

證券分析研究之實務探討

Introduction to Equity Research

Presentation at National Taiwan University

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Topics



Intro – What is Equity Research

Citi Organization Structure

Life as a Research Analyst

Preparing for the Career

Q&A

A graphic with a white background and a thin grey border. At the top, a red arc is positioned above the words "dreams" and "realities". Below this, the text "Whatever your ambition, we'll help make it happen." is centered. Underneath is a red arrow pointing right followed by the text "Get started now". At the bottom, the Citi logo is displayed next to the slogan "let's get it done" in red.

dreams realities

Whatever your ambition,
we'll help make it happen.

▶ **Get started now**

citi let's get it done

What is Equity Research?



What is Equity Research?



Conduct research to analyze companies (stocks) for investment opportunities

- n Equity research analysts analyze companies in order to find possible investments.
- n **Sell-side equity research** is when these analysts provide their research to clients.
- n **Buy-side equity research** is when the analysts do their own research to invest their firm's money (e.g. mutual funds, hedge funds).
- n **Analyst focuses on giving in-depth view; NOT stock talk shows!**

Research Provides Knowledge and Investment Ideas to Investors

Why Sell-Side Equity Research?



Help investors know particulars on industry/company

Create more efficient market

- n Provides analyzed information, help research clients obtain latest information to make buy/sell investment decisions
- n Follow companies on their latest developments
- n Compare specific changes in a certain industry
- n Platform for a more efficient and developed equity market

Sell-Side Provides Information for Client's Investment Decisions

What is Involved?



Collect (Analyst Meetings, Calls, Channels)

Analyze (Modeling, Industry Views)

Communicate (Publish Reports, Marketing, Calls, Emails)

- n Research companies which are interesting to investors
- n Conduct industry research – obtain industry growth projections, prospects, impact of new technology, etc.
- n Attend investor conferences, corporate events
- n Visit companies and its customers/suppliers/competitors

Analysts Collect Information From Various Sources

2 水泥行业各项指标完成情况

2.1 产量

2.1.1 全国水泥产量（2008.03）

1.1 全国城镇固定资产投资完成情况

3.1 中南地区 广东省 2008.03

地区	本月	完成额 (亿元)	完 (%)
	完成额		
全国	10,195.65		11
华北地区			
北京	241.43		
天津	248.05		
河北	723.89		
山西	186.79		
内蒙古	173.58		
东北地区			
辽宁	346.66		
吉林	96.83		
黑龙江	52.31		
华东地区			
上海	353.49		
江苏	986.28		
浙江	490.83		
安徽	450.82		
福建	349.16		
江西	262.05		
山东	1,203.81		



水泥产量				
主要城市	累计产量	企业数 (个)	企业平均 产量	占本省 产量(%)
广东省	2,030.96	407	4.99	
清远市	330.68	40	8.27	16.28
梅州市	302.07	49	6.16	14.87
广州市	277.71	74	3.75	13.67
江门市	243.03	46	5.28	11.97
惠州市	217.48	33	6.59	10.71
佛山市	151.14	26	5.81	7.44
云浮市	126.28	22	5.74	6.22
肇庆市	97.46	22	4.43	4.80
韶关市	79.52	32	2.49	3.92
湛江市	48.39	19	2.55	2.38

主要企业水泥产量				
企业	地理位置	累计产量	占本省 产量(%)	单位: 万吨
广东省		2,030.96		
江门海螺水泥有限公司	江门市	84.42	4.16	
英德海螺水泥有限责任公司	清远市	73.90	3.64	
英德龙山水泥有限责任公司	清远市	65.62	3.23	
台泥(英德)水泥有限公司	清远市	55.16	2.72	
广东塔牌集团股份有限公司	梅州市	55.06	2.71	
广州市越堡水泥有限公司	广州市	54.01	2.66	
广州市珠江水泥有限公司	广州市	45.47	2.24	
惠州市光大水泥企业有限公司	惠州市	42.86	2.11	

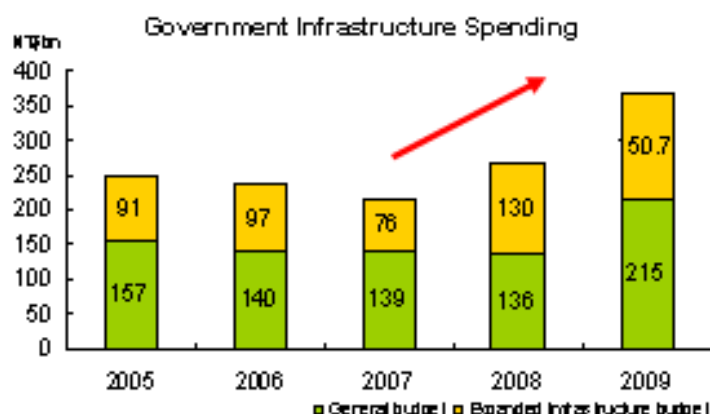
累计水泥产量		
比去年同期 增长(%)	占全国 比重(%)	产量 排名
9.17	100.00	
	9.81	
-8.42	0.70	24
51.37	0.37	28
20.52	6.21	6
7.36	1.14	21
44.91	1.38	19
	4.51	
14.72	1.58	18
8.64	2.20	17
32.78	0.73	23
	41.96	
7.17	0.62	25
12.71	10.96	1
6.63	7.67	4
5.42	3.90	11
21.80	4.27	8
6.13	3.94	10
1.84	10.60	2
	27.30	

41

数字水泥

2008年第()

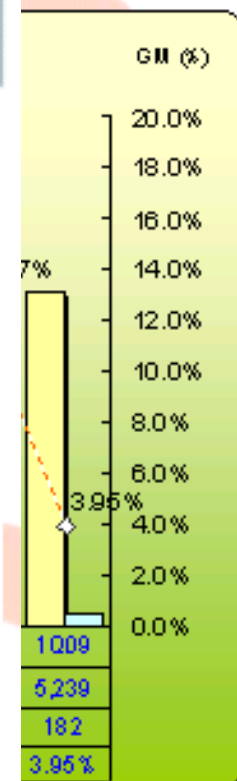
2009 Business Outlook – Taiwan Market



- Demand held up by expanded infrastructure spending
 - NT\$500bn in total
 - 2009 budget of NT\$150bn was approved by the Legislative Yuan
- NT\$336bn, 67% of total budget, is highly related to cement consumption

Expanded Infrastructure Spending Items	Estimated Budget (NT\$bn)				
	2009	2010	2011	2012	Total
Develop more convenient inland transportation	24	45	43	27	139
Improve environment safety	31	41	15	12	99
Strengthen Taiwan's competitiveness	17	28	25	25	95
Facilitate offshore island transportation	1	1	1	1	3
Enhance living quality	48	39	20	19	127
Education and employment stabilization related	29	7	1	0	37
Total	151	161	105	84	500

Source: Executive Yuan



What is Involved?



