piracy and tax evasion. These group discussions are important because eventually they come up with very good ideas to solve a common problem.

On december 16th, 2004 in the state of São Paulo a group of 60 Police Chiefs and 350 police agents coming from 39 cities made a great seizure: 20 tons of illegal products were taken away from the market. Among the products seized there were 30 thousand CD and DVD, 1.500 packs of cigarrets, clothes, perfums, watches, caps, sun glasses, etc.

According to Mr. Nelson S. Guimarães, director of the Department of Judiciary police in São Paulo – DEMACRO³⁷, operations like this one, where the agencies act simultaneously, have better results than individual operations. And this seems to be a common sense. There has been many operations successfully carried out by the Brazilian Customs together with the Federal Police and several other public organs, also counting with the help of some private organizations, like ETCO, BSA, etc.

A good exemple is the “Cataratas Operation” which was put through in 2004 and by the end of its first phase (december, 25th) US\$ 5 million in smuggled goods, besides drugs and forbidden medication had been seized³⁸. In the second phase (2005), just on the first two weeks of the year around US\$ 760,000 in smuggled good had been seized.

Fighting piracy is not an easy task. Even countries whose customs and police officers are well trained and equipped are having serious difficulties in eliminate piracy. The UK, for exemple, has one of the highest levels of film piracy in western Europe (see segment 5.3). So, we find that in spite of all the difficulties the Brazilian authorities, specially customs officers and police officers, have done a good job so far. It is clear that it has not been enough *to solve the piracy problem* yet, but it is our opinion that the country is seriously moving towards finding means of reducing it.

³⁶ American Chamber of Commerce in São Paulo – Brazil.

³⁷ Plínio Delphino – “Piracy: 20 tons seized” – ETCO News in december 17th, 2004 – www.etico.org.br.

³⁸ <http://www.receita.fazenda.gov.br/imprensa/notas/2005/janeiro/07012005.htm>

4.4 – Difficulties faced by the State to implement a satisfactory solution

The first and most easily noticed problem related to the battle against piracy is the huge difference between the “weapons” used by criminals and the “weapons” used by the Government. Criminals are usually better equipped than the Government. And why is that?

Well, one cause is of course because every time the Government needs to acquire new assets, computers for example, there is a long legal and administrative procedure to be followed that, although necessary to keep transparency in public deals, makes the whole operation very long. So, while criminals can decide and act almost immediately, Government is trapped in bureaucracy.

The amount of money available to each side is also a problem. For criminals this amount is enormous, since it comes from the profits they have with the illegal business. For the Government, on the other hand, the amount of money available to be spent is limited to the annual budget that is predetermined by a budget law, which has to take all the country’s problems into account when deciding how to distribute the State money. Anyway, whatever the Government decides to do in order to fight piracy will cause an increase on government expenditures, and the problem gets worse when the Government does not have enough money to afford this war.

Money is also an important issue when it comes to personnel. Hiring and training new customs and police officers require expenditures. The best the training the most expensive it is. In our opinion this is a very important point that needs immediate improvement by the Brazilian Government. **Brazil has to prepare its customs officers in a more efficient way.** Not only to control importation taxes but also to identify and fight piracy acts that are getting more and more sophisticated every day. Those customs officers, or at least a special group of them, should receive specific training on how to deal with the problem of organized crime and terrorist groups that seems to have a strong connection with piracy.

Another very common difficulty faced by the State is the gathering of evidence of illegal acts. If the operation is illegal, unless the government authorities get an excellent lead or a denounce of any sort, chances are that there will be no proofs, no documents, nor any written evidence of that illegal business. And except these government authorities act on the dot (which unfortunately does not happen very often), criminals are hardly ever caught.

But when it comes to implement a satisfactory solution to the piracy problem, we consider the bad receptiveness to new mechanisms of control amongst members of the formal economy the hardest problem faced by the State. For instance, if in order to solve the problem of tax evasion in the tobacco market (see segment 5.1 below), efficient mechanisms to control the cigarette production in all the cigarette factories were created, that would not become a popular measure among businessmen of this industry.

The same logic can be applied to the music, movie and software industries. Although eager to solve the piracy problem, some representatives of those industries will not be glad in having to submit to a stronger control of their output by the Government

4.5 – The important role of CUSTOMS in the war against piracy

As José Lence Carluci puts it in his book, “*Uma introdução ao Direito Aduaneiro*”, if we consider a country as being a living organism, Customs would be its skin, controlling its limits/borders and interfering with its interchange with the outside world, and as a skin, Customs can not be completely impermeable, but rather *selective*.

With this picture in mind we can conclude that although Customs regulates the trade flows among countries, its main role is much more **protective** than it is worried about collecting taxes. This protection works in several levels, for instance, protecting national industry from foreign competition or protecting society when seizing fake medicine, drugs or anything hazardous that can jeopardize society somehow. Therefore, we can say that Customs is in the front line of piracy combat.

