

"An investigation of the relationship between counterfeiting and culture: evidence from the

European Union"

José Cadima Ribeiro José Freitas Santos

NIPE^{*} WP 4 / 2006

URL: http://www.eeg.uminho.pt/economia/nipe/documentostrabalho.php

^{*} NIPE – Núcleo de Investigação em Políticas Económicas – is supported by the Portuguese Foundation for Science and Technology through the *Programa Operacional Ciência, Teconologia e Inovação* (POCTI) of the *Quadro Comunitário de Apoio III*, which is financed by FEDER and Portuguese funds.

EURAM 2006 Conference

Oslo, Norway

May 17 - 19, 2006

An investigation of the relationship between counterfeiting and culture: evidence from the European Union

J. Freitas Santos

ISCAP/IPP e NIPE/EEG/UM Rua Jaime Lopes de Amorim Portugal – 4465 S. Mamede de Infesta Tel: + 351 229050000 Fax: + 351 229025899 E-mail: jfsantos@iscap.ipp.pt

J. Cadima Ribeiro

Escola de Economia e Gestão e NIPE Universidade do Minho Campus de Gualtar Portugal – 4710 – 057 Braga Tel: + 351 253604511 Fax: + 351 253676375 E-mail: jcadima@eeg.uminho.pt

Abstract

International counterfeiting affects adversely producers, consumers and domestic economies. Some attempts have been made in the last years by international organisations (European Union, World Trade Organisation) to deal with this complex problem. Though some success has been achieved, the number of seizures of counterfeited goods detected in the external borders of EU has increased. This study examines the impact of Hofstede's cultural variables (power distance, individualism, masculinity, uncertainty avoidance) on the level of counterfeiting in European countries.

Keywords: Counterfeiting; Cultural Constraints; European Union.

I. Introduction

In the last years counterfeiting and piracy have grown considerably to a point where they have now become a widespread phenomenon with a global impact. The phenomenon has gone hand in hand with the steady growth of international trade, the internationalisation of the economy, the expansion of the communication infrastructures and the collapse of the political systems in central and eastern Europe and in the former Soviet Union [CEC, 1998]. Also Asian region, particularly China, represents the source of more than 60% of the fakes stopped by Customs in Europe, as stated by European Commissioner in charge of taxation and customs union.

According to the Counterfeiting Intelligence Bureau (CIB), set up by the International Chamber of Commerce (ICC), the increase of value of counterfeiting as a percentage of world trade rose massively from about 3,6% in 1990 to 5,6% in 1995. European companies have lost between 400 and 800 million Euros within the Union, but 2000 million Euros outside it [CEC, 1999]. The extent of the losses and the geographic spread of the phenomenon have become a focal point of international discussion (World Trade Organisation - WTO, European Union - EU), government action (USA) and corporate responses [Green and Smith, 2002]. Due to its scale, counterfeiting and piracy have a damaging effect not only on businesses, national economies and consumers, but also on society as a whole.

Scholars in international business have dealt with counterfeiting by investigating anti-counterfeiting strategies [Chaudhry and Walsh, 1996; Green and Smith, 2002], examining common counterfeiting methods [Harvey and Ronkainen, 1985], researching bribery and corruption [Tanzi, 1998; Habib and Zurawicki, 2002; Sanyal and Samanta, 2004] and evaluating the economic consequences of

international product counterfeiting [Globerman, 1988]. However, studies which focus primarily on the causes or factors that promote counterfeiting are scanty and are all related with intellectual property rights protection [Ronkainen and Cusumano, 2001; Bender, 2002; Andrés, 2002; Javorcik, 2002, Aryanto, 2003].

There are two empirical facts that motivate this paper. First, the increased seizures of counterfeited goods in the external border of EU, and the increasingly international concern about the problem. Second, the volatility of the seizures by EU member countries, suggesting that some host countries are more vulnerable to counterfeiters than others.

This paper adopts a dual approach in assessing the impact of counterfeiting on EU. First, some data on seizures in the EU countries are analyzed in order to approach the size and evolution of the phenomenon. Then, we search for the impact of four cultural variables on the level of counterfeiting detected in European countries to understand why some countries are more vulnerable than others.