Collect (Analyst Meetings, Calls, Channels)

Analyze (Modeling, Industry Views)

Communicate (Publish Reports, Marketing, Calls, Emails)

- n Analyze company and create financial models based on sales, pricing, future product pipeline, market share gains, etc.
- n Make comparison with industry peers; find the leaders
- n Evaluate longer-term prospects and growth drivers
- n E.g. Apply Porter's Five Forces, SWOT ...

Analyst Evaluate Companies On its Future Prospects

Research Methodology



Analyze information flow – from various sources

- n Local and international media
- n Global research perspectives (Citi advantage!)
- n External research institutions (Dataquest, Display Search)
- n Company official sources (company guidance)
- n Company non-official sources (but under U.S. regulations on non-public material information)
- n Industry sources (competitors, supply chain)

Forecast and modeling

- n Analyze information that has been gathered, and build into financial forecasts (earnings model)
- n Assumptions may include, but not limited to (using cement as an example):
 - n Company and industry growth rate
 - n Capacity, utilization and yield rate
 - n Product mix and ASP (average selling price)
 - n Production costs and operating costs
 - n Tax rate
 - n Capex (capital spending) and depreciation
 - n Balance sheet items (working capital, debt, equity)

Determine valuation of a company

- n Absolute valuation
 - n Discounted Cash Flow (DCF) – only useful if cash streams are relatively predictable
 - n Need to use CAPM and WACC to determine appropriate discount rate
 - n Critical factors
- n Relative valuation
 - n Compare against own history, against local peers, against global peers, against market, against return profile (ROE, ROIC)
 - n Most common methods include: price-to-earnings (P/E), price-to-book (P/B), price-to-sales (P/S), enterprise value-to-EBITDA (EV/EBITDA), sum-of-the-parts (SOTP), and net-asset-value (NAV).

Research Methodology – DCF



Operating Cash Flow Analysis Year to Dec (NT\$m)	Year 1 Dec-03	Year 2 Dec-04	Year 3 Dec-05	Year 4 Dec-06	Year 5 Dec-07	Year 6 Dec-08	Year 7 Dec-09	Year 8 Dec-10	Year 9 Dec-11	Terminal V: Dec-12
Revenues	13,194	14,774	21,540	24,508	26,959	29,655	32,621	35,883	39,471	43,418
Growth %	133%	12%	46%	14%	10%	10%	10%	10%	10%	10%
Gross Profits	2,711	2,627	3,384	3,651	3,505	3,855	4,029	4,210	4,399	4,597
Gross Profit Margin %	21%	18%	16%	15%	13%	13%	12%	12%	11%	11%
SG&A Expense+Unearned	824	1,095	1,345	1,442	1,555	1,483	1,305	1,407	1,516	1,635
SG&A as sales%	6%	7%	6%	6%	6%	5%	4%	4%	4%	4%
EBIT	1,887	1,531	2,039	2,209	1,950	2,372	2,724	2,803	2,883	2,963
Growth %	184%	-19%	33%	8%	-12%	22%	15%	3%	3%	3%
EBIT margin %	14%	10%	9%	9%	7%	8%	8%	8%	7%	7%
Less: adjusted cash tax	11	9	-	-	97	119	136	140	144	148
Tax rate	-1%	-1%	0%	0%	5%	5%	5%	5%	5%	5%
NOPAT	1,876	1,523	2,039	2,209	1,852	2,254	2,588	2,663	2,739	2,815
Add: Depreciation & Amortization	271	159	294	444	466	489	514	539	566	594
(Inc) Decrease in Working Capital	1,067	(1,851)	(464)	(197)	(197)	(300)	(250)	(250)	(250)	(250)
Less: CAPEX	252.343	250	900	1000	350	350	350	350	350	350
Operating Cash Flow	2,962	(419)	969	1,456	1,772	2,093	2,501	2,602	2,705	2,809
Discount Factor	1	1.1	1.3	1.4	1.6	1.8	2.0	2.3	2.6	2.9
Discounted value	2,962	(372)	764	1,020	1,102	1,156	1,227	1,134	1,047	965
Equity value										
Explicit forecasts	11,005									
Terminal growth %	2%									
Terminal value	9,108									
Value of core operations	20,113									
Add: investments	811									
Add: cash and CE & ST investments	3,336									
Total firm value	24,260									