In 1998, following the new world trends of globalization and the search for free trade, the Brazilian Internal Revenue Service, organ to which the Brazilian Customs is under, trying to “redefine” the role of Customs and speed up foreign trade operations, promoted a number of changes in the legislation of importation that may have helped the increase in smuggling as well as the development of the piracy market in the country. We are referring to the Normative Instruction nº 111/1998, which freed most importers from presenting the documentary proof of the business transaction to Customs. Fortunately this legislation was revoked in 2002.

But it is important to understand that *fast* control does not mean *lack* of control. It would be perfectly possible to verify documents and cargo in an efficient way, in a short period of time so as not to harm the private companies with extra costs, if we had enough people and the necessary instruments for the job. Removing the control away from Customs Officers does not help the economic growth. In reality it makes the economy more fragile, since there is a weakening in its protection.

According to the information presented by Paulo Gil H. Introíni, former UNAFICO³⁹ president, in a speech given a couple of years ago, from the 7.300 Federal Tax Auditors at Secretaria da Receita Federal (the IRS) only 2.000 were working as Customs Officers. So, Brazil with its enormous size had only 2.000 Customs Officers, while France had 20.000 and Japan 8.200.

But even with this shortage of people and proper equipment, the Brazilian Customs has done a great job. In São Sebastião do Paraíso, a city in the state of Minas Gerais, R\$ 800 thousand (around US\$ 300 thousand) in smuggled goods were seized this month (april, 2005). In Maringá, state of Paraná, after 30 days of operation, R\$ 1,5 million (over half a million dollars) in goods and drugs were seized last march. Last february, 10.428 pairs of faked ASICS TIGER tennis shoes were seized in the Port of Manaus. Last january in the Port of Suape, state of Pernambuco, 50 thousand faked watches (Rolex, Adidas and Swatch) and around 10 thousand faked bags (Louis Vuitton and Fendi) were seized. Those are just some of the successful results the Brazilian authorities had at the beginning of this year⁴⁰.

³⁹ UNAFISCO - Federal Tax Auditors' National Union

⁴⁰ source: www.receita.fazenda.gov.br

The most recent operation against smuggling and piracy has begun in the middle of this month (April, 2005) on the border with Paraguay and having the city of Dourados (MS) as the headquarter. This operation was set together with the Brazilian Army and Air Force, the Federal Police among other organs. Unfortunately we could not get the seizure statistics before this paper was due.

One more thing we considered worth mentioning is the fact that the Brazilian Customs has also found a way to take advantage of the enormous quantity of illegal cigarettes seized. A partnership between the Brazilian Customs and the Brazilian Association for Forgery Combat (Associação Brasileira de Combate à Falsificação – ABCF) has developed a very important project in Foz do Iguaçu. A shredding machine was installed and only in the year 2002 one thousand and three hundred tons of fake cigarettes were destroyed and transformed into **fertilizer**. This way, it is possible to turn a negative thing into a profitable positive and useful good.

V – SOME EXAMPLES AND STATISTICS OF PIRATING PRACTICES

5.1 – Tobacco

According to the Brazilian Internal Revenue Service (Secretaria da Receita Federal), the tobacco market is a very important source of tax revenue for the State, but there is a crucial problem related to this industry: *tax evasion*. This market alone is responsible for 23% of the total tax evasion in Brazil⁴¹.

One third of the Brazilian tobacco market is illegal. By “illegal” we are considering: a) cigarettes produced in other countries and smuggled into Brazil, b) counterfeit cigarettes produced in and out of the country but sold in the Brazilian domestic market, and c) cigarettes produced in Brazil but whose producers do not pay the due taxes.

Considering the quantity of cigarettes traded *in the illegal market*, Brazil holds the third position in Latin America, behind Mexico and Argentina. In 2003 a total of 40 billion cigarette units (packs) were traded in the illegal market. This amount represented 30% of the total quantity of cigarettes traded during that year in the country⁴².

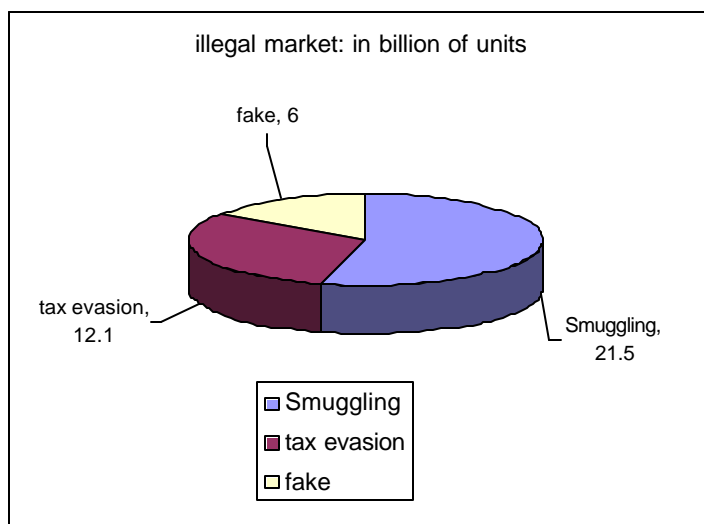
The possibility of very high profit has been making this illegal market grow significantly in the past few years. While the revenue for the legal market in 2003 was R\$ 9.5 billion (approximately US\$ 3.5 billion), the estimated amount of money that circulated in the illegal market in the same period was around R\$ 1.8 billion (approximately US\$ 650 million) and the estimated tax evasion R\$ 1.4 billion (approximately US\$ 520 million).

