

# Underpricing is not a Fairy Tale!?

The Initial Public Offering of Facebook or the Real Price of Shares



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# Agenda

- (1) The Facebook-IPO**
- (2) Shares**
- (3) Initial Listing**
- (4) Underpricing**
- (5) Discussion**

# Agenda

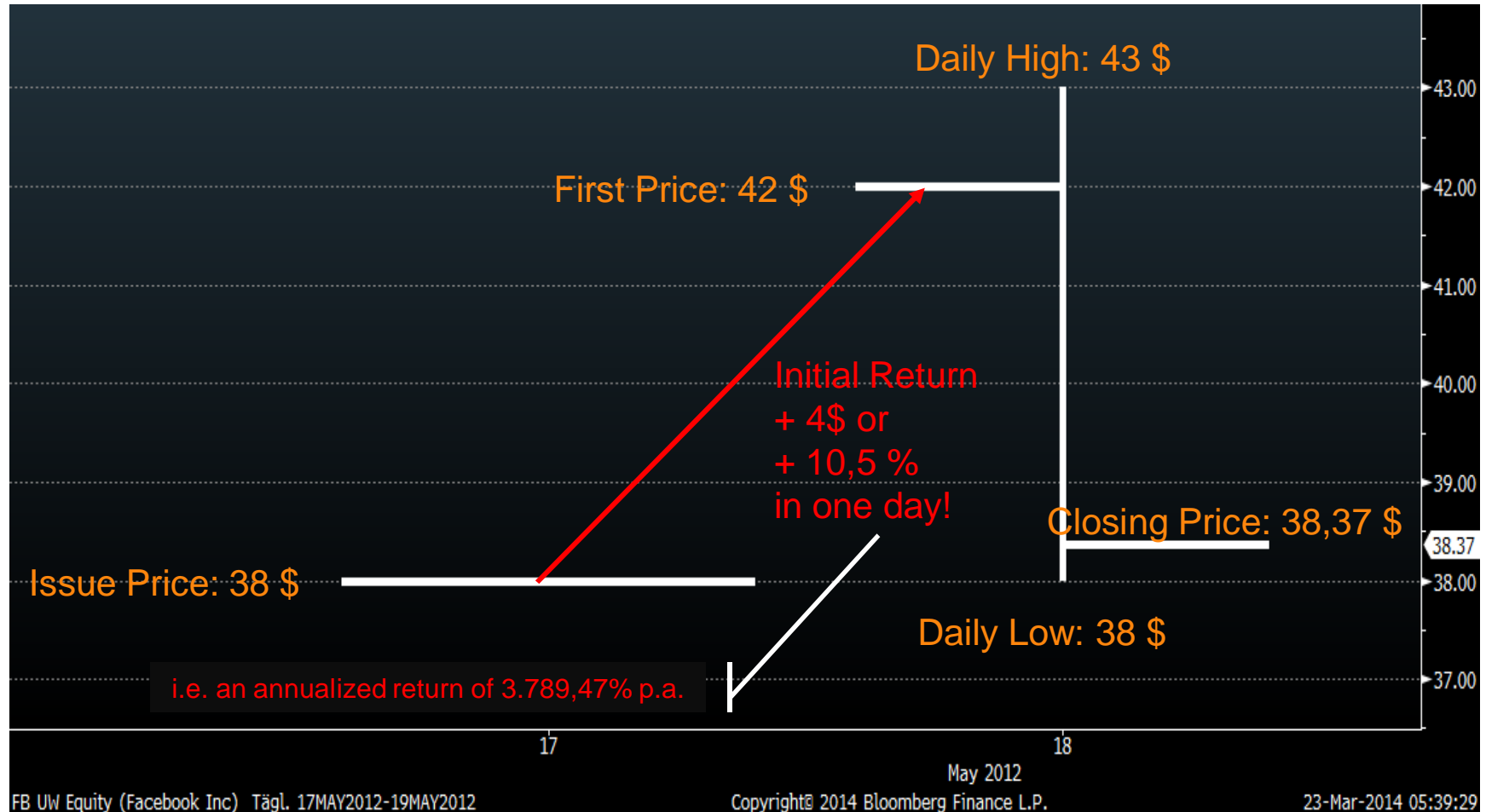
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# The **facebook** - IPO