The essential legal framework background and definition of counterfeiting are presented in section 1. Section 2 defines the nature and extent of the counterfeiting phenomenon in the EU member states. Section 3 presents a literature review on the linkages between the Hofstede's cultural variables (power distance, individualism, masculinity, incertainty avoidance) and counterfeiting. Study methodology is detailed in section 4, and the results of descriptive statistics are presented in section 5. Finally the paper concludes with recommendations for the development of culturally sensitive public policies that will be effective in the fight against counterfeiting.

II. Defining counterfeiting

The work of the World Intellectual Property Organisation (WIPO) and the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPs) of the World Trade Organisation (WTO) provide the legal framework for the enforcement of intellectual property rights and the limiting of trade of counterfeited goods. According to the TRIPs agreement, the owner of a registered trademark has the exclusive right to prevent all third parties from using an identical or similar mark without the owner's consent, if this use would create a likelihood of confusion (article 15).

In the European Union, Regulation (EC) n. 3295/94 states that counterfeited goods are those bearing a trademark that is identical to, or indistinguishable from, a trademark registered to another party and infringes the rights of the holder of the trademark. Pirated goods are copies that were made without the consent of the holder of the copyright or related rights.

According to the Green Paper [CEC, 1998], the concepts of counterfeiting and piracy cover all products, processes and services which are the subject-matter or result of an infrigement of an intellectual property right (trade mark or trade name, industrial design or model, patent, utility model and geographical indication), of a copyright or neighbouring right (the rights of performing artists, the rights of producers of sound recordings, the rights of the producers of the first fixations of films, the rights of broadcasting organisations), or of the "sui generis" right of the maker of a data base. This wide scope definition allows to cover not only the case of products which are copied fraudulently (fakes), but also the case of products which are identical to the original ones but which are made without the rightholder's consent. Piracy in the services sphere covers mainly broadcast services and services linked to the development of the information society. The definition does not cover look-alike products (duplication of the original product and bearing different names, but not a private label of a branded industrial product), reproductions that are not exact copies or unconvincing imitations.

The absence of a uniform international definition of counterfeiting and piracy raise problems in delimitating the boundaries of legal and illegal pratices. On the side of intellectual property right-holders, the incentive is to extend the boundaries to include pratices that some observers would deem legitimate manifestations of competition. The international organisations (WTO, EU) role is to maintain the legal infrastructure surrounding intellectual property, but it should not create incentives for anti-competitive or other rent-seeking behaviours beyond those already inherent to the acquisition of an exclusive property right [Globerman, 1988; OCDE, 1998].

As there is no generally agreed clear demarcation between piracy and counterfeiting, this paper will refer to all cases as counterfeiting, as collected by the services of European Comission.

III. Patterns of counterfeiting in the external border of European Union (2002/2004)

The statistics of seizures between 2002 and 2004 show that the amount of counterfeited and pirated articles seized at the EU's external borders is continuing to increase in all countries. During this period, 39 595 cases were reported by the Customs Authorities of the 15 European Union countries. The largest numbers come from Germany (11 980 cases), France (5 739 cases) and United Kingdom (5 677 cases). There was significant increases between 2002 and 2004 in Italy (+658%), Austria (+756%), Netherlands (230%), France (200%) and Spain (190%). Smaller

countries like Portugal, Greece and Luxembourg reported also the smalest number of cases (Table 1).

| Countries | 2002 | | 20 | 03 | 2004 | |
|--------------------|------|-------|-------|-------|-------|-------|
| | Ν | % | Ν | % | Ν | % |
| France | 1083 | 14,3 | 1410 | 13,2 | 3246 | 15,2 |
| Luxembourg | 55 | 0,8 | 71 | 0,6 | 193 | 0,9 |
| Denmark | 212 | 2,8 | 515 | 4,8 | 544 | 2,6 |
| Belgium | 396 | 5,2 | 830 | 7,8 | 929 | 4,4 |
| United Kingdom | 1125 | 14,9 | 2017 | 18,8 | 2535 | 11,9 |
| Italy | 157 | 2,1 | 297 | 2,8 | 1190 | 5,6 |
| Netherlands | 544 | 7,2 | 905 | 8,5 | 1794 | 8,4 |
| Spain | 439 | 5,8 | 761 | 7,1 | 1274 | 6,0 |
| Austria | 155 | 2,1 | 331 | 3,1 | 1327 | 6,2 |
| Finland | 182 | 2,4 | 170 | 1,6 | 135 | 0,6 |
| Ireland | 292 | 3,9 | 347 | 3,3 | 675 | 3,2 |
| Sweden | 253 | 3,3 | 396 | 3,7 | 540 | 2,5 |
| Portugal | 48 | 0,6 | 63 | 0,5 | 73 | 0,3 |
| Germany | 2583 | 34,2 | 2587 | 24,2 | 6810 | 31,9 |
| Greece | 29 | 0,4 | 9 | 0,0 | 68 | 0,3 |
| Total | 7553 | 100,0 | 10709 | 100,0 | 21333 | 100,0 |
| Source: TAXUD 2006 | | | | | | |

