

Discussion of  
“Going Public to Acquire?  
The Acquisition Motive in IPOs”

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# Do Firms Go Public to Become Acquirers?

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- Issues addressed:
  - Is acquisition activity related to IPO fund raising?
  - Do IPOs provide the cash for subsequent acquisition activity? (cash infusion hypothesis)
  - Do IPOs provide the currency (overvalued stock) for deals? (acquisition currency hypothesis)
  - Do IPOs facilitate acquisitions by mitigating uncertainty about firm value?

# Summary of Results

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- Acquisition activity increases significantly following an IPO.
- The amount of cash raised in the IPO is positively related to the amount of cash based acquisition in the year of the IPO.
- Greater under pricing is associated with more stock financed acquisitions and *less* Cap Ex and R&D.
  - Stock financed acquisitions have more negative returns than stock acquisition by mature firms.
  - Carve outs do fewer acquisitions.
- Reduction in valuation uncertainty (the change in offer from mid-point of valuation range) is positively (weakly) related to acquisition volume.

# Some Background: The Choice of Exit Strategy

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- Poulsen and Stegemoller (2008)

	IPO	Sellout
Sales Growth	44.6%	26.2%
Cap Ex/Assets	25.6%	17.7%
Interest/EBITDA	35.3%	28.6%

- High growth firms tend to select an IPO as an exit strategy.
  - Are acquisitions the main method of growth?
  - Does overvaluation effect the strategy for growth?

# Acquisition Activity Increases After an IPO

Panel B: Acquisition Amounts as Percentage of Market Value of Firm as of IPO Date

	All Targets		Public Targets	
	5-yr period before IPO	5-yr period after IPO	5-yr period before IPO	5-yr period after IPO
Mean of the total acquisition amount	5.64	33.58	6.72	27.74
Median of the total acquisition amount	0.42	10.38	0.84	8.35

# Questions

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- Do the most active acquirers pre-IPO become the most active acquirers post IPO (motive)
- Does higher growth pre-IPO imply faster growth post IPO?
- Are IPOs timed to coincide with increases in acquisition activity?

# Is Investment or Acquisitions the Motive For IPO?

Panel C: Acquisition Amounts and R&D and CAPEX as a Percentage of IPO Proceeds

	Year 0	Years 0-1	Years 0-2	Years 0-3	Years 0-4
Acquisition amount (mean)	26.94	84.68	181.09	225.91	327.88
R&D and CAPEX (mean)	27.50	67.55	118.42	168.00	216.35
t-statistics	-0.13	1.79*	1.46	1.32	1.97**
Acquisition amount (median)	0.00	3.66	17.16	37.07	57.36
R&D and CAPEX (median)	12.51	33.27	57.03	76.63	99.22
p-value for signed rank test	0.0001	0.0002	0.0037	0.1264	0.7276

# But IPOs Have the Same Propensity to Acquire as Mature Publicly Traded Firms

Panel B: Cash Financed Acquisitions

Year	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
IPO firms	14.08	14.45	12.28	10.22	17.83	2.40	2.51	5.51	3.24	6.99	0.53
Mature firms	8.84	11.67	9.01	7.24	7.00	5.26	5.59	4.57	3.71	2.02	0.96
t-statistics for test of mean	1.81*										
p-value for test of mean	0.10										
p-value for signed rank test	0.12										

Panel C: Stock Financed Acquisitions

Year	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
IPO firms	4.41	5.47	6.51	7.35	6.06	7.91	8.10	1.92	0.51	0.72	0.02
Mature firms	8.47	9.73	12.90	9.85	7.87	5.12	4.72	3.25	2.48	1.40	0.70
t-statistics for test of mean	-1.83*										
p-value for test of mean	0.10										
p-value for signed rank test	0.12										

# Is the Propensity to Acquire Greater for IPO firms?

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- Given that IPO probably have (at least initially) more cash than mature firms, IPO propensity to acquire (given available cash) may be *lower* than mature firms.
- Table IV: SEO not IPO proceeds are significantly related to cash acquisitions. Is this all about lowering the cost of capital?
- Kim and Weisbach (JFE forthcoming): Cap Ex propensities are higher and acquisition propensities are lower for IPOs relative to SEOs.