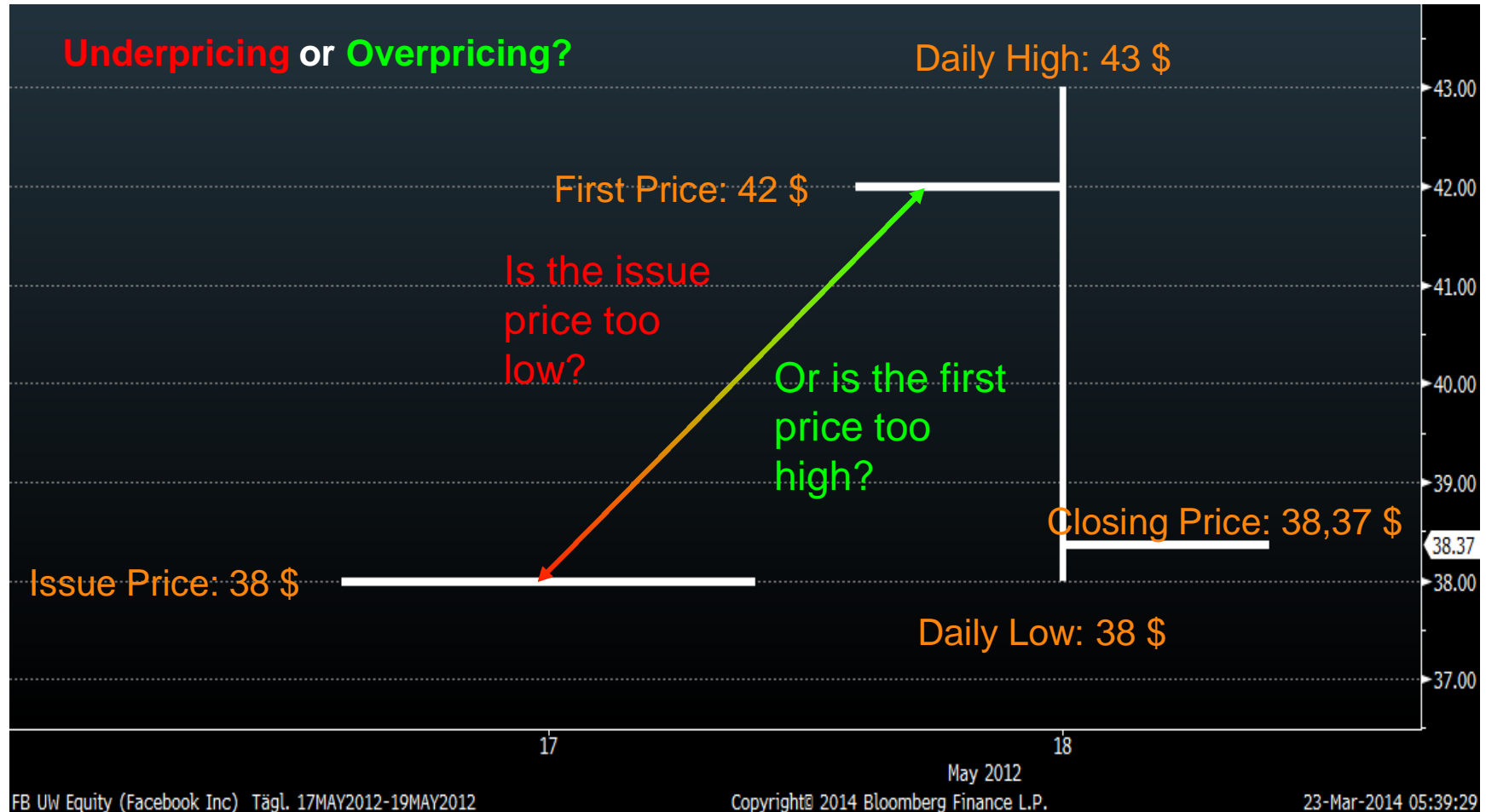
## Facts

- Issuing Volume: 421.233.615 Shares
  - Additional Greenshoe 63.185.042 Shares
  - Total Issuing Volume 484.418.657 Shares
- Gross Proceeds: 16,0 – 18,4 Bn. USD
- Free float: approx. 25%
- Issuing Date: May, 18<sup>th</sup>, 2012
- Stock Exchange: NASDAQ (US)
- **Issue Price:** **38,00 USD**
- Market Capitalization (total): approx. 104 Bn. USD (at Issue price)

# The **facebook** - IPO



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## Shares ...