Although serious, **fake cigarettes** are not the major problem for the tobacco industry in Brazil. In fact, the worst problem is **cigarette smuggling**. In 2003 smuggling represented 55% of the quantity traded in the illegal market, while fake cigarettes represented only 15%. The last 30% were represented by cigarettes produced in Brazil by companies that constantly evade the payment of taxes.

⁴¹ Source: CPI report pg 46.

⁴² Source: ETCO Research on unfair competition.

For a better idea, we have drawn the graph below, where it is possible to see that the quantity for smuggling is way over the other two cases.



Source: 2004 ETCO report

Most of the smuggling is done through the triple border of Uruguay, Paraguay and Brazil, and according to the CPI report there are four “entrance doors”, all of them on the boarder with Paraguay. The first one and the most important is a 600 Km long dry border between the cities of *Ponta Porã* (Brazil) and *Pedro Juan Caballero* (Paraguay). The other “entrance doors” for smuggling are the cities of *Foz do Iguacu* (Brazil) and *Ciudad Del Este* (Paraguay); *Mundo Novo* and *Guaíra* (Brazil) and *Salto Del Guaira* (Paraguay).

It is said that Paraguay alone is responsible for 87% of the cigarette supply in the illegal market, while Uruguay has a share of 7% of the market. Those numbers are understandable once we take the rate between production and consumption of those two countries into account. Although Paraguay produced 33 billion units (packs) of cigarette in 2003, only 3 billion units were consumed by its domestic market. Same way, Uruguay produced 10 billion units, but its internal market consumed only 3.5 billion units. This way, this difference between the quantity of units produced and the units consumed in those countries is believed to have been smuggled into Brazil.

According to the ETCO research the higher the tax burden of a country, the most likely it is to increase the illegal market. In Brazil the tax burden for tobacco is 70 %, while in Paraguay it varies from 13 to 16%. In our opinion tax burden is not the main factor for the development of an illegal market. Although it plays a relevant role since it has a direct influence on consumption, we think that there are other points much more important that must be taken into account, that make it easier for the illegal market to grow, as for instance, the lack of effective means of inspection, absence of severe laws granting heavy penalties for these crimes, a faster legal system and the social acceptance of these illegalities as minor crimes since it is viewed as one of the “solutions” for the unemployment problem (see item 3.3).

Another serious problem has to do with the danger for the consumers’ health. Everybody is aware that smoking is harmful, but what most people do not know is that fake

cigarettes are even more harmful for their health, as it has been proved in a recent analysis made in 30 brands of illegal cigarettes which has presented very worrying results⁴³.

Only 2 out of the 30 brands analysed had levels of nicotine, tar and carbon monoxide between the limits permitted. In 30% of the brands there was a flavor agent in their composition which usage has already been forbidden in many countries, including Brazil, France, Germany, United States and England. In 47% of the brands it was found sand grains, pieces of twine, herb seeds, insects, plastic materials, tobacco bug, green tobacco and grass, and in 43% of the brands it was found residue of herbicide.

5.2 – Software

The major concern for the software industry is the theft of intellectual property. But money loss although very significant is not the only thing that bothers people in this area. Since this is an area where creativity and intelligence dominate, the fact of having someone achieve success by using someone else's ideas really drives people mad. However, there is no doubt that the economic issue is extremely relevant.

Software piracy has to do with the reproduction or distribution of copyrighted software programs **without the authorization of the copyright holder**, which is given through a license agreement that specifies everything the user is entitled to or could do with the software.

There are two kinds of software: the *proprietary software* and the *free software*. Both kinds have license agreements. In the first case it is a usage license. The consumer pays to use the software but he is not allowed to reproduce nor change anything in the software. In the second case the license for usage is free, and the consumer can change the software as he wishes in order to adapt it to his needs, but the consumer is not allowed to copy and use the code source of the program in another software that is not a free software. This is, nobody can transform a free software into a proprietary software.

The entertainment software industry has also been affected by software piracy. The video and computer games industry sold in 2003 only in the United States the amount of US\$ 7 billion in entertainment software. The global game software market is around US\$ 25 billion, which shows the economical importance of this sector for the country.

In his testimony before the Senate Committee on Foreign Relations on June 9th, 2004, Robert Holleyman, President and CEO of the Business Software Alliance – BSA, which represents the most important proprietary software companies, said that besides costing billions of dollars in lost revenues each year, software piracy also reduces investment in creativity and innovation. To illustrate this loss he presented as estimated numbers for 2002, US\$ 2 billion in the United States and US\$ 13 billion worldwide (but just considering the market for packaged PC applications).

