



Valuation in Emerging Markets

Professor Joseph D. Piotroski

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ACCT 516: Valuation for Emerging Markets

Course Description

The goal of the course is to provide an overview of the unique transparency and governance issues facing investors in emerging economies, and the impact these issues have on firm performance and valuations

The first half of the course will focus on identifying and discussing the unique firm and country-specific institutional properties that impact firm performance and risk in an emerging economy.

The second half of the course will focus on:

- Forecasts of earnings, free-cash-flow and dividends to an outside investor in an emerging market context.
- Estimating cost of capital / discount rates.

Capstone of the course: Real-time final project examining the investment potential of a specific emerging market firm (as a minority shareholder).

Course designed to integrate corporate finance, micro-economics and international finance material with basic financial statement analysis tools.

Why Do We Care about EM firms?

Foreign direct investment in emerging markets has approached US \$300 billion in 2007.

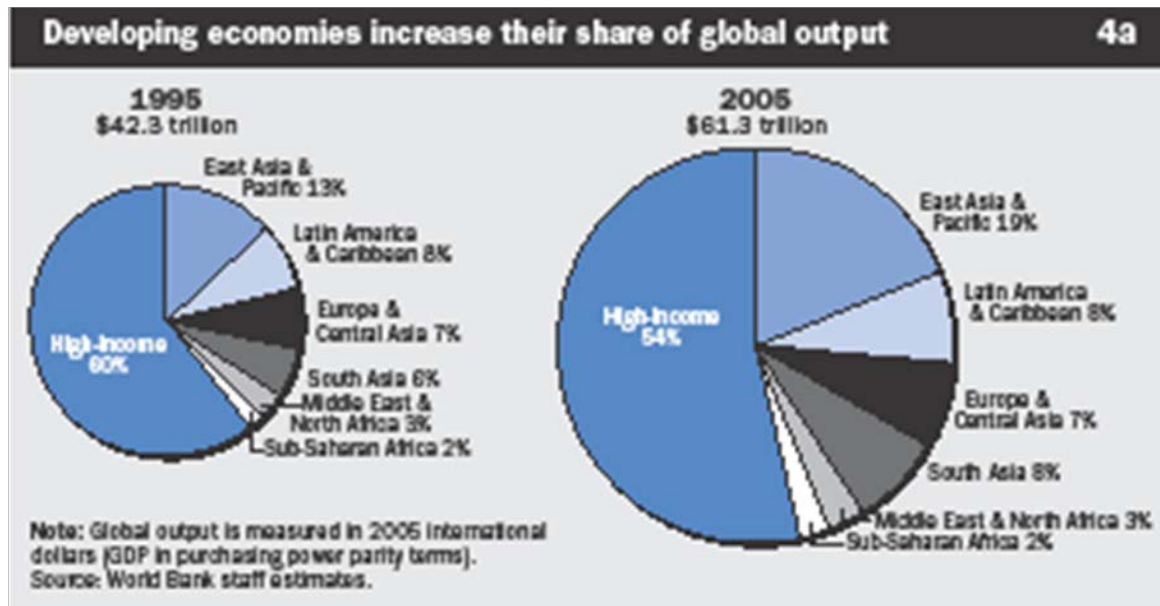
Distribution of foreign direct investment (in \$US billions), stock market capitalization (\$US billions), GNI per capita and GNI growth across emerging market regions (2004):

	<u>FDI</u>	<u>Stock Market Capitalization</u>	<u>GNI per capita</u>	<u>GNI growth</u>
East Asia & Pacific	\$ 96.898B	\$ 3.010B	\$ 1,630	8.0%
Europe & Central Asia	\$ 73.687B	\$ 1.863B	\$ 4,140	5.9%
Latin America & Caribbean	\$ 70.017B	\$ 1.471B	\$ 4,050	3.1%
Middle East & North Africa	\$ 13.765B	\$ 0.201B	\$ 2,200	2.4%
South Asia	\$ 9.869B	\$ 0.877B	\$ 690	6.9%
Sub-Saharan Africa	\$ 16.559B	\$ 0.800B	\$ 750	3.4%

Source: World Development Indicators

Attractiveness of Emerging Markets

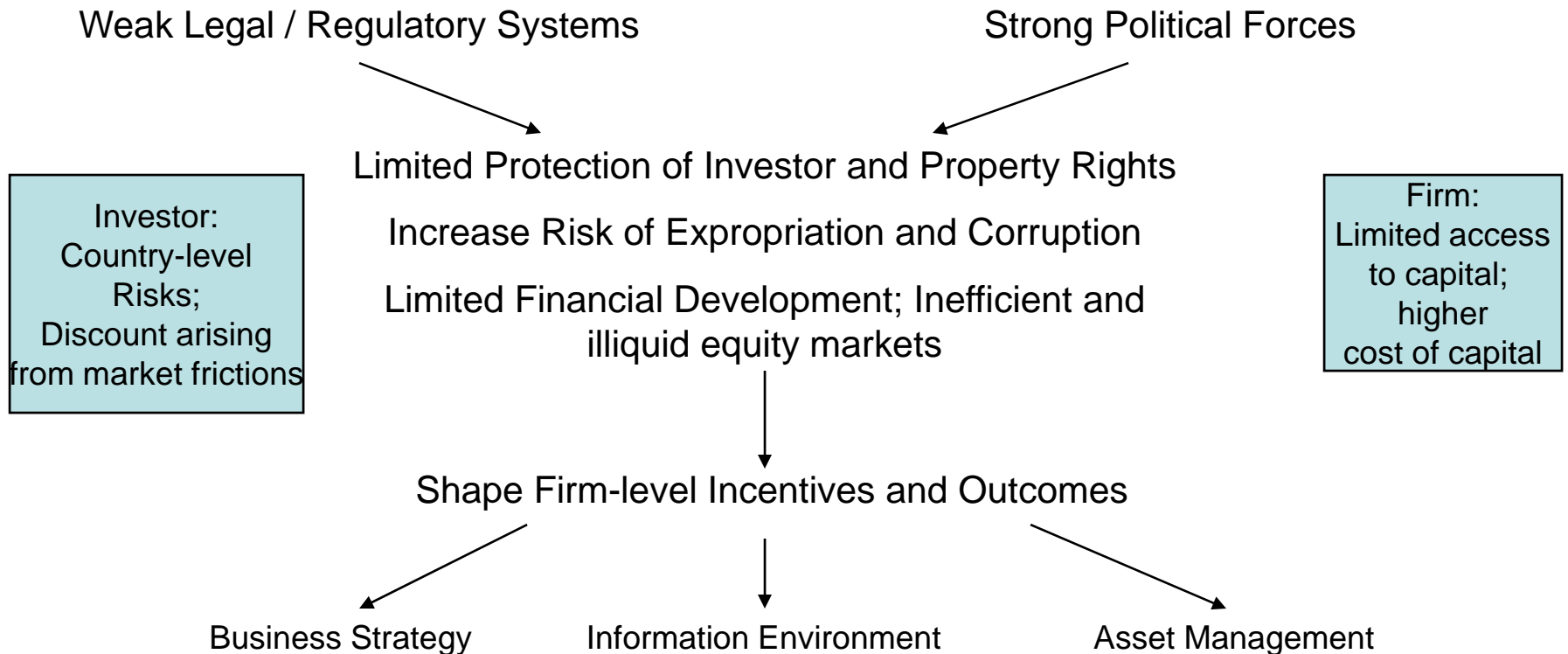
Over the last ten years, emerging markets are responsible for a larger share of the global economy (46% percent of global output).



