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# Study: The Effect of Leaks on Success and Costs of German Public Takeovers

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# Public Takeover Offers in Germany are preceded by substantial Price Runups of c. 7% abnormal positive Returns

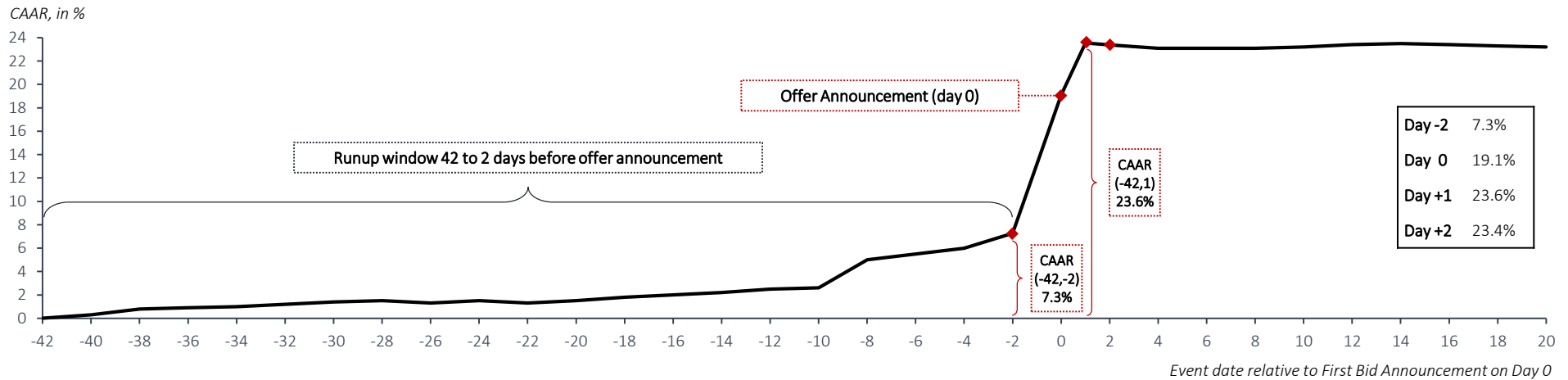
- First empirical study measuring the **relationship** of target **price runups**, **offer premium** and **takeover success** in **Germany**<sup>1</sup>. Conducted by HHL Leipzig, Chair of Prof. Dr. Bernhard Schwetzler, supported by ParkView Partners
- **Unique data sample** comprising **324 German public takeovers** in the period **2006-2019**
- Public **takeover offers** in Germany are **preceded** by **substantial price runups** of **c. 7% abnormal positive returns** over a **42 days period** (measurement period starts 42 days prior to announcement of a public takeover)
- **Significant runups** in the last **10 trading days** before offer announcement
- The study shows that takeover offers by **financial investors** are better **anticipated** and **more likely** leading to **larger price runup**
- Runups **reduce** the **success of takeover offers** and increase **takeover costs**, **however**, there is only **partial substitution in runups**, i.e. share price runup does not increase offer price 1:1 but a **1% higher runup drives** an increase in **total cost by 0.78%**

The study shows that confidentiality is of crucial importance, when preparing for a public takeover. Bidders and targets should limit team sizes to select key employees only and urge advisers to work with small teams

(1) Schwetzler, B./Uhlenkamp, L.M. (2020): Tailwind and headwind bidding in German takeover offers – the impact of price runups on takeover success

# Our Analysis reveals that Runups in public Takeovers in Germany exist and there is a Lack of Evidence that they are driven by public Information

Cumulative Average Abnormal Returns (CAAR) to stock prices before offer announcement



## Analysis of pre-bid stock price runups

- The sample group consists of **324 takeover offers** of publicly listed German companies from **2006 to 2019**
- Pre-bid price run-ups are measured by **cumulative abnormal returns (CAARs)** using the **CDAX as reference value**
- In **62.7% of the cases** the CARs between 42 to 2 days before offer announcement (CAR (-42,-2)) are positive (CAR > 0), indicating a **pre-bid runup**

