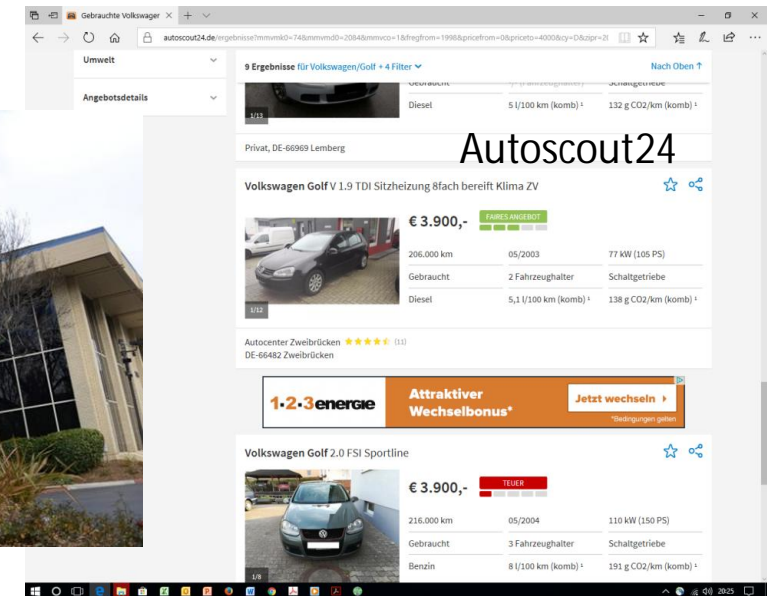


Trust and Reputation in the Digital World

Reputation systems reduce uncertainty and promote cooperation but there are also dark sides of rating systems



Wissenschaftskolleg zu Berlin
INSTITUTE FOR ADVANCED STUDY



Andreas Diekmann

Institute of Advanced Studies, Berlin and ETH Zurich

Venice, San Servolo, 20. -23. November 2017

Trust problems of social and economic transactions

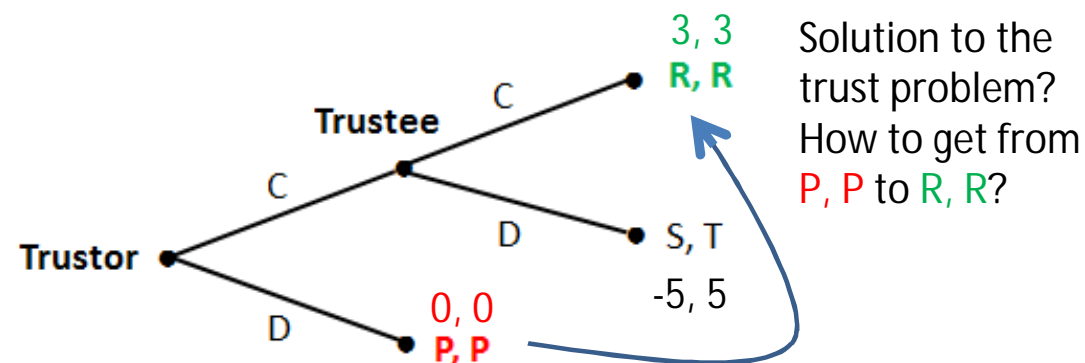
Transaction partners always face the risk of being cheated instead of achieving a mutual satisfying bargain.

1. Asymmetric information about the quality of goods
2. Transactions are sequential (time lag)

North (1991): “Throughout history, institutions have been devised by human beings to create order and reduce uncertainty in exchange.”

► The trustor is vulnerable and won't place trust. How to get from a „bad“ equilibrium to a mutual better outcome?

► Emergence of trust institutions!



Asymmetric information and trust in modern markets

Examples: **second-hand cars, car repair, medical treatments, dentists.**

Recent study by team of Wanda Mimra of ETH-Zurich :

- Student tester was visiting **180 dentists** in canton Zurich.
- Tester was diagnosed independently by four dentists.
Recommendation: **No treatment necessary at all!**
- Overtreatment: **28%** of dentists suggested one to six unnecessary fillings at average cost of CHF 535.
- Low patient status increases overtreatment!



Gottschalk, Mimra, Waibel 2017

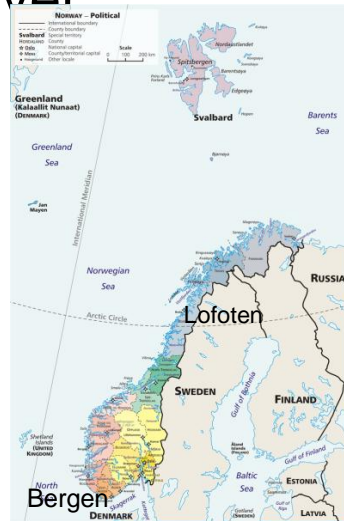
Repeated Trust Game

Example: The Hanse Kontor in Bergen

- Hanse merchants exchanged wheat and beer for stockfish since the 14th century.
- Lübeck merchants sailed to Bergen (where they resided in the Bryggen Kontor) while stockfish came from the Lofoten in northern Norway.
- Although the traders never met in person they established trust relationships over many years and sometimes over generations.



Bergen Bryggen



Hanse Museum Bergen

How to achieve cooperation with trust problems?

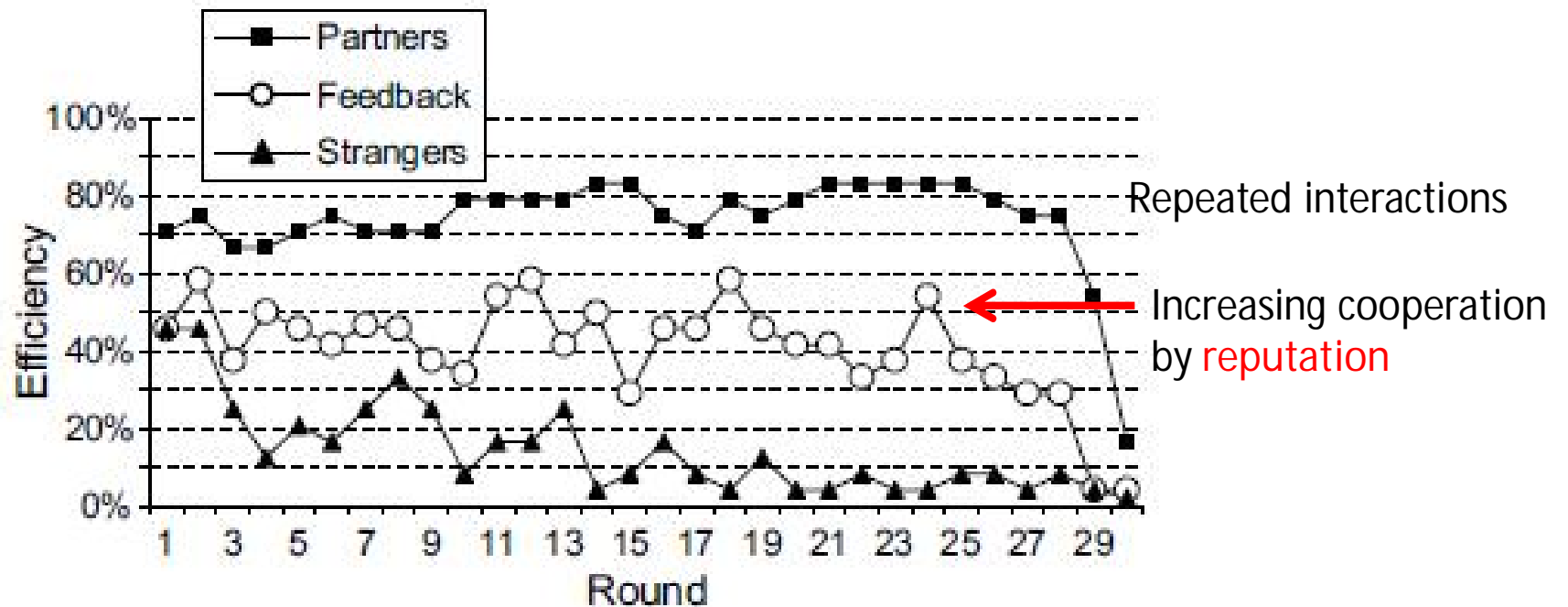
Decentralized mechanisms sustaining the emergence of cooperation:

1. Repeated games: „The shadow of the future“ (Axelrod 1984)
2. But non-repeated, single transactions among strangers?
Reputation: „The shadow of the past“

► Trust building Institutions based on reputation.

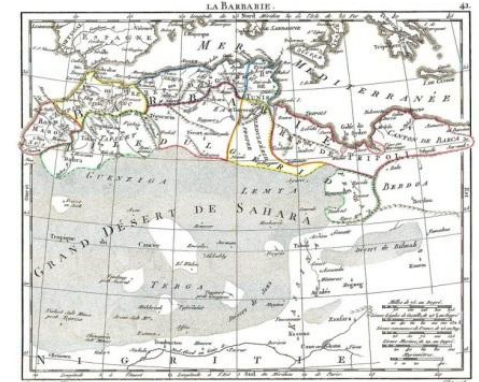
Experimental Study of Digital Markets

Figure 2 Efficiency Measured as How Often the Gain from Trade Is Realized, by Round



Reputation based commercial transactions of medieval long-distance trade

- Historical study by Avner Greif (1989) about long distance trade of Mahgreb merchants in the 11th century. Merchants established an effective reputation system to prevent fraudulent behaviour of agents.
- Long distance trade in medieval Europe: The Champagne Fairs in the 12th and 13th century. Private judges kept records on past behaviour of merchants; merchants payed a fee for access to information. (Game theoretic analysis: Milgram, North, Weingast 1990, The Role of Institutions in the Revival of Trade. The Law Merchant, Private Judges, and the Champagne Fairs.)



Wikimedia Commons

Reputation on Digital Markets

WWW: Enormous extension of markets and new technologies for sustaining reputation mechanisms:

1. Evaluation of past behavior by transaction partners.
2. Transparency: The Information on the past behavior of actor x with all other transaction partners is available to all market participants.
3. Information cost is almost zero.

Autoscout24

Car dealer
reputation
1 to 5 stars

Gebrauchte Volkswagen

autoscout24.de/ergebnisse?mmvmk0=74&mmvmd0=2084&mmvco=1&fregfrom=1998&pricefrom=0&priceto=4000&cy=D&zipr=20

Umwelt

Angebotsdetails

9 Ergebnisse für Volkswagen/Golf + 4 Filter

Nach Oben

1/13

Privat, DE-66969 Lemberg

Volkswagen Golf V 1.9 TDI Sitzheizung 8fach bereift Klima ZV

FAIRES ANGEBOT

€ 3.900,-

206.000 km 05/2003 77 kW (105 PS)

Gebraucht 2 Fahrzeughalter Schaltgetriebe

Diesel 5,1 l/100 km (komb) 138 g CO2/km (komb)

1/12

Autocenter Zweibrücken (11) DE-66482 Zweibrücken

1.2.3energie Attraktiver Wechselbonus* Jetzt wechseln

*Bedingungen gelten

Volkswagen Golf 2.0 FSI Sportline

TEUER

€ 3.900,-

216.000 km 05/2004 110 kW (150 PS)

Gebraucht 3 Fahrzeughalter Schaltgetriebe

Benzin 8 l/100 km (komb) 191 g CO2/km (komb)

1/8

Does Reputation solve for the trust problem?

- 1. Incentive problem of reputation: Does it pay off to have a good reputation?**
- 2. Do professional car dealer claim higher prices than private sellers?**
- 3. Warranty: A signal of quality?**

Findings from Autoscout24: Statistical analysis of 58'000 Autoscout24 auctions

Data

- Homogeneous goods (to reduce unobserved heterogeneity)
- Volkswagen Golf
- May and October 2015

(with Siow, Tobler, Wehrli)

•Warranty and Reputation
(Dealers only) In these
models, we drop 13'005
(5688+7317) cases from
private sellers. Additionally,
we also drop 16'746 cases
where the average
• rating is unobserved
because the ratings are
hidden or the number of
ratings is zero. t statistics in
parentheses
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

	May		October	
	(2.1)	(2.2)	(2.3)	(2.4)
	logprice	logprice	logprice	logprice
Age in Years	-0.0877***	-0.0878***	-0.0831***	-0.0837***
	(-177.77)	(-151.23)	(-131.53)	(-101.92)
Kilometers (km/10k)	-0.0353***	-0.0349***	-0.0331***	-0.0331***
	(-126.19)	(-125.85)	(-94.74)	(-92.83)
Horsepower (hp/10)	0.0575***	0.0489***	0.0538***	0.0459***
	(243.67)	(170.22)	(120.90)	(99.27)
Diesel (0/1)	0.0976***	0.0911***	0.0754***	0.0722***
	(73.73)	(78.29)	(37.88)	(40.37)
Warranty (0/1)	0.0175***	0.0128***	0.0158***	0.00934***
	(12.06)	(9.28)	(5.08)	(3.61)
Rating Average (1-5)	0.00552***	0.00497***	0.0110***	0.00874***
	(5.20)	(5.18)	(4.02)	(3.51)
Car Models (Df=19)	No	Yes	No	Yes
Car Features (Df= 14)	No	Yes	No	Yes
Constant	9.491***	9.500***	9.482***	9.499***
	(1811.69)	(1375.65)	(749.94)	(719.51)
Observations	36431	36431	42696	42696
Adjusted R ²	0.911	0.933	0.904	0.923
F	52798.4	10585.2	18864.6	3848.2
df_m	6	38	6	38
bic	-54065.0	-64306.5	-69906.8	-79212.5

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 because the ratings are
 hidden or the number of
 ratings is zero. *t* statistics in
 parentheses
 * $p < 0.05$, ** $p < 0.01$, *** $p <$
 0.001

