Frontier Market Analysis:
A Case Study of Iraq's Real Estate Industry

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Frontier Market Analysis and Investments:
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ABSTRACT

Success in frontier markets could mean high returns for real estate developers and investors. In order to succeed, companies must determine how to provide their products or services in an environment that may not necessarily adhere to familiar institutional, legal or even ethical norms.

Strategists may never feel informed enough to make educated decisions because there is not enough data to populate sophisticated financial models. However investors and multinationals have a growing desire to gain exposure to underdeveloped markets. This leaves managers with the challenge of evaluating frontier investment markets and navigating risky foreign business environments. This thesis attempts to answer the following question: *to what extent can a researcher establish a viable framework to strategically plan for and operate in frontier market built environments?*

To answer this question, this thesis shall first address the nature of "*frontier markets,*" then proposes a framework for entrepreneurs or multinationals intending to penetrate a frontier market's built environment through either direct investing or real estate development. The framework is a qualitative model, a compilation of analysis tools used by scholars, economists, political scientists, and investors working with and in emerging markets. The framework assesses markets on a broader, *strategic* echelon as well as an *operational* business management level.

Lastly, we populate the framework with current information from Iraq, one of the most challenging and interesting frontier markets in the world today. The conclusion assesses the utility of the framework by highlighting information voids as well as potential business opportunities.

The conclusion articulates that frontier market analysis will never be as valid as analysis of the developed markets because frontier markets are inefficient and information is difficult to ascertain, thus satisfying the definition of “frontier market". The analysis framework will not yield empirical findings like accurate forecasts of NPV, PV, IRR, etc. It will return, qualitatively, institutional voids in potential business opportunities.

Keywords: frontier markets, Iraq, real estate

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CHAPTER 1: INTRODUCTION

1.1 Argument

Since the late 1980's institutional investors have steadily increased their exposure to frontier markets for potentially high returns and to secure holdings that are uncorrelated with predominant market trends. RREEF Research reported [2007] that global direct real estate investment reached $580 billion in 2006. That is a 300% increase from five years prior (D'Argensio & Laurin, 2010). Investors perceived real estate as secure and profitable; furthermore, interest rates were low, cap rates declined and financing was inexpensive.

At the same time, investors started increasing their exposure to developing markets, especially real estate assets (Mullins, 2004). Investors were in search of high growth potential and stabilize economic climates. The US suffered a financial crisis in the 1990s, and investors once again found themselves seeking out solid macroeconomic policies, as well as "an increasing integration into the world financial markets, and fewer high return investment opportunities in developed countries; hence, as capital flows poured into real estate, both in developed and emerging countries" (D'Argensio & Laurin, 2010).

Frontier markets are those markets that are investable but are less developed, liquid, efficient and accessible than emerging markets. The world's emerging markets have provided favorable return benefits for many investors and multinational companies. In the wake of such returns and the international recession, many wonder if frontier markets are a viable option to diversity and add alpha.

Iraq is one such option. Iraq shows strong market potential as the country is in need of most products and services found in developed countries. For example, Iraq's Minister of Construction and Housing estimates that the country needs of over three million homes for their low and middle class families and has packaged $50B USD in investment opportunities to residential real estate developers. Also, the government attempts to attract international investors by offering free land and entitlements, tax benefits, and land-ownership rights.

With 115 billion barrels of proven crude oil, Iraq has the world's second-largest reserve and 11% of the global total (Kumins, 2005). MorningStar reported in April 2010 that Iraq produces 2.5 million barrels of oil per day and exports 1.9 million of those. They have goals of reaching 12 million barrels per day by 2016 (Kumins, 2005).

Iraq is undergoing a great deal of political change resulting in the nation being a more dynamic and influential player in the global energy market. To date, the majority of multinationals are waiting on the sidelines due to what they perceive as overwhelming social, political, financial, and economic risk. Violence is a congenital aspect of such risk. As of July 2010, the US-led Coalition is actively participating in combat operations, and has approximately 85,000 troops in country (O'Hanlon & Livingston, 2010). Deadly violence is still a daily event and so far this year, 1,924 total deaths have been reported (Ibid).

With all of these factors in play, Iraq seems an ideal backdrop to ask: *to what extent can a researcher establish a viable framework to strategically plan for and operate in frontier market built environments?* In this thesis, I will explore to what extent it is possible, and give an example by using such a framework to model one of the most complex and exciting frontier markets in the world today. *Framework* in the context of this thesis refers to a qualitative model designed to inform practitioners on the market in question. It is a series of tools selected based off their utility in informing the users of what is really important when preparing for and operating in frontier markets.

1.2 Methodology

This thesis is a qualitative exploration of business in frontier markets, using Iraq's built environment as a case study. In order to establish a framework useful in frontier markets, my methodology is first to establish what is meant by *frontier markets*. Chapter 2 identifies the origins of frontier and emerging markets as investment options. Included is an aggregate list of all countries considered frontier markets and an assessment of different criteria use to establish the list. Chapter 3 establishes the framework for practitioners to use when approaching, strategizing for, and operating in frontier markets. The framework consists of a collection of approaches used by scholars and industry practitioners. Chapter 4 is the application of the frontier market analysis framework to the Iraq built environment. Lastly, Chapter 5 discusses the utility of such a model.

1.3 Objective

The purpose of this thesis is to assist entrepreneurs and multinational corporations by studying what type of analysis is possible while preparing to enter a chosen frontier market. Information is too opaque and asymmetrical to run sophisticated asset valuation models. Any such attempt will result in GIGO: "Garbage In, Garbage Out" (Geltner & Miller, 2007).