- are a part of the nominal equity capital of a public company
- are securitized assets
- imply certain rights to the shareholders:
  - part of the net income
  - voting right on the shareholders' meeting
  - right to get information from the managing-board
- include a subscription right for new shares
- include the shareholders right to appeal shareholders resolutions
  
- can be differentiated between
  - common shares vs. preferred shares
  - par-value share vs. no-par shares
  - bearer shares vs. registered shares



# Financial Markets

## Financial Market

### Primary Market

- The primary market is used when governments and corporations initially sell securities.
- Most publicly offered corporate debt and equity come to the market underwritten by a syndicate of investment banking firms.
- Publicly issued debt and equity must be registered with the Securities and Exchange Commission.

### Secondary Market

- After debt and securities are originally sold, they are traded in the secondary market.

# Financial Market – Legal Structure

## **First Level:**

EU legislation and national legal framework

## **Second Level:**

Rules and Regulations referring to the secondary market  
EU-/national laws and/or rules and regulations of the Stock Exchanges

## **Third Level:**

Rules and regulations referring to the primary market, i.e. laws and/or listing requirements of the Stock Exchanges

# Stock Exchange Segmentation

## Segmentation

### Horizontal

- Securities can be traded in different market segments simultaneously.
- e.g. Budapest **and** London

### Vertical

- Securities can be traded in one market segment only.
- e.g. Prime Market **or** T Market (of the Budapest Stock Exchange)

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## Why to go public?

- Enhancement of the equity capital
- Financing of large investments
- Reduction of the costs of capital
- Popularity, Reputation
- Unsolved succession

# Costs of Going Public

- Listing costs of the Stock Exchanges
- Fees of the Underwriter(s) / Consultant fees
- Management costs / Presentation costs / Publication costs
- Costs for changing the legal form
  
- Indirect cost:
  - Investor Relations
  - Underpricing

... without the underpricing the costs of going public amounts up to 5-8% of the gross proceeds.

# The Initial Public Offering

- Pre-Conditions (depending on stock exchange/market segment):
  - legal form
  - minimum net equity base
  - 1-3 fully completed and audited business years
  - free float of the shares of at least 20-25%
  - minimum market price of the shares
  - valuable equity-story
  
- Time-Horizon:
  - up to two years up to the first listing
  
- Selection of the Stock Exchange and the Market Segment
  
- Selection of the Issuing- and Placement Procedures
  
- Determination of the Issue Price
  
- Greenshoe, Price Management

# Selection of the Stock Exchange/Market Segment

- **Criteria:**
  - Popularity
  - Issuing Volume/Free Float
  - Requirements of the Stock Exchange
  - Follow-up Obligations
  - Regional Acceptation of the Issuer/Stock Exchange
  - Primary Objective of the Going Public
  - Admission for an Index
  
- **Possibilities:**
  - **Hungary:**
    - Budapest Stock Exchange
    - Prime Market, Standard Market or T Market
  - **Germany:**
    - Frankfurt Stock Exchange or one of the regional stock exchanges
    - Prime Standard, General Standard, Entry Standard, Open Market (“Freiverkehr”)
  - **Europe:**
    - Euronext, London, Zurich, Vienna or another big player
  - **USA:**
    - NYSE, NASDAQ





# The Most Important Stock Exchanges of the World

## Market Capitalization

Stock Exchange	Bn. USD*
NYSE Euronext (US)	14,086.0
NASDAQ QMX (US)	4,582.0
Tokyo Stock Exchange Group	3,479.0
London Stock Exchange Group	3,397.0
NYSE Euronext (Europe)	2,832.0
Hong Kong Exchanges	2,832.0
Shanghai SE	2,547.0
TMX Group	2,059.0
Deutsche Börse	1,486.0
Australian SE	1,387.0
:	:
:	:
CEE Stock Exchange Group**	175.0
thereof Budapest Stock Exchange	14.4

\* Year-End, 2012

\*\* Year-End, 2013

Source: World Federation of Exchanges,  
CEE-Group

# Who is the Beneficiary of an IPO?

1. When a company is going public we have to bear in mind, that there are already **existing shareholders** who are selling their shares to the public.
2. On the other side it is possible (and mostly applied) that the going public is combined with a **capital increase**.

