

**THE ASIAN TIGERS AND THE LION KINGS:
THE RAPIDLY EMERGING MARKETS OF CHINA AND AFRICA
UNDERSTANDING INTERNATIONAL VALUATION PANEL
APPRAISAL INSTITUTE ANNUAL MEETING
LAS VEGAS, NEVADA
15 AUGUST 2011**



136 EAST FIFTY-SEVENTH STREET, NEW YORK, NEW YORK 10022

212. 832. 0001

HOWIE@GREENWICHREALTYADVISORS.US.COM

IA. INTRODUCTION TO EMERGING MARKET VALUATION

- **LANGUAGE ISSUES** **ENGLISH IS THE UNIVERSAL LANGUAGE OF BUSINESS**
- **CURRENCY** **REAL ESTATE IS OFTEN PRICED IN US DOLLARS**
- **LACK OF DATA** **ASK THE RIGHT QUESTIONS, BUY THE NEWSPAPER**
- **CORRUPTION** **VERY COMMON, BUT STARTING TO CHANGE**
- **SAFETY** **USE COMMON SENSE**
- **NETWORK** **JONES LANG LASALLE, KNIGHT FRANK, COLLIERS**
- **RELIABILITY** **CAN APPROXIMATE VALUE, DIFFICULT TO APPRAISE**
- **TECHNIQUES** **DIRECT CAP MORE COMMON THAN DCF FORECASTS**
- **CULTURE** **US: THE SQUEAKY WHEEL GETS THE GREASE**
JAPAN: THE NAIL THAT STICKS OUT GETS HAMMERED DOWN
CHINA: THE LOUDEST DUCK GETS SHOT

IB. LOWEST OFFICE BUILDING CAPITALIZATION RATES AROUND THE WORLD

RANK	LOCATION	CAPITALIZATION RATE
1.	TAIPEI, TAIWAN, CHINA	2.9%
2.	HONG KONG, CHINA	3.3%
3.	GENEVA, SWITZERLAND	4.0%
4.	ZURICH, SWITZERLAND	4.1%
5.	SINGAPORE	4.2%
6.	LONDON (WEST END)	4.5%
7.	MUNICH, GERMANY	4.5%
8.	TOKYO, JAPAN	4.7%
9.	PARIS, FRANCE	4.8%
12.	MANHATTAN (MIDTOWN)	5.0%

SOURCE: COLLIERS, DECEMBER 2010

IC. HIGHEST RETAIL RENTS AROUND THE WORLD

RANK	LOCATION	ANNUAL RENT PSF
1.	NEW YORK-FIFTH AVENUE	\$2,150
2.	HONG KONG, CAUSEWAY BAY	\$1,510
3.	HONG KONG, QUEEN'S ROAD	\$1,356
4.	LONDON, OLD BOND STREET	\$962
5.	ZURICH, BAHNHOFSTRASSE	\$955
6.	MILAN, VIA MONTE NAPOLEONE	\$943
7.	SYDNEY, PITT STREET MALL	\$901
8.	PARIS, CHAMPES-ELYSEES	\$873
29.	SHANGHAI, NANJING ROAD	\$326
48.	BEIJING, MALL AT CWTC	\$229

SOURCE: COLLIERS, SPRING 2011

IIA. INTRODUCTION TO CHINA

- **1.4 BILLION PEOPLE**
- **SIX HOURS TO FLY EAST-WEST**
- **NINE HOURS TO FLY NORTH-SOUTH**
- **FIVE TIME ZONES, BUT ONE UNIVERSAL TIME**
- **1980: INCOME PER HEAD IN AFRICA WAS 4X HIGHER THAN CHINA**
- **2010: INCOME PER HEAD IN CHINA IS 3X GREATER THAN AFRICA**
- **GOVERNMENT FOCUS ON A BETTER LIFE, NOT DEMOCRACY**