So what is the game plan when there are no rules to the game? To realize the benefits shown to exist in economic indicators, companies must invest in or expand to countries where business and live differ from developed world. Differences are not limited to language and culture. All too often emerging markets have unique risks that are difficult to diversify away or hedge against, such as political instability, illiquidity, repatriation risk and corruption. Furthermore, there exists no efficient real estate capital market in most frontier markets; meaning, to gain exposure mainly entails real estate development or direct investment. My objective is to explore an outline for companies to use while they strategize and operate in frontier market built environments.

CHAPTER 2: FRONTIER MARKETS

2.1 Conceptual Introduction to Frontier Market

The phrase “frontier markets” was coined by the IFC’s Farida Khambata in 1992 when he used it to describe a subset of emerging markets based on the following criteria (O'Hanlon & Livingston, 2010): Small countries of relatively high development level that are too small to be considered emerging markets

- Countries with investment restrictions that have begun to loosen as of the mid 2000s
- Countries at a lower development level than the existing “mainstream” emerging markets

Despite its original definition, no universally accepted definition of “frontier markets” currently exists. However, most people widely accept that these markets characterized as small, inefficient and illiquidity in countries which possess young and/or unstable economic and political systems. Frontier markets often feature less industrialization and technological sophistication then emerging or developed markets and often contain unhealthy economic indicators, such as gross domestic product and income per capita. Harvard Business School professors Khanna and Palepu (2010) describe emerging markets as “transactional arenas where buyers and sellers are not easily or efficiently able to come together” (Khanna & Palepu, 2010). This thesis highlights the definition articulated by these researchers, and stresses its applicability and utility when strategizing for frontier markets investment and operations.

2.1.1 Investing Rationale

The recent global recession has, if anything, increased investor interest in frontier markets, due to several reasons. The most compelling of these reasons are perhaps the following: growth potential, undercapitalization, underleveraged economies, under- owned markets, strong and uncorrelated equity market returns.

Return Potential

Performance of frontier market indices has been strong, both in relative and absolute terms. Fund managers hope to find growth like the 700% enjoyed by the Ukraine from 2005-2008, or 280% by Indonesia from 2004 – 2008 (Manwani, 2008). Tables 1 and 2 compare returns for the following indices:

Morgan Stanley Capital International (MSCI) Frontier Market Index
Standard & Poor's Broad Market Index (BMI) ex-Gulf Cooperation Council (GCC)[1]
Morgan Stanley Capital International (MSCI) Emerging Market Index
Morgan Stanley Capital International (MSCI) Europe, Australasia, and Far East Index
Standard & Poor's 500 Index
Barclays Aggregate Bond Fund Index

Table 1 – Return Comparison
Jun 2002 – Dec 2009

June 2002 to Dec 2009	Returns in US Dollars
MSCI Frontier Markets	11.3%
S&P BMI ex-GCC Frontier	14.0
MSCI Emerging Markets	17.6
MSCI EAFE	6.6
S&P 500	2.6
Barclays Aggregate	5.3

Table 2 - Return Comparison
Jan 1999 to Dec 2009

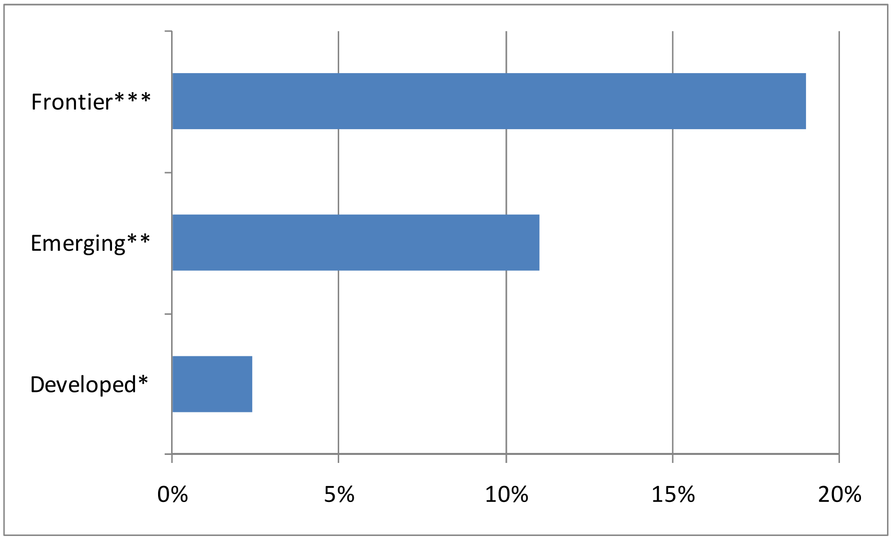
Jan 1999 to Dec 2009	Returns in US Dollars
S&P BMI ex-GCC Frontier	9.4%
MSCI Emerging Markets	14.0
MSCI EAFE	3.3
S&P 500	0.9
Barclays Aggregate	5.7

Source: Meketa Investment Group, Frontier Markets, 2009

The returns above are denominated in U.S. dollars and hence are additionally affected by changes in exchange rates[2]. In the publication "Launching the ML Frontier Index" (2008), Merrill Lynch's global emerging markets equity strategist Michael Hartnett compares the differences among frontier, emerging and developed market returns in the following table:

[1] As per the GCC website: http://www.gcc-sg.org/eng/index.php, GCC is an alliance established in 1981 comprising of the following six Middle Eastern countries: Saudi Arabia, Kuwait, the United Arab Emirates, Qatar, Bahrain and Oman.
[2] Most foreign equity markets benefitted from a currency appreciation versus the dollar during these periods.

Figure 1 - 8 Year Annualized Returns



*Source: (Hartnett, 2008), Bloomberg. *MSCI World Index.*
***MSCI EM Index. ***S&P Frontier Markets Index*

Finally, Karen Umland, CFA and portfolio Manager for Dimensional Fund Advisors, Inc. compiled the following table which reiterates that frontier markets tend to yield higher average monthly returns and higher standard deviations.