Table 1. Number of cases registered in the external border of EU, by country (2002/2004)

Source: TAXUD, 2006.

The type of products confiscated by the customs officials (Table 2) included clothing and accessories (63% of cases in 2004), media (18,4% in 2002) and watches and jewellery (10% in 2004). In the period, only the number of seizures in clothing and accessories (+218%), media (+100%) and toys and games (+98%) faced a significant increase. These counterfeited products threaten the health and safety of EU consumers, their jobs, community competitiveness, trade and investment in research and innovation.

Table 2. Number of cases registered on the external border of EU, by product type (2002/2004)

| Product type | 2002 | | 20 | 03 | 2004 (a) | |
|---------------------------|------|-------|-------|-------|----------|-------|
| | Ν | % | Ν | % | Ν | % |
| Foodstuffs, alcoholic and | 13 | 0,2 | 17 | 0,2 | 53 | 0,0 |
| other drinks | | | | | | |
| Perfumes and cosmetics | 37 | 0,4 | 116 | 1,1 | 214 | 1,0 |
| Clothing and accessories | 4380 | 58,0 | 5891 | 55,0 | 13928 | 63,0 |
| Electrical Equipment | 283 | 3,7 | 200 | 1,9 | 829 | 4,0 |
| Computer equipment | 22 | 0,3 | 43 | 0,4 | 122 | 1,0 |
| CD (audio, software, | 1388 | 18,4 | 1898 | 17,7 | 2785 | 12,0 |
| etc.), DVD | | | | | | |
| Watches and jewellery | 572 | 7,6 | 1098 | 10,3 | 2201 | 10,0 |
| Toys and games | 261 | 3,5 | 497 | 4,6 | 517 | 2,0 |
| Cigarettes | - | - | 130 | 1,2 | 316 | 1,0 |
| Other goods | 597 | 7,9 | 820 | 7,7 | 1346 | 6,0 |
| Total | 7553 | 100,0 | 10709 | 100,0 | 22311 | 100,0 |

Source: TAXUD, 2006.(a) EU25.

Table 3 lists the three most counterfeited brands, by product. The image of counterfeited merchandise in the external borders of the EU member countries tended to center on Boss, Calvin Klein and Armani perfumes, Nike and Adidas sportswear, Ralph Lauren polo shirts, Nokia cellular phones, Rolex watches and Nintendo games. The well-known brands Sony, Intel and Hewlett-Packard were ranked in the first place during this period on items related with computer equipment. IFPI (The International Federation of the Phonographic Industry), who represents the majority of record producers worldwide, and MPA (Motion Picture Association), similar organisation to the movie industry, reported an increased number of pirated CD's and DVD's.

| Product type | 2002 | | 2003 | | | 2004 | | | |
|--|----------------|-----------------|-----------------|------------------|-----------------|----------------|------------------|--------------------------|------------------|
| | 1° | 2° | 3° | 1° | 2° | 3° | 1° | 2° | 3° |
| Foodstuffs, alcoholic and other drinks | Charl- es | Disney | Grant's | Disney | Aust. Apples | Konar Lebe | Lipton | Spirits Prod Inter | Coca Cola |
| Perfumes and cosmetics | Boss | Calvin Klein | Gucci | Boss | Armani | Vuitton | Beier- sdorf | P&G | L'Oréal |
| Clothing and accessories | Nike | Adidas | Ralph Lauren | Vuitton | Nike | Bur- berrys | Vuitton | Nike | Adidas |
| Electrical Equipment | Nokia | Philips | Pana- sonic | Nokia | Philips | Sony | Philips | Nokia | Osram |
| Computer equipment | Sony | Epson | Philips | Intel | Philips | Epson | HP | Sam- sung | Sisvel |
| CD (audio, software, etc.), DVD | MPA | IFPI | Nin- tendo | MPA | IFPI | Philips | Philips | FACT | Philip Morris |
| Watches and jewellery | Rolex | Brei- tling | Gucci | Rolex | Brei- tling | Cartier | Rolex | Adidas | Gucci |
| Toys and games | Taiwan Moto | Nin- tendo | Disney | Nin- tendo | Hasbro | Disney | Kona- mi | Upper Desck | Disney |
| Cigarettes | - | - | - | Philip Morris | Reem- tsma | lmp. Tob. | Philip Morris | lmp. Tob. | Galla- her |
| Other goods | Nokia | Pfizer | Disney | Nokia | Pfizer | Disney | Dura- cell | Bic | Pfizer |