II.B. CHINA HAS TO FEED 1.4 BILLION PEOPLE

US FORECAST OF CHINA'S <u>ANNUAL</u> PURCHASE OF US CORN	500,000 METRIC TONS
AMOUNT OF CORN ACTUALLY PURCHASED IN <u>ONE MONTH</u> (JUNE)	540,000 METRIC TONS
<u>MAY</u> 2011 FORECAST* OF TOTAL 2011/12 CORN PURCHASES	2 MILLION TONS
<u>JUNE</u> 2011 FORECAST* OF TOTAL 2011/12 CORN PURCHASES	5 MILLION TONS
PERCENTAGE OF WORLDWIDE COPPER PURCHASED BY CHINA	40%
PERCENTAGE OF COTTON	39%
PERCENTAGE OF CORN	21%

* BARCLAYS CAPITAL

IIc. FROM “MADE IN CHINA” TO “SOLD IN CHINA”

NUMBER OF CARS SOLD IN THE US LAST YEAR	11 MILLION
NUMBER OF CARS SOLD IN CHINA IN 2011	18 MILLION
NUMBER OF CARS SOLD IN CHINA IN 2002	2.5 MILLION
CURRENT BACKLOG OF RANGE ROVER ORDERS IN CHINA	20,000
YEAR CHINA WILL BECOME THE WORLD’S LARGEST ECONOMY	
HSBC	2050
DEUTSCHE BANK	2040
WORLD BANK	2030
GOLDMAN SACHS	2020
YEAR THAT CHINA’S ECONOMY WILL SURPASS THE US	
INTERNATIONAL MONETARY FUND	2016

IIc. FROM “MADE IN CHINA” TO “SOLD IN CHINA” (CONTINUED)

FIRST MCDONALD’S IN MAINLAND CHINA	1990
NUMBER OF MCDONALD’S IN CHINA NOW	1,300
NUMBER OF MCDONALD’S IN CHINA IN 2013 (+54%)	2,000
NUMBER OF STARBUCKS IN MAINLAND CHINA (MARCH 2011)	450
NUMBER OF STARBUCKS BY 2015 (+122%)	1,000
LIMITED BRANDS: VICTORIA’S SECRET AND BATH & BODY WORKS	
NORTH AMERICAN STORES	1,000+
INTERNATIONAL STORES (3%)	< 30
VICTORIA’S SECRET ITEMS ON CHINESE eBAY (TAOBAO)	14,000
VICTORIA’S SECRET MENTIONS ON CHINESE TWITTER (SINA WEIBO)	20,000

IID. APPLE IN CHINA

APPLE STORE, BEIJING, CHINA



IID. APPLE IN CHINA (CONTINUED)

APPLE	
IPHONE COST, % OF AVG. ANN. HOUSEHOLD INCOME, US	1.0%
IPHONE COST, % OF AVG. ANN. HOUSEHOLD INCOME, CHINA	49.7%
AVERAGE NUMBER OF DAILY VISITORS PER STORE, US	10,000
AVERAGE NUMBER OF DAILY VISITORS PER STORE, CHINA	40,000
APPLE STORES PER PERSON, US (229)	1:1.4 MILLION
APPLE STORES PER PERSON, CHINA (4)	1: 350 MILLION

IID. APPLE IN CHINA (CONTINUED)

APPLE	
SALES AT 4 CHINA STORES, ANNUALIZED	US\$10.4 BILLION
IF 50,000 SF EACH, SALES PER SQUARE FOOT WERE	\$52,000 PSF!
OTHER RETAILERS	
APPLE OVERALL (EXCLUDES ONLINE SALES)	\$4,400 PSF
TIFFANY	\$3,100 PSF
COACH	\$1,800 PSF
BEST BUY	\$900 PSF

IID. APPLE IN CHINA (CONTINUED)

APPLE STORE, KUMMING, CHINA



III. CHINA HAS AN EXPORT SURPLUS

NEW FOREIGN TENANTS AT THE EMPIRE STATE BLDG. SINCE 2006	26
FROM CHINA	5
FROM GERMANY	4
FROM ITALY, SWEDEN TURKEY (EACH)	2
CHINA SHIFTING PRODUCTION TO CHEAPER DOMESTIC AREAS	
MORE AUTOMATION	
MORE HIGH-VALUE GOODS (ELECTRONICS)	
LOWER COSTS IN VIETNAM NOW; AFRICA NEXT?	
CONTINUED SHIFT TO TRADE WITH LATIN AMERICA	
CHINESE TRADE WITH LATIN AMERICA, 2000	\$12 BILLION
CHINESE TRADE WITH LATIN AMERICA, 2009 (+883%)	\$118 BILLION
CHINA HELPED LATIN AMERICA AVOID LAST RECESSION	