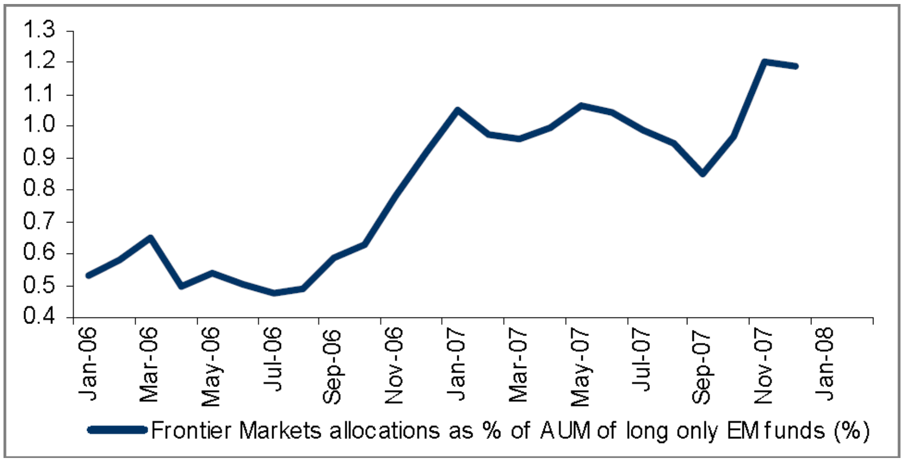
Table 3 - Frontier Market Returns

			Five-Year Monthly Average	
Country	**One-Year Return**	**Five-Year Annualized Return**	**Average Monthly Return**	**Monthly Standard Deviation**
Bahrain	29%	-	-	-
Bulgaria	-2%	41%	3.02%	7.65%
Croatia	-9%	29%	2.35%	6.57%
Estonia	-29%	25%	2.07%	6.25%
Kazakhstan	-3%	85%	5.65%	12.05%
Kenya	-6%	25%	2.05%	5.90%
Kuwait	40%	38%	3.04%	5.59%
Lebanon	26%	28%	2.42%	9.66%
Mauritius	40%	35%	2.54%	3.95%
Nigeria	45%	36%	2.72%	6.08%
Oman	82%	38%	2.85%	4.81%
Qatar	58%	30%	2.72%	9.70%
Romania	-19%	33%	2.65%	8.74%
Slovenia	13%	22%	1.77%	5.20%
Sri Lanka	-9%	28%	2.29%	7.29%
Tunisia	5%	21%	1.63%	3.15%
United Arab Emirates	58%	27%	2.38%	9.25%
Ukraine	18%	75%	5.30%	11.55%
Vietnam	-52%	29%	2.58%	12.22%
S&P 500	-7%	9%	0.78%	2.62%
MSCI EAFE Index	-5%	19%	1.42%	3.28%
MSCI EM Index	19%	32%	2.41%	5.35%

Source: (Umland, 2008) Country data – Bloomberg, S&P – S&P's Index Services Group, MSCI data copyright MSCI 2008, all rights reserved.

Many fund managers and analysts believe that frontier markets are under-owned, and that attractive frontier market holdings are not receiving the exposure commensurate with their risk – return profile. The following chart shows how, for example, Merrill Lynch emerging market fund managers only hold expose 1.2% of their AUM to frontier market.

Figure 2 – Emerging Market Fund Managers holdings in Frontier Markets as % of AUM



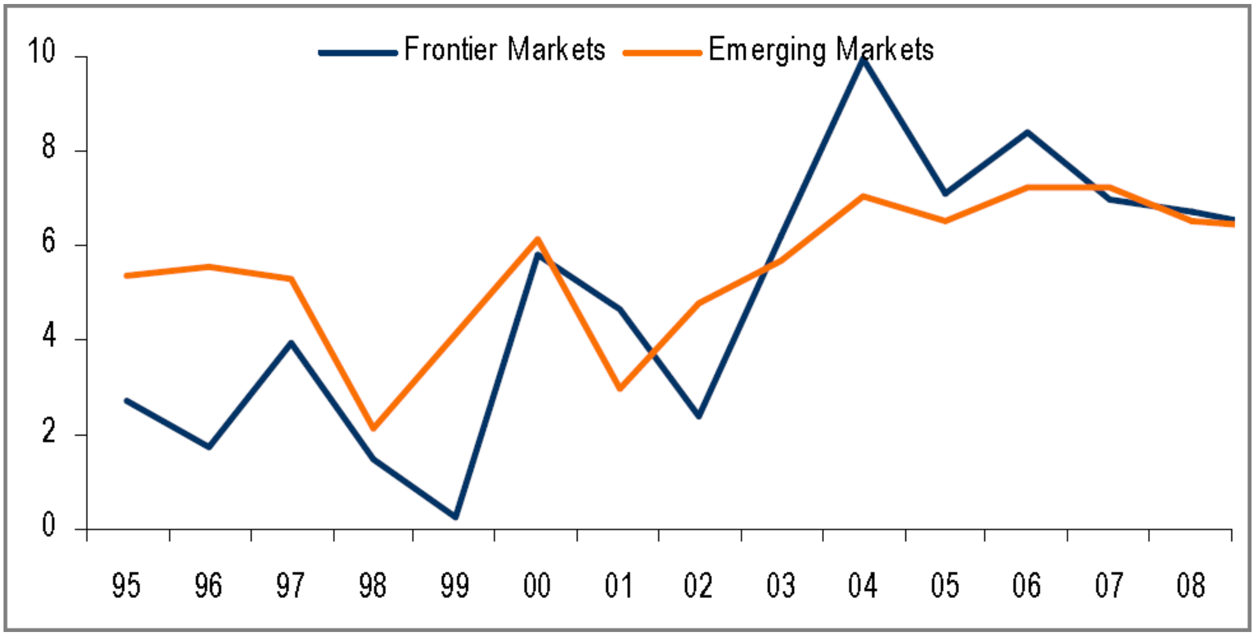
Source: (Hartnett, 2008) "Merrill Lynch calculations based on EM portfolio. The allocation of long only funds to frontier markets is calculated as the sum of assets under management (AUM) invested in the following frontier markets: Bangladesh, Sri Lanka, Vietnam, Ecuador, Panama, Venezuela, Bulgaria, Croatia, Cyprus, Estonia, Kazakhstan, Latvia, Lithuania, Romania, Slovakia, Slovenia, Tajikistan, Ukraine, Botswana, Ghana, Ivory Coast, Kenya, Malawi, Mauritius, India, Nigeria, Tanzania, Zambia, Zimbabwe, Lebanon as % of total AUM reported by EM Portfolio."