Based on an IDC⁴⁴ economic survey he also mentioned that the Information Technology sector employs more than nine million people in high-wage, skilled jobs, raising

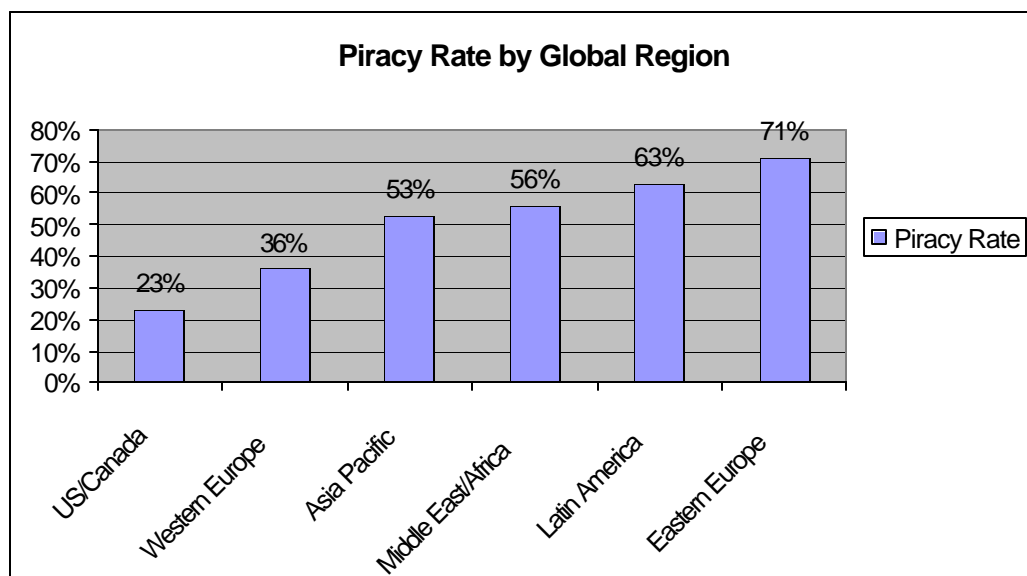
⁴³ Source: ETCO report.

⁴⁴ IDC - International Data Corporation – it is an Information Technology research firm.

more than US\$ 700 billion in taxes annually and contributing nearly US\$ 1 trillion each year to global economic prosperity.

According to the First Annual BSA and IDC Global Software Piracy Study, in 2003 “the world spent more than US\$ 50 billion for commercial packaged software that runs on personal computers (PCs). Yet, software worth almost US\$ 80 billion was actually installed”, concluding that “for every two dollars’ worth of software purchased legitimately, one dollar’s worth was obtained illegally”.

This study has divided the world into 6 global regions, consisting of 86 countries, and has calculated a piracy rate for the world as a whole, for each one of the regions and for each country individually. The rate was obtained by dividing the number of pirated software units by the total number of units put into use. For 2003 the world piracy rate was 36%, and for each one of the regions as followed:



But it is important to point out that the study also calls our attention for the fact that although three out of the top four pirating countries are located in the Asia Pacific region – Vietnam, China and Indonesia - its rate is lower than the other emerging regions. This is so because two countries located in that region – Japan and Australia – have low piracy rate thus bringing down the average.

Considering the individual rates of the countries, among the top 20 pirating countries China and Vietnam had the highest rates, 92%. In Latin America, Paraguay had the highest score, 83%, followed by El Salvador and Nicaragua (79%), Bolivia (78%), Guatemala (77%) and Dominican Republic (76%).

Although for 2003 piracy level in the United States was 22%, therefore under the world average of 36%, it still is a pretty high level. Same thing for Japan and the United Kingdom (29% each), Germany (30%), Australia (31%), Canada and Israel (35% each), among others, showing that piracy takes place everywhere, even in developed countries with strong copyright laws, like the United States. The difference from the developing countries is

that they have lower budgets to deal with serious social problems, besides the economic problems.

For Brazil the calculated rate was 61%. And it is important to say that this rate has been decreasing in the last few years. In 1991, 86% of the software market in Brazil was pirate, nowadays this percentage was reduced to 56%⁴⁵. This 30% drop indicates that, although it is a difficult issue it is possible to find a solution for the problem.

The worries with software piracy in Brazil is understandable. Brazil is a very important market for the software industry, since it has a high market-growth potential. According to the Brazilian Parliamentary Inquiry Commission's report, "in 2002 the software industry in Brazil was responsible for a revenue of US\$ 3.8 billion, besides some extra US\$ 4.1 billion in related services, and has shown an average growth higher than the GDP in the last five years"⁴⁶.

