

## M&A

Moqi Groen-Xu



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## Cross-border acquisitions

Advantages of acquisitions versus greenfield investments:

- Quicker
- Cost-effective way of gaining competitive advantages (technology, brands, logistical and distribution advantage)
- Market imperfections allow target firms to be undervalued (economic, political, and exchange rate conditions)



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## Cross-border acquisitions

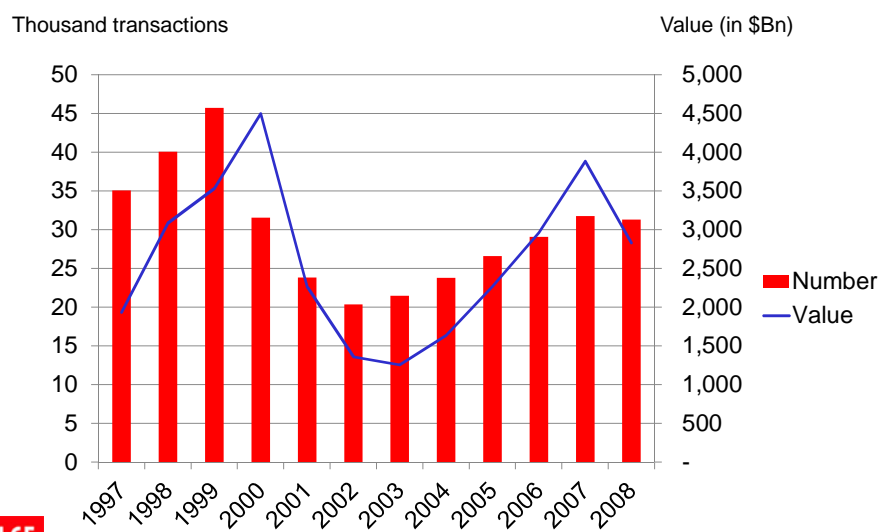
Pitfalls:

- Information asymmetry: price may be too high
- Corporate culture clashes
- Potential downsizing and loss of jobs
- Government intervention
- Fear of foreign ownership



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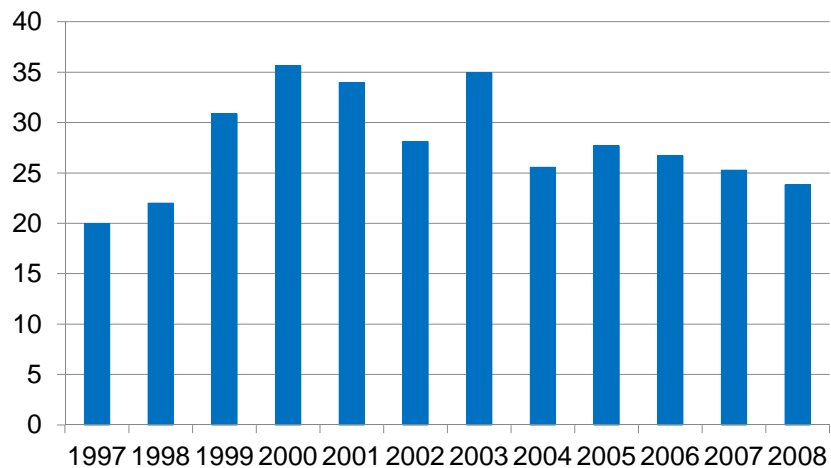
## Worldwide M&A (1997-2008)



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Source : Thomson Financial (deals completed)

## Average acquisition premium(1997-2008, US)



Source : Thomson Financial (deals completed), premium to stock price 4 weeks prior to announcement

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## Merger Event Study

- Event window: A few days around the merger announcement.
- Market model: Estimate A and B's respective  $\alpha$  and  $\beta$  over an estimation window, i.e., 120 days before the event window:  

$$R = \alpha + \beta R_m + \text{error term.}$$
- Estimate abnormal returns on each day of the event window:  

$$AR = R - (\alpha + \beta R_m)$$
- Cumulative abnormal returns (CAR):  
 For A and B, sum up ARs over the event window.



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## Merger Event Study (cont.)

- Bid premium:
  - in % terms =  $CAR_T$ .
  - in \$ terms per share =  $CAR_T * p_T$ .
  - In \$ terms for target (T) shareholders =  $CAR_T * V_T$ .