## 1. Example

- The proceeds of the shares which are sold from the existing shareholders to the public via an IPO accrue directly to the old shareholders!

## 2. Example

- The proceeds of the shares which are sold from the existing shareholders to the public via an IPO accrue directly to the old shareholders!
- The proceeds of the amount of the capital increase accrue to the firm.

Beneficiaries of the gross proceeds (and the underpricing) are the old shareholders. The firm benefits in case of a capital increase only.

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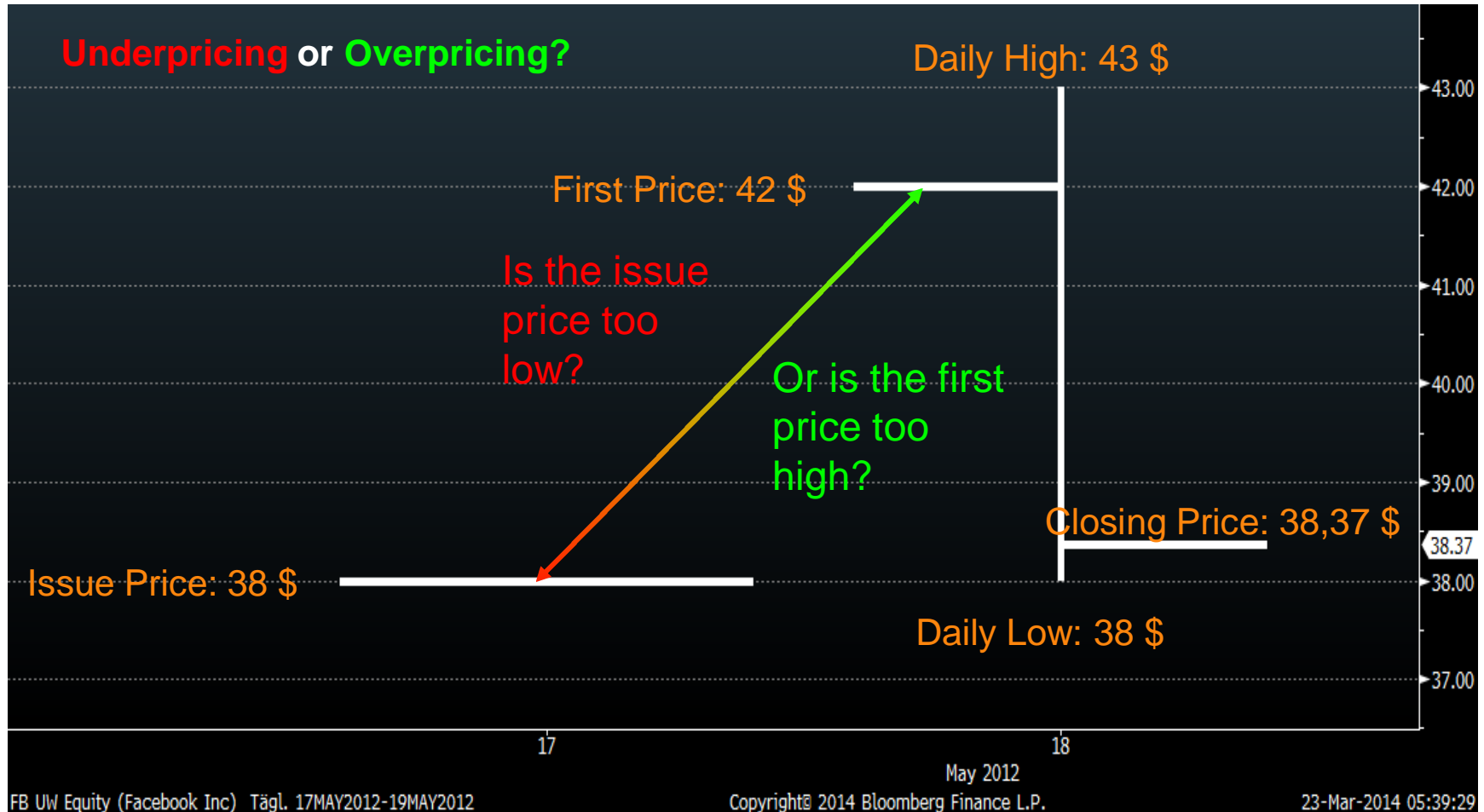
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- Last Price (as of March, 21<sup>st</sup>, 2014) 67,24 USD
  - Market Capitalization 170,8 Bn. USD