	May		October	
	(1.1)	(1.2)	(1.3)	(1.4)
	logprice	logprice	logprice	logprice
Age in Years	-0.0893***	-0.0879***	-0.0856***	-0.0848***
	(-214.82)	(-179.08)	(-171.61)	(-129.09)
Kilometers (km/10k)	-0.0350***	-0.0348***	-0.0330***	-0.0332***
	(-148.16)	(-146.29)	(-115.98)	(-118.81)
Horsepower (hp/10)	0.0576***	0.0488***	0.0548***	0.0455***
	(277.05)	(186.66)	(159.71)	(108.83)
Diesel (0/1)	0.102***	0.0919***	0.0807***	0.0748***
	(84.16)	(84.25)	(47.06)	(46.99)
Private Seller (0/1)	-0.00997***	-0.00357	-0.00203	0.00214
	(-4.36)	(-1.34)	(-0.94)	(0.79)
Constant	9.526***	9.520***	9.535***	9.534***
	(4553.71)	(2162.19)	(2792.20)	(1333.20)
Observations	50730	50730	58148	58148
Adjusted R ²	0.923	0.939	0.921	0.935
F	98389.1	16863.3	39418.5	7177.5
df_m	5	37	5	37
BIC	-69905.3	-81575.8	-88342.4	-99156.5

•Dealer vs. Seller

t statistics in parentheses. Model 1.1 and 1.2 have robust standard errors. Models 1.3 and 1.4 are additionally clustered on seller id.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

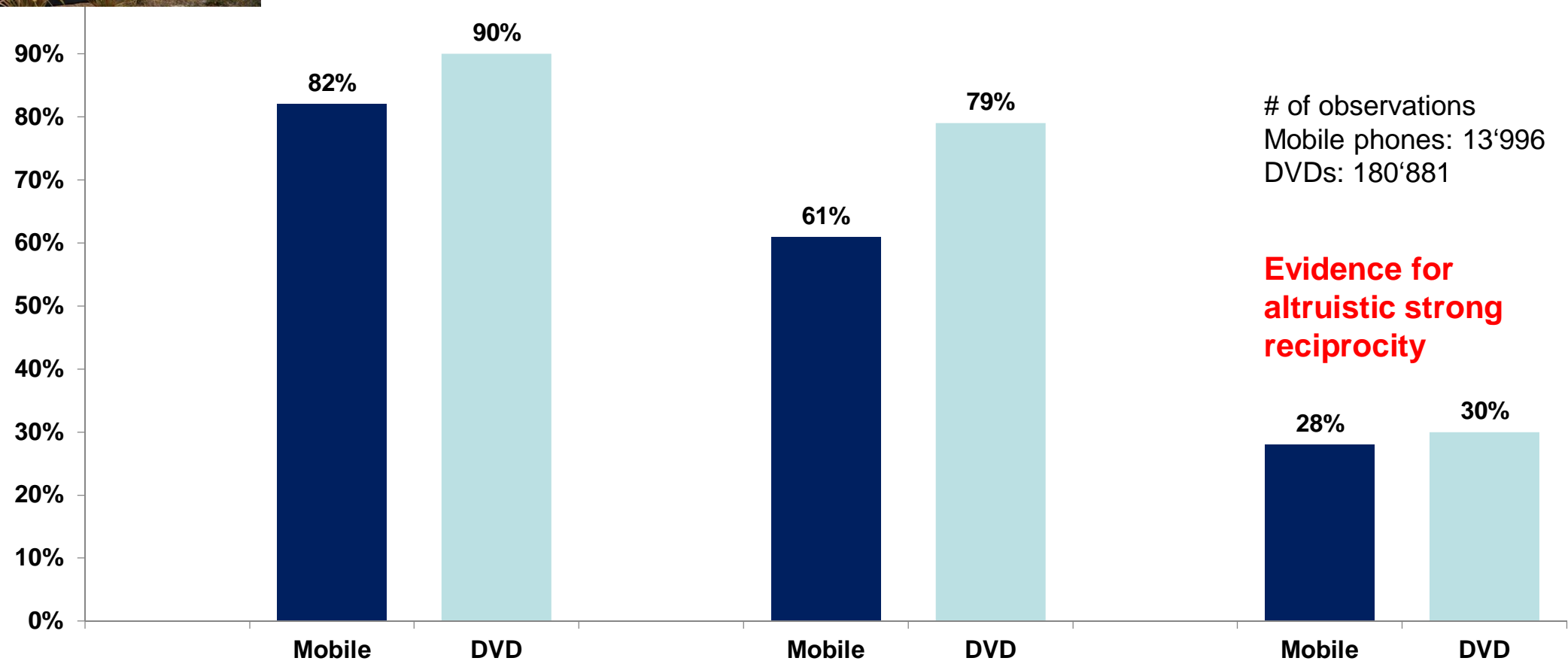


Feedback Patterns: Percent ratings by seller and buyer in two-sided rating system

% Rating

Seller and buyer give feedback

Buyer as a second rater



Diekmann, A., Jann, B., Przepiorka, W., Wehrli, S., 2014. Reputation Formation and the Evolution of Cooperation in Anonymous Online Markets. *American Sociological Review* 79: 65-85.

Use and Misuse of Reputation. Key Problem: Fake reputations

► Offers on web platform „Fiverr“

The screenshot shows a Fiverr gig listing. The title is "I will write a compelling and positive appraisal of your book For You for \$5". Below the title, it says "in Reviews" and "2 Days On Average". The main image features Jeff Bezos in front of an Amazon logo. To the right of the image, there is a green "Order Now (\$5)" button with a shopping cart icon. Below this, there is a "Basic Gig Quantity" dropdown menu set to "1 (\$5)". Social media icons for Facebook, Twitter, Google+, LinkedIn, and Email are displayed. The seller's profile picture and name are redacted with black bars. Below the profile information, it says "From United States" and "Speaks English". At the bottom right, there is a "Contact Me" button.

I will write a compelling and positive appraisal of your book For You for \$5

in Reviews 2 Days On Average

amazon

Order Now (\$5)

Basic Gig Quantity 1 (\$5)

f t g+ in e

[Redacted Profile Picture]

[Redacted Username]

From United States Speaks English

Contact Me

About This Gig

Are Fiverr Running Scared From Amazon Fake Reviews Lawsuit?
Oct 22, 2015 by [Anita Campbell](#) In [Marketing Tips](#)
[14](#)

„Professionel“ help to destruct competitor's reputation:

The image shows a screenshot of a Fiverr gig page. The main heading reads "I will post negative reviews in anywhere for \$5". Below this, it says "in Reviews" and "4 Days On Average". The central text is "ITS ALL ABOUT NEGATIVE REVIEWS" in large blue letters, followed by "100% SATISFACTION" in red letters, and a row of red asterisks. On the right side, there is a green "Order Now (\$5)" button with a shopping cart icon. Below the button, it says "Basic Gig Quantity" and "1 (\$5)". Further down, it shows "21 Buyer Reviews" with a 4.7 rating (5 yellow stars) and "Orders in Queue" with a count of 6. At the bottom right, there are social media icons for Facebook, Twitter, Google+, LinkedIn, and Email, and a cartoon illustration of a person running with a box.

Are Fiverr Running Scared From Amazon Fake Reviews Lawsuit?
Oct 22, 2015 by [Anita Campbell](#) In [Marketing Tips 14](#)

Misuse of
reputation
scores by
authorian states
to control
civilians:
Orwell „1984“?



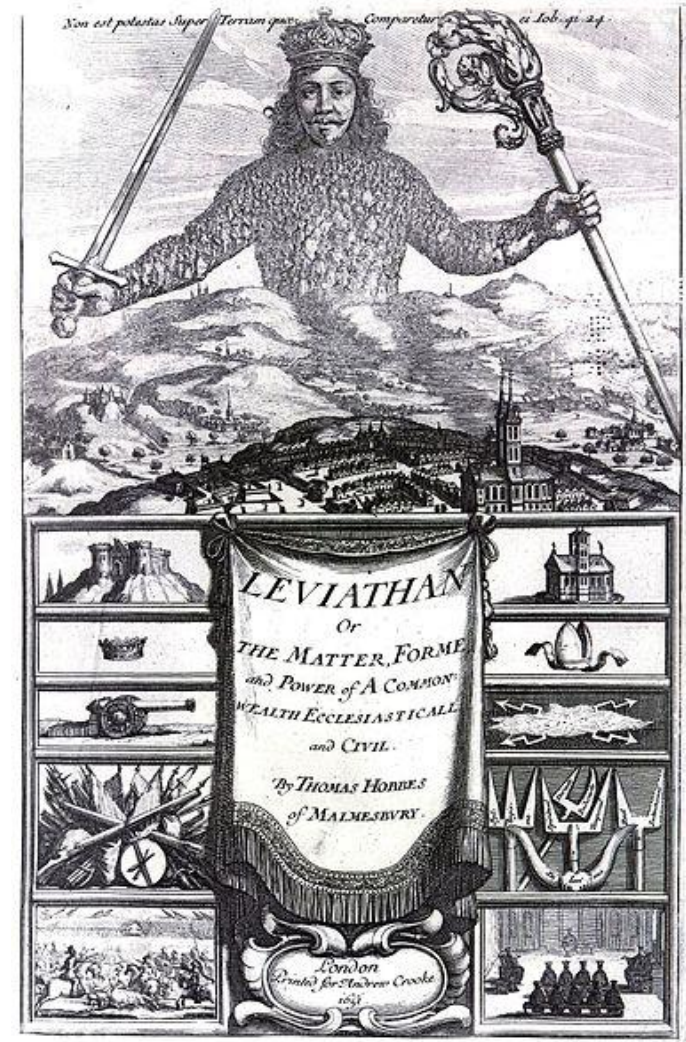
„A pilot scheme in Suining county, in Jiangsu province north of Shanghai, gives clues about what such a system might mean in practice. Starting in 2010, the local government awarded people points for good behaviour (such as winning a national honour of some kind) and deducted points for everything from minor traffic offences to „illegally petitioning higher authorities for help“. Those who score highest were eligible for rewards such as fast-track promotion at work or jumping the queue for public housing“ (The Economist, December 17th, 2016).

How to Cope With Anarchy in the Online World?

- The „Dark Net“: A real Hobbesean world
- Illegal digital markets : People have an incentive to cheat on each other and markets are likely to collapse.



In the state of nature life was
„solitary, poor, nasty, brutish, and
short“
(Thomas Hobbes 1651)



„Drugs“ is by far the most popular category.



Browse Categories		
➤ <input type="checkbox"/>	Fraud	9479
➤ <input type="checkbox"/>	Drugs & Chemicals	28713
➤ <input type="checkbox"/>	Guides & Tutorials	4347
➤ <input type="checkbox"/>	Counterfeit Items	1785
➤ <input type="checkbox"/>	Digital Products	3786
➤ <input type="checkbox"/>	Jewels & Gold	531
➤ <input type="checkbox"/>	Weapons	551
➤ <input type="checkbox"/>	Carded Items	958
➤ <input type="checkbox"/>	Services	2135
➤ <input type="checkbox"/>	Other Listings	748
➤ <input type="checkbox"/>	Software & Malware	465
➤ <input type="checkbox"/>	Security & Hosting	169

Browser window showing the AlphaBay Market listing for "Fake German ID Card *High Quality*".

URL: pwuah7foa6au2pul.onion/listing.php?id=8754

AlphaBay Market

Home / Counterfeit Items / Fake IDs / Fake IDs / Fake German ID Card *High Quality*

Listing Options

- Contact Seller
- Favorite Listing
- Favorite Seller
- Alert when restock
- Report Listing

Browse Categories

- ☐ Fraud 9479

Fake German ID Card *High Quality*

ID-2 Format Größe von 105 x 74 mm Format DIN A7 Der Personalausweis wurde in HD Qualität Gedruckt und mit der selben Folie Laminiert wie der echte. Gut für unter 18 Jährige um in die Disco Reinzukommen oder am Kiosk Alkohol und Zigaretten zu Kaufen. Bestellformular : Shipping Name (Vor- und Nachname) : Lieferadresse (genau wie es ist, auf dem Umschlag angezeigt): Nachname (Nachname) : Vor...

Sold by **KCO47169** - 28 sold since May 5, 2015 **Level 1**

	Features		Features
Product class	Physical package	Origin country	Worldwide
Quantity left	Unlimited	Ships to	Worldwide
Ends in	Never	Payment	Escrow

EU - 4 days - USD +2.23 / item

7.11.2015

Home / Counterfeit Items / Money / Money / Counterfeits Bills Top Quality - 20€ (10 bills)

Listing Options

Contact Seller
Favorite Listing
Favorite Seller
Alert when restock
Report Listing

Browse Categories

► ☐ Fraud 9479
► ☐ Drugs & Chemicals 28709
► ☐ Guides & Tutorials 4347
► ☐ Counterfeit Items 1785
► ☐ Digital Products 3786
► ☐ Jewels & Gold 531
► ☐ Weapons 551
► ☐ Carded Items 958
► ☐ Services 2135
► ☐ Other Listings 748
► ☐ Software & Malware 465
► ☐ Security & Hosting 169



Counterfeits Bills Top Quality - 20€ (10 bills)

10x20 top quality in the world

Sold by levistrau\$\$ - 72 sold since Mar 24, 2015 Level 2

	Features		Features
Product class	Physical package	Origin country	Italy
Quantity left	Unlimited	Ships to	Worldwide
Ends in	Never	Payment	Escrow

international Shipping - 10 days - USD +10.90 / item

Purchase price: USD 108.94

Qty: 1 Buy Now Queue

0.2851 BTC

Description Bids Feedback Refund Policy

Product Description

10x20

top quality in the world

levistrau\$\$ levistrauss fake money bills counterfeits

► Fixed price, payed in Bitcoins

► Auctions are very rare. I searched the market (all categories): the proportion of auctions is less than 1 %.