- Synergies:

$$CAR_A * V_A + CAR_T * V_T$$

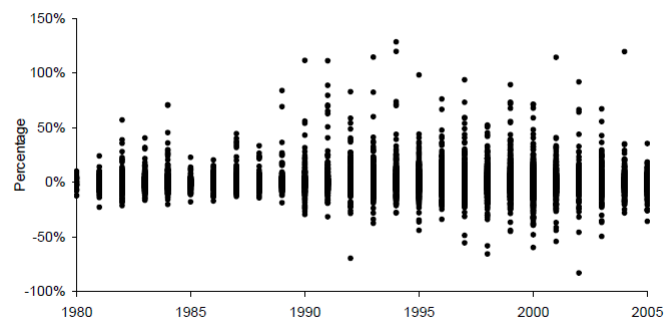


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## Acquirer announcement returns

A: Cumulative abnormal return (-1,1)



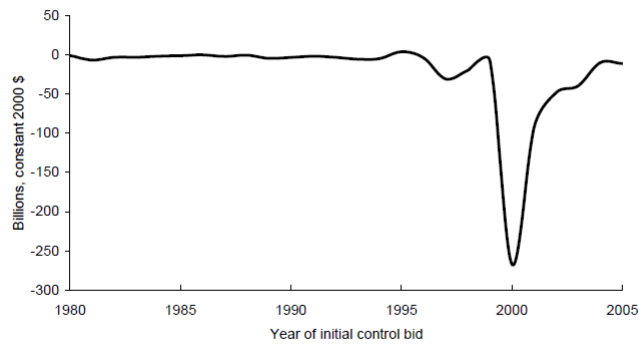
Source: Betton, Eckbo and Thorburn: Corporate Takeovers



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## Acquirer announcement returns

D: Aggregate dollar abnormal returns



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Source: Betton, Eckbo and Thorburn: Corporate Takeovers



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## Acquirer announcement returns

- Target shareholders are offered a premium and therefore gain from a takeover (10-50%)
- Bidder shareholders tend to be negative
  - Market reaction can contain other information about bidder
  - Bidders buying in cash instead of own shares experienced higher returns (again cash good and shares bad signals)
  - Bids can also provide (primarily positive) information about the target (targets on failed mergers trade at a premium)
  - What if the merger is anticipated?



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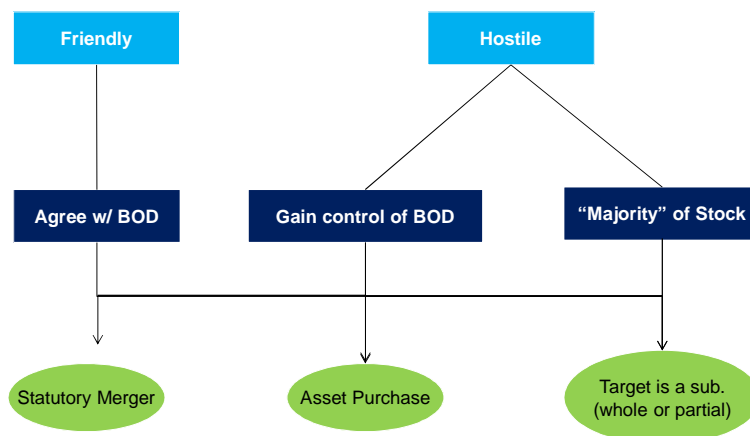
# Control



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# Deal structure



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## Method 1: Friendly Acquisition

- Negotiate with target's management in a "friendly environment".
- Both sides conduct their own valuation analysis.
- In principle:
  - Keep both Boards of Directors (BOD) informed.
  - Disclose that negotiations are taking place.
- BOD needs to approve → Fairness opinion by I-bank or valuation specialist to assess the terms of the deal.



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## Method 1: Friendly Acquisition (cont.)

- By far the most frequent acquisition method.
- This is the only possible method:
  - For privately owned firms.
  - For firms with a controlling shareholder.
- In most countries, most firms are tightly controlled (the typical firm is a family firm), even large publicly traded ones.



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## Method 2: Buy Majority of Stock

- Acquire enough shares to gain “Control”.
- How many shares? This varies across firms, countries, etc.
- How to go about it?
  - Private negotiation with a large shareholder.
  - Tender offer.
  - Creeping tender: Open market operation.



