[4159] Investigating the concentration of High Yield Investment Programs in the United Kingdom

PRELIMINARY DECISION: accept

Summary of Reviews

Review 1: 1 (4)

Review 2: 0 (2)

Review 3: 0 (4)

Review 4: 1 (3)

Review 5: 0 (5)

Reviews

Review 1

TOTAL SCORE: 1

Overall evaluation: 1 (weak accept)
Reviewer's confidence: 4 (high)

I like this paper. It does a thorough analysis of the current state of HYIPs and uses robust statistical analysis well. The result showing a concentration in the UK is interesting.

I wonder whether there are non-English language HYIPs that are not captured by this analysis?

The impact of using archive.org to go back in time but only being able to do so for schemes that still existed at the start of the data collection might skew the results and I didn't feel the impact was well quantified.

I think the recommendations could be tightened up a little to be more specific about what changes would be needed. Are the recommendations possible within current law and regulation or are changes required? Do try and ensure that the recommendations get to the relevant ministers (and shadow ministers).

Relevant paper:

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@inproceedings{clayton2015concentrating,
   title={Concentrating Correctly on Cybercrime Concentration.},
   author={Clayton, Richard and Moore, Tyler and Christin, Nicolas},
   booktitle={WEIS},
   year={2015}
}
```

Lots of stats which did good analysis of the data but a bit underwhelmed by the discussion. Is there any more you can evidence qualitatively to back up your quantitative analysis?

Minor comments

Formatting of the percentages in the abstract is off.

IV.B: Table 5 should be Figure 5.

IV.C: Do you mean "with *in*valid UK addresses are more likely to last"...

IV.D: "We expect these results to harden around more" Incomplete sentence. Are you still collecting data?

V: Missing "~" before reference [7].

Review 2

TOTAL SCORE: 0

Overall evaluation: 0 (borderline paper)

Reviewer's confidence: 2 (low)

This paper presents an analysis of more than 450 HYIPs with a specific focus on those that are run supposedly from the UK. The paper deals with an interesting problem and is highly related to the workshop topics. The authors present a dataset of 450 HYIPs collected from a single website. The authors state their journey and issues while collecting the data which already tells about how difficult and how problematic this kind of scheme are. I do wonder if the high number of schemes in the UK are because of the initial website used. Also, it is worth considering that many of these schemes will probably run in other languages. The rest of the paper focuses on the UK so I don't believe this is problematic. The obtained results are substantially different from previous literature. As the authors point out, today it is easier to get more accurate data and the use of new forms of payment can help run these schemes for longer but I do wonder if extra analysis on the HYIP website is needed to check that the scheme keeps running. This is, when are these schemes taken off the aggregator and how do they operate? This can affect the results obtained.

The analysis of results seems to be superficial. The authors just related the statistics on the lifetime of the HYIP to the data collected previously but there are no clear indicators or reasons to believe these relationships go beyond simple correlation. I am not sure enough evidence has been provided to support the results the authors provide but the authors also state that further research is necessary. It would be worth checking if this kind of behaviour also appears in other countries. Finally, I would recommend that the authors check for typos on their paper.

Review 3

TOTAL SCORE: 0

Overall evaluation: 0 (borderline paper)

Reviewer's confidence: 4 (high)

This paper is on an interesting topic, engages with the existing literature and employs a conventional statistical approach. Despite these positive elements, there is room for improvement:

- 1) The title does not scream cybercrime. As this is a cybercrime workshop, perhaps the title could be tweaked accordingly?
- 2) The key approach and research questions could be stated more clearly in the introduction. What is the motivation of the study, what is the key gap or theoretical tension that is being explored? The contribution subsection reads more like a shopping list of points of interest. But what is unifying this study? What is the key element that defines and drives this whole research enterprise? This should be something novel that does not currently exist within the literature (with the lit review section explaining this). The title suggests a particular angle, but the introduction does not clearly advocate for such an angle. Could the core interest be a kind of puzzle as to why these schemes are strongly linked to the UK, when one might expect the highest concentration to be in the USA (with its higher population suggesting more scammers might be present there)? Or do the authors merely wish to explore UK based schemes, as this has not been a specific focus in the literature (though with some explanation of why there is a need to specifically focus on the UK)? Whatever approach is chosen, this needs to be strongly justified and explicitly stated.
- 3) Are there HYIPs promoted in languages other than English? Unless more can be said on this, it should be noted that the results being discussed apply to the Anglophone world of HYIPs and not beyond it.
- 4) What's "thorough" regression?
- 5) Regression only gives correlation and not causation, unless much greater thought is given to the analysis. Linked to the overall purpose of the paper (which, as above, needs tightening), some thought should be given to the overall value and contribution of the quantitative analysis. What do various associations mean? What might be the direction of causality, if any, between associated variables? Theory can help here, as can ruling out alternative explanations, along with other approaches. But the key takeaway is that more thought needs to be given to the purpose of this paper, and how exactly the analysis achieves this end. This is not about the simplicity or complexity of methods, but the identification of clear research questions and the development of a research design to effectively answer them.
- 6) General quality of expression could be improved.

Review 4

TOTAL SCORE: 1

Overall evaluation: 1 (weak accept)
Reviewer's confidence: 3 (medium)

This paper studies HYIPs, carrying out analysis on a novel dataset. It has a decent background and related work section, which seems comprehensive if a little thin in places. Methodology generally looks OK - but more detail on the coverage would be good. How comprehensive are the lists on HYIPrank and HYIP? Are they likely to be missing some schemes? Analysis looks interesting - some more comment on the UK registrations would be useful, in particular why this clustering in the UK might occur. In general, there is a lot of interesting information here, but it feels structurally fragmented, and could be better integrated into a discussion of what this tells us about how to run a successful HYIP scam and how current practice actually works. Breaking some of the lengthy results section, which includes a lot of hypotheses, explanations, and theories, out into a separate subsequent discussion, which brought these theoretical/descriptive aspects together, incentives, etc. would help with the clarity of this paper. You could also be a little clearer - is a long running HYIP a good or a bad thing for the scammer? One might naively initially assume that a longer lasting scheme is an indication of better performance, but you mention much later in the paper than in fact higher return schemes reach completion a lot quicker. Thus, teeing this up earlier, slimming your results section down, and expanding a discussion section that sets out these different 'runner' practice forms and communities, and their differing incentives and practices, could help here.

Overall, though, an interesting paper - nice work.

Meta Review
TOTAL SCORE: 0

Overall evaluation: 0 (borderline paper)

Reviewer's confidence: 5 (expert)

All reviewers found the paper to present an interesting idea and results, and it can be accepted with minor changes. For the camera ready, we ask authors address reviewers' comments, and to provide further clarifications, e.g., to discuss on the limitations of the data sampling (since only English is considered), or to expand the analysis of the results, i.e., by providing a qualitative discussions on the results.