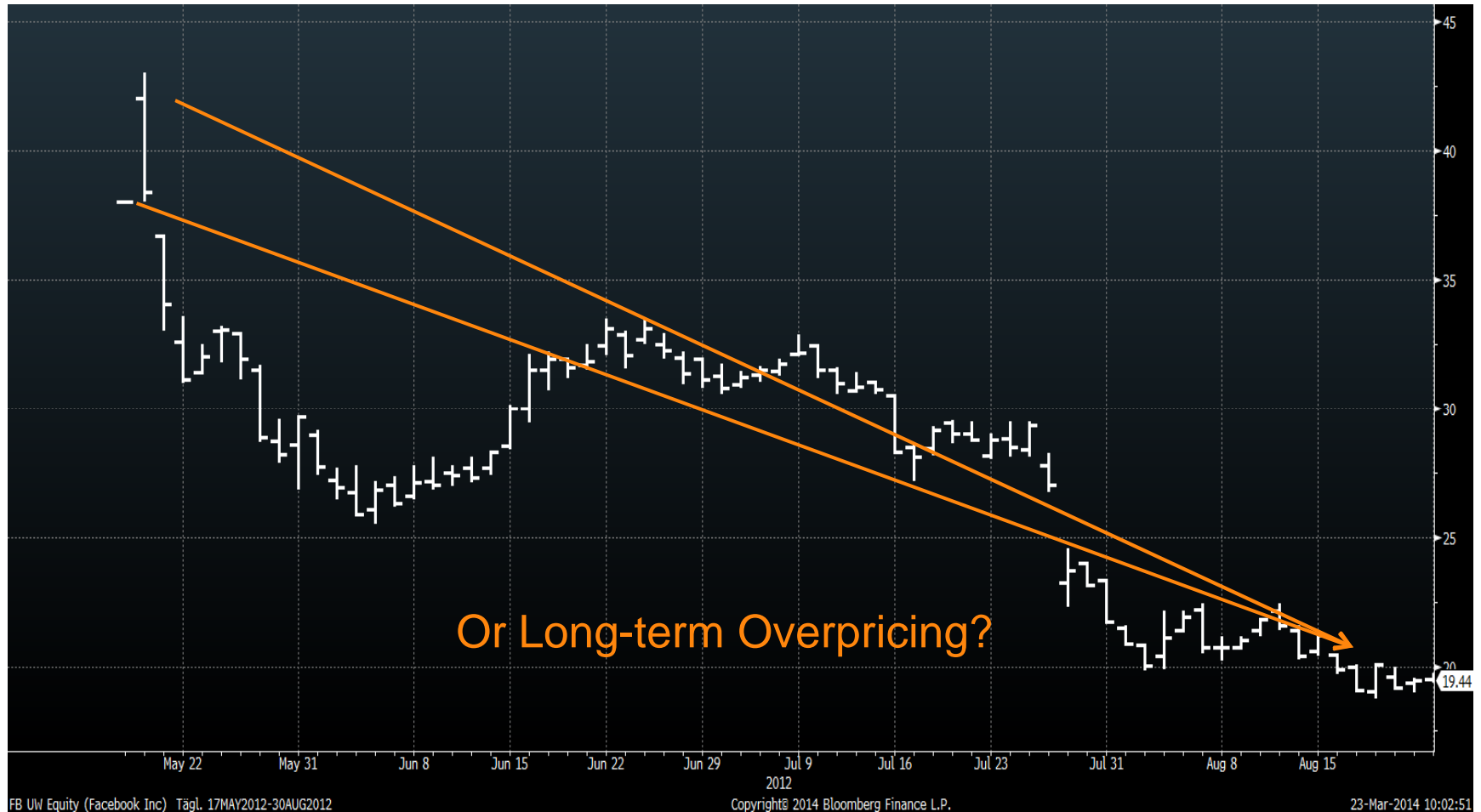
# The **facebook** - IPO

2012, May, 17<sup>th</sup> – May, 18<sup>th</sup>



# Die **facebook** - Aktie

## 2012, May, 17<sup>th</sup> – Aug, 23<sup>rd</sup>



FB UW Equity (Facebook Inc) Tägl. 17MAY2012-30AUG2012

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Source: Bloomberg

# Die **facebook** - Aktie May, 17<sup>th</sup>, 2012 – Mar, 23<sup>rd</sup>, 2014



Source: Bloomberg

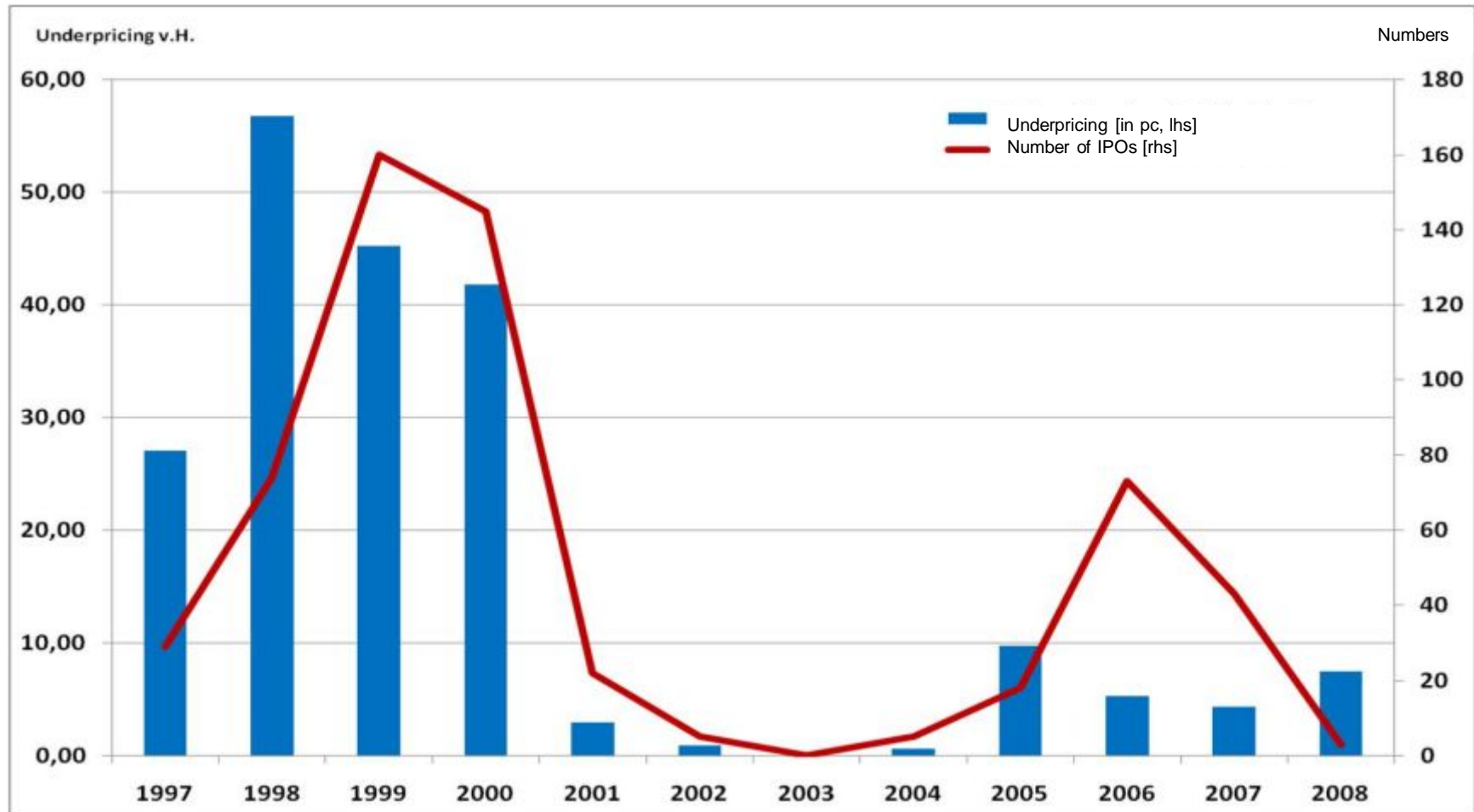
# Initial Return & Underpricing

- **Initial Return:**
  - Difference between first price and issue price
  
- **Underpricing:**
  - Difference between first price and issue price – adjusted by the return of a reference investment (e.g. market index)
  
  - it is the return for a few days only (not a p.a. figure)