But what were the specific factors that helped the development of piracy in the software industry? Well, the *internet* besides helping to increase the demand for software was also used as a sales channel for pirates, not to mention the possibility of software downloads. Another factor was the *increase in PC's sales*, which increased the number of people using the internet, and consequently increased demand for softwares. Development of *new technologies* helped too. The improvements in media recording, for exemple, CDs, DVDs (both used as instruments to spread pirate copies of softwares) and "mod chips" (device that is installed into video games consoles in order to allow it to play pirated games), and the extremely low cost of duplicating a software program (the price of the disk is usually just one dollar, or even less) are also factors. And, of course, the *high prices of original software*.

In Brazil, due to the social problems caused by poverty and unemployment a singular kind of "odd job" was developed: the "*camelôs*" (type of street vendors). They sell almost everything on the streets: batteries, CD, clothes, books, software, shoes, mobile phone equipment, etc. Although not all of the *camelôs* sell pirate products, once some of them manufacture their own goods, there are others who do, thus making it very easy for the regular citizen to acquire low priced pirate products, and making it more difficult for the government authorities to control piracy. They have helped the spread of piracy because they are a cheap and efficient merchandise distribution channel.

In order to understand how those factors mentioned above helped the development of piracy, we will list some of the ways we found of pirating this industry. But please keep in mind that since pirates are very creative in finding their way around the law, there may be new ways coming up that we have not been aware of yet. The first type is of course counterfeiting softwares, making illegal copies that look very similar to the original ones, and selling them in the pirate market. But that is not the only one.

Another common practice is to buy a legal product and make additional copies of the software for internal usage without authorization. This is what the software industry calls "organizational end-user piracy". This is a practice done by companies (large or small) or even Government agencies that purchase one licensed copy of software and then install the program on multiple computers violating the license terms. Together with this practice comes other ones, as for instance, to take advantage of upgrade offers without having a legal copy of

⁴⁵ "Piracy, the tip of the iceberg" – Carlos Vasconcellos.

⁴⁶ CPI report – pg 149.

the version to be upgraded, or having more employees access or use a central copy of a program than the agreed quantity established in the license at the same time. Although “end-user pirates do not generally make copies for resale or commercial distribution, they nonetheless receive an unfair commercial advantage because the money that they save on legitimate software licenses reduces their operating costs and increases the profitability of their enterprise”⁴⁷.

CD-ROMs compilation, this is, somebody records a CD containing a large selection of software programs, although each program has been published by a different software company, and sells it for a price lower than the price of the legitimate softwares, giving an idea of a “promotional product”.

The internet, because of its velocity in information exchange, its unique anonymous character and the fact that it is not limited by geographic borders, is a very effective way of advertising pirated products, as well as accelerating the access of pirate manufacturers and replicators to the latest releases of the software industry. Also, besides transmission and downloading of pirated softwares, it is possible to get codes or any other technology used as copy-protection security feature through internet.

Another common illegal practice we can find related to software piracy is the large quantity of computers sold with already installed pirated software. For obvious reasons controlling this matter is a very hard task, which makes this practice very profitable. Normally this is considered a “bonus” for the computer buyer, who is not always aware that the programs that had previously been installed in his computer are pirated. Of course there are softwares, like the GNU/Linux or the FreeBSD, that the buyer can have installed in his PC for free, but usually this is not explained to consumers because stores want to make more money by selling softwares too.

According to the First Annual BSA and IDC Global Software Piracy Study “an economic impact study concluded that reducing the piracy rate by 10% over four years would add more than one million new jobs and US\$ 400 billion in economic growth worldwide”. The study also presented Brazil in the 11th position in the ranking of countries that had software piracy losses showing the amount of US\$ 519 million. The first position was held by the United States with a US\$ 6,496 million loss.

These “losses” were calculated based on the value of pirate software, that is, they “were calculated using the known size of the legitimate software market in a country or region and using the piracy rate to derive the retail value of the software that was not paid for”⁴⁸. And here in our opinion, is where things should be looked at more attentively.

We do not disagree that piracy causes a great loss in revenue for the software industry, but we do have some restrictions in relation to the calculation of the amount of loss presented by this Study. And the reason is because we share the opinion of Prof. Pedro Antonio Dourado de Rezende⁴⁹ that those amounts can not be considered LOSSES for the software industry since they are in reality just *gain expectations*.

⁴⁷ Testimony of Robert Holleyman before the Senate Committee on Foreign Relations, June 9th, 2004.

⁴⁸ First Annual BSA and IDC Global Software Piracy Study

⁴⁹ “The other face of piracy”.

In our opinion it is not correct to calculate revenue losses based on the piracy rate because we can not guarantee that people would buy the original software if there were no pirate softwares available. It is very likely that most pirate software consumers will not be able to afford original softwares, so they would either choose to acquire free software (instead of the paid ones) or not to buy anything at all. So, we think that the figures presented in these studies as revenue losses do not mirror the reality.

5.3 – Music and the movie industry

One of the industries most affected by piracy is certainly the music recording, a world market that circulates annually the amount of US\$ 32 billion, more than one third of which is accounted by the United States recording industry⁵⁰. One of the things that has mostly contributed for the increase in the piracy of music is the development of digital recordings, once now pirates can reproduce near perfect copies of any recording, and in a very short time.