Browser window showing the AlphaBay Market listing for "Hacked UK Amazon Accounts".

AlphaBay Market

You are logged in as **Spiegelmuller**
Current balance: BTC 0.0000
Autoshop Logout

Home / Sales / Messages / Listings / Balance / Orders / Feedback / Forums / Contact

USD 382.10 CAD 507.70 EUR 355.73 AUD 542.19 GBP 253.87

Home / Fraud / Accounts & Bank Drops / Accounts & Bank Drops / Hacked UK Amazon Accounts

Listing Options

- Contact Seller
- Favorite Listing
- Favorite Seller
- Alert when restock
- Report Listing

Browse Categories

- Fraud 9479
- Drugs & Chemicals 28708
- Guides & Tutorials 4347
- Counterfeit Items 1785
- Digital Products 3786
- Jewels & Gold 531
- Weapons 551
- Carded Items 958
- Services 2135
- Other Listings 748
- Software & Malware 465
- Security & Hosting 169

Search Options

Search terms:

Listing type:
☒ All ☐ Fixed Price ☐ Auction

Product type:

Hacked UK Amazon Accounts

This listing is for 1 x unchecked hacked uk amazon account. Format of account Live | p.m.thomas7@gmail.com | hdl21 | [CRE:196] There is no guarantee with these account as of items or content they contain they are picked at random live and none checked. I will not replace due to security restricted accounts or any other problems you have caused. You are only buying login information email ...

Sold by **stackcash** - 122 sold since Apr 3, 2015 **Level 5**

Product class	Features	Origin country	Features
Digital goods	Worldwide		
Quantity left	Unlimited	Ships to	Worldwide
Ends in	Never	Payment	Escrow

Default - 1 days - USD +0.00 / item

Purchase price: USD 2.00

Qty: 1 **Buy Now** **Queue**

0.0052 BTC

Description **Bids** **Feedback** **Refund Policy**

Product Description

This listing is for 1 x unchecked hacked uk amazon account.

Format of account

Live | p.m.thomas7@gmail.com | hdl21 | [CRE:196]

There is no guarantee with these account as of items or content they contain they are picked at random live and none checked. I will not replace due to security restricted accounts or any other problems you have caused.

You are only buying login information email + pass with these accounts!

Hacked UK Amazon Accounts

„stackcash“ sells counterfeit items. Here, a hacked amazon account is for sale for US\$ 2.00 (stackcash is honest and does not give a guarantee).

stackcash | User Profile | AL...

pwoah7foa6au2pul.onion/user.php?id=4981

Search

AlphaBay Market

Home • Sales • Messages • Listings • Balance • Orders • Feedback • Forums • Contact

USD 383.67

CAD 509.45

GBP 507.70

AUD 544.34

JPY 254.60

You are logged in as Spiegelmuller

Current balance: BTC 0.0000

Autoshop Logout

Profile Actions

Home Page

My Information

Private Messages

Listings

Orders

Sales

Contracts

Favorites

Vacation Mode

Shared Access

Balance

Feedback

Buyer Blacklist

Vendor Stats

Order Queuing

Affiliate Stats

Help

Seller statistics

Currently selling

Listed items0

Will sell0

Listed amountUSD 0.00

Sold items

Items sold0

Sold amountUSD 0.00

Payments

ReceivedUSD 0.00

In EscrowUSD 0.00

Escrow holdingsBTC 0.0000

stackcash | User Profile

stackcash(2749)

Level 5

Positive feedback (last 12 months): 98%

[How is the feedback score calculated?]

Member since: March 18, 2015

Contracts: 0 in progress, 0 complete

View Store

Send Message

Favorite

Blacklist

FE Allowed

Seller Feedback Ratings

(last 12 months)

1 month6 months12 months

Positive6137451

Neutral041

Negative141

Stealth

Quality

Value for price

Detailed seller ratings:

★★★★★

★★★★★

★★★★★

+

NDD, look genuine, its going to be a good XMAS!

+

Don't think....Just buy! Fantastic product. Thank you.

+

Stackcash is the best vendor I've ever dealt with in my entire life

+

shipped quick

+

Top as usual.

Buyer Statistics

(since join date)

Since join

Total disputes / orders0 / 0

Total spendings---

Feedback left0 (100.0% positive)

Last onlineNov 7, 2015

About

Positive Feedback

Neutral Feedback

Negative Feedback

Feedback Left

PGP

Total positive feedback: 486

97% of all feedback

Feedback

Buyer / Price

Date / Time

+

Don't think....Just buy! Fantastic product. Thank you.

[NEW] ▣ Morrison ▣ Tesco ▣ Co-op ▣ Saver Stamps ▣ Only On USD 54.0000

AlphaBay ▣ Triple Your Money ▣ £100 - £1000+ ▣

g...e

Nov 6, 2015 01:09

View Item

+

NDD, look genuine, its going to be a good XMAS!

[NEW] ▣ Morrison ▣ Tesco ▣ Co-op ▣ Saver Stamps ▣ Only On USD 230.0000

AlphaBay ▣ Triple Your Money ▣ £100 - £1000+ ▣

g...e

Nov 6, 2015 00:55

View Item

+

Top as usual.

▣ Hacked Next ▣ Available Credit ▣ Catalog Shopping Accounts USD 15.0000

c...r

Nov 5, 2015 02:40

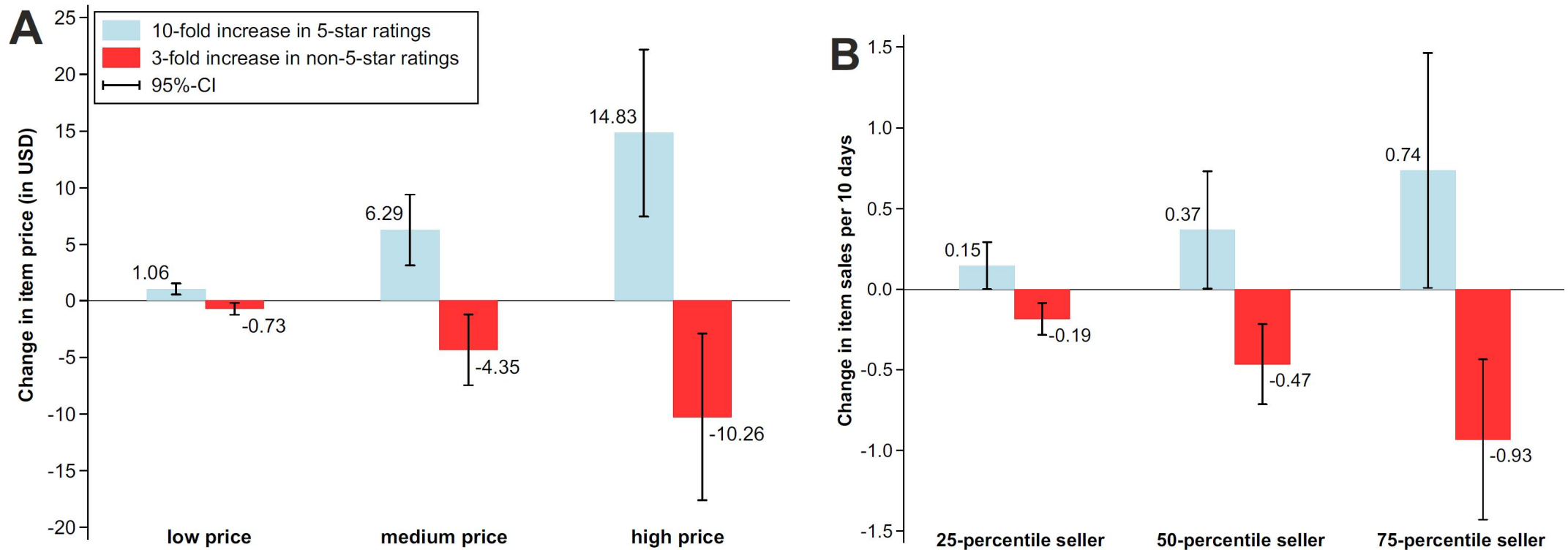
View Item

98 % positive ratings in last 12 months

Windows

18:26

Reputation on drug cryptomarket „silk road“ enhances both the selling price of drugs and the frequency of sales



Wojtek Przepiorka, Lukas Norbutas, Rense Corten 2017

Reputation is not sufficient: Buyer protection by escrow service

Interordnance R94 7,62x39 ... x +

pwoah7foa6au2pul.onion/listing.php?id=43036

Home • Sales • Messages • Listings • Balance • Orders • Feedback • Forums • Contact

USD 386.98 CAD 513.84 EUR 360.25 AUD 549.04 GBP 256.80






Home / Weapons / Long-Range Guns / Long-Range Guns / Interordnance R94 7,62x39 FULL ESCROW

Listing Options

- Contact Seller
- Favorite Listing
- Favorite Seller
- Alert when restock
- Report Listing

Browse Categories

- Fraud 9480
- Drugs & Chemicals 28730
- Guides & Tutorials 4347
- Counterfeit Items 1785
- Digital Products 3786
- Jewels & Gold 531
- Weapons 551
- Carded Items 958
- Services 2136



Interordnance R94 7,62x39 FULL ESCROW

For sale is an Interordnance R94 Straight-Pull-Repeater, which has been made in Austria by Interordnance. It's a 7,62x39mm caliber and operated by a simple straight-pull and safety lock. It comes with 2 magazines and 40 Rounds of FMJ Ammo. It is in good condition as you can see for yourself in the pictures. better quality Images <http://www0.xup.in/exec/ximg.php?fid=20577635> <http://www0.xu...>

Sold by **deschek1337** - 0 sold since Oct 5, 2015 **Level 1**

	Features		Features
Product class	Physical package	Origin country	Austria
Quantity left	1 items	Ships to	Europe
Ends in	Never	Payment	Escrow

EU - 12 days - USD +44.84 / item

Purchase price: USD 1,934.92

Qty: 1 **Buy Now** **Queue**

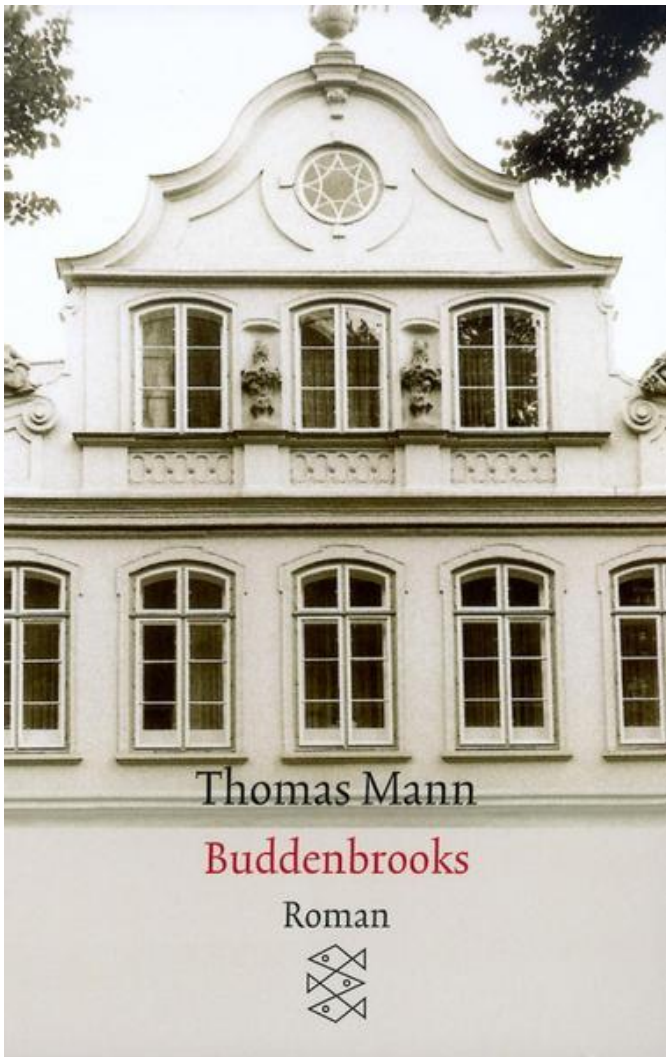
5.0001 BTC

Escrow: Buyer has to finalize after delivery (protection of buyer)

Description Bids Feedback Refund Policy

Product Description

For sale is an Interordnance R94 Straight-Pull-Repeater, which has been made in Austria by Interordnance. It's a 7,62x39mm caliber and operated by a simple straight-pull and safety lock. It comes with 2 magazines and 40 Rounds of FMJ Ammo. It is in good condition as you can see for yourself in the pictures.



The ethical code of an honourable merchant

- »Mein Sohn, sey mit Lust bey den Geschäften am Tage, aber mache nur solche, dass wir bey Nacht ruhig schlafen können.«
- “My son, attend with zeal to thy business by day; but do none that hinders thee from thy sleep at night.”

AlphaBay Market Rules for Sellers: Ethical Code in the Underworld

Seller Account

Here you can activate your seller account. Take time to read the seller rules below, check the box, and click the button. After that, you will be able to create listings and start selling here.

#1: FE (Finalize Early) is not permitted. This is to avoid potential exit scams. All transactions must be dealt through Escrow, unless you get explicit permission later.

#2: Digital orders auto-finalize after 48 hours, and physical orders auto-finalize after 14 days.

#3: If you get too many scam reports, we may revoke your seller account at any time.

#4: There is a USD \$100 vendor bond (0.2587 BTC at the current rate), refundable upon closure of account if in good standing.

#5: All sellers must have a PGP key in their profile before starting to sell.

