

Cybercrime and Country Risk:

A model of protection for investors and countries.

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Abstract-This paper aims to suggest the application of a new indicator for the risk-dads, to be assessed for the safety of cyberspace in the country.

Keywords: indicator, country risk, cybersecurit.

I. INTRODUCTION

We live in the communication age. The age of a globalized world, with independent territories, however, connected in real time every day. A world strongly articulated by the networks, where information regardless of its shape is one of the most valuable assets held by citizens and organizations today.

In recent years information technology and communication have evolved very quickly. With smartphones, tablets, laptops and the emergence of applications and social networking sites society was flooded with devices that keeps us connected in any local and / or circumstances, making our daily routines and our lives online are blending as never before experienced.

Although there are countless positive aspects of this connectivity is also necessary to consider the risks to which we are subject and which, when found an incidence of attack on the cybersecurity, have legal mechanisms to prosecute criminals who operate in the virtual world.

Investment in information security measures by corporations in educating people in order to correctly use the software that are available and the need to worry that each country with the creation of a legal instrument to deal with incidents cybersecurity measures are essential for us to have a safer Internet.

By understanding what the future will show even more technological ways to accomplish our daily activities, with the aim of informing users of electronic media and encouraging states to make greater investments in digital protection, we propose the inclusion of an electronic security in the calculation of "country risk", calculated by the rating agencies and investment banks and measures the degree of "danger" that represents a country for foreign investors. Among other data, are evaluated mainly aspects such as the fiscal deficit, political turmoil, economic growth and the relationship between revenues and the debt of a country. In this context, we intend to integrate an indicator of electronic security.

II. COUNTRY-RISK

With the globalization that we have today, Brazilians investing in Russia, Japanese in U.S, bonds, with applications in African Americans and so on. The principle followed by these investors is the free movement of capital, can come and go as you please. With the Country Risk these investors try to warn about possible changes in the rules of exit.

Country risk refers to the risk of investing in a country that is measured against pre-established guidelines for three regulatory companies (Moody's, Standard & Poor's and Fitch Ratings). These concepts are responsible for building the classification of the countrys, who will classify them in insurance markets to invest, to a high probability of not paying their debts.

This classification is of most importance, since many companies rely on it to select countries to invest. The changes in the business environment of the country can directly affect organizations, such as financial factors, such as exchange controls, devaluation or regulatory changes or stability factors such as mass riots, civil war and other potential events contribute to the risks of operating companies.

And it is precisely upon these factors that companies build their regulatory indicators. They are separated into: political risk, marketing risk and geographic risk [1].

Political risk refers to the possibility that the government of that country, exercising its sovereign power to take action adverse to investments.

But the concept also includes risks more sporadic and more significant as the risks of expropriation or nationalization of assets, of defaults on contracts to supply products or services, public disorder by government mishandling and even coup, terrorism or civil war.

The market risk refers to the possibility of market factors impacting the values or prices in order to influence investments. That is, when values or financial asset prices, interest rates, currency (or currency) or the basic inputs to production change due to market forces exogenous to the investment concerned, may negatively impact its value [1].

The geographical risk refers to the probability, more remote, geological factors, climatic and geopolitical influence negatively on foreign investment. Natural disasters,

international conflicts and diplomatic tensions, although less frequent, can significantly impact the value of investments when they occur [1].

The country risk as a whole is not amenable to measurement, because the result is composed of different sources and different potential impact. The results of this understanding result in assistance to investors, helping to manage their investments and maximize their returns [1].

The main sources of general information of countries, with emphasis on policy evaluation, economic, and geographic location of each, are the Economist Intelligence Unit, known as EIU), and the CIA World Factbook.