Table 3. Three most counterfeited brands (number of cases), by product type (2002/2004)

Table 4 shows the three most important countries of origin of the goods seized by the customs authorities of the European Union. The vast majority of counterfeited products arrived from China (toys and games), Thailand (clothing and accessories) and Hong Kong (computer equipment). Turkey and United Arab Emirates (perfumes and cosmetics) were very common sources too. European countries like Poland, Ukraine and Russia were also involved in the production of counterfeited goods.

Table 4. Three most counterfeiters countries (number of cases), by product type (2002/2004)

Source: TAXUD, 2006.

| Product type | 2002 | | 2003 | | | 2004 | | | |
|--|---------------|---------------|--------------|---------------|---------------|---------------|--------|---------------|------------------------|
| | 1° | 2° | 3° | 1° | 2° | 3° | 1° | 2° | 3° |
| Foodstuffs, alcoholic and other drinks | Thai- land | China | Turkey | Turkey | Poland | Chile | Russia | Ukrai- ne | Domi- nican Rep. |
| Perfumes and cosmetics | Turkey | Spain | China | UAE | Turkey | Thai- land | UAE | Turkey | USA |
| Clothing and accessories | Thai- Iand | Turkey | China | Thai- land | China | Turkey | China | Thai- land | Turkey |
| Electrical Equipment | China | Hong Kong | Turkey | China | Hong Kong | Taiwan | China | Hong Kong | UAE |
| Computer equipment | Hong Kong | Taiwan | China | China | Hong Kong | UAE | China | Hong Kong | Russia |
| CD (audio, software, etc.), DVD | Thai- land | Malay- sia | Bel- gium | Thai- Iand | Malay- sia | Pakis- tan | China | Thai- land | Malay- sia |
| Watches and jewellery | Thai- Iand | Hong Kong | China | Thai- Iand | China | Hong Kong | China | Hong Kong | Thai- Iand |
| Toys and games | China | Thai- land | Hong Kong | China | Thai- land | Hong Kong | China | India | Hong Kong |
| Cigarettes | - | - | - | Poland | China | Russia | Poland | China | Ukrain e |
| Other goods | China | USA | Hong Kong | China | Hong Kong | India | China | India | Hong Kong |

Source: TAXUD, 2005. Notes: UAE - United Arab Emirates.

IV. Culture and counterfeiting

Lacking prior empirical evidence on the linkage between counterfeiting and culture, we propose that the presence of counterfeiting in a host country is not culture free. Culture "is a system that enables individuals and groups to deal with each other and the outside world" [Mole, 2003, p.8]. Lewis [1999, p.2] argues that "people of different cultures share basic concepts but view them from different angles and perspectives, leading them to behave in a manner which we may consider irrational or even in contradiction of what we hold sacred". One useful paradigm to study the impact of national culture on individual behaviour is Hoftede's model. Hofstede [1991]

defined culture at national level in terms of four dimensions: large versus small power distance, individualism versus collectivism, masculinity versus femininity, and strong versus weak uncertainty avoidance. A fifth dimension was developed [Hofstede and Bond, 1988], confucian dynamism, which deals with time perceptions (long term versus short term orientation). However, this variable was not included in our study due to a lack of data for all European countries.

4.1. Counterfeiting and Hofstede's power distance

Power distance refers to "the extent to which the less powerful members of institutions and organizations within a country expect and accept that power is distributed unequally" [Hofstede, 1991]. People who possess large power distance values are accepting of gaps in power and believe that there is an order of inequality in the world and that everybody has a predetermined place. Small power distance people are unaccepting of inequality and believe that power should be distributed evenly.