Emerging Markets

Emerging markets affect the attractiveness of frontier markets in a few ways. First, investors see frontier markets as the next wave of emerging markets - which have proven to be successful in many cases (note figure 2's % of AUM is steadily increasing). In addition, great deals become harder to find in emerging markets as Foreign Direct Investment (FDI) inflow flood the market and ETF's become overpriced. Emerging markets with strong manufacturing industries will lose their competitive edges as products become more expensive to produce. Manufacturers will shift to frontier markets as they seek locations with more favorable business climates, fewer stringent labor laws, better government incentives and lower costs of labor.

Figures 4 and 5 serve as an orientation to market capitalization and highlight how frontier markets contain strong macro positioning and growth potential, particularly since affluent countries grow slower than lower income countries (Hartnett, 2008).

Figure 3 - Real GDP Growth (%)



Source: (Hartnett, 2008) EIU 2008 estimates. "Frontier markets are measured in this table using the MSCI proposed methodology; Notes: aggregate figures are weighted by nominal GDP."

Uncorrelated Markets & Diversification

The downturn in the equity and credit markets has sparked strong interest in frontier markets because it is believed the latter's performance is insulated from global market trends and outside politics.

Table 4 - Correlation with MSCI 2002 - 2009

June 2002 to Dec 2009	Correlation with MSCI Frontier
MSCI Frontier Markets	1.00
S&P BMI ex-GCC Frontier	0.74
MSCI Emerging Markets	0.57
MSCI EAFE	0.61
S&P 500	0.52
Barclays Aggregate	0.06

Table 5 - Correlation with MSCI 1999 - 2009

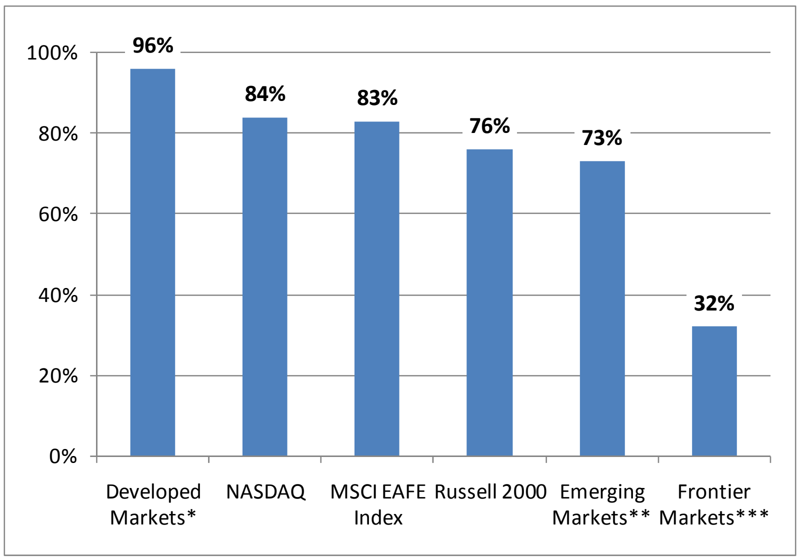
Jan 1999 to Dec 2009	Correlation with MSCI Frontier
S&P BMI ex-GCC Frontier	1.00
MSCI Emerging Markets	0.59
MSCI EAFE	0.64
S&P 500	0.49
Barclays Aggregate	0.03

Source: Meketa Investment Group, Frontier Markets, 2009

Frontier markets continue to be less connected to global market cycles and developed market growth. Currency diversification is also at play, since frontier markets do not rely on the performance of developed countries' currency. However, frontier markets rich in natural resources may possess a greater correlation with global market cycles and developed market growth since economic conditions in these countries are at least in part a result of global demand.

Figure 5 below highlights the correlation between the S&P 500 and frontier and emerging market indices from 2000 to 2007.

Figure 4 - Monthly Return Correlations vs. the S&P 500



Source: (Hartnett, 2008) Bloomberg. Data from Feb 2000 to Dec 2007.
**MSCI World Index. **MSCI EM Index. ***S&P Frontier Markets Index*

Table 6 - Monthly Return Correlations vs. the S&P 500

NASDAQ	91%
MSCI EAFE Index	87%
Russell 2000	85%
MSCI EM Index	73%
MSCI EM Small Cap Index	65%
Estonia	40%
S&P Frontier Index	29%
Morocco	29%
Ukraine	27%
Croatia	24%
Pakistan	21%
Vietnam	18%
Lebanon	15%
Kuwait	14%
Oman	12%
Kazakhstan	10%
Slovenia	7%
Qatar	4%
Nigeria	0%
Romania	-2%
UAE	-3%
Bahrain*	-8%

Source: Bloomberg. Data from Feb 2002 to Jan 2008.
**Since Aug 04 due to lack of data*