Research Methodology – SOTP

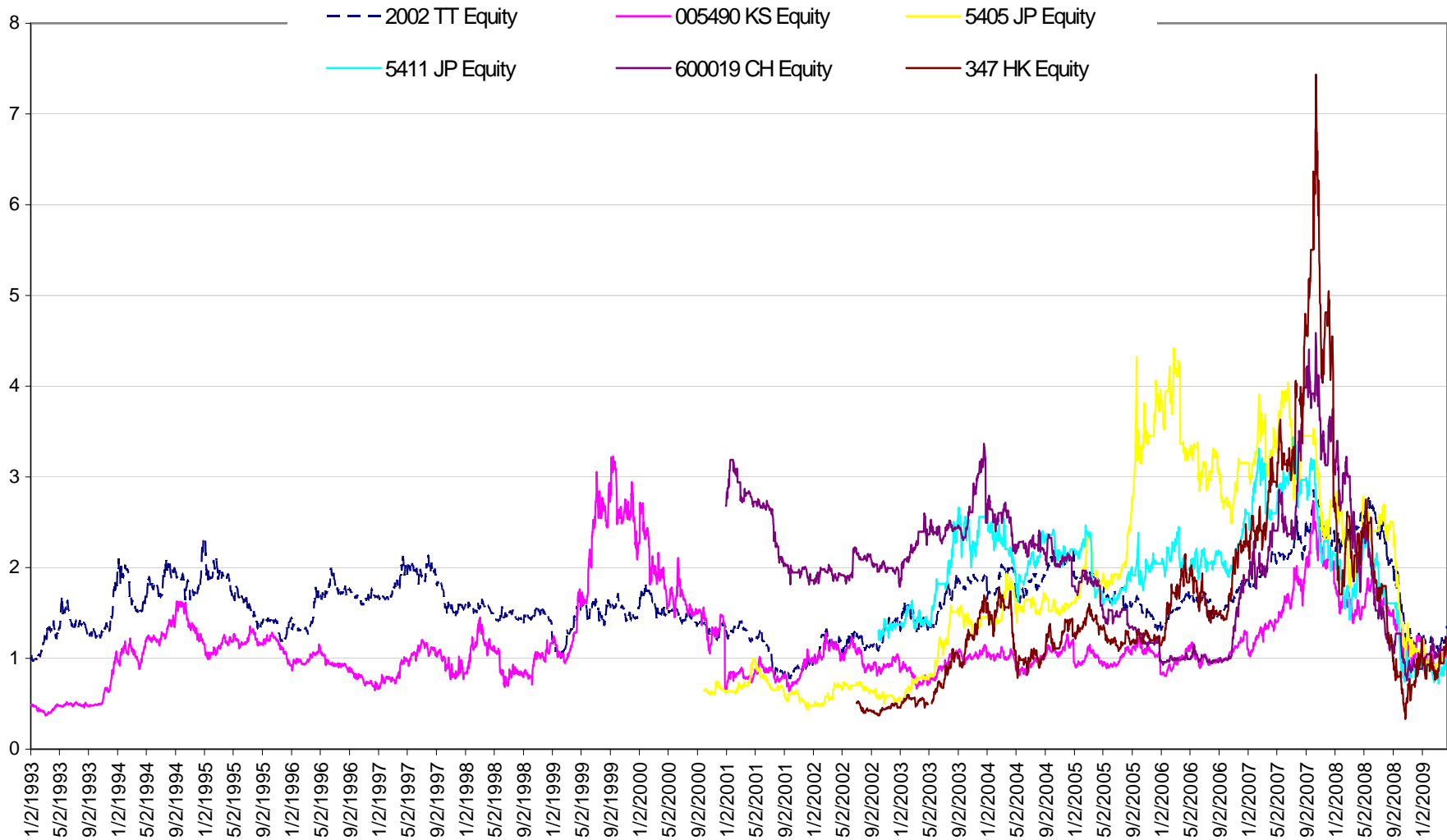


Far Eastern Textile — Sum-of-the-Parts Valuation

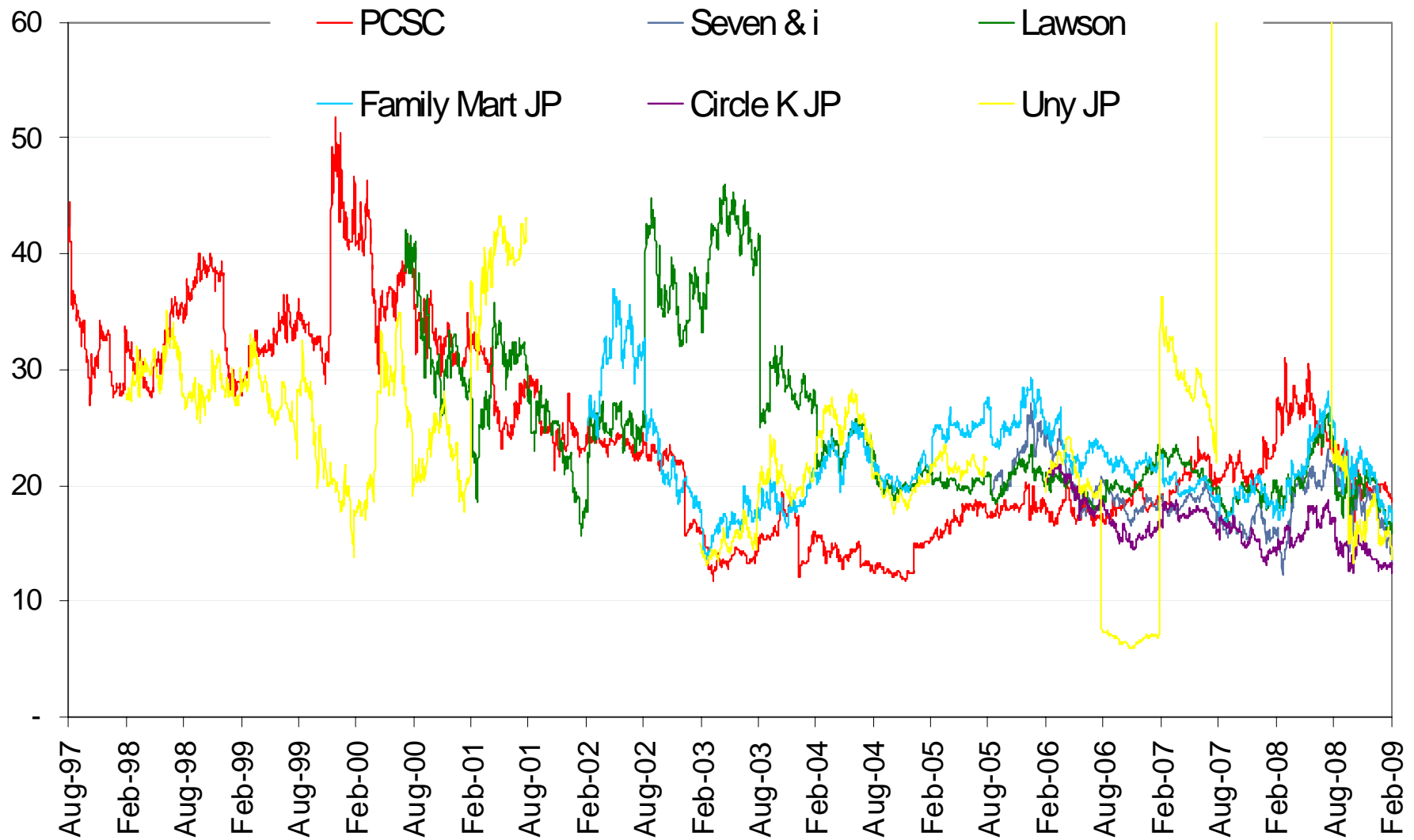
Item	Valuation method	Total value (NT\$mn)	Value per share (NT\$)	As % of total NAV
Core				
Taiwan	5x EV/EBITDA	12,763	2.8	9%
China	Replacement cost at US\$300/ton	6,534	1.4	4%
Listed companies				
Far EastOne	Market value	46,361	10.1	32%
Asia Cement	Market value	25,487	5.6	17%
Far Eastern Department Store	Market value	4,176	0.9	3%
Oriental Union Chemical	Market value	3,107	0.7	2%
Everest Textile	Market value	645	0.1	0%
Far Eastern Intl. Bank	Market value	1,848	0.4	1%
Unlisted companies				
Pacific Distribution Investment	(1.0x 0.9E P/E (TW & China))	9,672	2.1	7%
Oriental Securities	0.8x P/B	1,655	0.4	1%
Others	0.8x P/B	15,931	2.8	9%
Assets				
Land	15% discount to NAV	42,678	9.3	29%
Far Eastern Plaza	Est. book value	11,000	2.4	7%
Net debt		-35,129	-7.7	-24%
Total NAV		146,729		
No. of shares		4,569		
NAV per share			32.1	100%
Adjusted NAV per share	-1.5% conglomerate discount		27.3	