Power distance is the cultural dimension most related to the perception of corruption [Husted, 1999] and thus may be particularly useful for understanding whether or not counterfeiting will be accepted by enforcement authorities and national governments. In large power distance societies conspicuous consumption and flaunting of wealth are tolerated. Status symbols such as counterfeited prestige brands, are demanded by consumers to show the world that they hold power. Due to a lack of previous empirical studies we would expect that the higher the level of power distance in a country, the higher the incidence of counterfeiting.

4.2. Counterfeiting and Hofstede's individualism

According to Hofstede [1991] individualism describes the relationship between the individual and the collectivity which prevails in a given society. It is reflected in the way people live together – for example, in nuclear families, or tribes; and it has all kinds of value implications. In highly individualistic societies, individuals look after themselves and their immediate families. In highly collectivistic societies, people are strongly integrated into cohesive in-groups. Although empirical evidence did not allow us to infer from these cultural dimensions to counterfeiting, we might predict certain things about societies that are at the extremes of these two dimensions.

We would expect counterfeiters to flourish in individualistic societies. Greater product variety and consumption with the purpose of differentiating the purchaser from others are also predictable. In collectivist societies, we would predict that consumers would use product to convey the status of group membership. Brand names are likely to be dominant in collectivist cultures. Due to a lack of previous empirical studies we would expect that the more collectivistic (less individualistic) a society, the higher the level of counterfeiting in a country.

4.3. Counterfeiting and Hofstede's masculinity

Masculinity, with its inverse femininity, looks at how distinctly roles in society are defined. It is focused on material success as opposed to concern with the quality of life [Hofstede, 1991]. Societies with a masculine orientation focus on assertiveness, domination, and high performance. In this orientation, greater importance is placed on material things. Big and fast are considered beautiful and independence is the ideal. In feminine societies, greater importance is placed on relationships and quality of life. Small and slow are considered beautiful and interdependence is the ideal. Due to a lack of previous empirical studies we would expect that the importance of material success (masculinity) would, in some cases, lead to a greater willingness to purchase counterfeited goods and consequently to higher level of counterfeiting in a country.

4.4. Counterfeiting and Hofstede's uncertainty avoidance

Uncertainty avoidance is defined as the extent to which members of a society feel threatened by uncertainty or unknown situations (Hofstede, 1991). People who score high along this dimension try to avoid ambiguous situations by establishing more rules and policies. Strong uncertainty avoidance societies are more tolerant of unfairness and tend to believe in absolute truths. Weak uncertainty avoidance societies tend to be less affected by ambiguity and less tolerant of inequality and rules. In high uncertainty avoidance countries products are purchased to maintain affiliation to the group and innovations are seen as coming from powerful and wealthy people. Due to a lack of previous empirical studies we would expect that the greater the level of uncertainty avoidance in a country, the higher the incidence of counterfeiting in a country.

V. Methodology

The European Commision collects data on all counterfeited goods confiscated in the external borders of EU. For every case, the EU customs services record the country of origin, type of product and brand, among other characteristics of the seizure. Given the illegal nature of counterfeiting, these cases represent only a fraction of fraudulent goods entering EU marketplace each year. So, the number of cases detected may say more about the efficiency and competency of the EU customs authorities than about the level of counterfeiting. However, ambiguity arises when there is no agreement about the factors that should be taken into account when calculating the scale of counterfeiting [Green and Smith, 2002]. As the resolution of these issues are rather dificult and beyond the objectives of this paper, we take the data from the European Comission in order to achieve a measure of counterfeiting, that is, the number of cases of counterfeited goods detected in the external borders of the EU countries.

We have collected data from the 15 countries of EU in the years 2001, 2002, 2003 and 2004. The result is a database with 60 observations. Variable *CTF* (Counterfeiting) is the value of imports (in US dollars) in each EU country [LNO, 2005], divided by the number of cases detected in the external border of that EU country [TAXUD, 2006]. Then, a rank variable was created for *CTF* (Counterfeiting) assigning one point if the item was ranked in the first place, two if it was ranked in the second place and so on.