This continual increase in economic activity will only serve to fuel future foreign direct investment.

Valuation in Emerging Markets

Publicly-traded firms in emerging markets offer unique valuation challenges:



Each of these factors will have a direct or indirect impact on firm value

Valuation in Emerging Markets: A Tale of Four Firms

Duralex: Brazilian manufacturer of wood flooring products.

- Common shares traded on the BOVESPA

Dong Feng Motor Company: Third largest domestic manufacturer of automobiles in mainland China.

- B shares traded on the Shanghai Stock Exchange
- H shares traded on the Hong Kong Stock Exchange.

Khon Kaen Sugar Company: Third largest producer of raw sugar cane and related products in Thailand.

- Common shares traded on Bangkok Stock Exchange

Godrej Consumer Products Company: Largest producer of soap and personal hygiene related products in India.

- Shares traded on the Bombay Stock Exchange.

Duratex

Central problem in emerging markets: Majority-Minority Shareholder Conflict

Duratex's ownership structure: Dual-class shares

- Principal shareholder: Ituasa: 42% cash-flow rights; 89% voting rights.

Unfortunately, Brazilian legal, political and regulatory institutions are not designed to fully protect minority shareholders.

- Limited enforcement of investor and property rights.
- Limited ability for private enforcement actions.
- Opaque financial reporting environment (e.g., Brazilian GAAP; no SCF).

Corporate governance choices

- Voluntarily selected Level I corporate governance on BOVESPA.
- Board of directors consists of:
 - Seven senior executives from Ituasa.
 - Several members of the family controlling Ituasa.
 - A local politician.
 - An professor specializing in international trade.

Firm #1: Duratex

As a result of these country and firm-level institutional arrangements, the ultimate, controlling shareholders of Duratex enjoy the “private benefits of control”

In the case of Duratex, these perquisites and benefits include:

- Excess wages for top management.
- Favorable transfer pricing arrangements with Ituasa.
- Limited required dividend payouts to outside shareholders.
- Inefficient investment activity - no accountability or credible oversight.

Valuation Implications: The value of the firm to the minority shareholder is substantially less than that of the majority shareholder.

- Love (2005) estimates that the control premium in Brazil is nearly 65%.
- Additionally, a ten percent increase in the wedge between voting and cash flow rights can lead to a three to seven percent additional valuation discount.
- These discounts capture the cash flows expected to be lost by the minority shareholder.

Emerging Market Equity Valuations: Minority versus Majority Shareholder Valuations

Cash Flows from
Actual Operations

Enterprise
Value
(as operated)
Minus NetDebt

Emerging Market Equity Valuations: It is a Matter of Perspective

Cash Flows from
Actual Operations

Agency Conflicts and
Private Benefits
of Control

Enterprise
Value
(as operated)
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+

Value "Lost"
By Poor
Governance
(private benefits)