Source: Citi Investment Research and Analysis estimates

Research Methodology – PB Comp



Research Methodology – PE Comp



What is Involved?



Collect (Analyst Meetings, Calls, Channels)

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Communicate (Publish Reports, Marketing, Calls, Emails)

Taiwan Investor Conference 2008

6 & 7 May, Shangri-La Far Eastern Hotel, Taipei



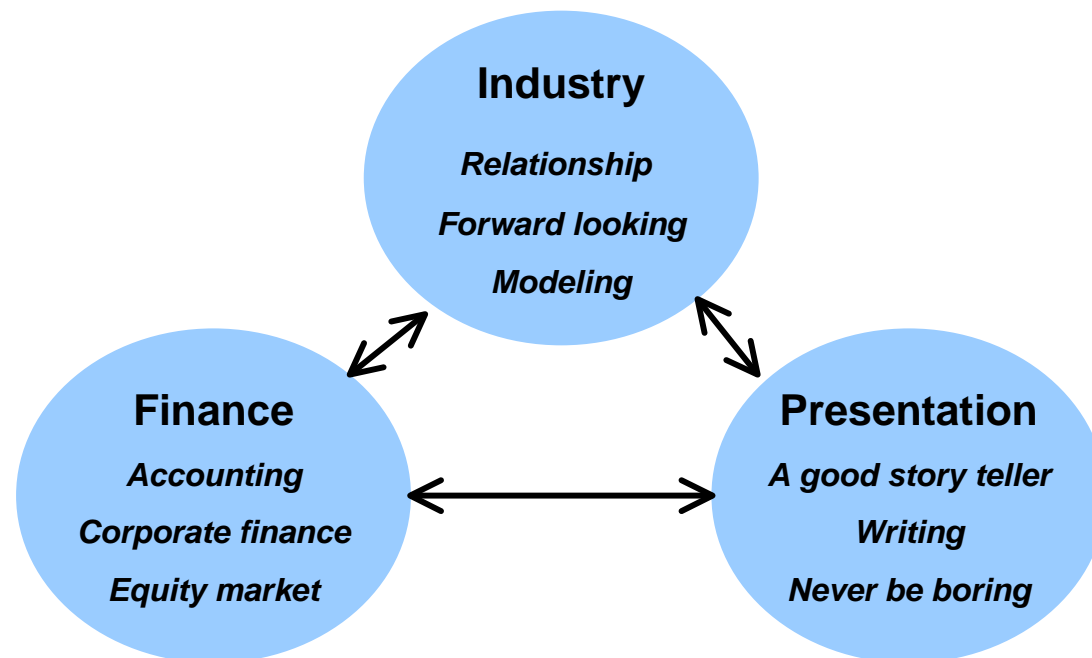
- n Write detail reports on companies, with impact ideas
- n Speak with sales to get your message out
- n Call and visit clients to provide investment views
- n Investor conferences to provide corporate access
- n Appear on public media (TV, newspaper, etc.)

Analyst Communicates with Reports, Calls and Marketing Events

Market Recognition



Building recognition from good/bad calls



Interacting with Public Media



Bloomberg.com BloombergAnywhere | SoftwareSupport |

Updated: New York, May 11 03:31 London, May 11 08:31 Tokyo, May 11 16:31

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Audio/Video Reports

Bove, Analyst, Sees Citigroup Recovery by Middle of 2009 May 9 (Bloomberg) -- Dick Bove, a managing director and analyst at Ladenburg Thalmann & Co., talks with Bloomberg's Mike Schneider about the outlook for Citigroup Inc. and the likelihood that Chief Executive Officer Vikram Pandit's programs will return to bank to profitability. Pandit plans to get rid of about \$400 billion of assets over the next three years as he starts to whittle away at the biggest U.S. bank. (Source: Bloomberg) [Watch](#)

Malik Discusses Gulf Region Inflation May 10 (Bloomberg) -- Monica Malik, chief economist at investment bank EFG-Hermes UAE Ltd., talks with Bloomberg's Rishaad Salamat about inflation in the Gulf region. Sean Evers speaks on oil prices, Catherine Robinson reports on Cairo's new technology park and Ryan Chilcote reports on Abu Dhabi's Sheikh Zayed mosque. ("Middle East Money Focus" airs weekends on Bloomberg TV.) (Source: Bloomberg) [Watch](#)

Value Proposition



Explore money-making ideas; provide view on market

- n Covered company research:
 - n Initiate on new companies, change of Buy/Hold/Sell recommendation (Upgrade / Downgrade), change of target price / earnings
- n Industry research:
 - n Supply chain analysis, global peer comparison
- n Thematic research:
 - n Topical analysis (ie, employee bonus impact, HDTV era)
- n **We are usually NOT:**
 - n Reporting non-impact company events, market noises
 - n Conducting first-hand market research