The table above lists the correlations from 2002 to 2008 between the S&P 500 and: the S&P frontier Index, two Morgan Stanley emerging market indices, three indices from developed markets, and 16 frontier markets. The S&P Frontier Index has only a 29% correlation with the S&P 500 Index. The emerging market indices are over double that at 73% and 65% for Morgan Stanley's Emerging Market Index and Small Cap Index respectively. These percentages imply a comparatively low correlation between frontier markets and major international economic trends. However, in the following graph, the MSCI Frontier Markets Index is overlaid on the EURO STOXX 50 (Price) Index, the Nikkei-225 Stock Average, and the Dow Jones Industrial Average. The graphs show an extremely high degree of positive correlation. Despite the difference between the S&P Frontier Index and the MSCI Frontier Index, a few additional theories account for this extremely high degree of positive correlation. One theory attributes the high correlation to the MSCI Frontier Index, which is comprised of a larger percentage of constituents in the

Middle Eastern oil and natural gas sector. Such companies will naturally be affected by the global energy market, a key economic driver. Upon further examination, the composition of these indices reveals that the companies comprising them are of the nationals' largest and most liquid, national or multinational corporations.

Figure 5 - MSCI Frontier Market Index overlayed on international indices

Source: Bloomberg.com, 2010

Education and Familiarity

Investors are aware now more than ever of the positive, opportunities inherent in under-developed business environments. Many frontier markets feature well-tracked features:

- Local populations and businesses are generally under-levered
- Opportunity for entrepreneurs
- Host government incentives
- Potential to uncover opportunities
- Low cost of labor
- Lower taxes
- Low inflation

2.1.2 Risk

Per the work of William Sharpe (1964) and John Lintner (1965), the Capital Asset Pricing Model (CAPM), risk is either systematic or idiosyncratic. Idiosyncratic risk can be theoretically eliminated through diversification; thus, such risk does not warrant the potential for higher returns. Systematic risk, also known as market or beta risk cannot be diversified away, thus investors will expect to be compensated accordingly (Fama & French, 2004).

Table 7 - Frontier Market Standard Deviation and Sharpe Ratio 2002 – 2009

June 2002 to Dec 2009	Std Deviation	Sharpe Ratio
MSCI Frontier Markets	26.1%	0.34
S&P BMI ex-GCC Frontier	22.3	0.52
MSCI Emerging Markets	30.5	0.50
MSCI EAFE	20.1	0.21
S&P 500	16.4	0.01
Barclays Aggregate	4.1	0.73

Table 8 - Frontier Market Standard Deviation and Sharpe Ratio 1999 - 2009

Jan 1999 to Dec 2009	Std Deviation	Sharpe Ratio
S&P BMI ex-GCC Frontier	18.6%	0.34
MSCI Emerging Markets	29.3	0.38
MSCI EAFE	18.4	0.01
S&P 500	16.3	Neg.
Barclays Aggregate	4.0	0.66

Source: Meketa Investment Group, Frontier Markets, 2009

When assessing frontier markets, investors can classify risk into the following: country risk, market risk, and deal risk (Liang, Connor, & McIntosh, 1999). Country and market risk can be considered systematic, whereby deal risk is considered idiosyncratic. The following table codifies all associated risk.

Table 9 - Frontier Market Risk Outline

Idiosyncratic Risk		**Systematic Risk**
		aka: Market Risk, Beta
Can be diversified away		Cannot be diversified away
No increase in returns		Higher returns
Deal Risk		***Country Risk***
Local Area risk		Political risk
		Expropriation risk
Site-Specific risk		Repatriation risk
		Coup d'état
		Insurgency
		Rule of law risk
		Legal System
		Crime and Corruption
		Economic & Financial risk
		Macroeconomic risk
		Fiscal Policy risk
		Currency risk
		Interest rate risk
		Market Risk
		Institutional risk
		Thematic Investing
		Informational quality
		Transparency risk
		Liquidity risk

Source: Adapted largely from the work of Dasgupta and Knapp (2008)

2.2 Frontier Market Classification and Exposure

In recent years, several organizations have made efforts to list which countries comprise the world's frontier markets, as well as better define criteria by which markets are assessed in order to determine appropriate classification. Criteria vary, but on a broad level, attempts to quantitatively establish classification use objective rules-driven and transparent methodology. The quantitative criterion pertains mostly to market microstructure, including conditions regarding liquidity, float-adjusted market capitalization, and the number of publicly traded companies. More qualitative components include basic governance, physical security and market infrastructure elements.

The following timeline contains indices, investment products and other milestones relevant to frontier market investment and analysis.

Table 10 - Frontier Market Timeline

1992	Khambata coins the phrase "*frontier markets*"
1996	S&P began to track the first frontier market index[3]
2005	Goldman Sachs predicts "the Next 11" (or N-11) – developing markets on track to become the world's largest economies in the 21st century along with the BRICs.[4]
2007	S&P launches the first two investable indices: Select Frontier Index – 30 companies, 9 countries Extended Frontier Index – 150 companies, 27 countries
2007	Morgan Stanley introduced the MSCI Frontier Index – 183 companies, 25 countries5
2008	FTSE Frontier 50 Index – 50 companies, 23 countries[6]
2008	Merrill Lynch Global Research – Frontier Index, 50 companies, 17 countries
2010	IFC Global Frontier Markets – 270 companies[7]

[3] Source: S&P Emerging Markets Index, Index Methodology, Nov 2007.
[4] Source: Goldman Sachs Global Economics Commodities and Strategy Research Paper No: 192, "The Long-Term Outlook for the BRICs and N-11 Post Crisis."
[5] Source: Morgan Stanley website, 2010.
[6] Source: FTSE Group, data as of 20 January 2009, FTSE Frontier 50 Index Fact Sheet.
[7] Source: International Finance Corporation, World Bank Group website, 2010.