Emerging Market Equity Valuations: It is a Matter of Perspective

Cash Flows from
Actual Operations

Agency Conflicts and
Private Benefits
of Control

Costs and Frictions
Due to Institutional
Environment

Enterprise
Value
(as operated)
Minus NetDebt

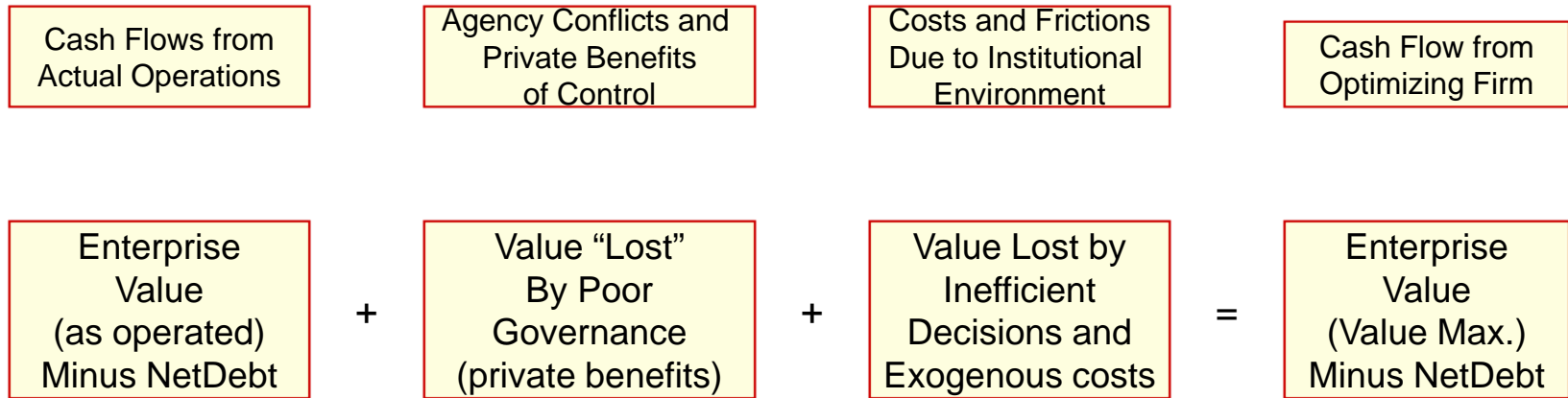
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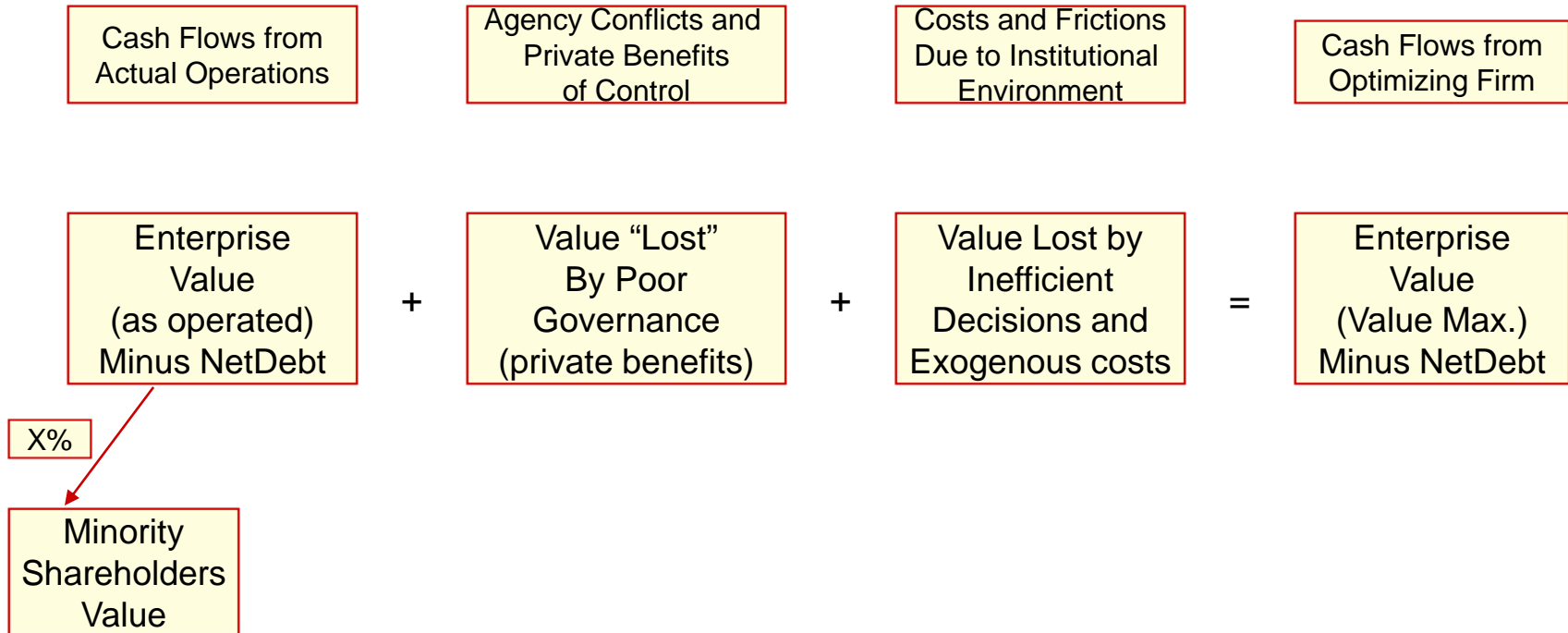
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Value Lost by
Inefficient
Decisions and
Exogenous costs

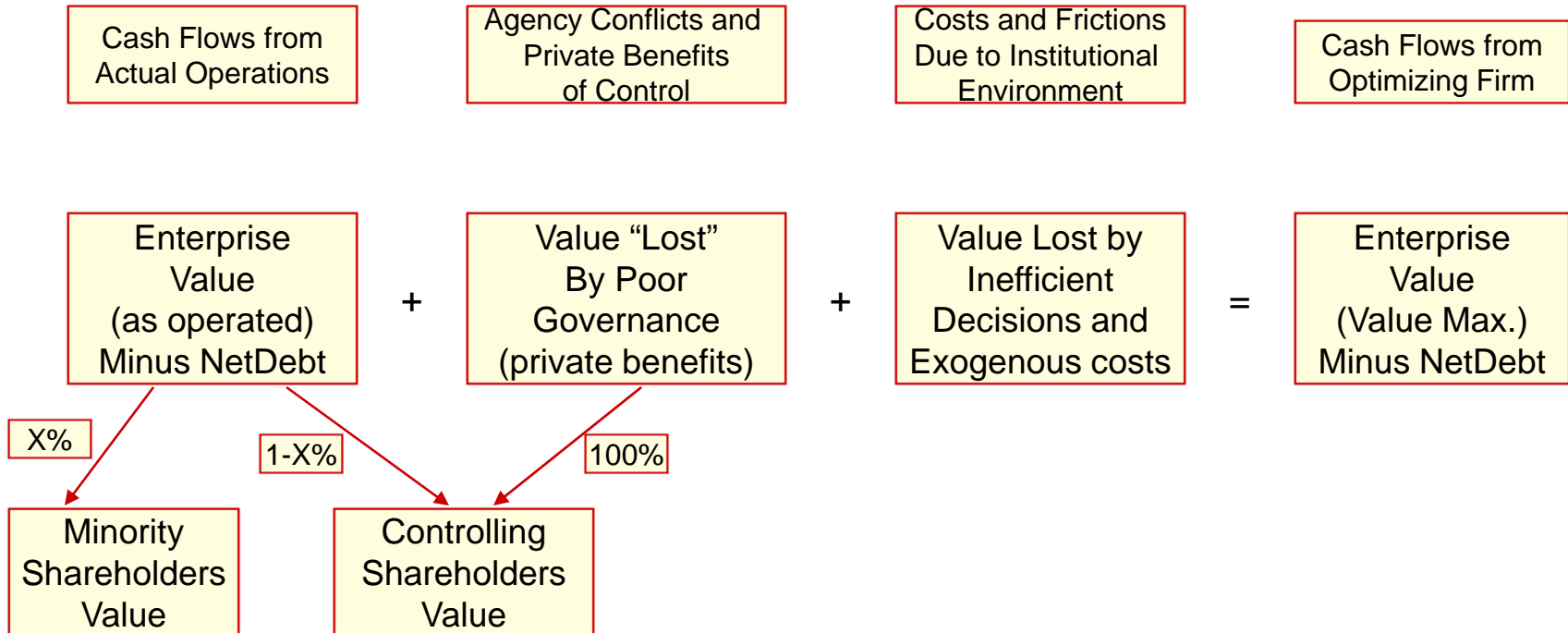
Emerging Market Equity Valuations: It is a Matter of Perspective