Actionable Call in a Timely Manner



Like all best things in life – keep it simple

- n Buy/Long calls
 - n We are upgrading Company A from Sell to Buy; target price increase by xx%
- n Why we are positive?
 - n Valuation attractive; Stock or industry catalysts (from top-down to bottom-up)
- n Sell/Short calls
 - n We are downgrading Company A from Buy to Sell; implying xx% downside risk
- n Trading ideas
 - n We recommend switching from Company A to Company B in the next 6-months

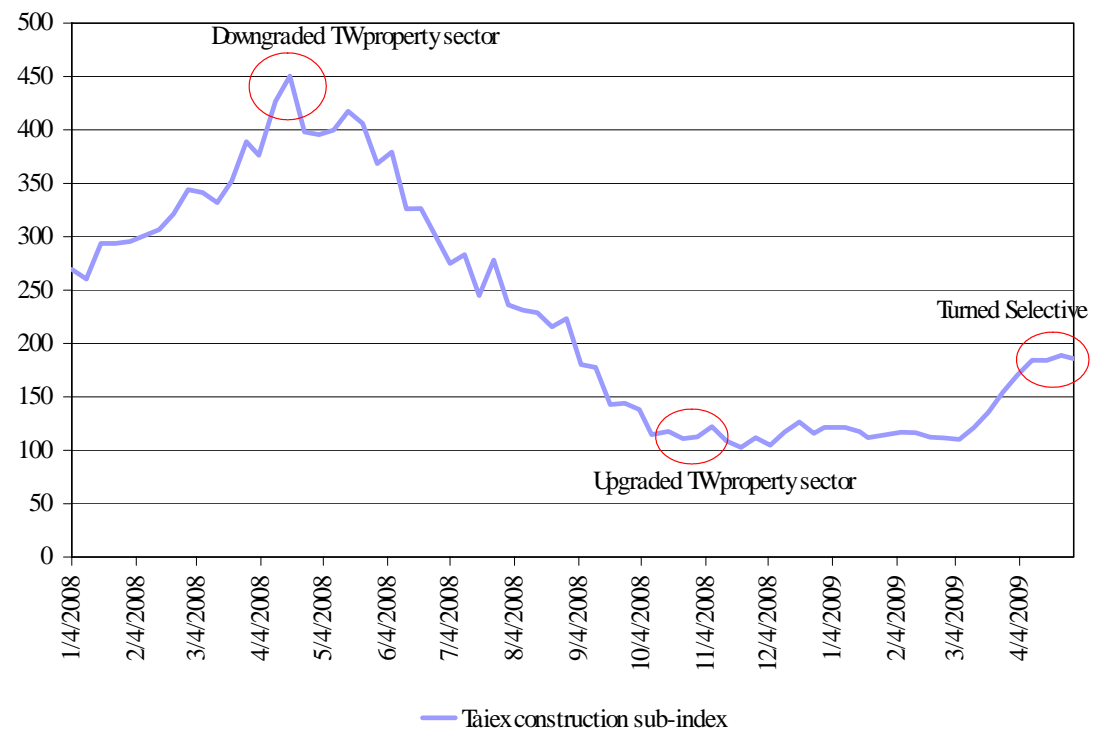
Strong Calls Tend to be Timely and Straightforward

Real Life Example



Forward looking; non-consensus (and right)

- n Property stocks – Buy or Sell?
 - n What did analysts get wrong?
 - n Why everyone over-estimated the impact after the presidential election in 2008?
 - n When to turn positive?



What is Involved – Summary



Collect (Analyst Meetings, Calls, Channels)

Analyze (Modeling, Industry Views)

Communicate (Publish Reports, Marketing, Calls, Emails)

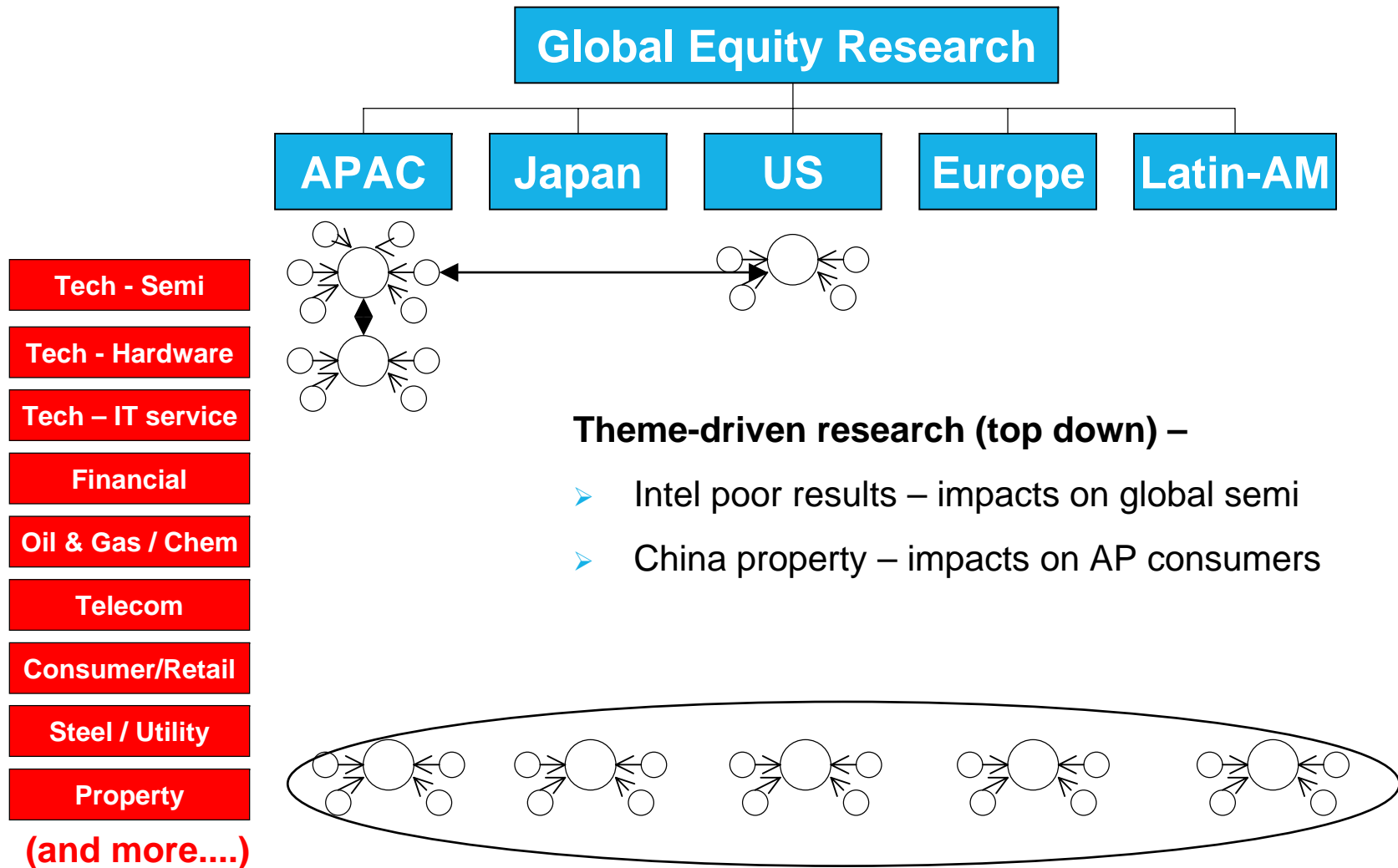
- n Analysts typically research industry sector(s), make visits to companies, collect information from industry sources and suppliers/vendors/customers/competitors/etc.
- n Analyze information and make sales/earnings projections, valuation projections
- n Communicate findings, provide actionable ideas to sales force and clients