Table 5 displays the rankings for the period 2001/2004.

| Countries | 2001 | 2002 | 2003 | 2004 |
|-------------|------|------|------|------|
| France | 2 | 7 | 10 | 6 |
| Luxembourg | 6 | 4 | 4 | 4 |
| Denmark | 3 | 5 | 1 | 5 |
| Belgium | 7 | 11 | 7 | 11 |
| United | 8 | 8 | 3 | 8 |
| Kingdom | | | | |
| Italy | 11 | 15 | 14 | 12 |
| Netherlands | 1 | 9 | 9 | 7 |
| Spain | 4 | 10 | 11 | 10 |
| Austria | 9 | 12 | 12 | 2 |
| Finland | 10 | 2 | 8 | 13 |
| Ireland | 14 | 1 | 2 | 3 |
| Sweden | 12 | 6 | 5 | 9 |
| Portugal | 15 | 13 | 13 | 15 |
| Germany | 5 | 3 | 6 | 1 |
| Greece | 13 | 14 | 15 | 14 |

Variables Power Distance (PDI), Individualism (IND), Masculinity (MAS) and Incertainty Avoidance (UNA) are measured according Hofstede (1997) values. Then, rank variables were created assigning: i) one point for high power distance and fourteen points for low power distance; ii) one point for individualism and fourteen points for collectivism; iii) one point for masculinity and fourteen points for femininity; iv) one point for high uncertainty avoidance and fourteen points for low uncertainty avoidance. Luxembourg was excluded due to lack of data on Hofstede's framework.

The countries of EU15 are generally characterized by low levels of power distance when compared to the median of the countries studied by Hofstede. EU15 countries tend to be very individualistic (United Kingdom, Netherland, Italy), while Portugal, Greece and Spain are very collectivistic. Nordic countries (Sweden,

Denmark and Finland) tend to be very feminine, while countries such as Austria, Italy, Ireland, UK and Germany are masculine. There is a great deal of variation among european countries with respect to the uncertainty avoidance dimension.

Table 6 displays the rankings for the Hofstede's cultural dimensions.

| Countries | PDI | IND | MASC | UNA |
|-------------|-----|-----|------|-----|
| France | 1 | 6 | 8 | 4 |
| Luxembourg | - | - | - | - |
| Denmark | 13 | 5 | 12 | 14 |
| Belgium | 2 | 4 | 7 | 3 |
| United | 8 | 1 | 4 | 11 |
| Kingdom | | | | |
| Italy | 6 | 3 | 2 | 6 |
| Netherlands | 7 | 2 | 13 | 10 |
| Spain | 5 | 12 | 9 | 4 |
| Austria | 14 | 11 | 1 | 7 |
| Finland | 10 | 10 | 11 | 9 |
| Ireland | 12 | 8 | 3 | 11 |
| Sweden | 11 | 6 | 14 | 13 |
| Portugal | 3 | 14 | 10 | 2 |
| Germany | 8 | 9 | 4 | 8 |
| Greece | 4 | 13 | 6 | 1 |

Table 6. Rankings of Hofstede's dimensions in EU15

Source: Adapted from Hofstede [1991]

Spearman's correlation coefficients are calculated to measure the degree of

association between rank orders from tables 5 and 6.

VI. Results

Analyzing each of the five correlations (Table 7), it is interesting to note that two of the four cultural variables are negatively associated with high power distance and uncertainty avoidance. Countries characterized by lower levels of power distance tended to have higher incidence of counterfeiting. In poor countries most of the consumers are not willing to pay a considerably higher price for the authentic good if the counterfeit item offers similar qualities. Consumers who purchase these goods subject themselves to social risk because the goods are of high symbolic value and social visibility. However, as long as the counterfeit good is not readily discernible as fake, it fulfills its function as well as the authentic item (Nill and Shultz, 1996).

| | PDI | IND | MASC | UNA | Ν |
|------------|----------|--------|--------|----------|----|
| CTF01 | 0,103 | 0,449 | -0,257 | -0,178 | 14 |
| CTF02 | -0,486 | 0,132 | -0,262 | -0,692** | 14 |
| CTF03 | -0,517 | 0,416 | -0,227 | -0,813** | 14 |
| CTF04 | -0,543* | 0,251 | 0,266 | -0,540** | 14 |
| CTF(01-04) | -0,357** | 0,320* | -0,113 | -0,549** | 56 |

Table 7. Spearman Correlations

(**) Correlation significant at the 0,01 level (2 – tailed)

(*) Correlation significant at the 0,05 level (2 – tailed)

Interestingly countries characterized by lower levels of uncertainty avoidance tended to have higher incidence of counterfeiting. This intolerance for inequality manifests itself in terms of rigidity in the enforcement of intellectual property laws and customs efficiency in the detection of counterfeited goods.

