The Øwned Price Index

is the season when we musically celebrate the 12 days of Christmas while quietly rejoicing that there are fewer days of Christmas than there are bottles of beer on the wall. Tis also the season for us to visit the Øwned Price Index (ØPI), our index of underground economy prices. The ØPI mimics the PNI Christmas index—the price index of the 12 days of Christmas items. The PNI Christmas index, the market price of 12 drummers drumming down to a partridge in a pear tree, rose an impressive 10.1% in 2008 to a record US\$86,609, outperforming most major market indices dramatically. Although we sheepishly concede that golden rings have outperformed Goldman Sachs, and swans a-swimming have outperformed Swanson Foods, it does serve to further distinguish between our true love and our financial advisor. In 2008, true love is pareto dominant.



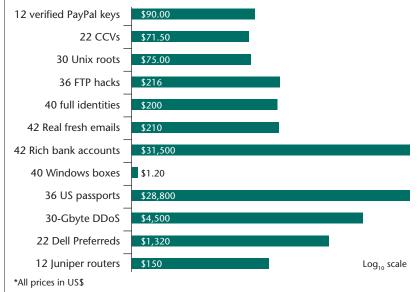
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For data describing the underground economy, we turn to Team Cymru (www.team-cymru.org), a specialized Internet security research firm dedicated to making the Internet more secure. Among the services Team Cymru provides are summary graphs tracking botnet traffic, compromised devices, stolen credit-card counts, and underground economy activity (see Figure 1).

With insights from Team Cymru, we can update our ØPI for 2008. For 2007, the value of the ØPI was \$66,902. For 2008, the ØPI increased slightly to \$67,133. This change was due to a robust increase in the price of US passports slightly edging out a notable decrease in the price of rich bank accounts. The prices of CCVs, fullz, and hosts all dropped in price, ranging from 10 to 25% from their 2007 levels.



Other prices of interest:

- Average price of a keystroke logger: \$25
- Botnets: \$100 to \$200 per thousand infections depending on location
- Spamming email service: \$.01 per 1000 emails, reliability of more than 85% delivered
- Shop admins (cc databases): \$100 to \$300
- CC w/o CCV2: \$1 to \$3
- CC with CCV2: \$1.50 to \$10.00, depending on the country

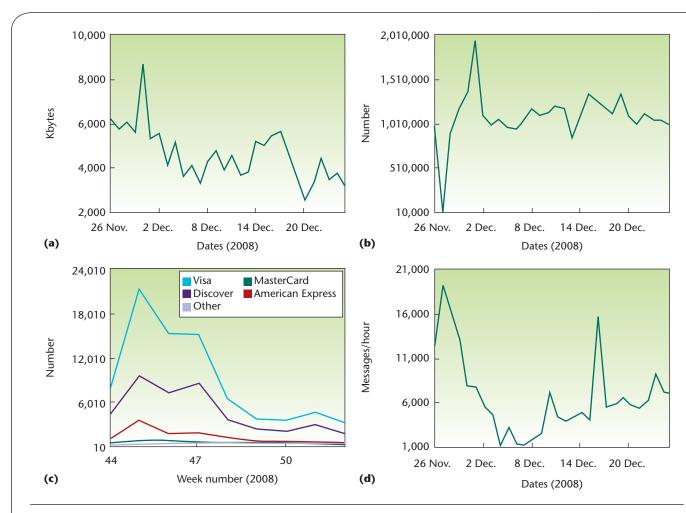


Figure 1. Summary graphs provided by Team Cymru. The Internet security research firm provides graphs tracking (a) botnet traffic, (b) compromised services, (c) stolen credit-card counts, and (d) underground economy activity, among others.

- CC relative prices: Visa < Mastercard < Discover < Amex
- Socks accounts: \$5 to \$40/month
- Sniffer dumps: \$50 to \$100 / month
- Western Union exploits: \$300 to \$1000
- Remote desktops: \$5 to \$8
- Scam letters: \$3 to \$5

A lthough a lack of transparency in underground marketplaces might lessen the Lords' leap, a lack of trust in this marketplace will always prevent a Ponzi in a pear tree. The 2008 price decreases in borrowed bank accounts, compromised credit cards, and filched fullz from 2007 might indicate overall deflationary pressure in this marketplace. Perhaps if we sing loud enough, we can get a government bailout for the Internet economy. \Box

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