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## Private Negotiation

- Acquire a block of shares from an existing large shareholder (“Passing the Parcel”).
- Equal Treatment Rules (Mandatory Bid Rule) might force you to extend the offer to other shareholders.



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## Tender Offer

- Bypass the target's management and ask shareholders directly to sell (tender) their stock.
- Public announcement: "Will pay \$55 per share!"
- Some terms and conditions:
  - 30 day period can be extended (esp. if offer is contested).
  - Conditional / Unconditional.
  - Payment in Cash/Shares/Both.
  - Restricted / Unrestricted.
  - Friendly / Hostile.



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## Creeping Tender

- Acquire shares in the open market.
- May be illegal. Probably get dragged into court.
- Disclosure and Equal Treatment limit creeping tender.
- Why acquire a small block (Toehold)?



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### **Method 3: Gain Control of Board of Directors**

- Follow a complex series of tricky moves.
- Propose a slate of directors at annual shareholders' meeting.
- Vote (complicated rules).
- Majority of votes → Your nominees win.
- If nominees constitute a majority of BOD → "Control".



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### **Method 3: Gain Control of Board of Directors (cont.)**

- Very few shares needed for this method (varies across firms).
- Cheaper than acquiring control by buying enough shares.
- But more time consuming and less likely to succeed.
- Sometimes do both.



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## Statutory Merger

- Combine Assets and Liabilities of the merging firms into new entity (“Successor liability”).
  
- No need to renegotiate all contracts of employment, credit or to transfer each asset: It’s automatic!



## Statutory Mergers: Important Remarks

- **Minority Squeeze Out (Freeze out).**
  - Merger requires vote of both sets of shareholders.
  - If approved, terms are binding for all shareholders.
  - Minority can sue the company.
  
- **Assets and Liabilities: “Both Known and Unknown”.**



## Asset Purchase

- The acquirer:
  - Buys selected assets.
  - Assumes selected liabilities.
  
- Usually vote to liquidate remaining assets and dissolve the target → Proceeds are distributed to target shareholders.
  
- What are pros and cons w.r.t. purchase of stock?



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## Asset Purchase (cont.)

### Remark 1:

- One way to evade some liabilities (including union contracts,...).
- Limited by Trust Fund Doctrine (and similar rules outside US).

### Remark 2:

- Bidder may not have to gain approval of its shareholders.
- Usually, approval is necessary in equity deals and when there are not enough shares already authorized.

### Remark 3:

- Sometimes incredibly high transactions costs.



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## Accounting

- **Pooling (merger) accounting:**
  - Assets and liabilities of the acquired company are carried forward at the “historical cost”.
  - Eliminated since 2001 in US.
- **Purchase (acquisition) accounting:**
  - The cost of the acquired company is assigned to the assets acquired and liabilities assumed.
  - The difference, if positive, is recorded as goodwill.
  - Goodwill amortized (written off) over up to 40 years +Tax deductible over up to 15 years.



## Mode



## XYZ's Tender Offer for ABC

- ABC has a dispersed ownership structure:
  - 10 million share outstanding.
  - Currently trading at \$50 → \$500m market cap.
- XYZ considers gaining control of ABC to implement changes that would increase ABC's value to \$600m → Stock price \$60.
- Tender-offer:
  - Conditional.
  - Cost: \$3m.
  - What price?



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## The “Holdout” Problem

- If XYZ bids \$51 per share, each small shareholder faces the following choice between tendering and not tendering.

	Value	
	if tender	if not
Bid succeeds	\$51	\$60
Bid fails	\$50	\$50

- The bid will fail and XYZ has lost \$3m.



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## What's Happening?

- Each small shareholder rationally believes that her tendering decision has no effect on the offer's outcome.
- Don't tender unless the price reflects the full value improvement.
- In principle, any bid lower than \$60 will fail!
- But then, how does XYZ cover the \$3m cost?
- In practice: The holdout problem may be less extreme but still limit the acquirer's gain. → Too few takeovers.