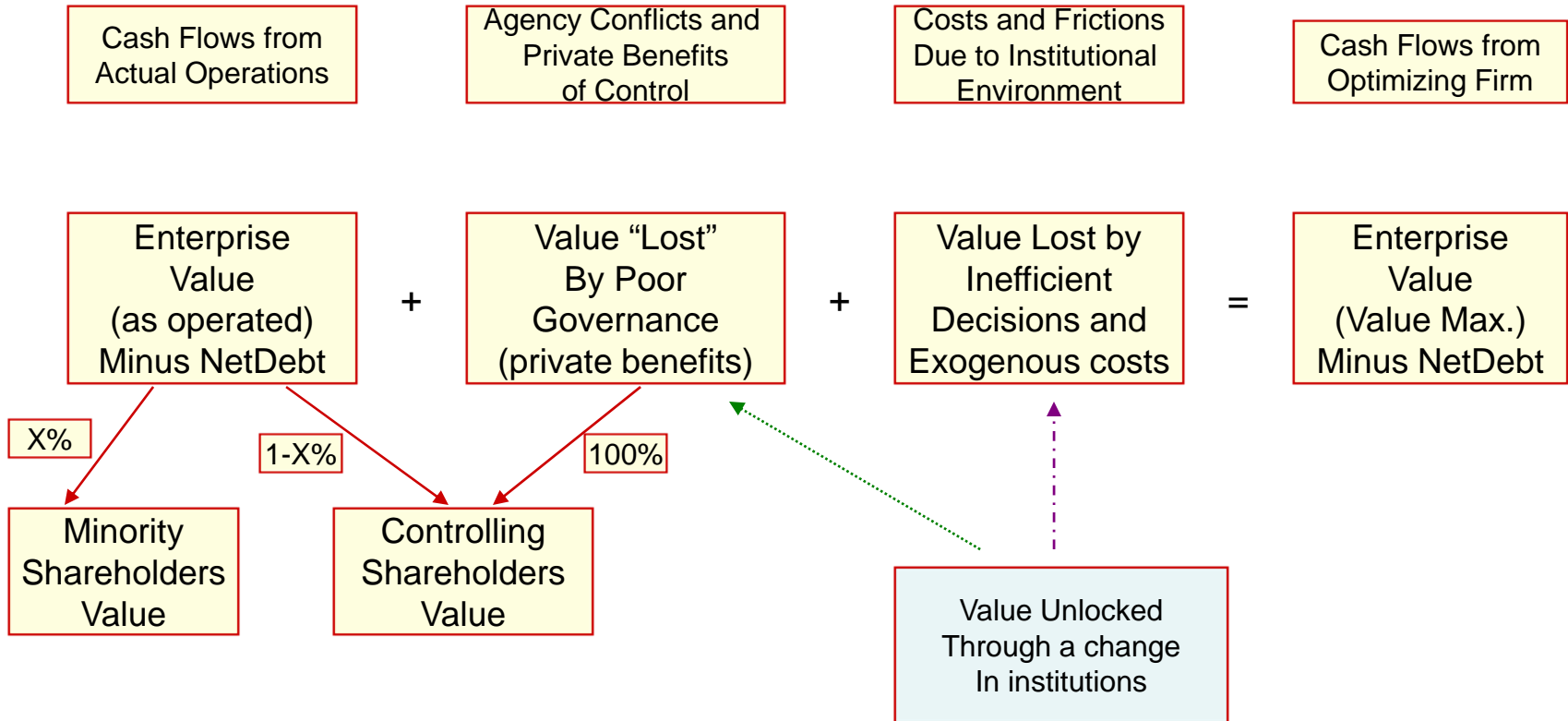
It is a Matter of Perspective: Minority Shareholder Valuation



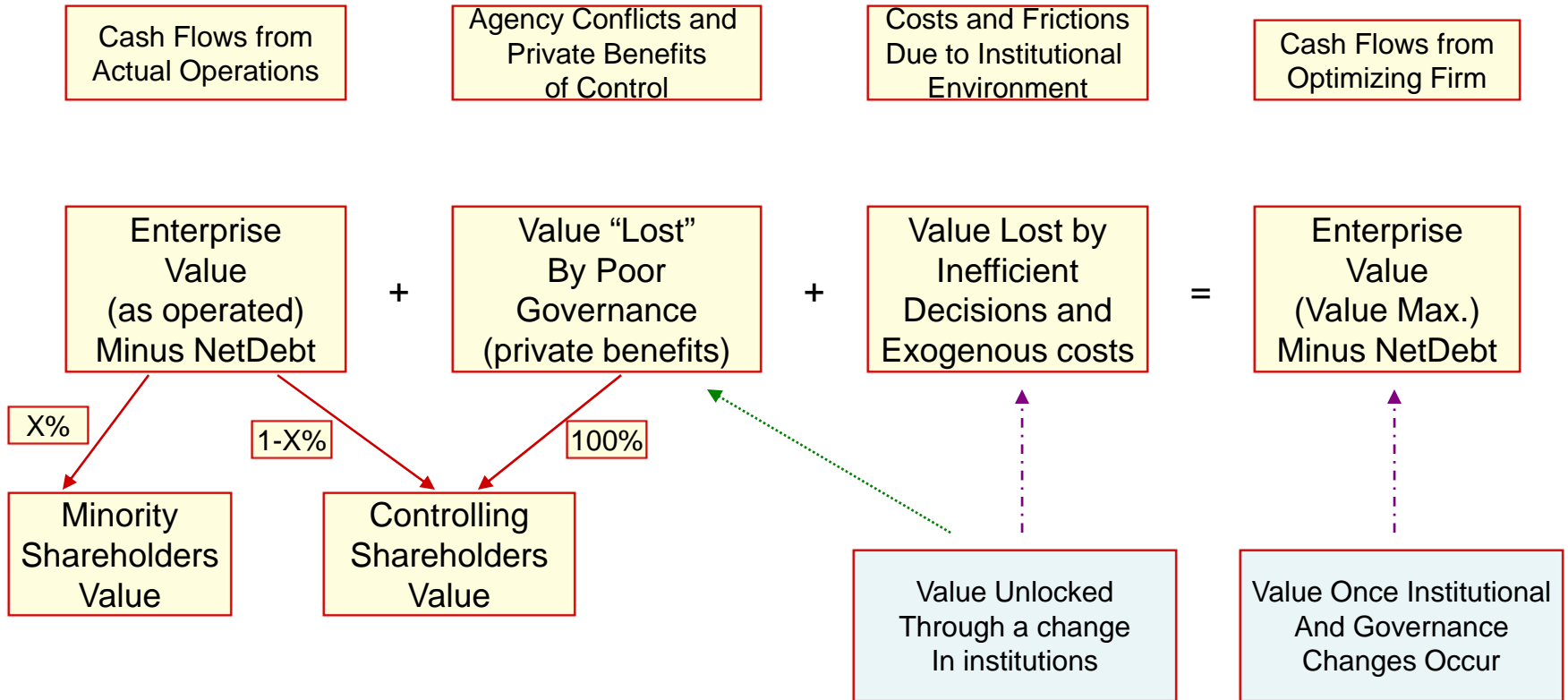
It is a Matter of Perspective: Controlling Shareholder's Valuation