There are basically four types of piracy related to music: the first one is, of course, *counterfeiting* the original CD, another one is to make *unauthorized compilation* of songs from several different artists who will not receive anything from their work. The third type is called *'bootlegs'*, and it is to record live shows and concerts without permission and then “produce” and sell the CDs. The last type is the *internet piracy*, where the song file is zipped and transmitted to anyone without any copyright payment.

Mitch Bainwol, Chairman and CEO of the Recording Industry Association of America – RIAA, in his testimony before the United States Senate Foreign Relations Committee explaining the concerns of this industry with the piracy problem has informed that world wide pirate sales approach 2 billion units annually, worth an estimated US\$ 4 to 5 billion. He has also pointed out that the International Intellectual Property Alliance, a copyright-based umbrella organization of which RIAA is a member, identified major piracy problems in 56 countries. The table below shows the figures that has been presented for 2003 for some of these countries:

COUNTRY	PIRACY RATE	RECORD INDUSTRY LOSS
Russia	64%	US\$ 405 million
Mexico	61%	US\$ 360 million
Brazil	52%	US\$ 340 million
China	90%	US\$ 286 million
Paraguay	99%	US\$ 150 million
Ukraine	75%	US\$ 125 million
Pakistan	100%	US\$ 70 million
Taiwan	40%	US\$ 58 million

In respect to these losses we would have to bring back the same point of view expressed in item 5.2, which is the idea that these are *gain expectations*, not necessarily losses. A pirate CD costs around R\$ 5.00 (less than US\$ 2.00). Pirate CD consumers are usually low income people who makes US\$ 100.00 a month (sometimes even less than that!) and probably will choose not to buy an original CD that costs 4 or 5 times more than the pirate CD.

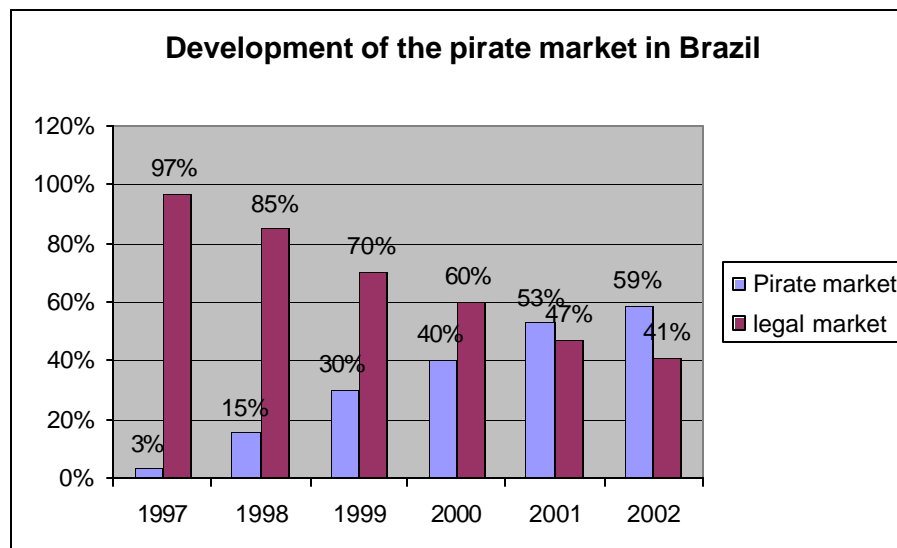
⁵⁰ Source: Testimony of Mitch Bainwol before the U S. Senate Foreign Relations Committee.

Therefore, it is rather likely that part of this “profit” produced by piracy would not have been produced at all if piracy did not exist.

Since we have a special interest in the Brazilian situation, we will present a more detailed picture of the piracy problem in this country. According to the Parliamentary Inquiry Commission Report, music piracy in Brazil was estimated to be around 3% in 1997. In 2003 the estimative was 52%. Needless to say this has become a very serious problem not only for the music industry in Brazil, but also for the Brazilian economy as a whole.

This piracy rate is calculated based on the average of seizures accomplished by government agencies and the output capacity of the illegal factories that have been shut down by the authorities. And it is considered to be very close to reality.

The following graph shows the development of piracy from 1997 to 2002 in terms of percentage of the market share taken.