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## Solution 1: Toeholds

- XYZ has acquired a 10% toehold (i.e., 1 million shares) in ABC paying \$50 per share in the open market.
- Will XYZ bid \$60 per share?
- Say all remaining 9 million shares are tendered.
- Owns 100% of ABC worth (after changes) \$600m.
- Paid 9m x \$60 = \$540m in the tender offer.
- Paid 1m x \$50 = \$50m for the toehold.

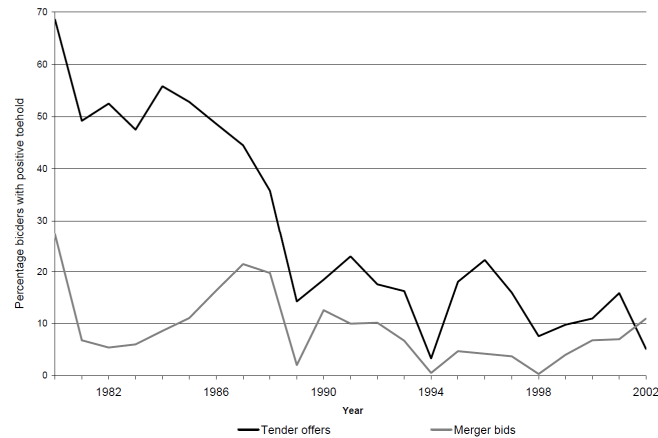
$$\$600\text{m} - \$540\text{m} - \$50\text{m} - \$3\text{m} = \$7\text{m} > 0!$$



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## The Toehold Puzzle



Source: Betton, Eckbo and Thorburn



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## Solution 2: Two-Tiered Offers

- Controlling shareholder can force out minority shareholders at price deemed “fair”.
- Ambiguity → Once in control, XYZ can force other shareholders to accept a payment (e.g. in securities) actually worth \$53.
- Will a tender offer at \$56 succeed?

	Value	
	if tender	if not
Bid succeeds	\$56	\$53
Bid fails	\$50	\$50



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## Competition

- XYZ has made a two-tiered offer for ABC at \$56.
- This alerts one of ABC's existing blockholders to the possibility of improvements → Counter-bid at \$57.
- Where will this takeover contest converge? Depends on transaction costs

→ XYZ loses \$3m.

**Solutions:** No-shop agreements, break-up fees, etc.



## Takeover Defenses



## 1. Preventative Measures



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## Poison Pills

- Usually, a kind of call option known as an “attached warrant” or “right” issued to existing shareholders deep out of the money.
- In most cases, the pill can be rescinded by directors.
- Over 1/3 of large US firms have poison pills of some kind.

**Note:** Also called “shareholder rights” plans.



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### Example: Flip-in Poison Pill

- ABC has a dispersed ownership structure:
  - 10 million share outstanding.
  - Currently trading at \$50 → \$500m market cap.
- ABC's management fears becoming a target in a hostile bid.
- As a form of dividend, shareholders receive 5-year warrants for 2 shares of new stock at \$500 per share.
- If any party acquires 20% or bids for 30% or more of the stock:
  - The strike price decreases to \$10 per share.
  - But the acquirer/bidder cannot exercise.



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### Example: Flip-in Poison Pill (cont.)

- XYZ accumulates a 20% toehold:
  - 2 million shares at \$50 → \$100m.
  - 8 million shares remain with other shareholders.
- Announcement triggers the change in the warrant's terms:
  - Everyone exercises their warrants → 16m new shares.
  - ABC "raises" \$160m → Market cap increases to \$660m.
  - Share price falls to  $660\text{m} / 26\text{m} = \$25.4$
- What is the effect on XYZ?
  - Toehold is down from 20% to  $2\text{m} / 26\text{m} = 7.7\%$ .
  - Value falls from \$100m to  $2\text{m} \times \$25.4 = \$50.8\text{m}$ .



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## Shark Repellents

- Defensive corporate charter amendments.
- Generally require shareholders' approval, but not always.
- **Supermajority Provision:**
  - Supermajority (e.g., 67% for sometimes 90%) approval needed for transactions involving a change of control.
  - Board-out clause: Supermajority can be waived by BOD.
  - Fair Price Provision: Supermajority waived if bid exceeds a "fair" price (e.g., accounting based).



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## Shark Repellents (cont.)