Table 11 - List of Frontier Markets

#	Country	Population	GDP (Nominal)	Per Capita GDP	GNI Per Capita
1	Bangladesh	162,221,000	$ 94.507	$ 573	$ 1,450
2	Cambodia	14,805,000	$ 11.453	$ 805	$ 1,870
3	Kenya	39,002,772	$ 32.724	$ 912	$ 1,560
4	Ghana	23,837,000	$ 18.000	$ 1,000	$ 1,320
5	Pakistan	169,835,000	$ 166.515	$ 1,016	$ 2,590
6	Cote d'lvoire	20,617,068	$ 22.497	$ 1,052	-
7	Vietnam	85,789,573	$ 92.439	$ 1,060	$ 2,700
	India	1,182,529,000	$ 1,367.000	$ 1,124	$ 2,930.00
8	Nigeria	152,217,341	$ 173.428	$ 1,142	$ 1,980
9	Sri Lanka	20,238,000	$ 41.323	$ 2,041	$ 4,460
10	Iraq	31,234,000	$ 65.838	$ 2,108	$976 to $3,855
11	Ukraine	46,011,300	$ 127.133	$ 2,795	$ 7,210
	China	1,338,612,968	$ 4,909.000	$ 3,677	$ 6,010.00
12	Jordan	6,407,058	$ 22.929	$ 3,828	$ 5,720
13	Tunisia	10,432,500	$ 40.168	$ 3,851	$ 7,460
14	Albania	3,659,616	$ 12.185	$ 3,911	$ 7,520
15	Bosnia and Herzegovina	4,613,414	$ 17.133	$ 4,278	$ 8,360
16	Jamaica	2,825,928	$ 11.903	$ 4,390	$ 7,370
17	Macedonia	2,114,550	$ 9.569	$ 4,656	$ 9,250
18	Serbia	7,334,935	$ 42.879	$ 5,809	$ 10,380
19	Bulgaria	7,563,710	$ 47.102	$ 6,223	$ 11,370
20	Botswana	1,990,876	$ 11.630	$ 6,406	$ 13,310
21	Mauritius	1,288,000	$ 8.761	$ 6,838	$ 12,580
22	Kazakhstan	16,196,800	$ 109.273	$ 7,019	$ 9,720
23	Argentina	40,134,425	$ 310.065	$ 7,725	$ 14,000
24	Romania	22,215,421	$ 168.644	$ 7,902	$ 13,380
	Brazil	192,272,890	$ 1,574.000	$ 8,220	$ 10,080.00
	Russia	141,927,297	$ 1,229.000	$ 8,693	$ 15,460.00
25	Lebanon	3,341,966	$ 37.254	$ 11,172	$ 11,750
26	Lithuania	3,341,966	$ 37.254	$ 11,172	$ 17,170
27	Croatia	4,489,409	$ 63.188	$ 14,243	$ 17,050
28	Estonia	1,340,021	$ 19.123	$ 14,266	$ 19,320
29	Trinidad and Tobago	1,299,953	$ 20.380	$ 15,580	$ 24,240
30	Saudi Arabia	28,686,633	$ 438.009	$ 16,778	$ 24,500
31	Oman	2,845,000	$ 53.395	$ 18,013	$ 22,170
32	Malta	413,609	$ 7.955	$ 19,111	$ 20,580
33	Bahrain	791,000	$ 20.214	$ 19,455	$ 33,430
34	Slovenia	2,054,199	$ 49.217	$ 24,417	$ 27,160
	Japan	127,380,000	$ 5,068.000	$ 39,731	$ 35,190.00
	Germany	81,757,600	$ 3,352.000	$ 40,874	$ 35,950.00
	United States	309,573,000	$ 14,256.000	$ 46,381	$ 46,790.00
35	United Arab Emirates	6,888,888	$ 229.971	$ 46,857	-
36	Kuwait	3,484,881	$ 156.309	$ 57,482	$ 53,480
37	Qatar	1,409,000	$ 83.910	$ 68,871	-
	TOTAL	952,971,812	$ 2,874.28	-	-
	Average	25,755,995	$ 77.68	$ 11,479.92	$ 12,921.52
	World	6,697,254,041	$ 61,100.000	$ 9,118	-
	Frontier as % of World	14.23%	4.70%	-	-

Source: Information compiled from the World Bank Data Catalog, and the frontier markets tracked by Merrill Lynch, Dimensional Fund Advisors, S&P, FTSE, and IFC

For the purpose of adding context and perspective, the same data for BRIC and three developed countries are embedded.

Differences

Conceptualizing frontier markets cause many to think of oppressive sweatshops in Asia, conflict ravaged villages in the Balkans or perhaps slashed and burnt rainforests in Africa. Such is not necessarily the case. From the list and basic statistics above, it is clear frontier markets differ from one another socially, culturally, politically and economically. Frontier markets can feature everything from democracies to dictatorships, goat-drawn carriages to Eurorails, deserts to rain forests, and agrarian villages to New Century Cities.

Table 12 - Frontier Market Span in Economic Indicators

Populations:	Malta (413,609)	to	Pakistan (169,835,000)
GDP:	Malta ($7.955 bn)	to	Saudi Arabia ($438.009 bn)
GDP Per Capita:	Bangladesh ($573)	to	Qatar ($68,871)
GNI Per Capita:	Ghana ($1,320)	to	Kuwait ($53,480)

Source: World Bank Data Catalogue

Frontier markets are also increasingly affected by the information age, both economically and culturally. Young people in the United Arab Emirates, Turkey and Argentina, for example are very much members of the 'Millennials,' which are also known as 'Echo Boomers' or 'Net Generation' (Wikipedia, 2010). These groups are characterized by secularism, neoliberalism, and technological isolation.