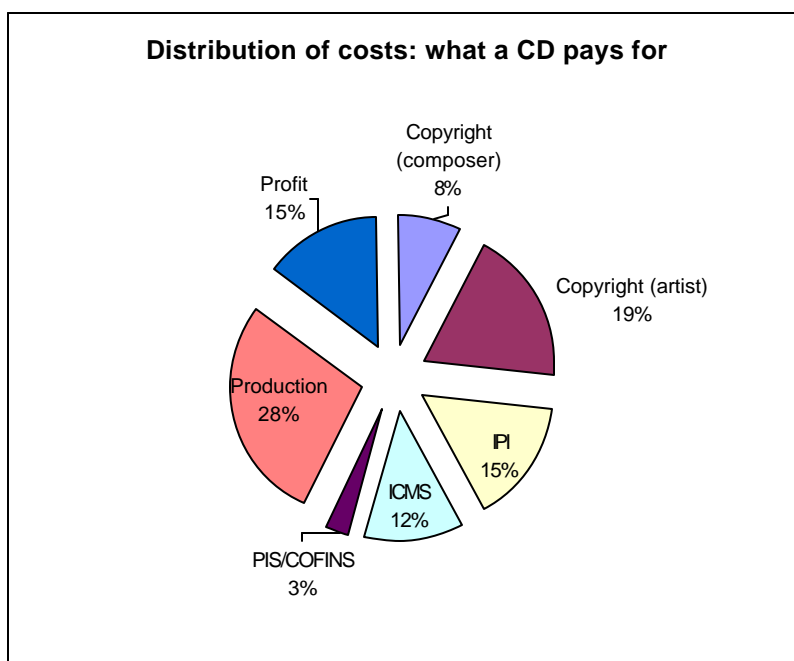
In the last 5 years there has been a fall of 30% in the number of new releases and an estimated loss in tax revenue of R\$ 500 million (about US\$ 186 million) caused by piracy. There has been a shrinkage of 60,000 formal jobs in the music industry, and comparing the volume of sales in the period of January to May, 2002 with the period of January to May, 2003 we will find that there has been a fall of 26%⁵¹ in sales.

A survey conducted by the Franceschini Institute of Market Research concluded that 59% of the music sales in the Brazilian market is done by pirates, which in terms of numbers means 115 millions of pirate CDs sold annually and R\$ 800 million (around US\$ 290 million) circulating in the pirate market⁵².

⁵¹ Source: CPI report pg 115.

⁵² Source: CPI report pg 114.

But where does the money made with a CD go? What is the distribution of costs involved in the production of a CD? According to the *Associação Protetora dos Direitos Intelectuais Fonográficos - APDIF*⁵³ this is how the money is divided⁵⁴:



Most part, 30%, goes towards tax payments, 28% to production costs, 27% to intellectual property rights and 15% to profit.

A very interesting piece of information was given by Paulo Rosa, director of the ABPD - Brazilian Association of Music Producers – who stated that 76% of CD sales in the Brazilian market are of Brazilian music, while only 24% of the market belongs to foreign music⁵⁵. This means that piracy in Brazil causes more damage to Brazilian artists than to foreign ones, because the greater the piracy the less investment there will be in Brazilian music and in the search of new artists. Foreign artists will still be able to find investors in their home country.

According to Aloysio Reis (from EMI/Virgin)⁵⁶ “for every 10 titles released only 1 will succeed. Those 9 unsuccessful titles are considered the greatest cost in the recording industry, and it is a cost that pirates do not have”. So, when profits shrink, investments in that field shrink too and everybody loses: artists, recording studios, music stores, factories, and most of all national culture.

The **movie industry** is having a hard time with piracy as well, and most of what has been said about music piracy suits movie piracy. If we compare music and movie industries, we will find that they present basically the same causes and consequences for piracy. Both are entertainment industries, whose products can be downloaded from the

⁵³ Phonographic Intellectual Rights Protection Association

⁵⁴ Source: Mayla Yara Porto: Multimedia, musical piracy and copyright”.

⁵⁵ Source: CPI report pg 114.

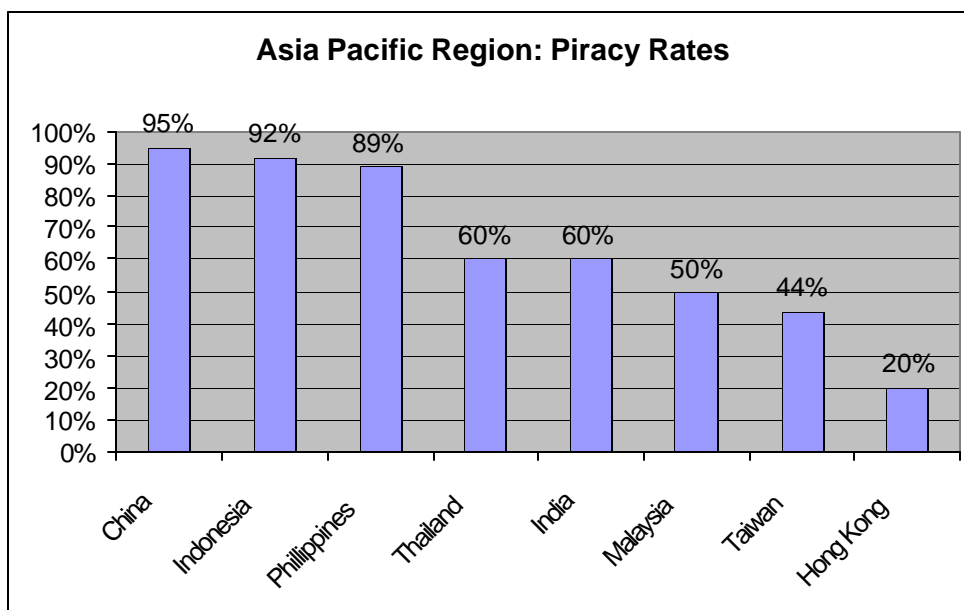
⁵⁶ Interview given to Pedro Alexandre Sanches in 07/25/2001 - Folha on line.