III. NOT ALL ROSY FOR CHINA

- **STILL A COMMUNIST COUNTRY**
- **IMPACT OF “ONE FAMILY, ONE CHILD” POLICY MEANS A DECLINING LABOR FORCE**
- **DIFFERENT VIEW TOWARDS AGING**
- **LARGE GAP BETWEEN THE RICH AND POOR (BICYCLES)**
- **SUPPRESSION OF HUMAN RIGHTS (INTERNET)**

NUMBER OF PUBLIC SURVEILLANCE CAMERAS:

NEW YORK CITY	8,000
CHICAGO	10,000
BEIJING	280,000

- **RISING INFLATION**
- **LACK OF TRANSPARENCY, QUESTIONABLE ACCOUNTING:**
BIG FOUR CPAS RESIGNED FROM AT LEAST SEVEN US LISTED COMPANIES
- **YOGI BERRA: “IT’S TOUGH TO MAKE PREDICTIONS, ESPECIALLY ABOUT THE FUTURE”**

III.A. VALUATION IN CHINA

- **LAND**

RIGHT TO USE, NOT OWNERSHIP

RIGHT OF POSSESSION

RIGHT TO EARNINGS

RIGHT OF DISPOSAL (SELL, DONATE, ETC.)

- **NATIONWIDE REAL ESTATE APPRAISER EXAM HELD ONCE PER YEAR**
- **USE SQUARE METERS, NOT SQUARE FEET**
- **USE YUAN (RMB), NOT US DOLLARS**

IIIA. VALUATION IN CHINA (CONTINUED)

OFFICE BUILDING EXAMPLE:

- **CAN USE DIRECT CAPITALIZATION OR A FORM OF DISCOUNTED CASH FLOW ANALYSIS (DCF)**

CAPITALIZATION RATES COME FROM:

COMPARABLE SALES

BUILT-UP RATES BASED ON RISK

USE OF SEPARATE LAND AND BUILDING CAP RATES

- **VALUATIONS BASED ON PRESENT VALUE OF ANTICIPATED INCOME OVER REMAINING ECONOMIC LIFE**

A 5 YEAR OLD BUILDING WITH A 50-YEAR LIFE MIGHT GENERATE 45 MORE YEARS OF INCOME

NO INFLATION INCORPORATED INTO THE FORECAST

PV OF CURRENT STABILIZED INCOME

III.B. VALUATION IN CHINA

- **APPRAISAL INSTITUTE TEXTBOOK EXAMPLE:**

30,000 SQUARE METERS X 10.7639 EQUALS 322,917 SQUARE FEET

POTENTIAL GROSS INCOME	RMB	US\$/PSF
30,000 SQUARE METERS @ RMB 30 PER MONTH	10,800,000	\$5.35
AT AVERAGE OCCUPANCY OF 90% (10% VACANCY LOSS)	-1,080,000	
EFFECTIVE GROSS INCOME	9,720,000	\$4.82
LESS: OPERATING EXPENSES OF 100,000 PER MONTH X 12	1,200,000	
PROPERTY TAXES @ 10% OF EGI	972,000	
OTHER TAXES @ 5% OF EGI	486,000	
TOTAL EXPENSES	2,658,000	\$1.32
NET OPERATING INCOME (65%)	7,062,000	\$3.50

III.B. VALUATION IN CHINA (CONTINUED)

- **APPRAISAL INSTITUTE TEXTBOOK EXAMPLE:**

PRESENT VALUE OF 7,062,000 RMB PER YEAR FOR 45 YEARS OF REMAINING LIFE @ 10%

69,651,200 YUAN (\$11,145,000)