With this information, the notes are formed classification, shown below, with the example of company Standard & Poors.

| Category | Grade | What does it mean |
|-------------------|-------|--|
| Investment grade | AAA | Total capacity to pay debts on time. The highest level |
| | AA | High capacity to meet financial commitments. |
| | A | Good ability to pay debts, but susceptible to changes in circumstances. |
| | BBB | Good financial conditions, but not so protected against breakage. |
| speculative grade | BB | Less vulnerable in the short term, but with uncertainty about the future .. |
| | B | Can you pay your debts, but is vulnerable to changes in economic conditions |
| | CCC | Very vulnerable, dependent on extremely favorable economic conditions to get to honor their debts. |
| | CC | Highly vulnerable. |
| | C | Provavelmente não honrar a dívida |
| | D | Non-payment of obligations within the stipulated period. Delinquency. |

Table Classification – Standard & Poor’s

When an agency considers a country or a company “good payers”, they receive an investment grade rating. It is nothing more than a quality seal, which indicates very low risk of default. Companies or countries, once they receive an investment grade, may continue to climb the rankings. Once reaching the top, they are considered with full capability to repay their debts. The country risk affects directly the level of investments in national economies, making this measure of paramount importance to the country’s growth.

III. PROPOSAL

With the global economy further weakened by the financial crisis started in 2008, ensure the integrity and availability of digital files of businesses and citizens can not be a priority for world leaders, but remains a determinant of strategic vulnerability.

It is common knowledge among experts in information security to justify economically the systemic security remains a major challenge because the decision makers - be they corporate executives or end users - often do not understand the scale of the threat or the requirements for a mitigation of a cyber attack. For people to be aware many times often required a negative experience, so convincing the agents about the reality of the threat and the need for protection against it.

Given that some basic fundamental measures are not yet widely adopted is an urgent need for government incentives to achieve higher levels of electronic security. Some experts categorize cyberspace as having three “legs”: security, ease of use and privacy. Even in a brief analysis of recent scenario of cyber realize with some ease that the focus was directed to the ease of use to the detriment of other needs. While officials continue to seek an operational freedom without limits, we are threatened by a cyber war.

Our intention to include an indicator of cybersecurity in the calculation of country risk is precisely sensitize governments about the urgency in the adoption of measures and policies that require improvements in corporate information security in their environments as failures in this regard can cause operational barriers negotiating countries and attracting investments.

While we know that the assessment of a country’s sovereign rating focuses on the state’s capacity to honor the payment of internal and external public debt, high levels of fraud and / or electronic attacks and the lack of legal provisions provided for in the constitution just having a negative influence on image that is transmitted to foreign investors.

Is explicit in that the holders of global critical infrastructure security are mostly private parties. Even when government entities play a role as protectors of cyberspace, trying to prevent attacks and improve security levels, some IT executives and security are still skeptical about its ability to guard against such threats electronics - although we know that these perceptions vary between different countries.

One of the areas in which the state is seen as capable of generating positive impacts is regulation. Using this tool in order to improve the instruments of cooperation between public and private entities and a network of international cooperation of police will certainly be generated positive results and that may be used in order to maximize efficiency in compliance with international regulatory standards established.

It is essential that such legislation or regulatory measures are well planned before executed. The implementation of measures can shoddy “leveling down” security in several strategic sectors for economic growth worldwide and reverse the positive expectations that arise when the idea of regulating agents.

IV. CONCLUSÃO

The treatment of information security as a strategic component of national economies is justified by the increasing use of the on-line environment in the generation and management of capital. Thus, the relationship between the terms “cyber threat” and “country risk” is not a mere game of words, but further a fundamental condition for daring investors to measure the real security in applying in certain countries .

It is deterrent, however, assign a specific weight to the indicator of cybersecurity within the general indicator (rate)

of a country, since the companies that provide these rates do not open it - what can be justified by the likely complaints the chosen methods could expect. The method of construction of the indicator of cybersecurity is easier to be developed, considering the abundance of agencies and research centers throughout the world dedicated to measuring the volume of online fraud and researching according to scientific parameters.

The predominantly propositional character of this paper shall not exclude the possibility of progress in the discussion of the ideal model for the mentioned object. The importance of developing specialized judicial apparatus, as well as strengthening the so-called extrajudicial system (enforcement power, in the words of economist Douglass North), has always proved to be essential for the maturation of economies. It wouldn't be different when the subject is cyber security, considering the importance of the protection of intellectual and trademark property in this field, common objects in the neo-institutionalist approach [2].

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