German takeover offers are preceded by substantial price runups which cannot be explained by public information – this allows the conclusion that pre-bid runups are partly driven by non-public information leaking to the market

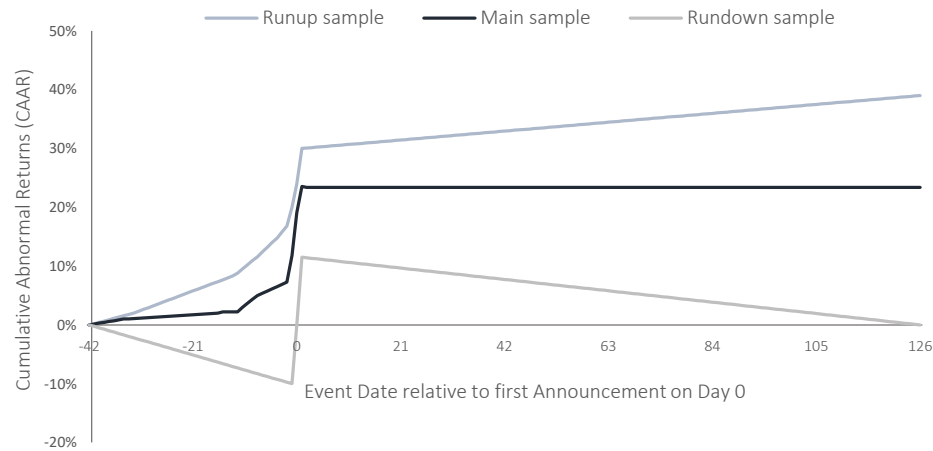
## Main Findings

- **Significant runups** starting **10 days before** offer announcement; whereby insider trading activity are possibly causing abnormal returns
- On offer **announcement day** (day 0) significant news about the target are revealed to market participants, triggering average **abnormal returns of 10.0%**
- **Almost one third** (7.28% vs. 23.55%) of the **abnormal returns occur before offer announcement**

(1) The market model parameters are fitted over an estimation period from 252 to 43 days before the takeover offer announcement

# Approximately two Thirds of all Public Takeovers in Germany are preceded by a Stock Price Runup

The main sample (n = 324 cases) can be split into a pre-bid runup & rundown sample



Mean values	Main sample	Runup sample: CAR (-42,-2) > 0	Rundown sample: CAR (-42,-2) < 0
Number of cases	324	203	121
Success rate <sup>3</sup>	35.4%	32.5%	40.3%
Markup premium	13.6%	11.1%	17.9%
CAR (-1,1) <sup>1</sup>	16.3%	13.1%	21.5%
Runup premium <sup>2</sup>	4.5%	8.1%	-1.6%
		+	
Market premium <sup>2</sup>	14.4%	12.1%	18.2%
		=	
Offer premium <sup>2</sup>	18.8%	20.2%	16.6%

Main findings

- **Runup cases:** Targets with **positive** CARs between 42 to 2 days before offer announcement
- **Rundown cases:** Targets with **negative** CARs between 42 to 2 days before offer announcement
- **Success rate:**  $\frac{\text{Acquired shares during takeover}}{\text{Total shares outstanding} - (\text{Shares under control})^3} \cdot [0-100\%]$
- **Success rate:** Pre-bid target price runup achieve significantly smaller takeover success than pre-bid rundowns, *ceteris paribus*
- **CAR (-1,1):** In pre-bid target runups the capital market reacts to a smaller extend to the offer announcement, *ceteris paribus*
- **Total costs:** Pre-bid target runup (20.2%) yield a higher total cost (= runup + markup premium) compared to pre-bid rundowns (16.6%), *ceteris paribus*

(1) Cumulative abnormal returns 1 day before to 1 day after the offer announcement; (2) Based on 3m VWAP; (3) Include toehold and irrevocable undertakings/pre-negotiated stakes

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