US\$11,145,000 VALUE / 322,917 SQUARE FEET = \$34.50 PER SQUARE FOOT VALUE

7,062,000 RMB NOI / 69,651,200 VALUE = 10.1% CAP RATE

69,651,200 VALUE / 10,800,000 GROSS INCOME = 6.45X GROSS RENT MULTIPLIER

IIIc. CHINA AGRICULTURAL LAND LEASE EXAMPLE

- **LIMITED AMOUNT OF DOMESTIC ARABLE LAND**
- **CHINA PRODUCES 85 BUSHELS OF CORN PER ACRE; US PRODUCES 185 BUSHELS**
- **COLLECTIVE OWNERSHIP IN RURAL AREAS:**
 - SOCIALIST COLLECTIVE ECONOMIC ORGANIZATION REPRESENTS ALL WORKING PEOPLE, AND OWNS THE LAND**
 - THE FARMER IS MERELY A “CONTRACTOR”**
- **LEASES BASED ON ANTICIPATED CROP PROFITABILITY**
- **SINCE THERE ARE NO ARM’S LENGTH TRANSFERS OF SIMILAR LAND PARCELS**
- **FAMILY MEMBERS CAN INHERIT LAND**

IIIc. CHINA AGRICULTURAL LAND LEASE EXAMPLE (CONTINUED)



III.D. LAND VALUATION IN CHINA

LAND VALUATION EXAMPLE:

- **KNOWN AS THE COST APPROACH TO LAND**

LAND VALUE CALCULATED AS:

EXPENSE OF LAND ACQUISITION

+ EXPENSE OF LAND DEVELOPMENT

+ INTEREST COST ON THE INVESTMENT

+ APPRECIATION

= LAND VALUE

IIIId. LAND VALUATION IN CHINA (CONTINUED)

ITEM	DERIVATION	RMB PER SQUARE METER
1.	<u>ACQUISITION</u> LAND COMPENSATION, RESETTLEMENT SUBSIDY, COMPENSATION FOR GREEN CROPS ON LAND	155.61
2.	<u>DEVELOPMENT</u> AMORTIZED COSTS OF ACCESS, POWER SUPPLY, WATER, DRAINAGE, SEWER, GRADING	90.00
3.	<u>INTEREST ON INVESTMENT</u> 2 YEARS, 7.47% INTEREST RATE ON FIXED ASSETS SET BY THE BANK OF CHINA	12.57
4.	<u>PROFIT ON INVESTMENT</u> (155.61 ACQUISITION COST + 90.00 DEVELOPMENT COST) AT 8.0%	19.60
5.	<u>APPRECIATION OF LAND</u> TOTAL COST (155.61+90.00+12.57+19.60) X 30%	83.33
	LAND VALUE (OR US\$5.37 PSF)	361.11

IVA. INTRODUCTION TO AFRICA

- **53 COUNTRIES**
- **TOTAL POPULATION OF ABOUT 1 BILLION**
- **ONLY 2% OF WORLD GDP, BUT INCREASING RAPIDLY; HAD BEEN UNDERSTATED FOR MANY YEARS**
- **GDP IS STILL ONLY ONE-TENTH THE SIZE OF ASIA**
- **REASONS FOR GROWTH**
- **CHINESE DEMAND FOR RAW MATERIALS**
- **SURGING COMMODITY PRICES**
- **LARGE INFLOWS OF FOREIGN INVESTMENT**
- **CHINESE AGRICULTURAL LANDS, KAMPALA GOVERNMENT BUILDINGS**
- **URBANIZATION**
- **RISING PERSONAL INCOMES**

IVB. AFRICA BY THE NUMBERS

NUMBER OF KFC OUTLETS IN AFRICA, 2010	600
PROJECTED NUMBER OF KFC OUTLETS IN AFRICA, 2014	1,200
RECENT WAL-MART OFFER FOR 51% OF MASSMART	\$2.5 BILLION
SAME STORE US SALES HAVE DECLINED LAST EIGHT QUARTERS	
AFRICANS WHO CAN NOW AFFORD ONLY BASICS BUT WILL HAVE DISCRETIONARY INCOME BY 2015	220 MILLION
AFRICA'S COLLECTIVE 2008 GDP IS THE SAME AS	BRAZIL
PAST 5 YEARS REVENUE GROWTH IN TELECOM INDUSTRY	40% PER YEAR

IVB. AFRICA BY THE NUMBERS (CONTINUED)

2008 FOREIGN DIRECT INVESTMENT IN AFRICA	
<u>SAME</u> AS CHINA RELATIVE TO GDP	\$40 BILLION
PROJECTED INCREASE IN POPULATION, 2010-2030	50%

IVB. AFRICA BY THE NUMBERS (CONTINUED)

STREET SCENE, DOWNTOWN KIGALI, RWANDA



IVC. WORLD'S FASTEST GROWING ECONOMIES

RANKED BY ANNUAL AVERAGE GROWTH IN GDP

GO SOUTH, YOUNG MAN!

