Cryptocurrency Forensics and the Crime Barons of Cyberspace

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As you know, in 2009, was born the world’s most accessible financial asset
While this new financial asset has been used on Dark Markets, the market share of this activity has been dramatically falling.
Darknet market’s share of Bitcoin transaction values has declined, even while the absolute value has increased.
Blockchain analytics can be used to trace criminal activity on the blockchain
Blockchain analytics in action:
The Silk Road
144,000 Bitcoin seized from Silk Road
THIS HIDDEN SITE HAS BEEN SEIZED
by the Federal Bureau of Investigation,
in conjunction with the IRS Criminal Investigation Division,
ICE Homeland Security Investigations, and the Drug Enforcement Administration,
in accordance with a seizure warrant obtained by the
United States Attorney’s Office for the Southern District of New York
and issued pursuant to 18 U.S.C. § 983(j) by the
United States District Court for the Southern District of New York
21,000 BTC more was found later....
Liquidation of Silk Road Theft Proceeds

**Silk Road**

*Anonymous marketplace*

**January 25, 2013**
20,073 bitcoins are stolen from Silk Road and Silk Road vendors and deposited into bitcoins address 12783pwyTeA67qd6E3gGB0Ss5w2ch74aA

**January 26, 2013**
1,475 bitcoins are sent from 12783pwyTeA67qd6E3gGB0Ss5w2ch74aA into Mt. Gox bitcoin address 1B1yNGJxVwHhGqQ28mbt mhr6GzJrTB

**January 26, 2013**
another 955 btc are sent from 12783pwyTeA67qd6E3gGB0Ss5w2ch74aA into Mt. Gox bitcoin address 1B1yNGJxVwHhGqQ28mbt mhr6GzJrTB

As of January 26, 2013, Mt. Gox account
1B1yNGJxVwHhGqQ28mbt mhr6GzJrTB controls at least 2,480 stolen bitcoins

Federal Task Force

Between March and May of 2013, Mt. Gox account
1B1yNGJxVwHhGqQ28mbt mhr6GzJrTB makes 9 wires to Quantum International LLC, into Shaun Bridges’ Fidelity Account

**May 9, 2013**
BRIDGES served as the affiant on a multi-million dollar seizure warrant for Mt. Gox and its owner’s bank accounts

**Table: Liquidation Details**

<table>
<thead>
<tr>
<th>Date</th>
<th>Amount</th>
<th>Approx. BTC Price</th>
<th>Approx. Number of Bitcoins Sold</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/6/2013</td>
<td>$98,511.08</td>
<td>$42.00</td>
<td>2345.50</td>
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<tr>
<td>3/8/2013</td>
<td>$98,968.00</td>
<td>$44.00</td>
<td>2249.27</td>
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<td>3/12/2013</td>
<td>$99,968.62</td>
<td>$46.92</td>
<td>2130.62</td>
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<td>3/18/2013</td>
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<td>3/19/2013</td>
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<td>4/5/2013</td>
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<td>4/16/2013</td>
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<td>4/26/2013</td>
<td>$99,969.32</td>
<td>$136.00</td>
<td>735.07</td>
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<tr>
<td>5/7/2013</td>
<td>$25,559.37</td>
<td>$109.00</td>
<td>234.49</td>
</tr>
</tbody>
</table>

*If sold on the day it was wired out*

13289.15
Blockchain analytics even allows governments to see transactions in real time...and to catch criminals in the act...
Notice

THIS HIDDEN SITE HAS BEEN SEIZED
and controlled since June 20

by the Dutch National Police in conjunction with the Bundeskriminalamt, Lietuvos Policija, Federal Bureau of
Investigation and Europol, under the authority of the Dutch National Prosecutor’s Office and the Attorney General’s
office of the Federal State of Hesse (Germany).

The Dutch National Police have located Hansa Market and taken over control of this marketplace since June 20, 2017. We have modified the source code, which allowed us to capture passwords, PGP-encrypted order information, IP addresses, Bitcoin and other relevant information that may help law enforcement agencies worldwide to identify users of this marketplace. For more information about this operation, please consult our hidden service at publicPoliceAssociation.

This seizure was part of Operation Bayonet, which includes the takeovers of Hansa Market by the National Police of the Netherlands and the takeovers of AlphaBay Market by the Federal Bureau of Investigation of the United States of America on July 4, 2017.

OPENBAAR MINISTERIE
POLITIE
EUROPOL

HAHSA
AlphaBay Market
Blockchain analytics in action: Setting the Stage - Mt. Gox
Mt. Gox

- Launched in July 2010
- By 2013, Mt. Gox was handling over 70% of all BTC transactions
- By February 2014, 850,000 bitcoins had been stolen
- Valued at $450 million at the time
Blockchain analytics in action: Follow the Money - BTC-e
BTC-e

- Cryptocurrency exchange
- Started in 2011
Alexander Vinnik

THE DOMAIN FOR BTC HAS BEEN SEIZED

Pursuant to a seizure warrant issued by the United States District Court for the District of New Jersey under the authority of 18 U.S.C., §§ 981, 1966(a)(1)(A), and 1960 - as part of a joint law enforcement operation and action by:

- U.S. Department of Justice - Northern District of California and Computer Crime and Intellectual Property Section
- Internal Revenue Service – Criminal Investigation
- Homeland Security Investigations
- Federal Bureau of Investigation
- U.S. Secret Service
- Federal Deposit Insurance Corporation - Office of Inspector General

INDICTMENT
Alexander Vinnik

- FinCEN fines BTC-e $110 million civil penalty and Vinnik $12 million penalty
- 21-count indictment for
  - money laundering;
  - conspiracy to commit money laundering;
  - engaging in unlawful monetary transactions; and
  - the operation of an unlicensed money transmitting business.
Questions?

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