Individualism is positively correlated with counterfeiting, but only for CTF(01-04). Counterfeiting is tolerated in individualistic societies as individualist traits tend to exclusively focus on caring for themselves and their immediate families. We found no support for masculinity relationship with counterfeiting. On the basis of these four year period results, we can tentatively describe a cultural profile of a counterfeiter country as one in which there is low power distance, low uncertainty avoidance, and high individualism.

VII. Recommendations and conclusion

The fight against international counterfeiting is a complex phenomenon that must be pursued on many fronts. The greatest mistake that can be made is to rely on a strategy that depends excessively on actions in a single level (intergovernmental agencies, national governments, nonprofit organizations, coalitions of firms, firms). Any realistic strategy must start with an explicit recognition that counterfeiting is not culture free. This suggests the need for sustained improvements in education and income, as well as for social and economic policies that favour law enforcement.

The role played by intellectual property owners should be analysed at two different levels. First, firms must be enrolled in global mutual cooperation such as the International Trademark Association (INTA), the International Anti-Counterfeiting Coalition (IACC) and the Global Business Leaders' Alliance Against Counterfeiting (GBLAAC), as well as industry specific groups, including the International Federation of the Phonographic Industry (IFPI) and the Business Software Alliance (BSA) to inform governments and politicians in general about the major problems suffered by their members and general populations as a consequence of intellectual property theft. Second, brand owners need to have its own intellectual property protection in place. After that, developing anti-counterfeiting tactics can be a effective way of preventing or reducing trademark counterfeiting. This often includes using key features on the genuine article that are difficult to copy, such as official seals or distinctive detailing. Many brand owners also use the addition of forensic features to products or packaging as a means of authentication. This includes overt features such as holograms, or covert features such as invisible fluorescent inks, taggants, digital water marking, bar coding or tracking.

In conclusion, counterfeiting is a worldwide phenomenon with negative impacts on host economies and firms doing business internationally. Despite the increasing international concerns (EU, WTO), few systematic studies have been undertaken to provide empirical evidence. This paper sheds some light on the impact of Hofstede's cultural dimensions (power distance, individualism, masculinity, uncertainty avoidance) on the attraction of international counterfeiting to European Union member countries. Spearman correlations show that some countries' cultural traits are important to international counterfeiters. A cultural profile of a counterfeiter country is one in which there is low power distance, low uncertainty avoidance, and high individualism.

References

- Andrés, A. (2002) The European software piracy: an empirical application, *mimeo*, University of Southern Denmark.

- Aryanto, V. D. W. (2003) Intellectual property rights theft in far east countries, *Journal of Business Administration*, Vol. 2, n. 2, Fall.

- Bender, C. (2002) Intellectual property rights protection and information technology: evidence from music market panel data, *mimeo*, University of Muenster, Germany.

- Chaudhry, P. E.; Walsh, M. G. (1996) An assessement of the impact of counterfeiting in international markets, *Columbia Journal of World Business*, Vol. XXXI, n. 3, pp. 34-48.

- CEC (COMMISSION OF THE EUROPEAN COMMUNITIES) (1998) Green paper: combating counterfeiting and piracy in the single market, Office for Official Publications of the European Communities, Luxembourg. - CEC (COMMISSION OF THE EUROPEAN COMMUNITIES) (1999) Final report on responses to the European Commission green paper on counterfeiting and piracy, Office for Official Publications of the European Communities, Luxembourg.

- Globerman, S. (1988) Adressing international product piracy, *Journal of International Business Studies*, Vol. 19, n. 3, pp. 497-504.

- Green, R. and Smith, T. (2002) Executive insights: countering brand counterfeiteirs, *Journal of International Marketing*, Vol. 10, n. 4, pp. 89-106.

- Habib, M. and Zurawicki, L. (2002) Corruption and Foreign Direct Investment, *Journal of International Business Studies*, Vol. 33, n. 2, pp. 291-307.

- Harvey, M. G. and Ronkainen, I. A. (1985) International counterfeiters: marketing sucess without the cost and the risk, *Columbia Journal of World Business*, Vol. XX, n. 3, pp. 37-45.

- Hofstede, G. H. (1991) *Cultures and organizations: software of the mind*, McGraw Hill, London.