Analyst Collects, Analyzes and Communicates Investment Ideas

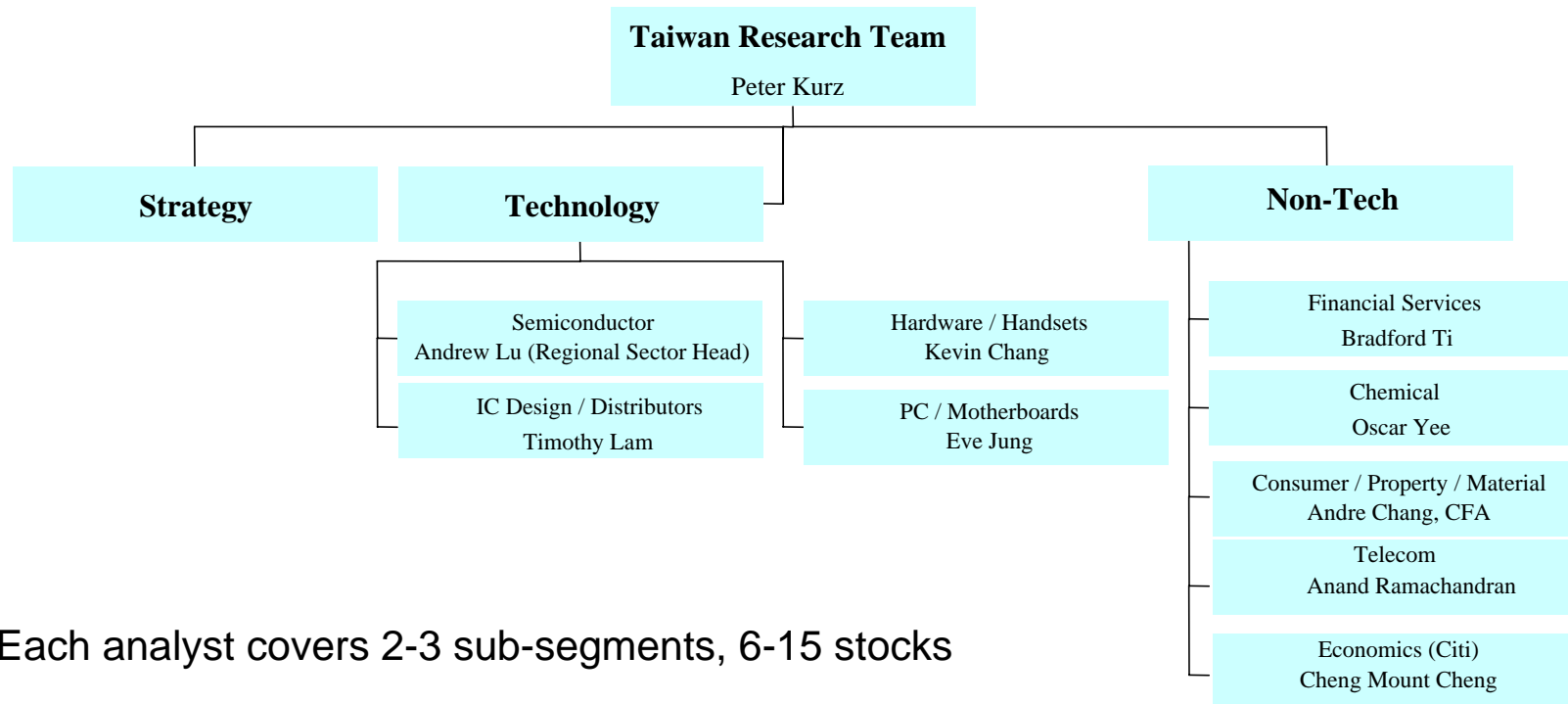
Organization Structure



Citi Investment Research (Global Presence)