# Investment Propensities IPOs

$$Y = \beta_1 \ln \left[ \left( \frac{\text{primary}}{\text{total asset}_0} \right) + 1 \right] + \beta_2 \ln \left[ \left( \frac{\text{other sources}}{\text{total asset}_0} \right) + 1 \right] + \beta_3 \ln [\text{total assets}_0] + \xi$$

	<i>t</i>	N	$\ln \left[ \frac{\text{primary}}{\text{total asset}_0} + 1 \right]$		$\ln \left[ \frac{\text{other sources}}{\text{total asset}_0} + 1 \right]$		p-value-
			$\beta_1$	t-stat	$\beta_2$	t-stat	$\beta_1 = \beta_2$
$\Sigma$ CAPEX	1	3,670	<b>0.147</b>	<b>7.29</b>	<b>0.061</b>	<b>3.41</b>	<b>0.00</b>
	2	3,175	<b>0.253</b>	<b>7.30</b>	<b>0.206</b>	<b>9.49</b>	0.08
	3	2,591	<b>0.234</b>	<b>7.10</b>	<b>0.299</b>	<b>9.43</b>	0.07
	4	2,031	<b>0.180</b>	<b>4.19</b>	<b>0.347</b>	<b>10.36</b>	<b>0.00</b>
$\Sigma$ Acquisition	1	3,376	<b>0.052</b>	<b>2.87</b>	<b>0.062</b>	<b>5.08</b>	0.56
	2	2,817	<b>0.073</b>	<b>2.96</b>	<b>0.133</b>	<b>5.40</b>	<b>0.04</b>
	3	2,304	<b>0.057</b>	<b>1.62</b>	<b>0.185</b>	<b>6.41</b>	<b>0.00</b>
	4	1,800	<b>0.081</b>	<b>2.06</b>	<b>0.203</b>	<b>5.71</b>	<b>0.01</b>
$\Sigma$ R&D	1	2,190	<b>0.280</b>	<b>8.96</b>	0.008	1.57	<b>0.00</b>
	2	1,824	<b>0.488</b>	<b>8.73</b>	<b>0.056</b>	<b>3.48</b>	<b>0.00</b>
	3	1,464	<b>0.689</b>	<b>11.28</b>	<b>0.055</b>	<b>1.97</b>	<b>0.00</b>
	4	1,156	<b>0.788</b>	<b>8.98</b>	<b>0.090</b>	<b>2.56</b>	<b>0.00</b>
$\Delta$ Cash	1	3,671	<b>0.720</b>	<b>29.65</b>	<b>0.092</b>	<b>5.30</b>	<b>0.00</b>
	2	3,179	<b>0.534</b>	<b>20.96</b>	<b>0.155</b>	<b>9.48</b>	<b>0.00</b>
	3	2,594	<b>0.499</b>	<b>17.65</b>	<b>0.168</b>	<b>10.13</b>	<b>0.00</b>
	4	2,041	<b>0.476</b>	<b>13.89</b>	<b>0.213</b>	<b>12.98</b>	<b>0.00</b>

# Investment Propensities SEOs

$$Y = \beta_1 \ln \left[ \left( \frac{\text{primary}}{\text{total asset}_0} \right) + 1 \right] + \beta_2 \ln \left[ \left( \frac{\text{other sources}}{\text{total asset}_0} \right) + 1 \right] + \beta_3 \ln [\text{total assets}_0] + \varepsilon$$

			$\ln \left[ \frac{\text{primary}}{\text{total asset}_0} + 1 \right]$		$\ln \left[ \frac{\text{other sources}}{\text{total asset}_0} + 1 \right]$		p-value-
	<i>t</i>	N	$\beta_1$	t-stat	$\beta_2$	t-stat	$\beta_1 = \beta_2$
$\Sigma$ CAPEX	1	6,890	<b>0.081</b>	<b>3.88</b>	<b>0.108</b>	<b>3.88</b>	0.23
	2	6,094	<b>0.205</b>	<b>5.70</b>	<b>0.207</b>	<b>4.76</b>	0.94
	3	4,712	<b>0.159</b>	<b>5.55</b>	<b>0.310</b>	<b>5.92</b>	<b>0.01</b>
	4	3,539	<b>0.136</b>	<b>4.18</b>	<b>0.370</b>	<b>6.99</b>	<b>0.00</b>
$\Sigma$ Acquisition	1	6,493	<b>0.205</b>	<b>4.11</b>	<b>0.156</b>	<b>6.01</b>	0.13
	2	5,661	<b>0.242</b>	<b>3.07</b>	<b>0.193</b>	<b>5.57</b>	0.37
	3	4,336	<b>0.241</b>	<b>3.24</b>	<b>0.242</b>	<b>5.99</b>	0.98
	4	3,226	<b>0.285</b>	<b>4.01</b>	<b>0.282</b>	<b>7.17</b>	0.95
$\Sigma$ R&D	1	3,669	<b>0.192</b>	<b>4.98</b>	-0.019	-1.28	<b>0.00</b>
	2	3,101	<b>0.377</b>	<b>5.90</b>	0.004	0.24	<b>0.00</b>
	3	2,364	<b>0.484</b>	<b>6.53</b>	<b>0.059</b>	<b>2.14</b>	<b>0.00</b>
	4	1,739	<b>0.523</b>	<b>5.63</b>	<b>0.094</b>	<b>2.98</b>	<b>0.00</b>
$\Delta$ Cash	1	6,889	<b>0.594</b>	<b>23.34</b>	<b>0.077</b>	<b>3.68</b>	<b>0.00</b>
	2	6,100	<b>0.468</b>	<b>12.35</b>	<b>0.139</b>	<b>9.84</b>	<b>0.00</b>
	3	4,718	<b>0.363</b>	<b>7.64</b>	<b>0.191</b>	<b>12.51</b>	<b>0.00</b>
	4	3,540	<b>0.327</b>	<b>6.12</b>	<b>0.176</b>	<b>8.20</b>	<b>0.01</b>