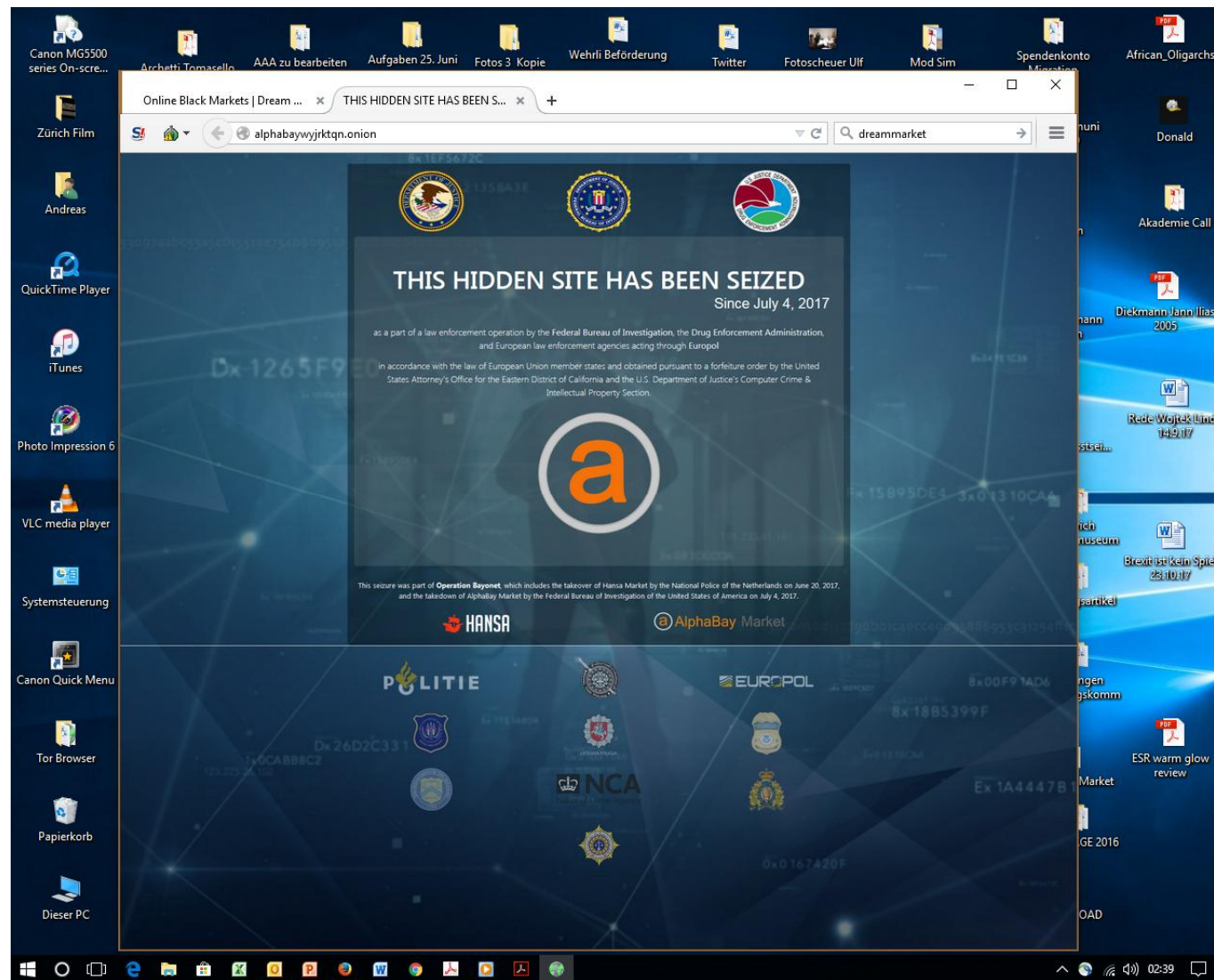
#6: Prostitution, child porn, and murder services are not permitted. Personal information about Russian citizens is also prohibited.

#7: Any dox threat will result in an immediate ban.

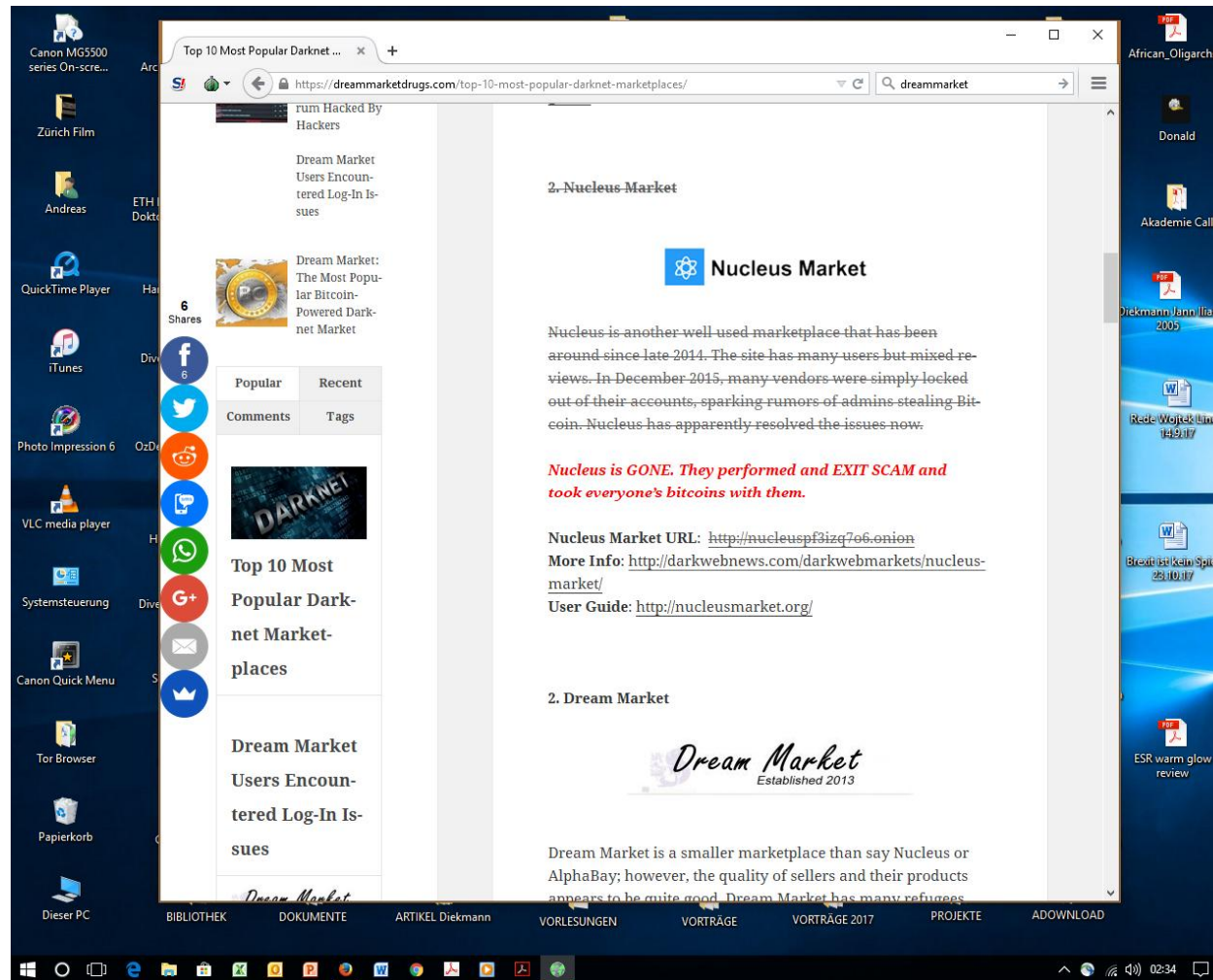
#8: It is not mandatory but strongly recommended that you enable 2FA on your account. If you get hacked, there is nothing we can do. Use the security features.

I have read and accept the rules mentioned above.

Alphabay market
was closed by a
joint operation of
Netherland police
And FBI in July
2017



Exit Scam: A Further Trust Problem



Cooperation on illegal and completely anonymous markets

- ▶ Mostly fixed price offers
- ▶ Payment in bitcoins (tumbling service)
- ▶ Reputation yields additional information but is not a sufficient guarantee of cooperation.
- ▶ Escrow: Institutional device to reduce the trust problem (as well as other institutional market regulations)
- ▶ Ethical Rules of conduct!

The mixture of institutional rules (escrow service etc.) and reputation ensures:

- ▶ „Order Without Law“

What to do?

- ▶ In principle, **reputation systems** (possibly supplemented by other institutional mechanisms) are very **efficient, decentralized** mechanisms to sustain cooperation.
- However, there is the risk that **social bots and faked ratings will undermine** and eventually destroy reputation systems. My research is also concerned with suggestions to mitigate these risks.
- **Design of reputation institutions matters!** (One-sided, double-sided, double-sided blind systems etc. make a difference.) The effect of market regulations may depend on culture and social context.
- There is also **misuse of reputation scores** by companies (secret algorithms, e.g. Research Gate, credit scores etc.) and by authorities (e.g. China's experiments with citizen score)!
- **There are limitations and negative side effects of decentralized reputation systems:** hospitals, universities, **reputation scores in science?** Often reputation scores set wrong incentives!

**“The most
expensive
item sold on
eBay**

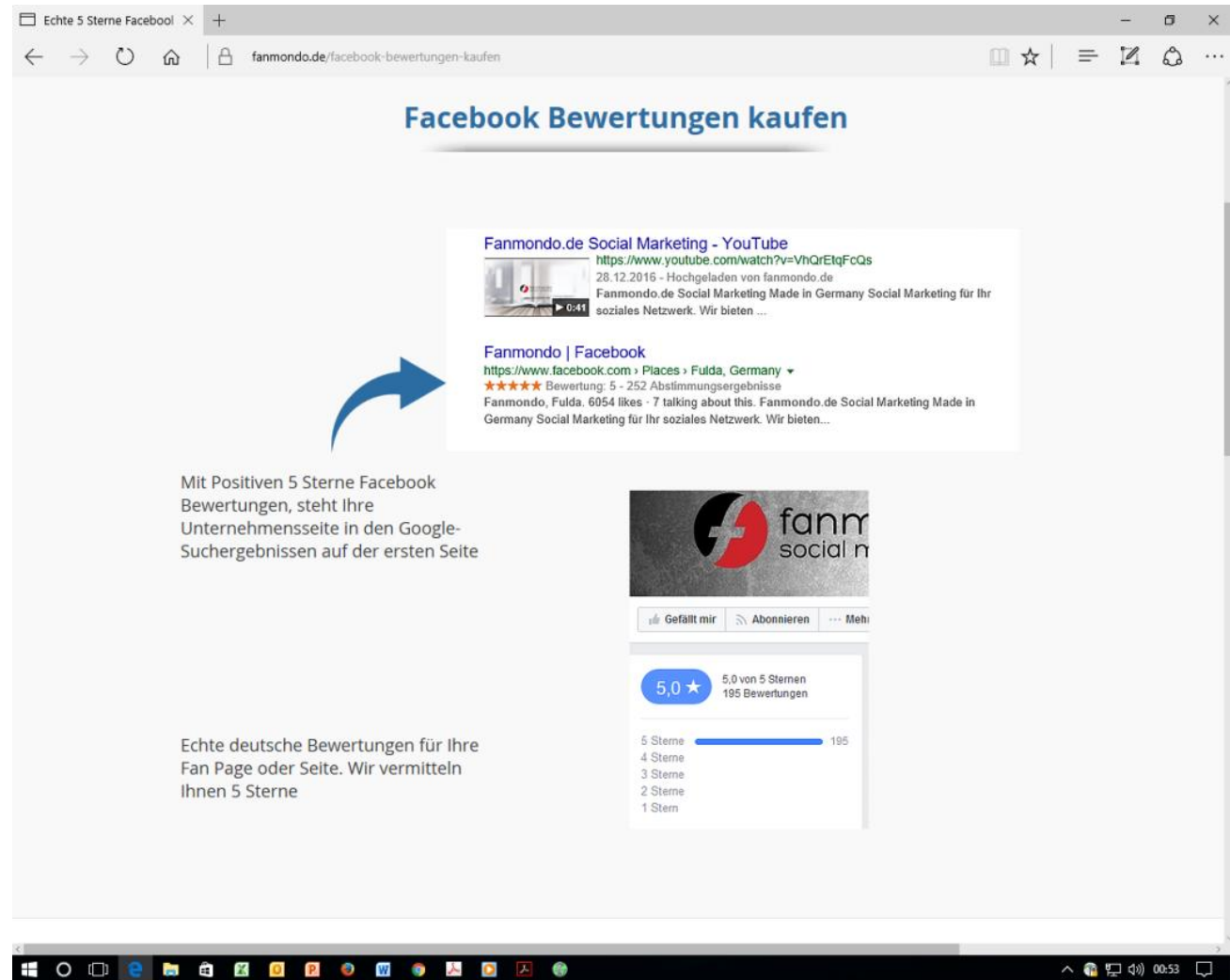
\$168 million!



“The most expensive item sold on eBay to date is a Frank Mulder designed Gigayacht, which auctioned off for an incredible \$168 million, in 2006. The yacht was purchased by Russian billionaire, [Roman Abramovich](#) who rose to fame and riches by owning the investment company, Millhouse LLC and the Chelsea Football Club. At 405 feet long, his new ginormous yacht includes two VIP suites, a children’s cabin, guest cabins, a gym, movie theater, spa, elevator and helicopter pad. We’re not sure why the yacht’s manufacturers chose to sell it on eBay, but because of their decision and Abramovich’s bid, history was made.”

