

Peer Review for Group 3 on assignment Externalities

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Summary

The paper gives insight into three actors and their options in combating cybercriminal markets. For each of these options an analysis was done what impact these options have on other factors, the externalities, and whether the actor has (good) incentive to execute its option. The three actors that were analysed in this scenario are the Dutch National Police, the abstract entity Law Enforcement in other countries and the forum owners of underground forums. However, in the paper there is no actual analysis of forum owners but instead of the General Intelligence and Security Service (AIVD) of the Netherlands.

Besides that, an analysis was made of a metrics variance and what causes it. The metric analysed was the total sales on underground forums per country. They found that the budget of law enforcement parties hardly influenced the cybercriminal market revenue. Drug usage in a country might have influence. However, there was not enough statistical data to be able to make significant conclusions.

Strengths

- Good analysis of existing countermeasures.
- Good that you mention that your metric needs to be normalized by the number of internet users.
- The performed factor analysis seems to be very thorough despite the limited amount of data points. You look at both the drug use in a country as the national (cyber)crime budget as possible suspects for metric performance variance and try to find significant effects using adequate statistical tests (correlation & linear regression).
- Nice explanation of limitations and future work.

Major issues

- You only discuss existing countermeasures and do not propose your own view on possible countermeasures or come up with new ones.
- Why are there no positive externalities? Your countermeasures result in many positive externalities right?
- In your metric, how did you measure the rate of forum sales posts? Maybe you explained this in the previous assignment, but we have not reviewed that one so we do not know. Please take into account that the Netherlands is very popular for hosting and has one of the largest Internet Exchange Points.

- In 3.2, the budgets you mention do not say anything regarding the part that is reserved for combatting cybercrime. You just take the complete law enforcement budget which does not tell a lot when you compare budgets with other countries.

Minor issues

- Rather many spelling/language errors and use of tenses inconsistent.
- In figure 1 on page 4, the data for november 2011 seems to be missing. This could either be a mistake, or the data is actually missing. Either way, this should have been fixed or indicated why it is missing.
- Cost analyses are incomplete for actor's countermeasures. For instance, for Dutch National Police, the costs are also in hardware.
- In 3.2 - Law enforcement Budget, we found the sentence: "Monies used to address cybercrime (..)". Although it nicely fits the slang used by (cyber)criminals, it is not that professional and should be changed.
- In figure 4 on page 9, the axis are not labeled. This makes it more difficult than necessary to interpret the figure as you have to go back one page to be able to guess which scale fits which variable.