# Comments & Suggestions

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- Kim and Weisbach results are only suggestive since they do not control for industry effects.
- Compare the propensity to acquire for IPO firms to the propensity to acquire for mature firms conditional on financing. Do IPO firms acquire more?
- Examine whether propensities vary with the degree of under pricing (over valuation).

# Comments & Suggestions

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- Testing the Acquisition Currency hypothesis
  - Why is an overvalued stock *at the time of the IPO* a motive for a stock acquisition? Why not issue stock and then pay cash?.
  - Shleifer and Vishny (2003).
    - Given overvaluation, the choice of acquisition versus investment depends on the synergies and the required acquisition premium relative to fundamental value. Buy when acquisition premiums are low and synergistic gains (real or imagined) are high.
    - Stock deals are more likely when:
      - The supply of “over valued” bidders is high.
      - The market perceives synergies & the dispersion in firm values is high.
  - Is all about the tech bubble?

# Stock Financed Deals End After the Bubble

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# Cisco Acquisition Activity

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<b>Year</b>	<b>Stock Financed Acquisitions</b>	<b>Cisco Acquisitions Activity</b>
1994	4.41	3
1995	5.47	4
1996	6.51	7
1997	7.35	6
1998	6.06	9
1999	7.91	18
2000	8.10	23
2001	1.92	2
2002	0.51	5
2003	0.72	4

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# Mean First-day Returns and Money Left on the Table, 1990-2007

Year	Number of IPOs	Mean First-day Return		Aggregate Amount Left on the Table	Aggregate Proceeds
		Equal-weighted	Proceeds-weighted		
1990	107	10.9%	8.1%	\$0.34 billion	\$4.18 billion
1991	279	11.9%	9.6%	\$1.36 billion	\$14.11 billion
1992	396	10.2%	8.0%	\$1.74 billion	\$21.81 billion
1993	488	12.8%	11.3%	\$3.24 billion	\$28.76 billion
1994	405	9.8%	8.3%	\$1.47 billion	\$17.59 billion
1995	456	21.2%	16.6%	\$4.76 billion	\$28.64 billion
1996	671	17.2%	16.1%	\$6.80 billion	\$42.22 billion
1997	473	14.1%	14.4%	\$4.54 billion	\$31.58 billion
1998	284	21.7%	15.5%	\$5.25 billion	\$33.80 billion
1999	476	71.0%	57.1%	\$36.94 billion	\$64.66 billion
2000	382	56.1%	45.6%	\$29.69 billion	\$65.11 billion
2001	80	14.0%	8.6%	\$2.97 billion	\$34.30 billion
2002	66	9.1%	5.1%	\$1.13 billion	\$22.03 billion
2003	63	12.2%	10.5%	\$1.01 billion	\$9.58 billion
2004	174	12.3%	12.2%	\$3.86 billion	\$31.53 billion
2005	161	10.2%	9.3%	\$2.64 billion	\$28.33 billion
2006	156	12.1%	12.9%	\$3.93 billion	\$30.39 billion
2007	159	14.0%	13.9%	\$4.95 billion	\$35.63 billion
<b>1990-2007</b>	<b>5,276</b>	<b>22.4%</b>	<b>21.4%</b>	<b>\$116.6 billion</b>	<b>\$544.25 billion</b>