<http://www.therichest.com/luxury/most-expensive/top-10-most-expensive-items-ever-sold-on-ebay/>

► Social Marketing: Buy Facebook likes



The screenshot shows a web browser window with the URL [fanmondo.de/facebook-bewertungen-kaufen](https://www.fanmondo.de/facebook-bewertungen-kaufen). The page title is "Facebook Bewertungen kaufen".

On the left, there is a blue curved arrow pointing from the text below to a highlighted section on the right.

Mit Positiven 5 Sterne Facebook Bewertungen, steht Ihre Unternehmensseite in den Google-Suchergebnissen auf der ersten Seite

Echte deutsche Bewertungen für Ihre Fan Page oder Seite. Wir vermitteln Ihnen 5 Sterne

Fanmondo.de Social Marketing - YouTube
<https://www.youtube.com/watch?v=VhQrEtqFcGs>
28.12.2016 - Hochgeladen von fanmondo.de
Fanmondo.de Social Marketing Made in Germany Social Marketing für ihr soziales Netzwerk. Wir bieten ...

Fanmondo | Facebook
<https://www.facebook.com> > Places > Fulda, Germany
★★★★★ Bewertung: 5 - 252 Abstimmungsergebnisse
Fanmondo, Fulda. 6054 likes · 7 talking about this. Fanmondo.de Social Marketing Made in Germany Social Marketing für Ihr soziales Netzwerk. Wir bieten...

fanm social n
Gefällt mir Abonnieren ... Mehr

5,0 ★ 5,0 von 5 Sternen
195 Bewertungen

5 Sterne ————— 195
4 Sterne
3 Sterne
2 Sterne
1 Stern

<https://www.fanmondo.de/>

Reputation = an index based on ratings, e.g. the number or proportion of positive ratings

Here 100%

ebay® [Startseite](#) | [Artikel bezahlen](#) | [Anmelden](#) | [Service](#) | [Übersicht](#) [Erweiterte Suche](#)

[Kaufen](#) [Verkaufen](#) [Mein eBay](#) [Gemeinschaft](#) [Hilfe](#) Powered By

Hallo! [Einloggen/Ausloggen](#).

[Startseite](#) > [Service](#) > [Bewertungsportal](#) > **Bewertungsprofil**

Bewertungsprofil:

Bewertungsprofil:	2	Jüngste Bewertungen:		
Positive Bewertungen:	100%	Letzter Monat	Letzte 6 Monate	Letzte 12 Monate
Mitglieder, die mich positiv bewertet haben:	2	+ positiv 1	1	2
Mitglieder, die mich negativ bewertet haben:	0	neutral 0	0	0
Alle positiven Bewertungen:	2	- negativ 0	0	0

[Weitere Informationen](#) zur Bedeutung dieser Zahlen.

Zurückgezogene Gebote (in den letzten 6 Monaten): 0

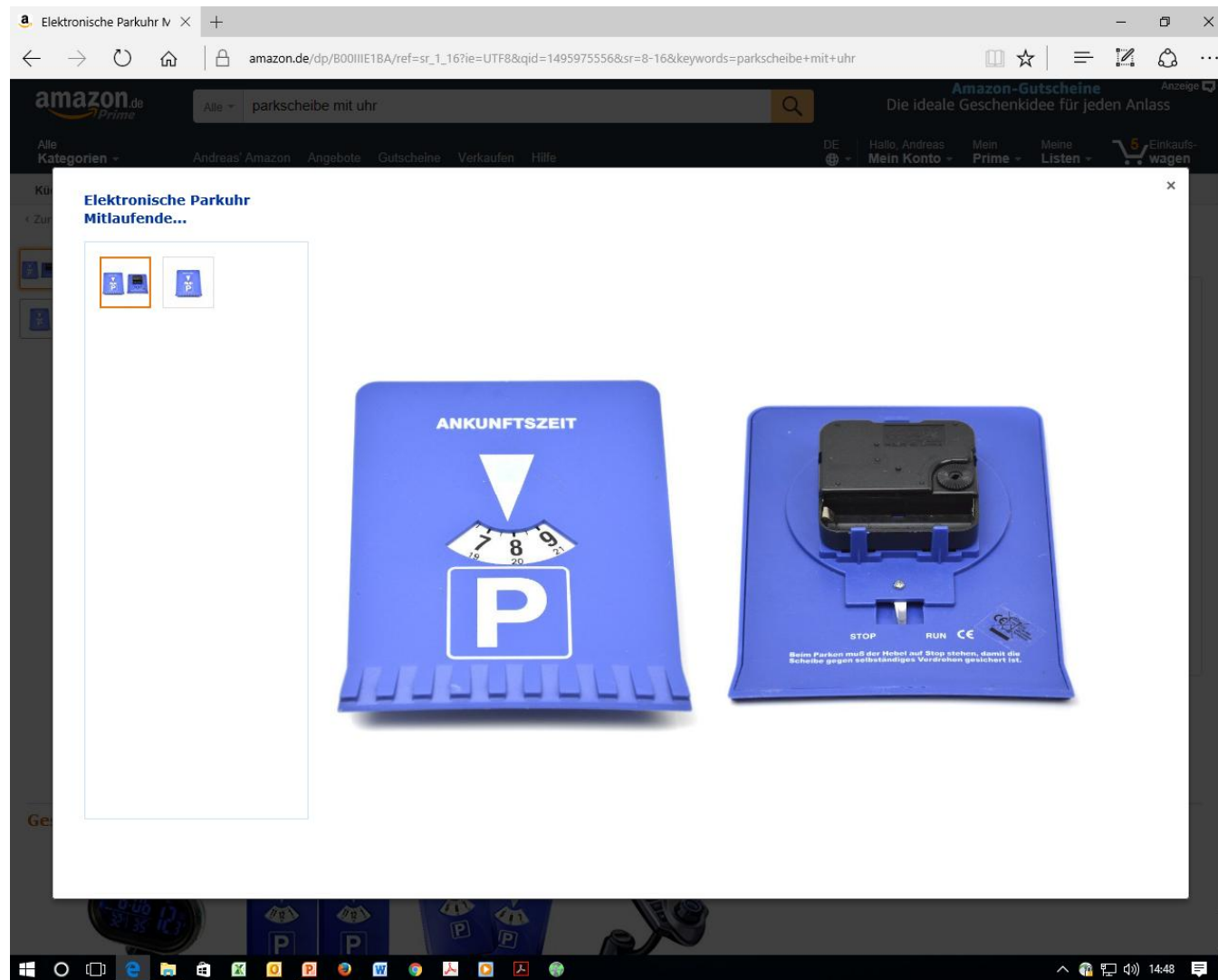
Mitglied seit: 14.12.02
Ort: Deutschland

- [Bisherige Mitgliedsnamen](#)
- [Angebotene Artikel](#)
- [Zu meinen bevorzugten Verkäufern hinzufügen](#)

Bewertung erhalten [Von Käufern](#) [Von Verkäufern](#) [Alle abgegebenen Bewertungen](#)

2 Bewertungen für andreasdie (0 in gegenseitigem Einverständnis zurückgezogen) Seite 1 von 1

Bewertungskommentar	Von	Datum/Uhrzeit	Artikelnummer
+ super gelaufen, gerne wieder, mit bestem Dank von www.ebc-gmbh.de	Verkäufer ebcgmbh (5620 ★)	11.01.05 11:21	5147615317
+ ... Vielen Dank & weiter ...	Verkäufer onlineworldshop24 (1865 ★)	02.06.04 16:21	3292195540



Parking disc with clock. (Not illegal to buy or sell but illegal in Germany when displayed in a parking car with clock switched on!)

	(-177.77)	(-151.23)	(-131.53)	(-101.92)
Kilometers (km/10k)	-0.0353***	-0.0349***	-0.0331***	-0.0331***
	(-126.19)	(-125.85)	(-94.74)	(-92.83)
Horsepower (hp/10)	0.0575***	0.0489***	0.0538***	0.0459***
	(243.67)	(170.22)	(120.90)	(99.27)
Diesel (0/1)	0.0976***	0.0911***	0.0754***	0.0722***
	(73.73)	(78.29)	(37.88)	(40.37)
Warranty (0/1)	0.0175***	0.0128***	0.0158***	0.00934***
	(12.06)	(9.28)	(5.08)	(3.61)
Rating Average (1-5)	0.00552***	0.00497***	0.0110***	0.00874***
	(5.20)	(5.18)	(4.02)	(3.51)
Car Models (Df=19)	No	Yes	No	Yes
Car Features (Df= 14)	No	Yes	No	Yes
Constant	9.491***	9.500***	9.482***	9.499***
	(1811.69)	(1375.65)	(749.94)	(719.51)
Observations	36431	36431	42696	42696
Adjusted R²	0.911	0.933	0.904	0.923
F	52798.4	10585.2	18864.6	3848.2
df m	6	28	6	28

• Warranty and Reputation (Dealers only) In these models, we drop 13'005 (5688+7317) cases from private sellers. Additionally, we also drop 16'746 cases where the average rating is undetermined because the ratings are hidden or the number of ratings is zero. F statistics in parentheses.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Autoscout24

Data from more than 40'000 offers of second-hand VW Golf cars were collected from the platform Autoscout24 using web crawling Software.

Indep. Variable	log (price)	
Age in Years	-0.091	
Mileage	-0.028	
Horsepower [PS]	0.006	
Warranty	0.016	
Reputation	0.011	
Constant	9.504	
Adj. R2	0.893	
N	42696	

Siow/Tobler & Diekmann/Wehrli 2016 (preliminary results). All coefficients are significant for $p < 0.001$.

► Car dealers voluntarily granting a **warranty** claim higher prices (1.6% according to the analysis of 42'696 VW Golf offers on Autoscout24.)

Autoscout24

Data from more than 40'000 offers of second-hand VW Golf cars were collected from the platform Autoscout24 using web crawling Software.

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Autoscout24

Data from more than 40'000 offers of second-hand VW Golf cars were collected from the platform Autoscout24 using web crawling Software.

Indep. Variable	log (price)	log (price) for Golf TDI
Age in Years	-0.091	-0.085
Mileage	-0.028	-0.034
Horsepower [PS]	0.005	0.005
Warranty	0.016	0.017
Reputation	0.011	0.012
„Dieselgate“ (before/after Oct. 2015)	-	-0.039
Constant	9.476	9.638
Adj. R2	0.898	0.882
N	42696	3964

Siow/Tobler & Diekmann/Wehrli 2016 (preliminary results). All coefficients are significant for $p < 0.01$.

- Car dealers voluntarily granting a **warranty** claim higher prices (1.6% according to the analysis of 42'696 VW Golf offers on Autoscout24. Besides: the impact of “Dieselgate” is measurable as a price reduction of 3.9%)
- Smaller but in most models significant coefficients in fixed-effects regression with May and October data

Empirical analysis of auction data shows:

1. Buyers pay for reputation („premium“ on reputation).
2. Sellers have an incentive to invest in reputation, i.e. to behave cooperatively.
3. Sellers choose payment mode („second mover advantage“).
4. A large proportion of buyers is motivated to give feedback: Both motives are present: strategic and altruistic, „strong reciprocity“
5. Simple institutional setting to ensure cooperation! Emergence of institutional rules: 1. Buyer's choice of seller, 2. Advance payment, 3. Seller shipping the product in quality advertised, 4. Buyer's and seller's feedback.

► «Strong reciprocity» supports feedback. Note: without altruistic motives the feedback system would break down and the market would collapse.

► Similar with other institutions (tax compliance, recycling etc.): Important not to destroy the intrinsic motivation of low cost contribution to the public good!

Effect of Reputation on Price

Table 2. Effect of Reputation on Sales and Prices

	Product Sold (0/1)			Selling Price			Selling Price (with Fixed Effects)			
	1	2	3	4	5	6	7	8	9	10
	New Mobile Phones	Used Mobile Phones	DVDs	New Mobile Phones	Used Mobile Phones	DVDs	New Mobile Phones	Used Mobile Phones	DVDs	DVDs
Seller's positive ratings (log)	.344* (.136)	-.019 (.064)	.117** (.040)	.005*** (.001)	.008* (.003)	.053*** (.015)	.027** (.010)	-.002 (.045)	.016*** (.002)	.005 (.007)
Seller's negative ratings (log)	-.670* (.301)	-.207 (.132)	-.145* (.058)	-.013*** (.002)	-.018** (.006)	-.101** (.035)	-.055 (.034)	-.025 (.033)	-.012** (.005)	-.036** (.014)
McFadden <i>R</i> -squared	.858	.678	.133							
<i>R</i> -Squared				.844	.513	.111				
Number of observations	5,499	9,128	339,517	5,269	8,727	180,881	1,612	1,944	113,276	103,030
Number of sellers	4,341	7,687	33,166	4,242	7,474	30,018	585	691		6,901
Number of titles									18,054	15,964

Note: Models 1, 2, and 3: Coefficient estimates of logistic regressions are shown; the binary dependent variable is equal to one for successful auctions. Models 4, 5, and 6: Coefficient estimates of OLS regressions are shown; the dependent variable is the logarithm of the selling price (in Euros). Models 7, 8, 9, and 10: Coefficient estimates of fixed-effects regressions are shown (seller fixed effects in Models 7 and 8, title fixed effects in Model 9, title and seller fixed effects in Model 10); the dependent variable is the logarithm of the selling price (in Euros). Numbers in parentheses are robust standard errors (adjusted for seller-clusters). Models contain various control variables (starting price, length of product description, number of competing offers, and dummies for private profile, verified identity, Me-Page, PowerSeller, auction picture, thumbnail listing, bold listing, payment modes, auction duration, time and date of auction ending, and product subcategory); for detailed results see the online supplement.

* $p < .05$; ** $p < .01$; *** $p < .001$ (two-tailed tests).