- **Staggered Boards:**
  - Each annual meeting, 1/3 of BOD is elected → 2 annual meetings to get majority on BOD even w/ a majority of stock.
- **Authorization of Stock:**
  - BOD can issue securities (usually preferred stock) with multiple votes to "stable shareholders".
  - Reduces the bidder's voting power.
- **Voting Right Restrictions:** Limits "cumulative" voting rights.



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## Anti-Takeover Laws

- Corporate lobbying:
  - In late 1980s, many US states passed anti-takeover laws.
  - Similar to stringent charter amendments.
  - Apply to all firms incorporated in that state.

→ Choose state of incorporation strategically (Delaware).



## 2. Active Measures



## Greenmail + Standstill Agreement

- A potential acquirer has an equity stake in the target.
- Greenmail payment + Standstill agreement:
  - The target buys the raiders' stake at a large premium.
  - The raider agrees not to raise his stake for a given period.
- **Note:** Also called Targeted Stock Repurchase.



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## Restructuring Assets/Liabs

### Asset Restructurings:

- Sell some assets.
- Buy some assets.

### Leveraged Recapitalizations or LBOs

- Less FCF problem.
- More concentrated ownership due to share repurchase.

- Do what the bidder would do → Removes takeover motive.



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## Litigation

- Based on:
  - Antitrust or industry-specific regulation.
  - Inadequate disclosure.
  - Fraud.
  
- Very frequent (about 1/3 of tender offers).
  
- Effect:
  - Premium up by 17% if bidder persists.
  - But can also lead the bidder to withdraw the offer.



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## Press Campaigns

TO CONRAIL SHA REHOLDERS:

It's bad enough:  
They want you to settle for inferior value.

The case you're engaged in also works to dilute the value of the shares of the company.

They want you to assume equity risks.

The case you're engaged in also works to dilute the value of the shares of the company.

They want to take away your right to receive fair value.

The case you're engaged in also works to dilute the value of the shares of the company.

*And they want you to help them pull it off.*

The case you're engaged in also works to dilute the value of the shares of the company.

Protect your interests. Vote your AGM/ST General's proposal to "opt out" of the case you're engaged in.

General Shareholders: Please do not vote on the case you're engaged in. Please vote on the AGM/ST General's proposal to "opt out" of the case you're engaged in.

General ESOP Participants: Please do not vote on the case you're engaged in. Please vote on the AGM/ST General's proposal to "opt out" of the case you're engaged in.