- Hofstede, G. H. and Bond, M. H. (1988) The confucian connection: from cultural roots to economic growth, *Organizational Dynamics*, Vo0I. 16, n.º 4, pp. 5-21.

- Husted, B. W. (1999) Wealth, culture and corruption, *Journal of International Business Studies*, Vol. 30, n. 2, pp. 339-360.

- Javorcik, B. S. (2002) The composition of foreign direct investment and protection of intellectual property rights: evidence from transition economies, *European Economic Review*, 48, pp. 39-62.

- Lewis, R. D. (1999), *When cultures collide: managing sucessfully across cultures*, Revised Edition, Nicholas Brealey Publishing, London.

- Le Nouvel Observateur (LNO) (2005), Atlas économique et politique mondial 2006.

- Mole, J. (2003), *Mind your manners: managing business cultures in the new global Europe*, Third Edition, Nicholas Brealey Publishing, London.

- Nill, A. and Shultz, C. J. (1996), The scourge of global counterfeiting, *Business Horizons*, November/December, pp. 37-42.

- OCDE (1998) The economic impact of counterfeiting, Organisation de Cooperation et de Développement Economique, Paris.

- Ronkainen, I. and Cusumano, J. (2001) Correlates of intellectual property violations, *Multinational Business Review*, Vol. 9, n. 1, pp. 59-65.

- Sanyal, R. N. and Samanta, S. K. (2004) Determinants of bribery in international business, *Thunderbird International Business Review*, Vol. 46, n. 2, pp. 133-148.

- Tanzi, V. (1998) Corruption around the world: causes, consequences, scope and cures, *IMF Working Paper*, WP/98/63.

- TAXUD (Taxation and Customs Union) (2005) Statistics of counterfeiting, unpublished data, European Comission, Luxembourg.

Most Recent Working Papers

| NIPE WP 4/2006 | Ribeiro, J. Cadima and J. Freitas Santos, "An investigation of the relationship between counterfeiting and culture: evidence from the European Union", 2006. |
|-----------------|---|
| NIPE WP 3/2006 | Cortinhas, Carlos, "Asymmetry of Shocks and Convergence in Selected Asean Countries: A Dynamic Analysis", 2006. |
| NIPE WP 2/2006 | Veiga, Francisco José, "Political Instability and Inflation Volatility", 2006 |
| NIPE WP 1/2006 | Mourão, Paulo Reis, The importance of the regional development on the location of professional soccer teams. The Portuguese case 1970-1999, 2006. |
| NIPE WP 17/2005 | Cardoso, Ana Rute and Miguel Portela, The provision of wage insurance by the firm: evidence from a longitudinal matched employer-employee dataset, 2005. |
| NIPE WP 16/2005 | Ribeiro, J. Cadima and J. Freitas Santos, Dilemas competitivos da empresa nacional: algumas reflexões, 2005. |
| NIPE WP 15/2005 | Ribeiro, J. Cadima and J. Freitas Santos, No trilho de uma nova política regional, 2005. |
| NIPE WP 14/2005 | Alexandre, Fernando, Pedro Bação and Vasco J. Gabriel, On the Stability of the Wealth Effect, 2005. |
| NIPE WP 13/2005 | Coelho, César, Francisco José Veiga and Linda G. Veiga, Political Business Cycles in Local Employment, 2005. |
| NIPE WP 12/2005 | Veiga, Francisco José and Ari Aisen, The Political Economy of Seigniorage, 2005. |
| NIPE WP 11/2005 | Silva, João Cerejeira, Searching, Matching and Education: a Note, 2005. |
| NIPE WP 10/2005 | de Freitas, Miguel Lebre, Portugal-EU Convergence Revisited: Evidence for the Period 1960-2003, 2005. |
| NIPE WP 9/2005 | Sousa, Ricardo M., Consumption, (Dis) Aggregate Wealth and Asset Returns, 2005. |
| NIPE WP 8/2005 | Veiga, Linda Gonçalves and Maria Manuel Pinho, The Political Economy of Portuguese Intergovernmental Grants, 2005. |
| NIPE WP 7/2005 | Cortinhas, Carlos, Intra-Industry Trade and Business Cycles in ASEAN, 2005. |
| NIPE WP 6/2005 | Mourão, Paulo Reis, Que Critérios Redistributivos na Lei das Finanças Locais?, 2005. |