Citi Investment Research – Taiwan

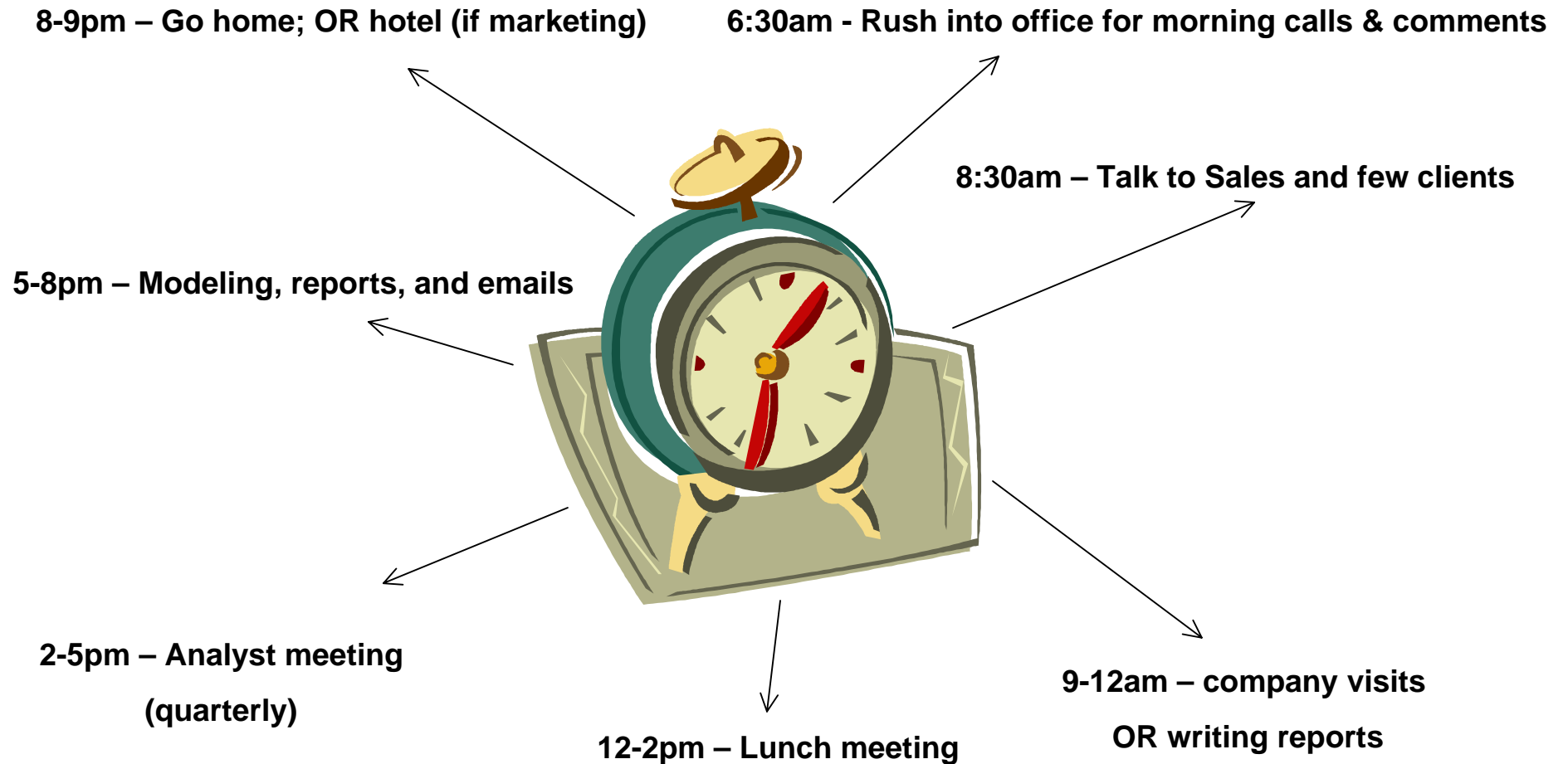


- Each analyst covers 2-3 sub-segments, 6-15 stocks
- Analysts share Research Associate (RA) resources
- Taiwan Daily - morning meeting summary
- Ad-hoc products - Weekly strategy, Weekly metal, Semi-beat, AP MB Beat, TW Domestic Pulse