AGM/ST

\*Agreement 2015/16/17/18/19/20/21/22/23/24/25/26/27/28/29/30/31/32/33/34/35/36/37/38/39/40/41/42/43/44/45/46/47/48/49/50/51/52/53/54/55/56/57/58/59/60/61/62/63/64/65/66/67/68/69/70/71/72/73/74/75/76/77/78/79/80/81/82/83/84/85/86/87/88/89/90/91/92/93/94/95/96/97/98/99/100/101/102/103/104/105/106/107/108/109/110/111/112/113/114/115/116/117/118/119/120/121/122/123/124/125/126/127/128/129/130/131/132/133/134/135/136/137/138/139/140/141/142/143/144/145/146/147/148/149/150/151/152/153/154/155/156/157/158/159/160/161/162/163/164/165/166/167/168/169/170/171/172/173/174/175/176/177/178/179/180/181/182/183/184/185/186/187/188/189/190/191/192/193/194/195/196/197/198/199/200/201/202/203/204/205/206/207/208/209/210/211/212/213/214/215/216/217/218/219/220/221/222/223/224/225/226/227/228/229/230/231/232/233/234/235/236/237/238/239/240/241/242/243/244/245/246/247/248/249/250/251/252/253/254/255/256/257/258/259/260/261/262/263/264/265/266/267/268/269/270/271/272/273/274/275/276/277/278/279/280/281/282/283/284/285/286/287/288/289/290/291/292/293/294/295/296/297/298/299/300/301/302/303/304/305/306/307/308/309/310/311/312/313/314/315/316/317/318/319/320/321/322/323/324/325/326/327/328/329/330/331/332/333/334/335/336/337/338/339/340/341/342/343/344/345/346/347/348/349/350/351/352/353/354/355/356/357/358/359/360/361/362/363/364/365/366/367/368/369/370/371/372/373/374/375/376/377/378/379/380/381/382/383/384/385/386/387/388/389/390/391/392/393/394/395/396/397/398/399/400/401/402/403/404/405/406/407/408/409/410/411/412/413/414/415/416/417/418/419/420/421/422/423/424/425/426/427/428/429/430/431/432/433/434/435/436/437/438/439/440/441/442/443/444/445/446/447/448/449/450/451/452/453/454/455/456/457/458/459/460/461/462/463/464/465/466/467/468/469/470/471/472/473/474/475/476/477/478/479/480/481/482/483/484/485/486/487/488/489/490/491/492/493/494/495/496/497/498/499/500/501/502/503/504/505/506/507/508/509/510/511/512/513/514/515/516/517/518/519/520/521/522/523/524/525/526/527/528/529/530/531/532/533/534/535/536/537/538/539/540/541/542/543/544/545/546/547/548/549/550/551/552/553/554/555/556/557/558/559/560/561/562/563/564/565/566/567/568/569/570/571/572/573/574/575/576/577/578/579/580/581/582/583/584/585/586/587/588/589/590/591/592/593/594/595/596/597/598/599/600/601/602/603/604/605/606/607/608/609/610/611/612/613/614/615/616/617/618/619/620/621/622/623/624/625/626/627/628/629/630/631/632/633/634/635/636/637/638/639/640/641/642/643/644/645/646/647/648/649/650/651/652/653/654/655/656/657/658/659/660/661/662/663/664/665/666/667/668/669/670/671/672/673/674/675/676/677/678/679/680/681/682/683/684/685/686/687/688/689/690/691/692/693/694/695/696/697/698/699/700/701/702/703/704/705/706/707/708/709/710/711/712/713/714/715/716/717/718/719/720/721/722/723/724/725/726/727/728/729/730/731/732/733/734/735/736/737/738/739/740/741/742/743/744/745/746/747/748/749/750/751/752/753/754/755/756/757/758/759/760/761/762/763/764/765/766/767/768/769/770/771/772/773/774/775/776/777/778/779/780/781/782/783/784/785/786/787/788/789/790/791/792/793/794/795/796/797/798/799/800/801/802/803/804/805/806/807/808/809/810/811/812/813/814/815/816/817/818/819/820/821/822/823/824/825/826/827/828/829/830/831/832/833/834/835/836/837/838/839/840/841/842/843/844/845/846/847/848/849/850/851/852/853/854/855/856/857/858/859/860/861/862/863/864/865/866/867/868/869/870/871/872/873/874/875/876/877/878/879/880/881/882/883/884/885/886/887/888/889/890/891/892/893/894/895/896/897/898/899/900/901/902/903/904/905/906/907/908/909/910/911/912/913/914/915/916/917/918/919/920/921/922/923/924/925/926/927/928/929/930/931/932/933/934/935/936/937/938/939/940/941/942/943/944/945/946/947/948/949/950/951/952/953/954/955/956/957/958/959/960/961/962/963/964/965/966/967/968/969/970/971/972/973/974/975/976/977/978/979/980/981/982/983/984/985/986/987/988/989/990/991/992/993/994/995/996/997/998/999/1000



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## Press Campaigns

Attention All Conrail Shareholders—

READ BETWEEN THE LINES...

### CONRAIL DELIVERS VALUE



The Return On Conrail's Stock Has Been Greater Than 640%<sup>1</sup>  
You Don't Create This Kind Of Value Without Making The Right Choices.

CSX-CONRAIL—

THE RIGHT CHOICE

THE RIGHT TIME

THE RIGHT MERGER

**The Conrail Board Is Fully Committed  
To The CSX-Conrail Merger.**

The Special Meeting of Shareholders Will Be Held On January 17, 1997.

Vote "FOR" Approval Of The Opt-Out Of The Pennsylvania Statute  
On The White Proxy Card Today

If you have any questions regarding the Special Meeting of Shareholders or need assistance in voting,  
please contact our proxy advisor, G.F. King & Co., Inc., toll free at 1-800-696-6746.



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January 14, 1997

<sup>1</sup>Source: Public Market Research Services.

The S&P 400 Index is based on the S&P 500 Index of 400 companies. The S&P 500 Index is based on the S&P 500 Index of 500 companies. The S&P 500 Index is based on the S&P 500 Index of 500 companies.