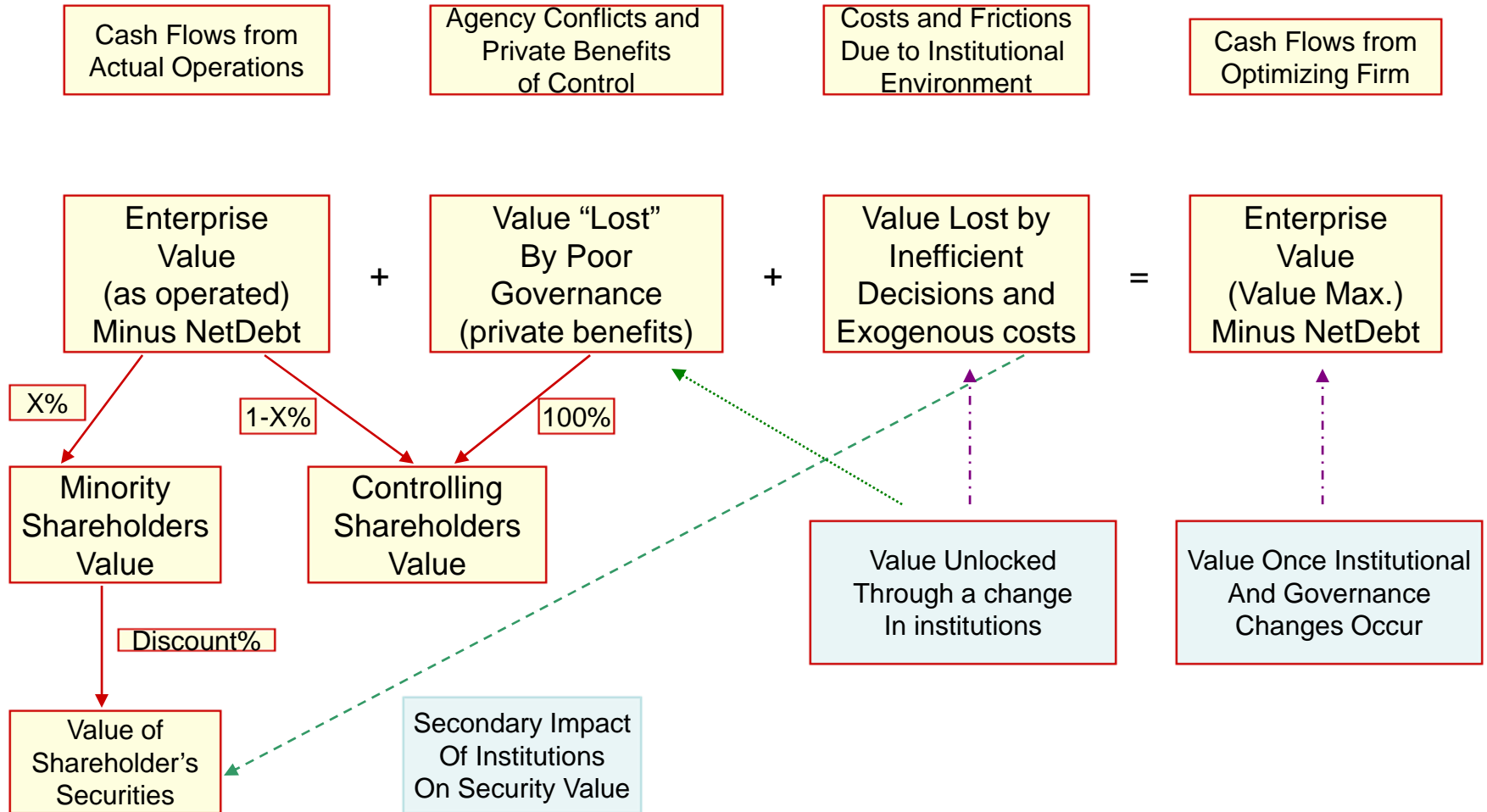
It is a Matter of Perspective: Controlling Shareholder's Valuation



It is a Matter of Perspective: Controlling Shareholder's Valuation



Emerging Market Equity Valuations: Impact of Institutions on Security Valuation of Minority Shareholder



Duratex: Additional Emerging Market Considerations

Limitations on the firm's business activities

- Measure of Economic Freedom: Brazil 55.9% = Mostly Unfree.
- Ease of doing business: Rank 121 (out of 175).
- Time to start a business nearly 3 years.

- As a result, day-to-day business activity is less than optimal.

Extremely high tax burden: Income taxes and social contributions account for 70% of pre-tax profits.

Business section: Forestry-related products.

Value of natural resource: Forest reserve: 70 million hectares

Macro-economic conditions: Brazil has a history of significant inflation and currency devaluations.

Firm #2: Dong Feng Motor Company

Common characteristic in emerging markets: State involvement in the economy

Ownership and Organizational Structure:

- Dong Feng Motor Company is controlled by Dong Feng Motor Group (\approx 80% ownership)
 - Dong Feng Motor Group is a wholly owned subsidiary of a state asset management company.
- Dong Feng's minority shares are traded on the Shanghai (B) and Hong Kong (H) stock exchanges.
- Dong Feng Motor Company receives loans from both state-controlled banks and a finance subsidiary of Dong Feng Motor Group (parent).
- Dong Feng Motor Company is has numerous customer-supplier relations between other state-controlled entities and their subsidiaries.

Dong Feng Motor Company: The impact of political incentives on corporate behavior

DFMC is representative of a classic pyramid of corporations that allow local and central politicians to potentially expropriate foreign capital.

- Fan, Wong and Zhang - Pervasive use of tunneling mechanisms in China.

Pyramidal arrangement allows politicians to exercise political objectives through these listed firms

- Political incentives will frequently outweigh value maximization goals.
 - Local economic concerns (e.g., full employment).
 - Human capital / reputation concerns of local politician.
- Evidence that state-controlled entities have less efficient investment strategies.

The presence of state intervention in the economy leads to various information outcomes:

- Opaque reporting practices
- Biased information for political purposes.

