

Ransomware Economics: An Empirical Analysis of Payments, Actors and Policy Responses (2019-2025)

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ABSTRACT

This paper examines ransomware economics. Drawing on original data and 28 expert interviews, we find that existing policy frameworks underestimate systemic risk and overestimate institutional capacity. Our analysis of open-source data covering the past eighteen months points to a clear inflection point in the second quarter, when the frequency of reported incidents more than doubled. That trend has since plateaued, but at a level well above the pre-crisis baseline. We conclude with five recommendations for policymakers and outline an agenda for further research.

1. INTRODUCTION

For policymakers, the challenge is one of sequencing. Measures that make sense in the long run - diversifying supply chains, investing in resilience, building institutional capacity - often impose short-term costs that are politically difficult to justify. Critics argue that the current approach treats symptoms rather than causes. In interviews with more than two dozen practitioners, a recurring theme emerged: coordination between agencies remains weak, and information is still shared on a case-by-case basis rather than systematically.

2. METHODOLOGY

History offers some guidance, though not much comfort. Previous episodes of this kind were resolved only after a combination of sustained external pressure and a shift in domestic incentives - conditions that do not yet appear to be in place.

3. FINDINGS

Technology is both part of the problem and part of the solution. The same digital tools that enable faster coordination also create new vulnerabilities, from data leaks to targeted disinformation campaigns that exploit existing social divisions. Not everyone shares this assessment. Some analysts contend that the risks have been overstated and that markets have already priced in most of the downside. The evidence for this more optimistic view is real, but it rests on assumptions about stability that recent events have repeatedly challenged.

4. POLICY RECOMMENDATIONS

The legal framework has struggled to keep pace. Existing rules were designed for a different era and leave significant grey areas, particularly where state and non-state actors operate in the same space or where activity crosses multiple jurisdictions.

5. CONCLUSION

Ultimately, the question is not whether the system will be tested again, but how prepared it will be when that happens. On current evidence, the answer is: better than before, but not yet good enough.