  - market- und risk adjusted measurable
  - worldwide proved
  - different in different periods
  - different over stock exchanges and countries
  - approximately 4-50%, but also 100, 200 or 300%



# IPOs & Underpricing:

Risk-adjusted returns and number of German IPOs, 1997-2008



Source: Hunger (2003, 2004, 2007)

# Explanations:

## Superordinate (equilibrium-based)

- Market Reputation

## Equilibrium-Based Theses

- Winner's Curse
- Ex-ante Uncertainty
- Underwriters Reputation
- Signaling
- Advanced Information of the Underwriters
- The Venture-Capital Industry

## Ad-hoc Hypotheses

- Legal Liability
- Monopsony Power
- Institutional Allocation
- Underwriters Price Support
- Prospect Theory

## Equilibrium-Based Theses

- **The Winner's Curse** (Rock, 1986)  
Shares must be offered at a discount to hold uninformed investors in the market
- **Ex-ante Uncertainty** (Beatty/Ritter, 1986)  
Underpricing serves as a compensation for the investors' cost of getting information
- **Signaling** (Allen/Faulhaber, Grinblatt/Hwang, Welch (1989)  
Underpricing serves as a signal for high quality firms to leave "a good taste in investors mouth"
- **Advanced Information of the Underwriters** (Baron, 1982)  
Share are offered at a discount to minimize the risk not to sell all the shares within an IPO
- **Underwriters Reputation** (Carter/Manaster, 1990)  
Underwriters with low research activities are cheap, but they aren't possible to estimate a fair price
- **The Venture-Capital Industry** (Booth/Smith, 1986, Barry, 1990)  
VC-backed IPOs are less risky because of a professional monitoring, therefore sold at a fair price