- ▶ Significant effect of reputation on price („premium on reputation“)
- ▶ Negative ratings have a much larger effect than positive ratings!
- ▶ In accordance with many other studies. However, here with FE models and panel data.

Diekmann, A., Jann, B., Przepiorka, W., Wehrli, S., 2014.

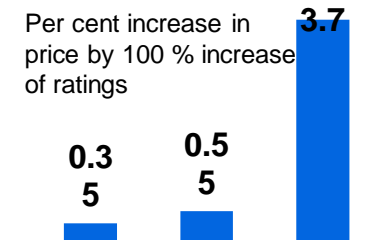


Table 4. Hazards of Positive and Negative Feedback in the DVD Market

	Positive Feedback		Negative Feedback	
	11	12	13	14
	Buyer	Seller	Buyer	Seller
Positive first move by partner (time-dependent)	5.106*** (.112)	13.754*** (1.013)	.003 (.004)	-.006** (.002)
Neutral first move by partner (time-dependent)	.410 (.732)	2.176*** (.461)	.011** (.004)	.440*** (.109)
Negative first move by partner (time-dependent)	-.544 (.327)	1.859*** (.461)	.535** (.166)	1.871*** (.311)
Positive ratings (log)	-.880*** (.183)	-.421 (.234)	-.025* (.012)	-.012* (.004)
Negative ratings (log)	-.616 (.508)	-.225 (.258)	-.102* (.051)	-.008 (.006)
Partner's positive ratings (log)	-.840*** (.137)	-.259 (.269)	.017*** (.005)	.021*** (.006)
Partner's negative ratings (log)	1.023*** (.259)	-.894 (.755)	-.043** (.014)	-.059 (.035)
Previous interaction rating				
Received only	-.067 (.459)	.943 (.596)		
Provided only	-2.051*** (.428)	-1.448* (.676)		
Received and provided	-1.147*** (.219)	-.158 (.286)		
Received or provided			.002 (.005)	.006* (.003)
Number of observations	96,055	96,055	96,055	96,055
Number of events	80,601	80,343	310	223
Number of sellers	9,309	9,309	9,309	9,309
Number of buyers	26,188	26,188	26,188	26,188

Note: The table shows coefficient estimates for effects on the conditional probability of submitting a rating on a specific day given that no rating had been submitted yet (scaled by a factor of 100) for discrete-time linear probability models (LPMs) with seller and buyer fixed effects (standard errors in parentheses, adjusted for buyer-clusters in Models 11 and 13 and for seller-clusters in Models 12 and 14). Time indicators parameterizing the baseline hazard are not displayed.

* $p < .05$; ** $p < .01$; *** $p < .001$ (two-tailed tests).

Seller (buyer) initiates positive feedback:

Buyer (seller) responds to positive feedback:

Evidence for „strong reciprocity“ of buyer

And, to some degree, strategic rating of seller

Strong(er) response of seller

Strong response of buyer

Hazard rate
(conditional
probability) of
positive feedback

Hazard rate
(conditional
probability) of
negative feedback

► Strategic motive

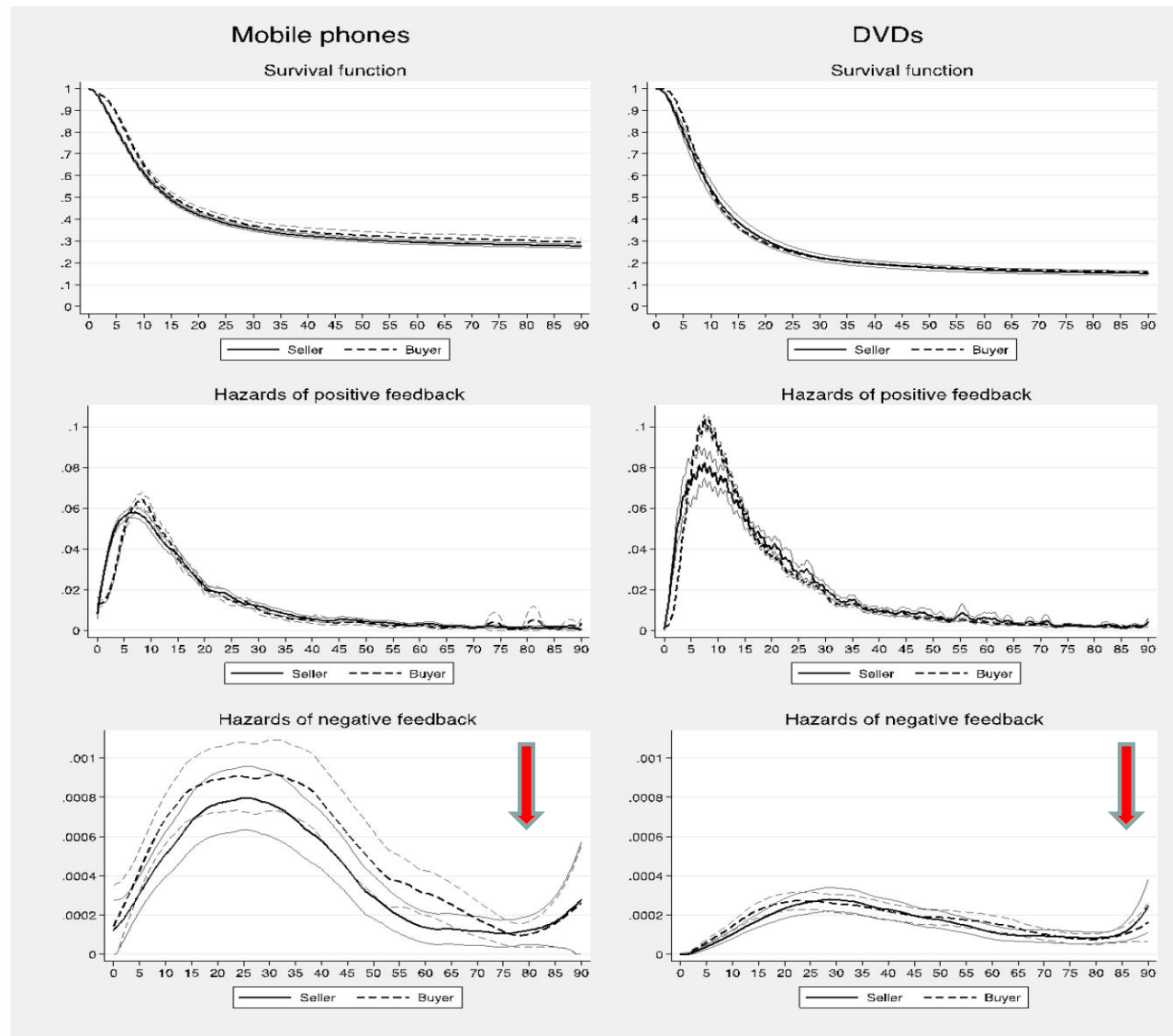
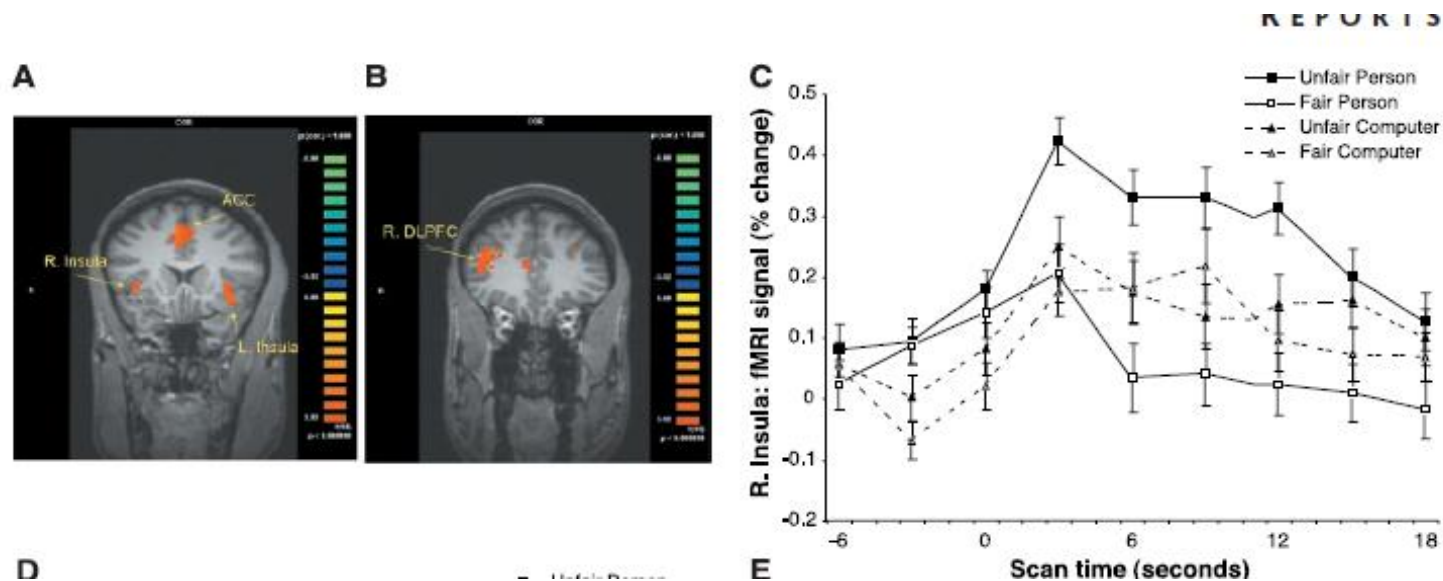


Figure 1. Survival Functions and Hazard Rates of Sellers' and Buyers' Rating Decisions

Sanfey et al., 2003. The Neural Basis of Economic Decision Making in the Ultimatum Game.



„Hard wired“ tendency of reciprocity in Humans?

Subjects playing the ultimatum game in an fMRI scanner

„Monkeys reject unequal pay“. Reciprocity and fairness. An Experiment with Capuchine Monkeys

Preference order of probands



Experimental Design

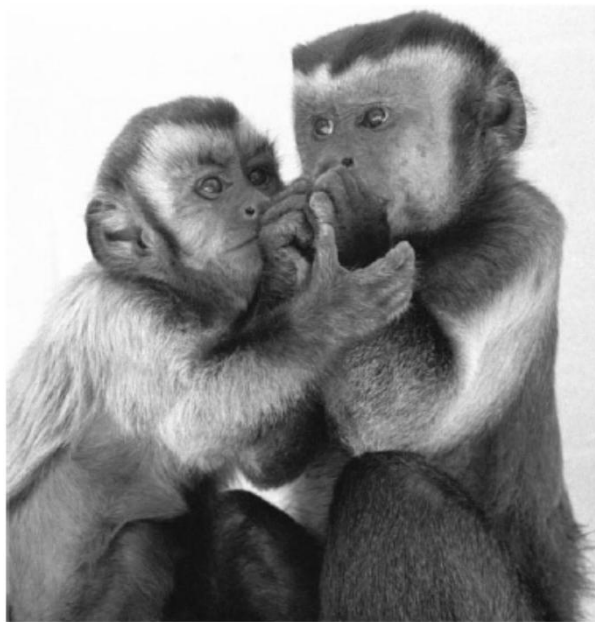
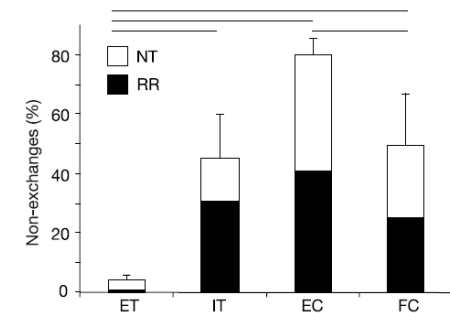


Figure 3 A juvenile capuchin monkey shows cheek-to-cheek begging to an eating adult male, cupping his hand next to the adult's food in solicitation. This primate is exceptionally tolerant and readily shares food, which may be a precondition for the reported reactions to reward division.

Control



Unequal exchange



Monkeys observe partners' exchange.

The Power of Reciprocity

FAIRNESS, RECIPROCITY, AND STAKES IN VARIANTS OF THE DICTATOR GAME

ANDREAS DIEKMANN

Swiss Federal Institute of Technology

In two experiments, the existence and extent of altruistic reciprocity is explored in the context of a simple experimental game, “the sequential dictator.” Findings show that altruistic reciprocity is frequent and robust, and the reciprocity norm does not erode if stakes are raised. Implications of the findings for social theory and further empirical research are discussed.