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## Some Other Defenses

### White Knight Defense:

- The target finds a company to do a friendly merger.

### White Squire Defense:

- The target finds a company to buy a big block.

### Pac Man:

- "Eat or Be Eaten!": Target launches a counter-bid for the raider.



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## Why Takeover Defenses?

- Gain to target shareholders:
  - Successful takeovers → >20%.
  - Unsuccessful takeovers → Little if not eventually taken over.
  
- Why would target management resist a premium offer?
  - Entrenchment?
  - Bargaining strategy that might benefit shareholders?



## Some Evidence

- Substantial stock price decline at announcement of:
  - Poison pill adoption.
  - Shark repellent.
  - Especially Supermajority and Staggered Board.
  - Greenmail offer and/or standstill agreement.
  - Anti-takeover legislation.
  
- Resistance closely tied to target management's financial stake.



## Golden Parachutes

- Severance package to top management if fired due to takeover.
- Rationale: Avoid entrenchment by target management (Caveat: Won't they accept just any bid?).
- Stock price reaction: Target stock price rises 3% on the news that the firm is enacting a golden parachute.
- Why?
  - Golden parachute is small relative to the takeover gains.
  - The incumbent manager will now get out of the way.



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## Payment method



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## Method of Payment

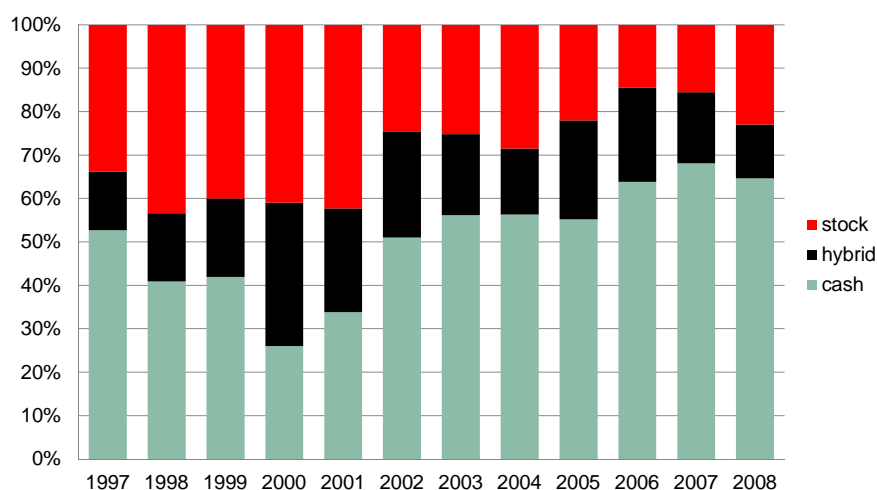
- Cash: In most cases, purchase the equity and assume the debt.
- Stock:
  - A issues new shares to be exchanged against B shares.
  - Exchange Ratio = # A shares per B share.
  - Fixed shares vs. fixed value.
- A mix of both.
- Many other contractual arrangements:
  - Floor, Ceiling, etc.



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## Acquisition Finance (1997-2008, worldwide)



Source : Thomson Financial (volume, deals completed)



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## Method of Payment: Determinants

- Does the buyer have cash or can raise cash easily/cheaply?
- Does the seller need cash?
- Cash quicker:
  - No need for the seller to evaluate the offer.
  - The buyer might not need shareholder approval.
- Basic principle for taxes (for target shareholders):
  - Stock-for-stock deal → Non-taxable transaction.
  - Cash or debt payment → Taxable transaction.



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## Method of Payment: Determinants (cont.)

- Holding the offer value constant, increasing its cash component makes the offer value less sensitive to:
  - Synergies.
  - Standalone value of acquirer.
  - Standalone value of the target.
- Cash/stock mix affects:
  - Risk allocation between acquirer and target shareholders.
  - Value allocation if value estimates differ, e.g., pay cash if you think that the target is undervalued.
- Means of payment can affect perception and actual integration: Who buys whom? Merger of equals?



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## Financing

- Should be driven by debt capacity of Buyer + Target. See capital structure lecture
- Be careful:
  - It is always possible to increase leverage later.
  - It can be too late to reduce leverage!
  - Particularly important if you consider further acquisitions.