When the BRIC nations are compared to frontier markets, the comparison reveals that most frontier markets resemble Brazil and Russia versus India and China. Frontier markets are often characterized by an overall smaller population than India and China, with a more a more sophisticated consumer base. The consumer base tends to include a more established middle class of people who earn moderate incomes. In India and China, people may discuss how some of these countries rural citizens may buy toiletries, canned goods and novels for the first time; these anecdotes are not applicable to most frontier markets.

Exposure to Frontier Markets

A total of five frontier market Exchange Traded Funds (ETFs) and a frontier market close-end fund are beginning to trade on United States markets (Lydon, 2009). ETFs and frontier market close-end funds are all strategically broad, not country specific. The following are current example of frontier market investment products.

T. Rowe Price Africa & Middle East (TRAMX)
Average Market Cap: $4.5bn
Expense Ratio: 1.75
Fund Assets: $128m
Eaton Vance Tax-Managed Emerging Markets (EITEX)
Average Market Cap: $1.4bn
Expense Ratio: .95
SPDR S&P Emerging Middle East & Africa ETF (GAF)
PowerShares MENA Frontier Countries Portfolio (PMNA)
Claymore BYN Mellon Frontier Markets ETF (FRN)

An alternative means of gaining indirect exposure to frontier markets is through investing in multinational companies who are operationally invested in frontier markets. Telecommunications companies are a favorite for this strategy: China Mobile (NYSE: CHL), Telkom Indonesia (NYSE: TLK), America Movil (NYSE: AMX), Millicom International Cellular (Nasdaq: MICC), Vodafone (NYSE: VOD) (Hanson, 2010). For example Vodafone is so heavily invested in several frontier markets, either through direct operations or joint ventures, that by investing in Vodafone, one essentially gains some exposed to such markets. Vodafone exists in the following 17 of the 37 total frontier markets: Albania, Bahrain, Bulgaria, Croatia, Estonia, Ghana, Kenya, Lithuania, Macedonia, Malta, Qatar, Romania, Serbia, Slovenia, Sri Lanka, UAE and the Ukraine (Hanson, 2010).

CHAPTER 3: FRONTIER MARKET ANALYSIS FRAMEWORK

Chapter 2 discusses how to identify existing frontier markets and utilize selection criteria. Chapter 3 compiles a framework for evaluating frontier markets. The methodology herein proposes approaching frontier markets from two perspectives: *Strategic Investment Climate* and *Operational Landscape.*

The figure below outlines the frontier market framework proposed in this thesis. The framework is divided into two general approaches: *Strategic Investment Climate* and *Operational Landscape*. The *strategic investment climate* is predominantly a top-down analysis methodology designed to conduct potential market comparison and selection; this methodology consists of five analytical components or tools:

- Sociopolitical and Economic History
- Investment Climate Surveys
- Capital Market Inquiry
- Macro Context Inquiry
- Premium for Risk Analysis

The *strategic investment climate* takes into account national and international factors which primarily include social, political and economical. The purpose of conducting *strategic investment climate* analysis is to compare frontier markets in order to decide which one to penetrate.

The second category of the proposed frontier market analysis framework is *operational landscape* analysis which consists of the following four components:

- Product Market Inquiry
- Labor Market Inquiry
- Range of Estimates Analysis
- Risk Analysis

The operational landscape analysis is generally designed to continue where the strategic analysis concludes. Researchers analyze a frontier market after selection; different markets are not compared. Figure 6 below captures the entire framework:

Table 13 - Frontier Market Analysis Framework

Strategic Investment Climate		*Predominantly top-down analysis methodology designed to conduct potential market comparison and selection*
	Analytical Tool	**Notes**
1	Industry Surveys, Studies and Indices	Primary source of macro analysis; compare comprehensive investment climate surveys to include aggregate and disaggregate indices, As well a specific investment climate features to include regulations, corruption, freedom, governance, legal issues, transparency, etc.
3	Capital Market Inquiry	Identify nature of capital markets - efficiency, accounting standards, regulations, credit and rating agencies, existing financial press and analysis.
4	Macro Context Inquiry	Expand understanding of information symmetry or asymmetry, institutional arrangements, market participants, institutional voids.
5	Premium for Risk Analysis	Common industry practice used by 80% of multinationals - characterized by country investment rating scale
Operational Landscape		*Rigorous market research and analysis designed to determine how to operate in the selected frontier market*
	Analytical Tool	**Notes**
1	Sociopolitical and Economic History	Conduct general historical orientation with emphasis on how the frontier market came about.
2	Product Market Inquiry	Develop understanding of consumer behaviors, advertising and marketing, corporate impression management considerations, corporate communications, third-party independent quality assurance and information providers, consumer credit, wholesale and retail activity, soft and hard infrastructure.
3	Labor Market Inquiry	Gain an understanding of the human resources within the market including educational institutions, placement agencies, headhunters, unions, hiring and firing norms.

Most of the tools that comprise the framework were adopted from the work of scholars and practitioners. Deciding on which tools to include was the result of exhaustive literature reviews, interviews, as well as drawing on years of personal experience in frontier markets. Based on these factors, the tools compiled are among the most valuable and realistic in this area of academia. When the literature review was conducted, two sources emerged as especially valuable and applicable in light of my experience, interviews and research.

- "Winning in emerging markets: A road map for strategy and execution" by Harvard Business School professors Tarun Khanna and Krishna G. Palepu, 2010.
- "How to analyze foreign investment climates: Four techniques for dealing with tricky questions of economic and political stability" by Harvard Business School professor Robert E. Stobaugh, Jr., 1969.