RANK	2001-2010	2011-2015
1.	ANGOLA	CHINA
2.	CHINA	INDIA
3.	MYANMAR	<i>ETHIOPIA</i>
4.	<i>NIGERIA</i>	<i>MOZAMBIQUE</i>
5.	<i>ETHIOPIA</i>	<i>TANZANIA</i>
6.	KAZAKHSTAN	VIETNAM
7.	CHAD	<i>CONGO</i>
8.	<i>MOZAMBIQUE</i>	<i>GHANA</i>
9.	CAMBODIA	<i>ZAMBIA</i>
10.	<i>RWANDA</i>	<i>NIGERIA</i>

ITALICS: AFRICA

SOURCE: THE ECONOMIST, INTERNATIONAL MONETARY FUND

IVd. WHY INVEST IN AFRICAN REAL ESTATE?

- **PORTFOLIO DIVERSIFICATION**
- **HIGHER RETURNS THAN MANY OTHER COUNTRIES**

POTENTIAL INVESTMENT RISKS:

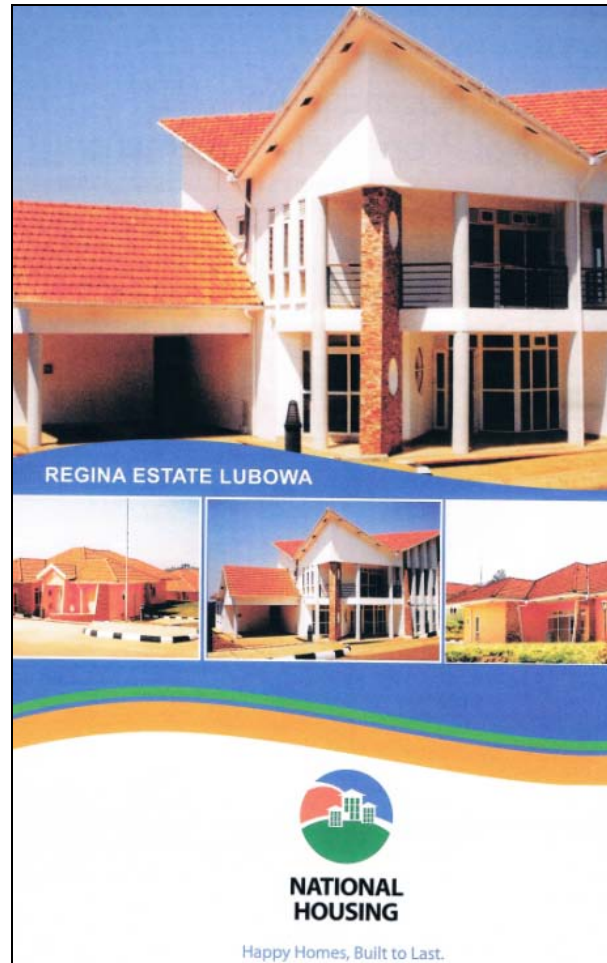
- **PROPERTY RIGHTS?**
- **LACK OF RELIABLE INFORMATION (LACK OF TRANSPARENCY)**
- **POLITICAL RISKS**
- **DIFFERENT LEGAL SYSTEMS**
- **LANGUAGE BARRIERS**
- **TRAVEL DISTANCE AND TIME ZONES**
- **DIFFERENT REAL ESTATE CUSTOMS**

IVd. WHY AFRICA? (CONTINUED)