Level of Firm-Specific Information in Equity Prices

Country	Rule of Law	Low Corruption	Low risk of Expropriation	Percentage Comovement	Market-Model R-Squared
United States	10.00	8.63	9.98	57.9	0.021
Ireland	7.80	8.52	9.67	65.7	0.058
Canada	10.00	10.00	9.67	58.3	0.062
United Kingdom	8.57	9.10	9.71	63.1	0.062
Australia	10.00	8.52	9.27	61.4	0.064
New Zealand	10.00	10.00	9.69	64.6	0.064
Portugal	8.68	7.38	8.90	61.2	0.068
Denmark	10.00	10.00	9.67	63.1	0.075
France	8.98	9.05	9.65	59.2	0.075
Austria	10.00	8.57	9.69	66.2	0.093
Netherlands	10.00	10.00	9.98	64.7	0.103
Germany	9.23	8.93	9.90	61.1	0.114
Norway	10.00	10.00	9.88	66.6	0.119
Indonesia	3.98	2.15	7.16	67.1	0.140
Finland	10.00	10.00	9.67	68.9	0.142
Sweden	10.00	10.00	9.40	66.1	0.142
Belgium	10.00	8.82	9.63	65.0	0.146
Hong Kong	8.22	8.52	8.29	67.8	0.150
Brazil	6.32	6.32	7.62	64.7	0.161
Philippines	2.73	2.92	5.22	68.8	0.164
South Korea	5.35	5.30	8.31	70.3	0.172
Pakistan	3.03	2.98	5.62	66.1	0.175
Italy	8.33	6.13	9.35	66.6	0.183
Czech Republic	8.30	-	-	69.1	0.185
India	4.17	4.58	7.75	69.5	0.189
Singapore	8.57	8.22	9.30	69.7	0.191
Greece	6.18	7.27	7.12	69.7	0.192
Spain	7.80	7.38	9.52	67.0	0.192
South Africa	4.42	8.92	6.88	67.2	0.197
Chile	7.02	5.30	7.50	66.9	0.209
Colombia	2.08	5.00	6.95	72.3	0.209
Japan	8.98	8.52	9.67	66.6	0.234
Thailand	6.25	5.18	7.42	67.4	0.271
Peru	2.50	4.70	5.54	70.5	0.288
Mexico	5.35	4.77	7.29	71.2	0.290
Turkey	5.18	5.18	7.00	74.4	0.393
Taiwan	8.52	6.85	9.12	76.3	0.412
Malaysia	6.78	7.38	7.95	75.4	0.429
China	-	-	-	80.0	0.453
Poland	8.70	-	-	82.9	0.569

Suppression of Bad News in China: Anecdotal Evidence

Economic and Business Activities:

“Unfavorable news – information that could put local leaders in a bad light in Beijing – is routinely suppressed by multiple layers of party propaganda officials in towns, counties, cities and provinces.” The Seattle Times (August 2007)

“Chinese officials often suppress bad news because they fear upsetting the public or their bosses or to prevent economic losses.” Cox International (August 2007)

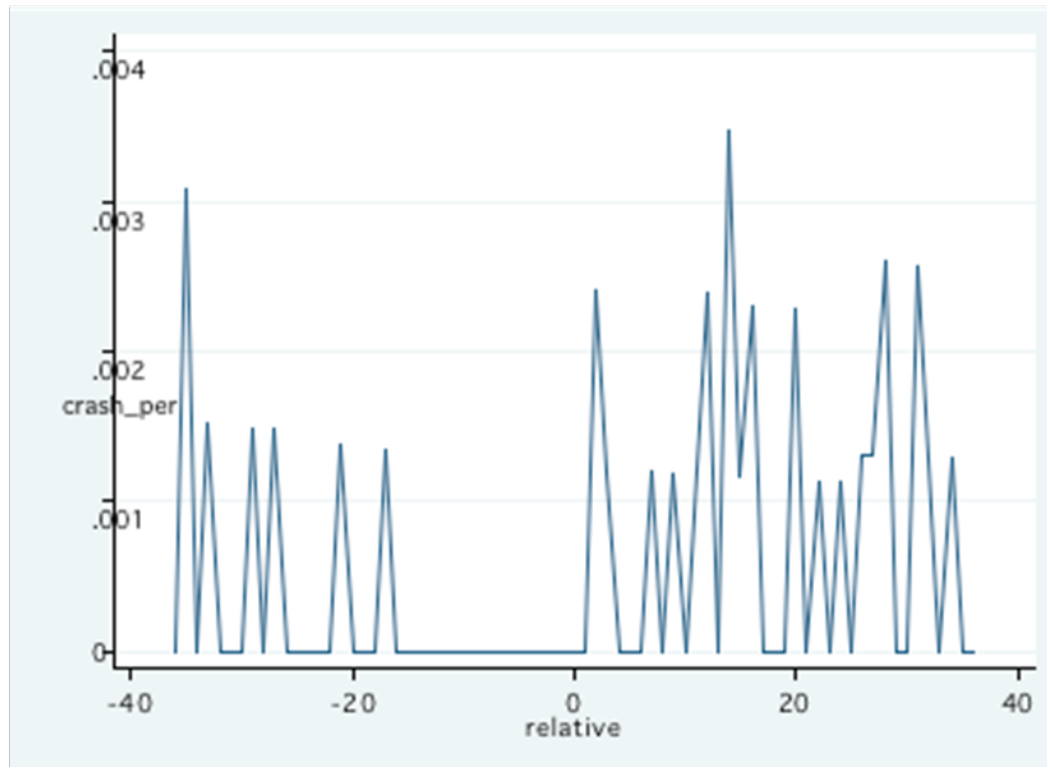
“[The] suppression of bad news remains an unedifying habit that dies hard on the Mainland.” South China Morning Post (June, 2007)

Measurement of Economic performance

“[The] Chinese government had systematically falsified its gross domestic product data to hide an economic downturn that took place in 1998 and 1999.” Thomas Rawski (2001)