Internet and enjoyed in any personal computer. The process of counterfeiting a CD is very close to the process of counterfeiting a DVD. The price of a pirate DVD is much cheaper than the original one, and in both cases the development of new technologies has helped increase piracy rates.

According to Jack Valenti, President and CEO of Motion Picture Association of America, “stolen films, usually captured by sophisticated camcorders in theaters, or in special preview screenings, are uploaded to the Internet and are available for individuals to download in any country around the world”⁵⁷.

The worries seen in the United States are also found on the other side of the Atlantic. According to a BBC News (UK edition) article⁵⁸, “the UK has one of the highest levels of film piracy in western Europe, with a DVD black market estimated to have a value of up to £500m”. The article has also informed that “the Federation Against Copyright Theft (FACT) seized **3 million** pirate film DVDs” in 2004, which represents only **5% of the estimated number** of DVDs in circulation, and that “the main sources of imported pirate film DVDs in the UK are Pakistan, Malaysia and China, while Russia has a thriving counterfeit market”.

Considering the statistics presented by Mr. Jack Valenti in his already mentioned testimony, in the case of movie piracy, China is the country that has presented the highest piracy rate in 2003, 95%, followed by Russia and Indonesia, which have presented a high rate for 2003, 92%. The graph below shows the piracy rates for the Asia Pacific Region.



In Brazil, considered to be the most important South American market by the Motion Picture Association of America, movie piracy represents 35% of the market, causing a loss of more than R\$ 370 million (around US\$ 137 million) and R\$ 100 million (around US\$ 37 million) in tax evasion⁵⁹. These numbers, together with the statistics presented in the other

⁵⁷ Testimony before the US Senate Committee on Foreign Relations.

⁵⁸ “Crackdown urged on film piracy” December 13th, 2004 – <http://news.bbc.co.uk/1/hi/entertainment/film/4085353.stm>.

⁵⁹ Source: CPI report pg 132.

two items of this chapter, give us a pretty good estimated picture of the losses Brazil is facing due to piracy, and the necessity and importance of the support by the developed countries in this battle against piracy acts.

VI – CONCLUSION

From everything that has been exposed so far, we must agree with Mr. Holleyman's statement⁶⁰ that "there is no silver bullet technological solution that will solve the problem of piracy". The problem is so complex and so closed linked to other serious problems, such as unemployment, poverty, organized crime, informal economy, tax evasion, necessity to better train and equip the personnel who is going to fight piracy, among others, that a simple single solution is just not possible. It would be necessary to adopt a set of measures facing many of those problems and try to solve them simultaneously, this way, by attacking in several flanks, it would weaken the pirate business.

Piracy causes losses not only to *private companies*, that have their products pirated, and to *consumers* who get products of inferior quality that in many cases can cause serious problems to their health or even put their life in danger, but also to *the State*. And State losses are greater than the others because besides the economical cost (decrease in the tax sales revenue together with a high rate of tax evasion), there is a social cost (increase in unemployment rate, decrease in the number of formal jobs, overload of the social security system, increase in violence rates, etc).

The piracy problem has become a source of pressure for the American government onto other countries. The American trade law allows the American government to impose economical restrictions on nations that do not protect intellectual property (or that do not protect it the way they think it is acceptable). Therefore, representants of some American industries have gone to the United States Senate Committee on Foreign Relations to complain about countries where piracy is a serious problem and ask the senate that, "in case of failure to show substantial progress on the decreasing of pirate rates, there should be an immediate suspension of this country's preferential duty-free "GSP" benefits on their products imported into the United States".

Imposing these kind of economical restrictions to countries, in our point of view, **is not a solution** for the piracy problem nor it is a fair measure, because by doing so, in reality it is the formal sector of the country's economy (the formal economy) that will be suffering the "punishment", once they are the ones who export legally to the USA. For the pirate businessmen there would be no change at all since they are not worried about the cost of tariffs or any other duty on *their* products.

Thus, these measures will not help to solve the piracy problem. They might only create an even more prosperous field for the increase of piracy rates, since the economical restrictions can worsen economical problems for the "punished" country, making it poorer and having to deal with more serious and urgent social issues.

⁶⁰ Testimony of Robert Holleyman before the Senate Committee on Foreign Relations, June 9th, 2004.

If we understand that the increase in piracy rates affects the society as a whole, this is to say, **everybody loses**, we can come to the conclusion that fighting piracy is not an individual job (of one specific person, industry or country), but a job for the whole society.

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