- **IMPROVED POLITICAL STABILITY**
- **VAST POPULATION**
- **GROWING MIDDLE CLASS**
- **RESOURCE-RICH**
- **INCREASING URBANIZATION**
- **EXPECTED INCREASES IN SPENDABLE INCOME**
- **CHINESE HAVE ALREADY INVESTED THERE**

IVd. WHY AFRICA? (CONTINUED)

REPRESENTATIVE NEW AFRICAN HOME



IVE. INFLATION: WHY YOU SOMETIMES CAN'T USE DISCOUNTED CASH FLOW ANALYSIS

HIGHEST MONTHLY INFLATION RATES IN HISTORY

COUNTRY	MONTH WITH HIGHEST INFLATION RATE	HIGHEST MONTHLY INFLATION RATE	EQUIVALENT DAILY INFLATION RATE	TIME REQUIRED FOR PRICES TO DOUBLE
HUNGARY	JULY 1946	1.30 x 10¹⁶%	195%	15.6 HOURS
ZIMBABWE	MID-NOVEMBER 2008 (LATEST MEASURABLE)	79,600,000,000%	98.0%	24.7 HOURS
YUGOSLAVIA	JANUARY 1994	313,000,000%	64.6%	1.4 DAYS
GERMANY	OCTOBER 1923	29,500%	20.9%	3.7 DAYS
GREECE	NOVEMBER 1944	11,300%	17.1%	4.5 DAYS
CHINA	MAY 1949	4,210%	13.4%	5.6 DAYS

SOURCE: PROF. STEVE H. HANKE, FEBRUARY 5, 2009.

IVE. INFLATION: WHY YOU SOMETIMES CAN'T USE DISCOUNTED CASH FLOW ANALYSIS (CONTINUED)



NEW HYPERINFLATION INDEX (HHIZ) PUTS ZIMBABWE INFLATION AT 89.7 SEXTILLION PERCENT

IVF. VALUATION IN SOUTH AFRICA

- **SALES COMPARISON APPROACH USED FOR:**

RESIDENTIAL PROPERTIES

LAND

COMMERCIAL BUILDINGS DIVIDED INTO SEPARATE, OWNED SPACES

- **COST APPROACH:**

USED FOR SPECIALIZED BUILDINGS SUCH AS *ABATTOIRS* (SLAUGHTERHOUSES), SCHOOLS, TEMPLES, ETC., THAT ARE PART OF AN ONGOING CONCERN

EX: SERVICE STATION/GASOLINE, CONCERT HALL/SYMPHONY

IVF. VALUATION IN SOUTH AFRICA (CONTINUED)

- **INCOME APPROACH IS USED:**

FIVE YEAR FORECASTS ARE COMMON, VS. 10-YEARS IN THE US

INVESTOR SURVEY DATA IS SURPRISINGLY AVAILABLE

DISCOUNT RATES (IRRS) GENERALLY APPROXIMATE THE SUM OF:

CAPITALIZATION RATE + THE MARKET RENT GROWTH RATE

10% CAP RATE + 5% RENT GROWTH = 15% DISCOUNT RATE

HIGHER INFLATION THAN IN THE US:

5-8% FOR RENTS, 7-10% FOR EXPENSES

IVG. LOOKING FORWARD TO 21ST CENTURY RAPIDLY GROWING ECONOMICS

	BRICS (ALPHABETICALLY)	GOLDMAN SACHS NEXT 11 (N-11)
1.	BRAZIL	BANGLADESH
2.	RUSSIA	<i>INDONESIA</i>
3.	INDIA	EGYPT (STOCK EXCHANGE CLOSED)
4.	CHINA	IRAN
5.		<i>KOREA</i>
6.		<i>MEXICO</i>
7.		NIGERIA
8.		<i>PAKISTAN</i>
9.		<i>PHILIPPINES</i>
10.		TURKEY
11.		VIETNAM

ITALICS: FASTEST

IVH. PLEASE KEEP ME IN MIND IF YOU COME ACROSS ANY
“SOUVENIR BUILDINGS”



IVI. PLEASE STAY IN TOUCH

Howie Gelbtuch, MAI, CRE, FRICS

Greenwich Realty Advisors Incorporated

136 East 57th Street

Suite 1601

New York, New York 10022

howie@greenwichrealtyadvisors.us.com