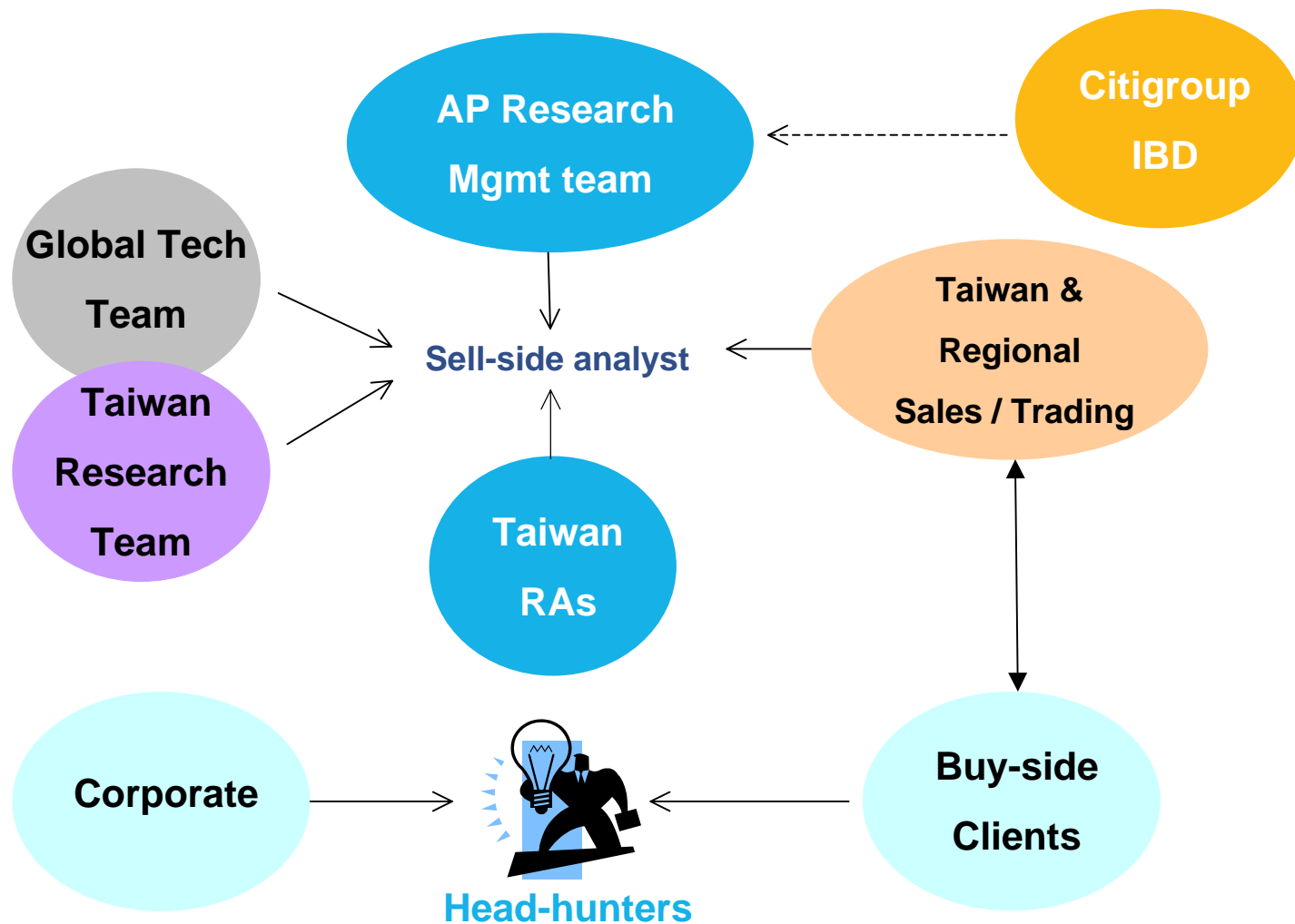
Life as a Research Analyst



A Regular Day At Work...



Working Dynamics – 360° Evaluation



What Clients Value



Clients evaluate sell-side analysts by...

No.1 – Industry knowledge & trends

No.2 – Timely stock calls; new coverage & ideas

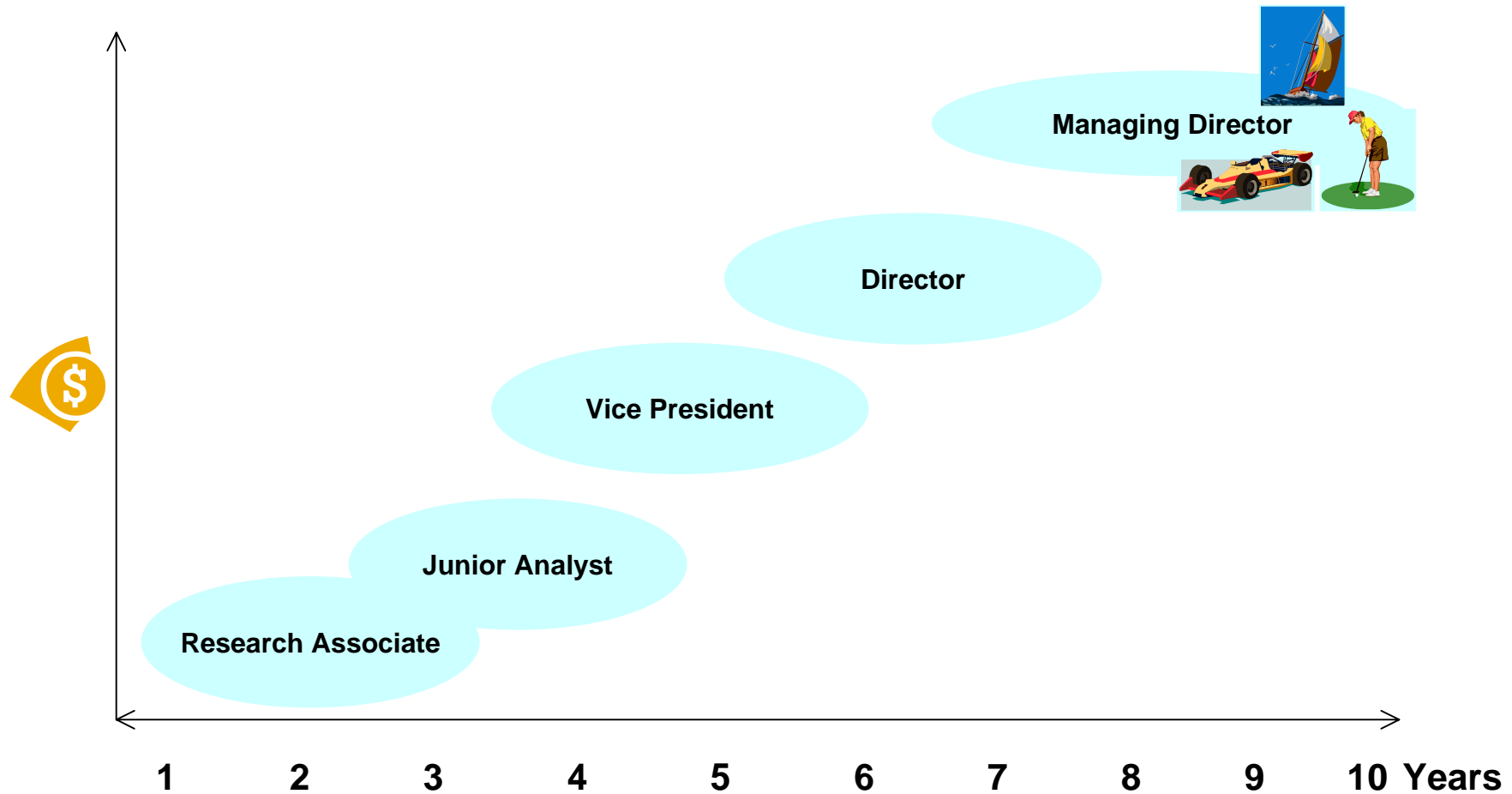
No.3 – Corporate access

The first interesting ideas > the fourth following right calls



Source: Institutional Investor (II) Magazine (2009), Commercial Times

Career Path at Citi – From RA to MD



Life as a Research Analyst



Competitive Environment

Knowledge Driven

Build Connections

Rewarding Career

- n Research analyst is a competitive environment, as you race to provide first-hand information to your clients
- n Long working hours to respond to changing market news, expertise in industry/sector
- n Rewarding to produce results, convincing ideas

Being an Analyst is a Rewarding and Challenging Career!

Preparing for the Career



"Politics is perhaps the only profession for which no preparation is thought necessary."

- *Robert Louis Stevenson*

Qualifications



One Rule: Willing To Learn

- n **Qualitative:** Communication and analytical skills, hard working, detail oriented, well rounded personality
- n **Quantitative:** Finance/Accounting BA degree and/or relevant industry experience, senior brokerage license
- n Useful to have but NOT required - MBA, CFA

Be Confident. Be yourself!

Final takeaway...

**Never Stop Learning-
Knowledge Is Power**

Thank You!

Q & A

Any Questions?