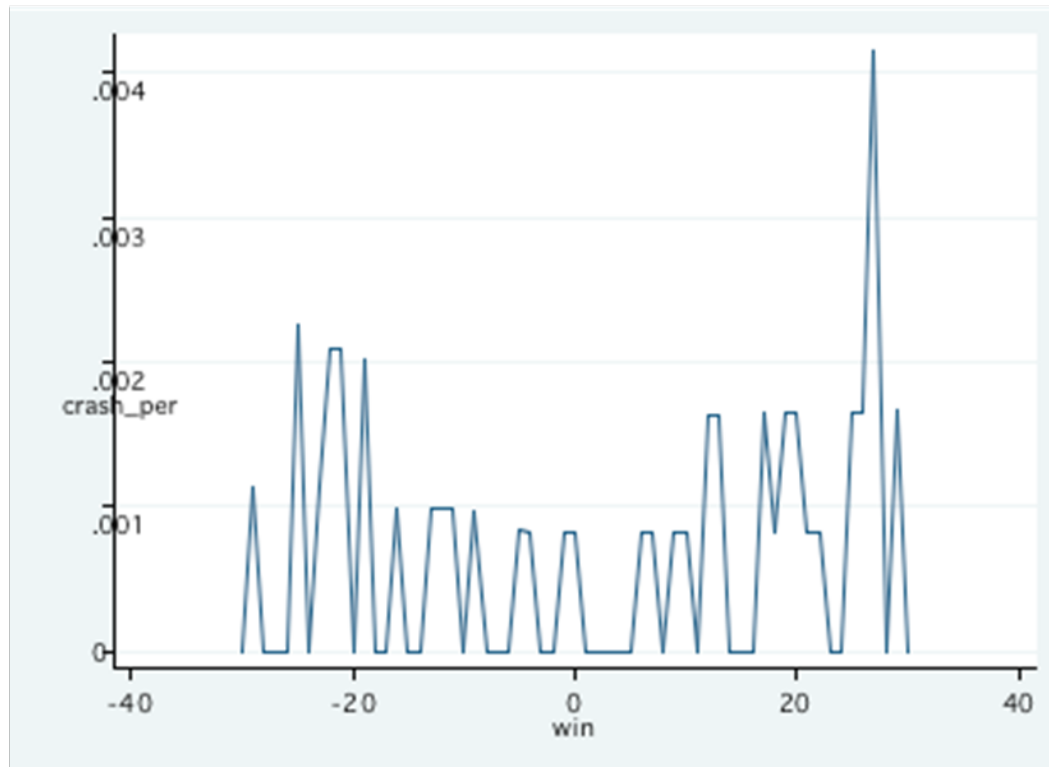
Frequency of Stock Market Crashes around Political Promotion Events

Percent of traded firms with significant price decline in a given month



Frequency of Stock Market Crashes around Chinese National Congress Meetings

Percent of traded firms with significant price decline in a given month



Impact of Political Forces on Information Environment

In response to prevailing political and financial incentives, reported outcomes are biased towards either favorable or unfavorable realizations.

- Suppress negative news in order to hide poor performance, perquisite consumption and/or inefficient investments.
 - Negative news suppressed in the year of Chinese National Congress
 - Negative news suppressed in advance of regional promotion decisions.
 - Negative news suppressed in advance of corruption exposure.
- Hying performance in order to attract foreign investment.
- Understating net assets to avoid expropriation and/or undue taxation by the State.
- Earnings management to meet regulatory/listing requirements.
 - For example, China requires a minimum 10% ROE for a rights issue; 6% ROE to offer additional shares.

Broader Effect: Limited Corporate Transparency in EMs

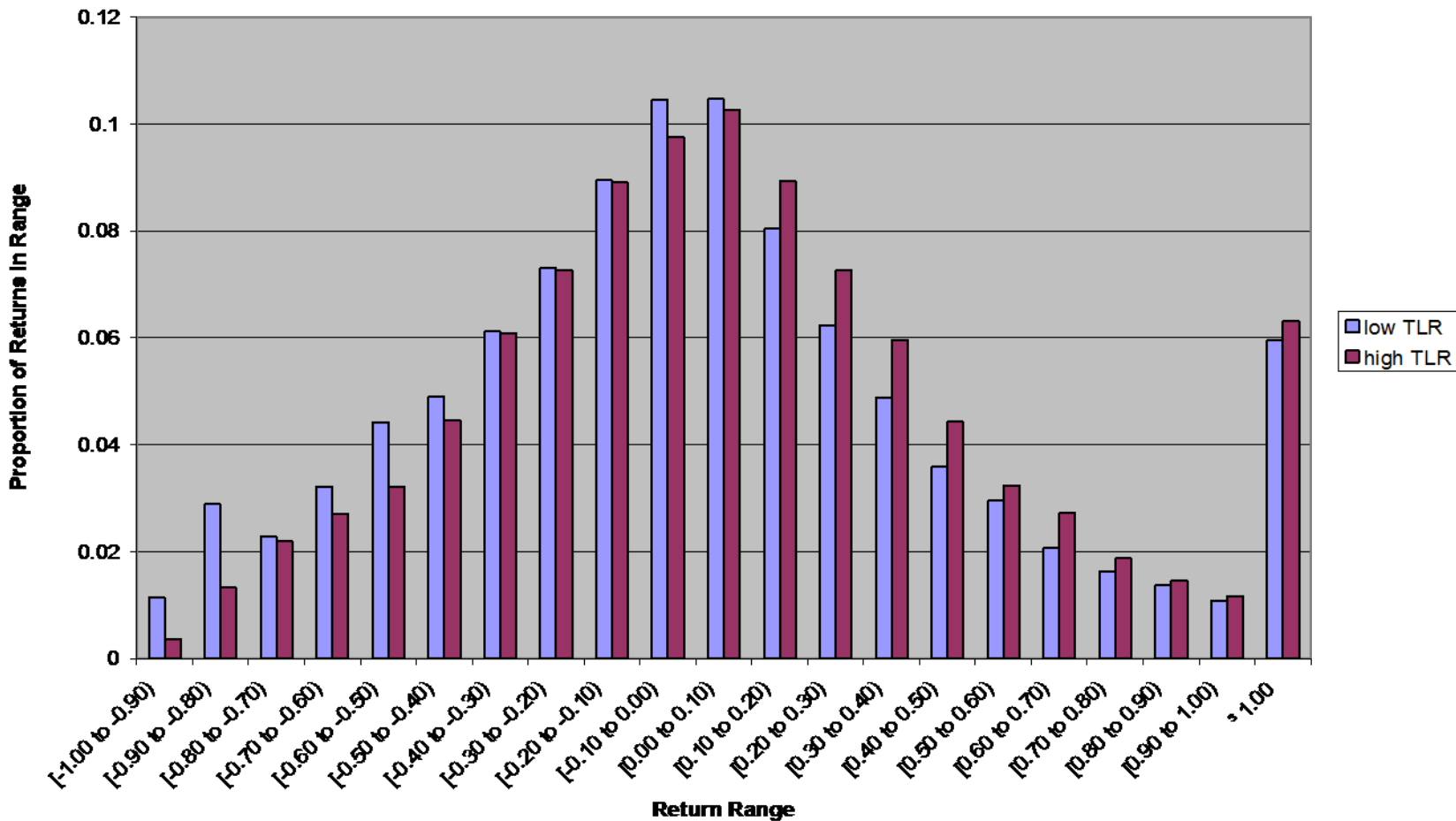
Country	CIFAR	DISCL	GOVERN	TIME	AUDIT	ANALYST	MEDIA
Argentina	68	70.65	68.12	91.3	.	12.73	68.29
Brazil	56	57.25	65.94	86.96	3	16.1	56.14
Chile	78	92.75	76.45	94.2	4	5.53	62.46
Colombia	58	14.49	65.58	62.32	3	3.31	58.13
India	61	79.35	76.45	45.65	1	11.9	29.51
Kenya	.	79.71	76.45	17.39	.	0	23.05
Korea	68	65.22	77.9	17.39	3	9.9	83.5
Sri Lanka	74	63.41	97.83	73.91	.	2.4	37.86
Mexico	71	68.12	65.58	84.78	3	18.53	59.95
Malaysia	79	100	96.74	65.22	3	19.9	63.83
Nigeria	70	71.01	84.06	17.39	3	0	27.29
Pakistan	73	68.48	92.75	51.45	2	3.4	32.47
Peru	.	53.99	65.58	71.74	.	8.1	40.33
Philippines	64	80.07	65.58	75.36	1	10.87	44.26
Thailand	66	51.07	68.12	89.13	3	9.77	52.26
Turkey	58	59.06	67.03	17.39	1	7.97	58.55
Taiwan	58	59.78	69.93	17.39	2	6.8	.
Uruguay	.	33.33	33.33	17.39	4	0	71.83
Venezuela	.	36.23	69.57	17.39	3	1.67	62.64
South Africa	79	88.41	94.2	86.96	4	7.4	59.56
Zimbabwe	72	66.67	87.68	60.87	4	0	28.71