## Ad-hoc Hypotheses

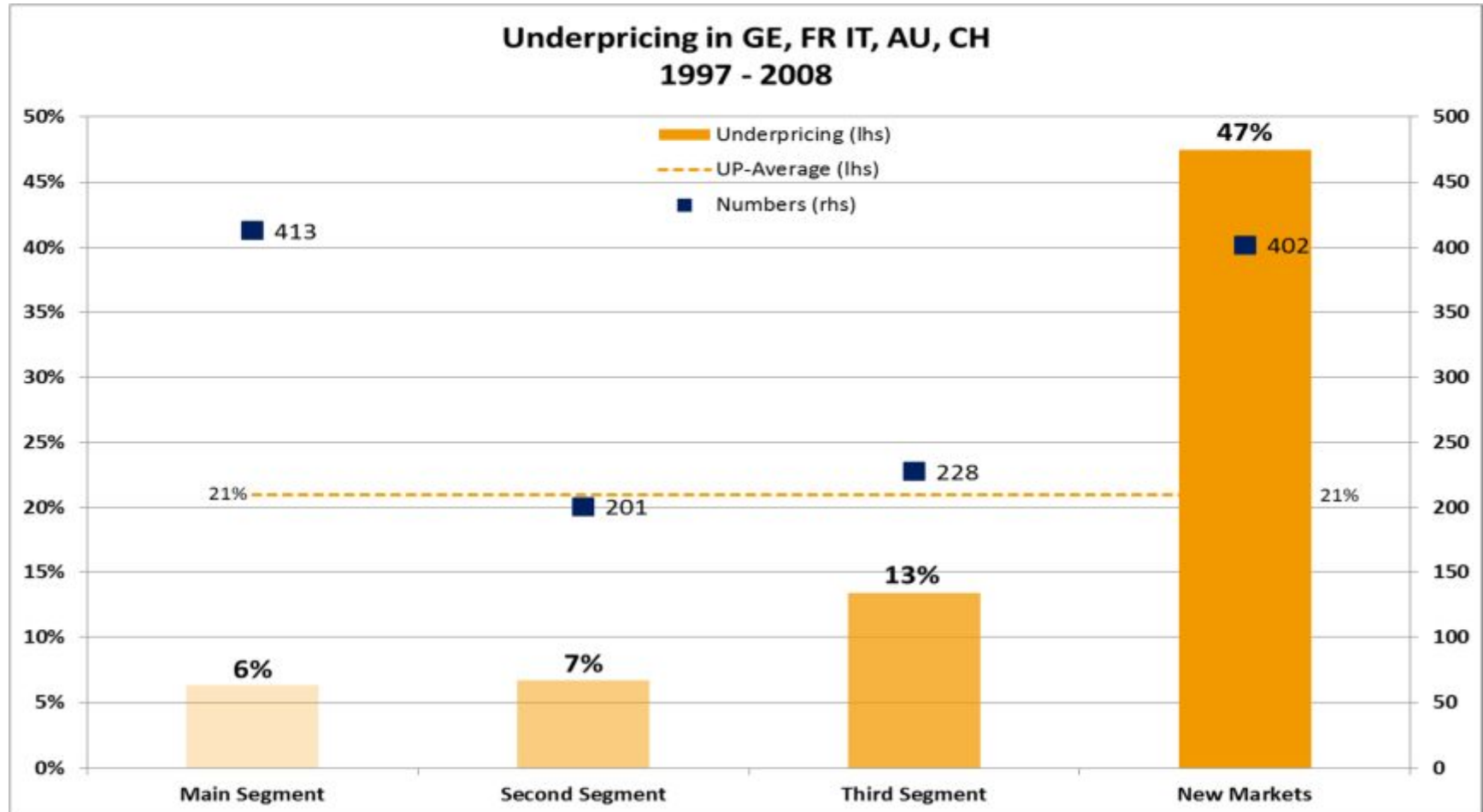
- **Legal Liability** (Tinic, 1988)  
Because underwriters are liable for false information they underprice the shares to avoid lawsuits
- **Monopsony Power** (Logue, 1973, Reilly, 1977, Ritter, 1984)  
There is a monopolistic structure in the underwriters market so they can minimize the sale risk
- **Institutional Allocation** (Hanley/Wilhelm, 1995, Aggarwal, 2001)  
Underwriters will give a benefit (= underpriced shares) to their good/important clients
- **Underwriters Price Support** (Ruud, 1993)  
Underwriter intervene in the market to avoid a negative performance
- **Prospect-Theory** (Loghran/Ritter, 2000)  
Better a low issue price for sure than a higher price with uncertainty

# Superordinate

- **Market -Reputation** (Hunger, 2001-2005)

Each vertical market segment possesses a certain reputation due to the respective listing requirements, the marketing of the stock exchange, their presence in the media and the historical and jurisdictional arrangement in the national/international capital market. This reputation of the market segments is correlated that way with the IPO-Underpricing, that Underpricing is the higher, the lower the reputation of the market segment is.

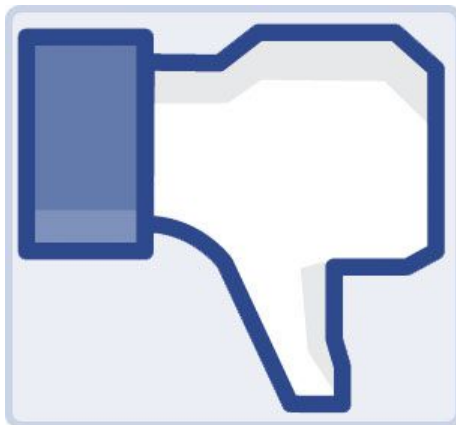
# Support for the Market-Reputation Thesis



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## (5) Discussion





## Contacts

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