JOURNAL OF CONFLICT RESOLUTION, Vol. 48 No. 4, August 2004 487-505

Institutional regulations promote cooperation: Acemoglu & Robinson (2012): „Why Nations Fail“

- ▶ Cooperative and prosperous societies have learnt to build „inclusive institutions“!
- ▶ But there is also the possibility that, under certain conditions, cooperation emerges under conditions of anarchy - even among selfish actors! (Axelrod 1984)

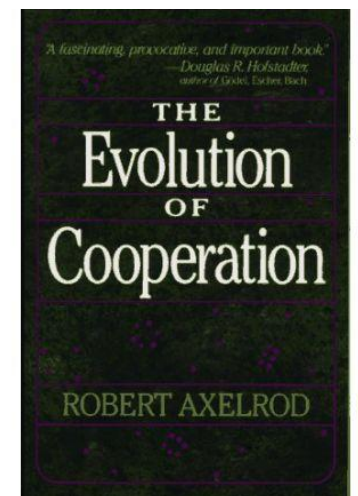
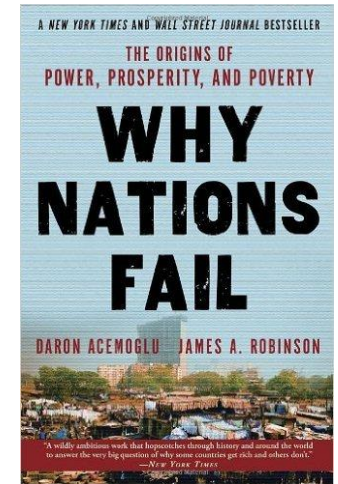
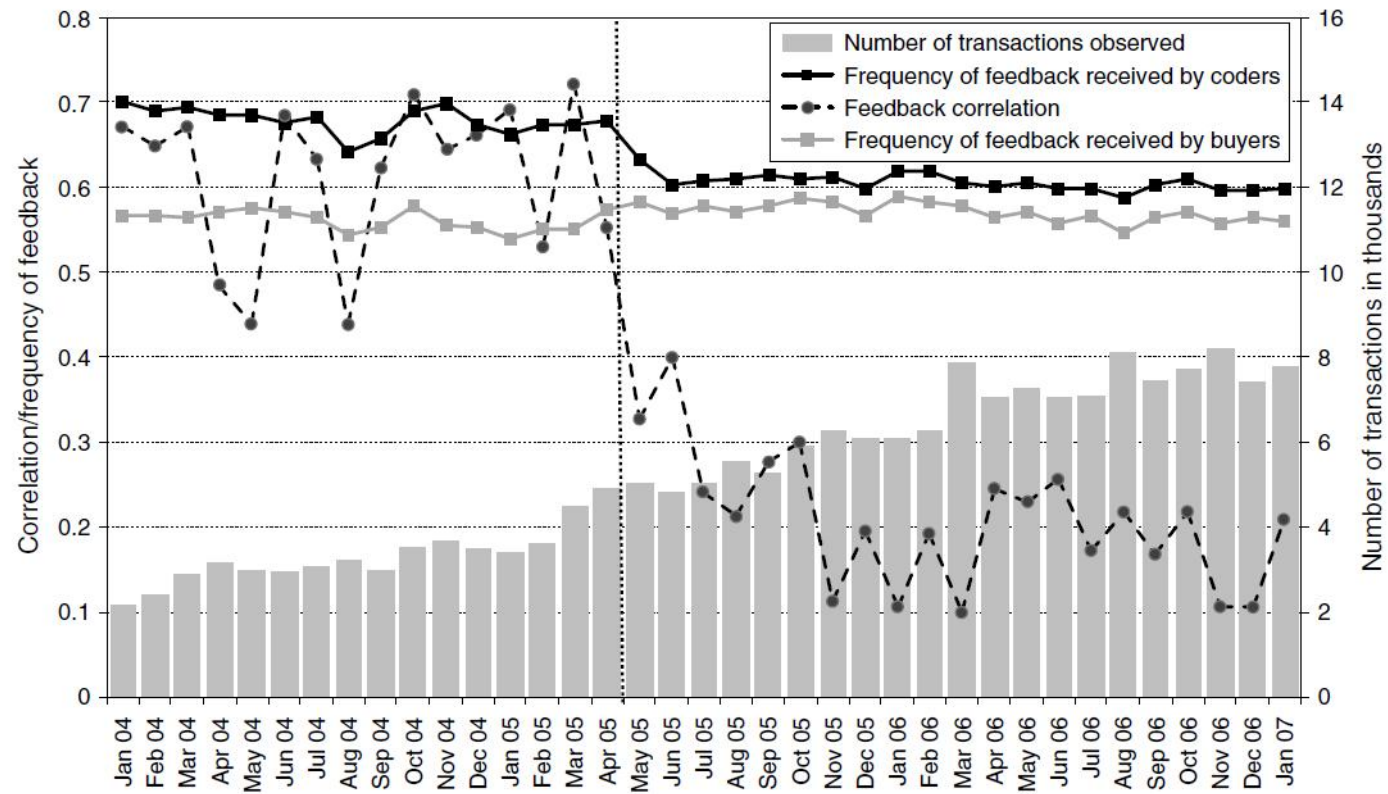


Table 2 Feedback Frequency, Content, and Correlation on MercadoLivre and eBay China, Compared to Other eBay Platforms

	Feedback frequency			Problematic feedback given by (%)		Feedback-content correlation	Feedback-giving correlation
	<i>N</i>	Buyer (%)	Seller (%)	Buyer	Seller	Kendall's tau	Kendall's tau
eBay U.S.	10,169	74.8	76.7	1.4	1.2	0.720	0.595
eBay Germany	14,297	77.3	76.9	1.9	1.1	0.621	0.623
eBay China	2,011	9.3	19.7	5.0	6.7	0.576	0.652
Verified buyers	1,062	15.0	13.6	5.0	4.9	0.576	0.682
Unverified buyers	949	3.1	3.6		14.7		0.460
MercadoLivre Brazil	1,958	71.1	87.9	18.7	29.2	0.785	0.175

Note. All correlations are highly significant.

Figure 2 Feedback Frequency and Correlations Before and After the System Change in April 2005 on RentACoder.com

How to achieve cooperation with trust problems

Decentralized mechanisms sustaining the emergence of cooperation:

1. Moral norms, Kant: categorical imperative
2. Peer Punishment: Sanctioning norm violations (Fehr and Gächter 2001)
3. Costly signals of trustworthiness (Signaling theory), (Spence 1973, Zahavi 1975)
4. Commitments: Deposit, escrow service (Schelling 1960)
5. Repeated games: „The shadow of the future“ (Axelrod 1984)
- 6. Reputation: „The shadow of the past“**

► Trust building Institutions are based on these elements or combinations of it.

Research program: Analysis of alternative reputation systems, its problems and the impact on society

Research question: Functioning and social cooperation on decentralized digital markets without state intervention.

Empirical research:

- Market regulation less important. Decentralized systems („The Foxes“)
- Collecting large („big data“) by web crawling (data from second-hand car market, dark net markets etc.)
- Refined statistical analysis of internet data
- Research with experimental markets in the lab

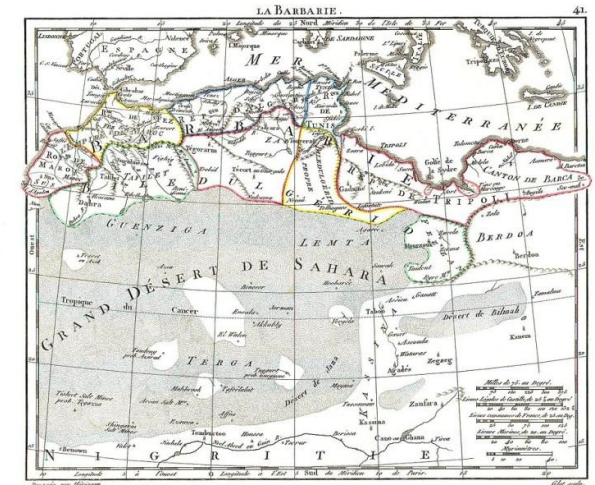
Market regulation is much more important concerning the big companies (Facebook, What's app, Credit Score, Google, Airbnb, Uber etc.) – „The Lions“

Reputation in Science

- Bibliometric measures, citations, h-index etc?
- Various competitive systems: Web of Science (Thompson Reuters), Google Scholars, Research Gate, Academia Edu etc.
- Reputations scores set incentives (and sometimes wrong incentives) for research and publishing.
- Private companies' reputation scores are often not transparent and have an impact on scientists careers!

Historical study by Avner Greif (1989):
Long distance trade of Mahgreb
merchants in 11th century

- Actors are merchants and agents
- Agents had plenty of opportunities to commit fraud (e.g. reporting a lower price for the goods sold while keeping the difference).
- Asymmetric information and trust problem
- Mahgreb merchants solved the dilemma by forming a coalition and establishing a system of exchange of information, i.e. by **establishing a decentralized reputation system.**



Wikipedia Commons

Law Merchant (Lex mercatoria)

- Long distance trade in medieval Europe
 - Important trading place: Champagne Fairs in the 12th and 13th century.
 - Solving the trust problem by private judges.
 - Judges keep records on past behaviour of merchants, merchants pay a fee for access to information, and merchants can ask for a judgment in case a trading partner had been cheated.
- Law Merchant: Endogenous evolution of institutions to establish a reputation system.
- Game theoretic analysis by Milgram, North, Weingast 1990, The Role of Institutions in the Revival of Trade. The Law Merchant, Private Judges, and the Champagne Fairs.

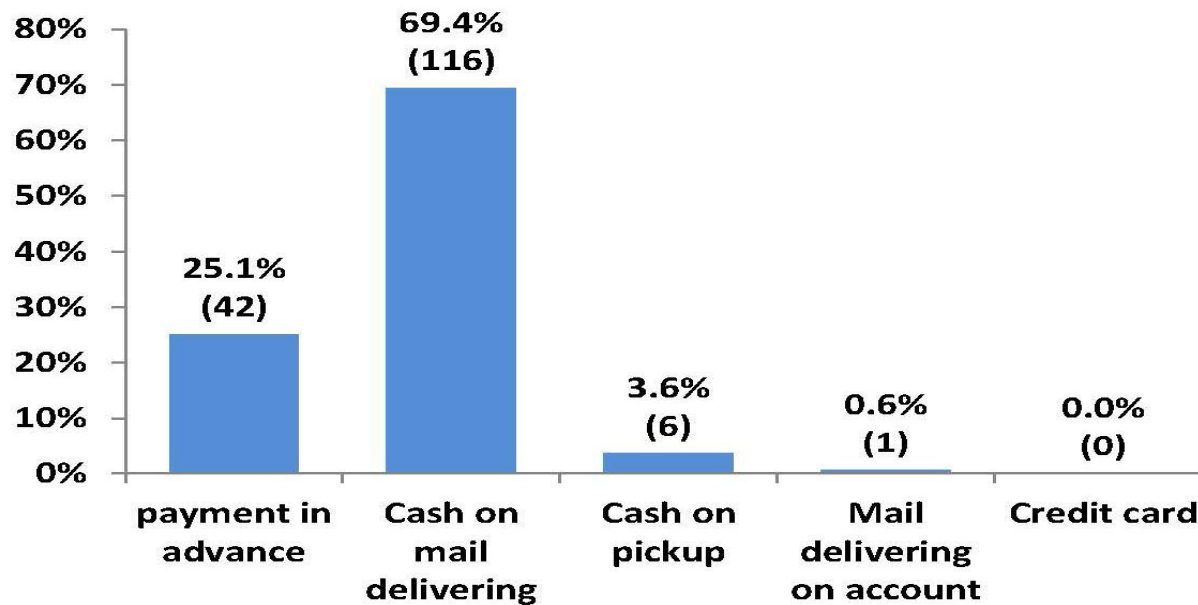


Champagne Fair, Wikimedia Commons

Seller's Trust Problem

- Asymmetry: Buyer chooses seller while seller has to accept buyer!
- Solution to seller's trust problem: Establish payment rules in favour of seller (advance payment, cash on delivery etc.)
- „Small Data“ study with Ricardo.ch: 95 % of 165 transactions were in favour of seller (Diekmann & Wyder 2002)

Payment Rules by Power of Seller



- Shift of power from buyer to seller
- Buyer pays in advance.
- The „strength“ of advance payment (the power of the seller) increases with the sellers' reputation.

Ranking of asymmetry in favour of seller

4 3 2 1 0

Medium reputation of seller

22.1 7.3 1.7 – –

Data from 2001/2002 Ricardo Switzerland auction of Nokia cell phones
(Diekmann and Wyder 2002; Diekmann, Jann, Wyder 2009)

Goldbarren bei eBay



Ende Januar ersteigerte ein Schnäppchenjäger im Internet auf der Handelsplattform Ebay einen solchen Perth-Mint-Barren vom Gewicht einer Feinunze (31,1 Gramm) für 367 Euro. Auf die Idee, dass daran etwas faul sein könnte, kam er nicht. Gemessen am aktuellen Goldkurs wäre ein echter Barren 1163 Euro wert gewesen - dreimal so viel.

Die Anbieter im Internet erfinden dazu gern Geschichten. Einer schrieb, er habe das Gold auf dem Dachboden einer verstorbenen Tante gefunden und wolle es loswerden, deshalb gebe er es billiger ab. "Gerade wenn sie im Internet kaufen, handeln manche nach dem Motto: Gier frisst Hirn", sagt Experte Meyer (Süddt. Zeitung, 18.2.2017).

Reputation

Solution to the trust and cooperation problem:

- ▶ Repeated interactions, Axelrod's „Shadow of the future“
- ▶ However, many transactions are non-repeated, single transactions.
- ▶ Cooperation problem with encounters of strangers. Solution?
- ▶ Reputation: „The shadow of the past“!

How to achieve cooperation with trust problems

Decentralized mechanisms sustaining the emergence of cooperation:

1. Moral norms, Kant: categorical imperative
2. Peer Punishment: Sanctioning norm violations
3. Costly signals of trustworthiness (signaling theory)
4. Commitments: Deposit, escrow service
5. Repeated games: „The shadow of the future“
6. Reputation: „The shadow of the past“

Market with uncertainty of the quality of goods

For sellers.—During each trading period you will have an opportunity to sell *one* shipment of “goods” to one of the buyers. The shipment you sell can vary in terms of its quality. There are three levels of quality (low, regular, super) and the higher the quality the more it will cost you to produce a shipment (a low costs 20 points, a regular costs 60 points, and a super costs 100 points). You will be asked at the beginning of each trading period what quality of goods you wish to produce. The higher the quality, the more the shipment is worth to a buyer. However, *at the time you sell the shipment the buyer will not know the quality*. After the purchase the buyer will be told the quality of the shipment he or she just bought from you.