Mean: Emerging	67.82	64.72	74.52	55.31	2.76	7.44	51.03
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Mean: Developed	73.92	90.70	80.88	75.07	3.60	16.15	87.69
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Economic Impact of Limited Information: Distribution of Realized Stock Returns across TLR regimes

Density Functions Table 2 Panel B: Ball and Shivakumar Incremental (without US and JPN)



Firm #3: Khon Kaen Sugar Company

Central Problem: Uncertainty; Limited Market Liberalization; commodity-product

KKSC is the third largest produce of raw sugar cane in Thailand.

- Two principal products: Refined Sugar and Biofuel

Government intervention in the market mechanism.

- Mandates that 75% of cane sugar production must be sold to the State.
- Historically, price > market prices.
- Import quotas and tariffs on sugars; no export subsidies.
- Investment in biofuel is subsidized by the regional government.
 - Local government has a minority interest in KKSC.

Stability of political and legal environment: 28 coups since 1949.

Strong allegations of corruption in government and politically-connected firms.

Persistence of cash flows and above-average performance are linked to the stability of these policies and practices.

Firm #4: Godrej Consumer Products

Largest producer of soap and personal hygiene related products in India.

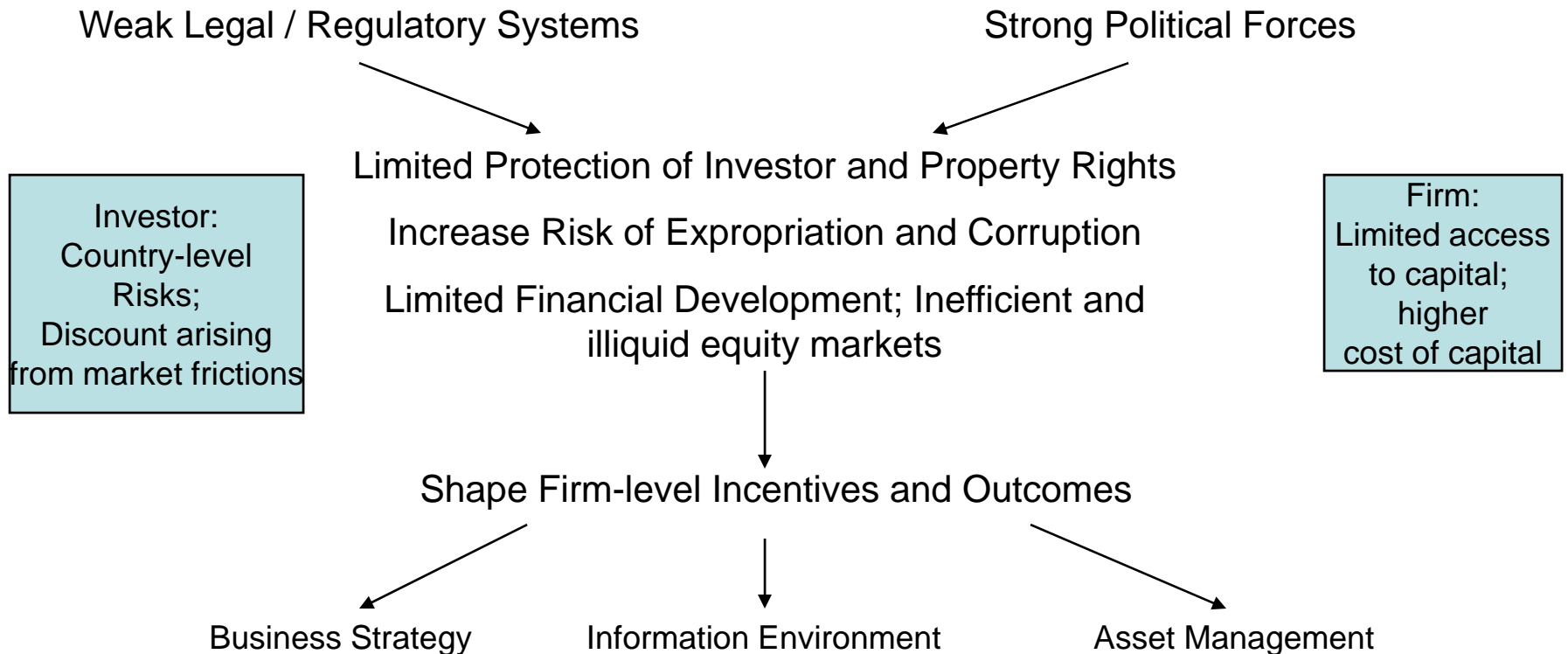
Example of a traditional family-run Indian business.

In light of the (historically) poor market development in India, the use of family groups is one means of bypassing capital market frictions.

- These group structures, seen globally under different names, are a natural response to weak external markets.
- Also, weak contracting environments lead to relationship-based transactions.
- Growth achieved through diversification and acquisitions

Conclusion

Publicly-traded firms in emerging markets offer unique valuation challenges:



Each of these factors will have a direct or indirect impact on firm value