For buyers.—During each trading period you will have an opportunity to buy *one* shipment of “goods” from one of the sellers. The value of a shipment to you depends on its quality. There are three levels of quality (low, regular, super) and the higher the quality, the higher its value to you (this value is known as the “redemption value”). A low is worth 40 points, a regular is worth 120 points, and a super is worth 200 points. *At the time you buy the shipment you will not know the quality* but after the purchase you will be told the quality of the shipment you bought.

Seller	Buyer
20	200 (40)
60	200 (120)
100	200 (200)

The Emergence of Exchange Structures: An Experimental Study of Uncertainty, Commitment, and Trust¹

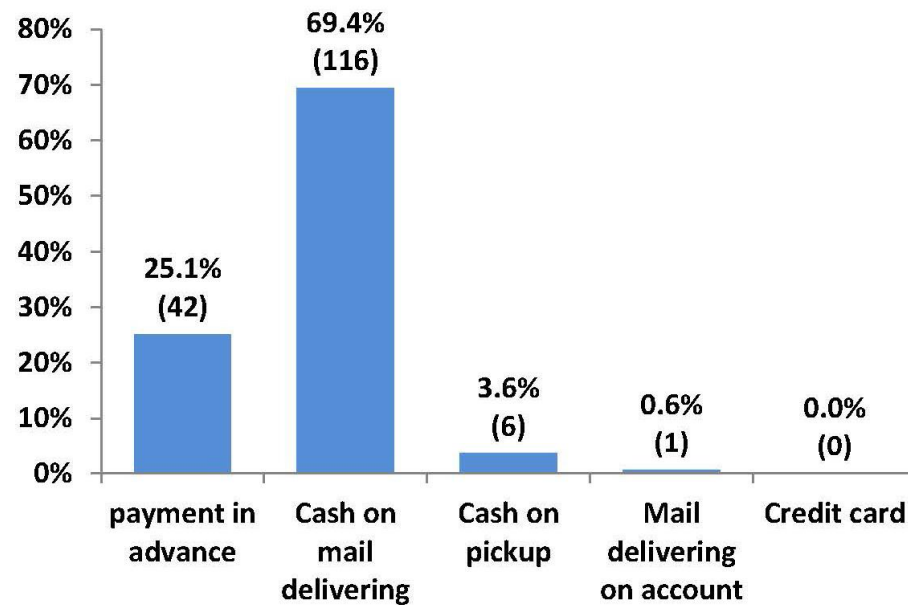
Peter Kollock
University of California, Los Angeles

American Journal of Sociology 100, 1994: 313-345

Seller's Trust Problem

- Asymmetry: Buyer chooses seller while seller has to accept buyer!
- Solution to seller's trust problem: Establish payment rules in favour of seller (advance payment, cash on delivery etc.)
- „Small Data“ study with Ricardo.ch: 95 % of 165 transactions were in favour of seller (Diekmann & Wyder 2002, Diekmann, Jann, Wyder 2009)

Payment Rules by Power of Seller



- Shift of power from buyer to seller
- Buyer pays in advance.
- The „strength“ of advance payment (the power of the seller) increases with the sellers' reputation.

Ranking of asymmetry in favour of seller

4 3 2 1 0

Medium reputation of seller

22.1 7.3 1.7 – –

Data from 2001/2002 Ricardo Switzerland auction of Nokia cell phones
(Diekmann and Wyder 2002; Diekmann, Jann, Wyder 2009)

Kollock, 1994: Lab experiments about trading behaviour on experimental markets with goods of
a) Certain quality
b) Uncertain quality

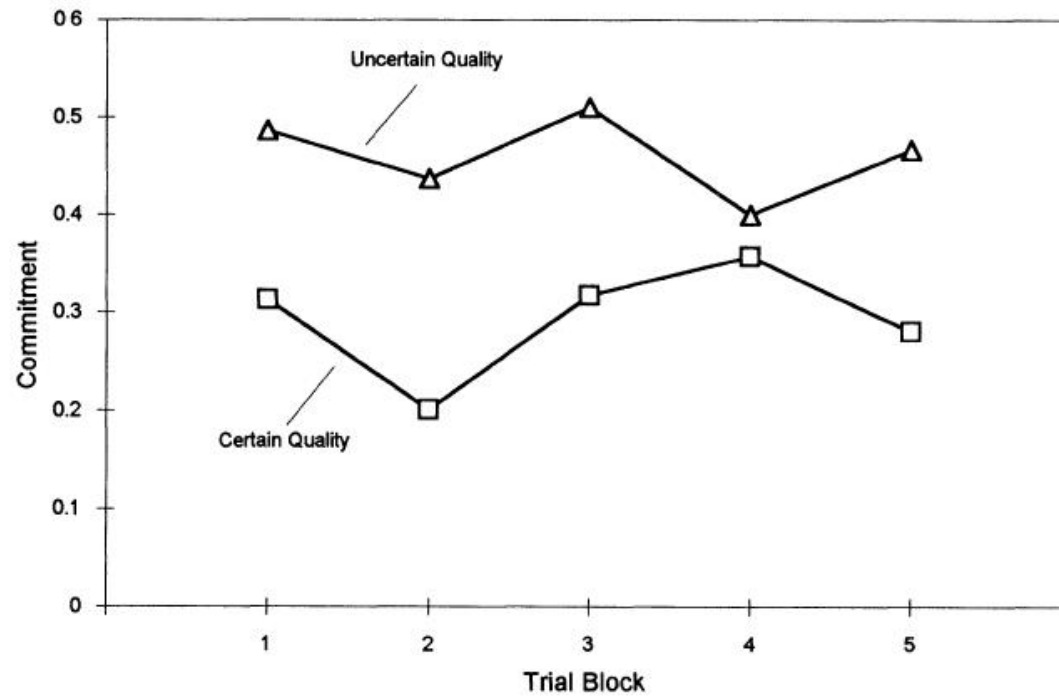


FIG. 1.—Average level of commitment

Kollock 1994

Commitment measure = Standardized network index for the tendency to deal in dyads [0, 1]

Illegal and completely anonymous markets:

- ▶ Ethical Rules of conduct!
- ▶ Seller deposit
- ▶ Seller's account may be revoked if in bad standing
- ▶ Mandatory escrow service
- ▶ Reputation system (informing about product prices of rated transactions)
- ▶ Forum

The mixture of institutional rules (escrow service etc.) and reputation ensures:

▶ **„Order Without Law“**

Max Weber (1920)
“The Protestant Sects and the Spirit of Capitalism”



Foto Max Weber, Bavarian
Academy of Science

After attending a baptism ceremony of a Baptist congregation, Weber learned that “... **once being baptized he will get the patronage of the whole region and he will outcompete everybody.**’ Further questions of ‘why’ and ‘by what means’ led to the following conclusion: Admission to the local Baptist congregation follows only upon the most careful ‘probation’ and after closest inquiries into conduct going back to early childhood (Disorderly conduct? Frequenting taverns? Dance? Theatre? Card Playing? Untimely meeting of liability? Other Frivolities?) The congregation still adhered strictly to the religious tradition. **Admission to the congregation is recognized as an absolute guarantee of the moral qualities of a gentleman, especially of those qualities required in business matters. Baptism secures to the individual the deposits of the whole region and unlimited credit without any competition. He is a ‘made man’**” (Weber 2002:129-130; also see Voss 1998).

Reputation

- ▶ Evaluation of conduct
- ▶ Reliable („careful ,probation‘ and after closest inquiries“)
- ▶ Visible, easy to recognize

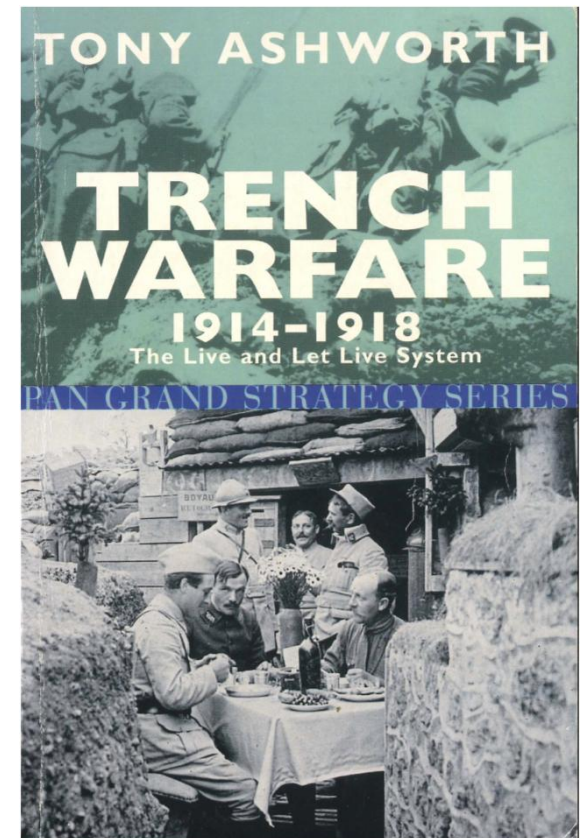
Diekmann, Jann, Wyder 2009; Voss 1998

WW I: Emergence of cooperation among German and French soldiers in repeated interactions

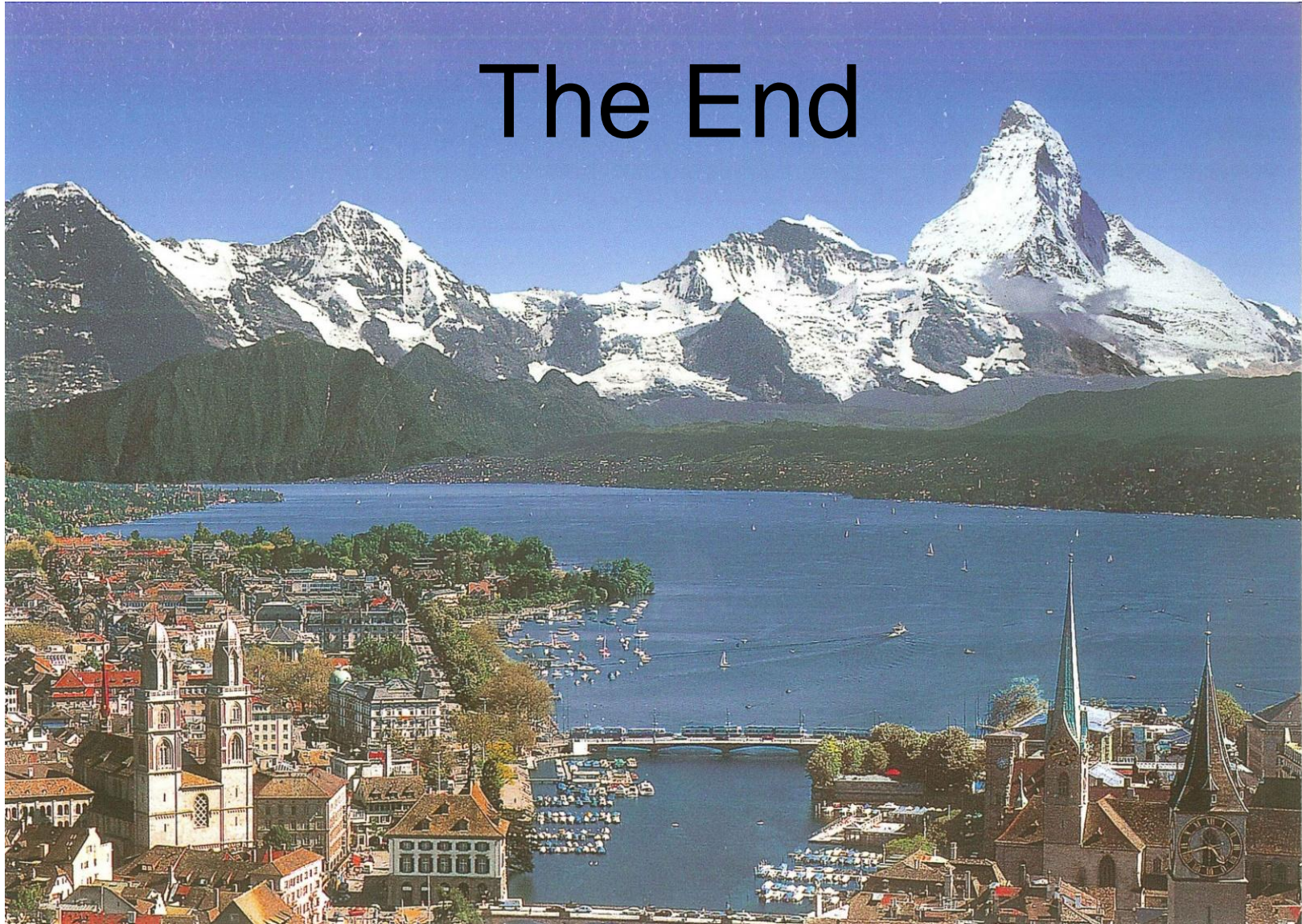


18. German trenches in the Vosges sector where live and let live prevailed for long periods throughout the war.

A system of cooperation emerged among soldiers. Trench warfare led to frequent interactions among the German, British and French soldiers. Soldiers started singing christmas carols, intentionally failed to shoot on each other, and even fraternized and engaged in soccer playing between the front lines in WW I. The „live and let live system“ was explained by theorems of the theory of repeated games (Axelrod 1984, The Evolution of Cooperation)



The End



Othello

Cassio

„Reputation, reputation, reputation! O, I have lost my reputation! I have lost the immortal part of myself, and what remains is bestial. My reputation, Iago, my reputation!

Bertold Brecht, Life of Galileo

- ANDREA loudly: "Unhappy the land that has no heroes"

Bertold Brecht, Life of Galileo

- ANDREA loudly: "Unhappy the land that has no heroes"
- GALILEO: "No. Unhappy the land that is in need of heroes."