Both bodies of work present the culmination of years of extensive research on topics; both offer practical models appropriate for practitioner use. Some of the models included in these two works were adapted for the overall framework presented in this thesis. For example, one of the most valuable and operationally relevant elements of Khanna and Palepu's work is a *toolkit* entitled "Spotting institutional voids in An emerging market" (Kapas & Liang, 2009). The presence of some fifty questions grouped into the following categories: *product market, labor market, capital markets, macro context.* The toolkit is not designed for the real estate industry or frontier markets; it was therefore modified by changing and adding some questions which appear as tools in the framework.

Khanna and Palepu (2010) designed their toolkit to assist the user in identifying institutional voids in an emerging market. Institutional voids are gaps that exist between supply and demand. They are important features when identifying strategies for a frontier market.

> Institutional voids come in many forms and play a defining role in shaping the capital, product, and labor markets in emerging economies. Absent or unreliable sources of market information, and uncertain regulatory environment, and inefficient judicial systems are three main sources of market failure, and they make foreign and domestic consumers, employers, and investors reluctant to do business in emerging markets… … institutional avoidance, however, are not only roadblocks. They are also palpable opportunities for entrepreneurial foreign or domestic companies to build businesses based on filling these voids (Khanna & Palepu, 2010).

Khanna and Palepu's (2010) concept of identifying and possibly filling institutional voids is essential to anyone who attempts to succeed in frontier markets. In addition to tailoring Khanna and Palepu's approach for greater applicability to real estate industries in frontier markets, this researcher also broadened the scope of the desired findings beyond identifying institutional voids. The objective in creating (the framework doesn't have an intent, the researcher does) the framework specified in appendix 1 is not only to find institutional voids, but also to gain a contextual understanding of the frontier market business landscape.

This researcher's goals in creating the frontier market framework included in this thesis are twofold: 1 – to aid the researcher and readers in selecting which frontier market to penetrate; 2 – to gain a thorough understanding of that market. For an entrepreneur or business developer, gaining an understanding of the market can mean identifying institutional voids in the business environment. The following figure is a tool practitioners can use to frame the business landscape and discover institutional voids.

Table 14 - Institutional Infrastructure Model

Type of Market Institution	Function It Performs	Capital Markets	Product Markets	Talent Markets
Credibility Enhancers	Third party certification of claims by suppliers or consumers			
Information Analyzers and Advisers	Collect and analyze information on producers and consumers in a given market			
Aggregators and Distributors	Provide low cost matching and other value added services for suppliers and consumers through experience and economies of scale			
Transaction Facilitators	Provide a platform for exchange of information, goods, and services, support consummating transactions			
Adjudicators	Resolve disputes regarding law and private contracts			
Regulators and Other Public Institutions	Create and enforce appropriate regulatory and policy frameworks			

Adapted and reprinted by permission of Harvard Business School Publishing. Tarun Khanna and Krishna G. Palepu, "Spotting institutional voids in emerging markets," Note 9-106-014 (Boston: Harvard Business School Publishing, 2005). Copyright © 2005 by Presidents and Fellows of Harvard College

3.1 Strategic Investment Climate

3.1.1 Industry Surveys, Studies and Indices

The purpose of a strategic investment climate analysis is to determine which frontier markets to penetrate. Good markets will show strong social, political and economic growth indicators. Conducting a large-scale comparison of all possible markets may be unrealistic for an entrepreneur or business development manager; such an endeavor would entail a multidisciplinary analysis of nearly forty countries. , Alternatively, researchers can rely on reports generated by other corporations or government entities as a more realistic and practical method of analysis.

A large and growing amount of research analyzes emerging markets; an even greater body of work evaluates investment environments. In contrast, the research on frontier markets as investment options is comparatively new. However, the main differences between frontier and emerging markets relate to political and economic evolvement. Therefore, when looking for a start pointing to evaluate frontier markets with the hope of conducting further research, one can review indices and reports covering developing markets and hope that either desired frontier markets or analysis systems are included. At this phase of analysis, it is unrealistic to expect one's research to yield any real estate specific data.

Khambata (1992) was not the first nor was he the most thorough researcher to establish the groundwork for identifying and gauging frontier markets. In 1986, The Economist published an article that continues to influence countless bodies of work, analysis models and corporate strategies on the topic, even after more than twenty years after its publication. The four page article entitled "Countries in trouble: Who's on the skids," outlines a country risk model and uses it to take "a non-computer-modeled look at a broader question: Which of the fifty developing countries are at greatest risk of becoming unstable during the rest of the 1980s." Since 1986, scholars and practitioners have developed a great number of assessment techniques and tools to measure components of investment climates.

Frontier markets do not necessarily supply readily accessible or extensive economic data. These markets are often omitted from rankings in indices as a result of insufficient information. However, reviewing the existing surveys, indices and assessments can be a valuable process for the researcher. Conversely, there are a great deal of organizations which outline approaches to measuring and analyzing market attractiveness: so many, in fact, that the production of such surveys may be described as a cottage industry in itself. Figure 8 lists several valuable comprehensive investment climate surveys.

Figure 6 – Comprehensive Investment Climate Surveys

Aggregate Indices
World Economic Forum's Global Competitiveness Index
International Institute for Management Development's (IMD) World Competitiveness Scoreboard
Disaggregate Indices
Commonwealth Business Council's Business Environment Surveys (BES)
World Bank's Investment Climate Survey (ICS)
World Bank's World Development Report (WDR)
Other Indices
United Nations Conference for Trade and Development (UNCTAD) - Foreign Direct Investment Potential Index
United Nations Industrial Development Organization (UNIDO)
Private Entity Surveys and Indices
Economist Intelligence Unit
Euromoney
The PRC Group

Information in part consolidated from: International Conference "Reforming the Business Environment", Cairo 2005, Silva-Leander and The Handbook of Country and Political Risk Fourth Edition, PRS Group

Comprehensive investment climate surveys often lack the in-depth analysis which can be found in assessments specific to investment climate features. These surveys provide a means of comparing political and macroeconomic factors to comparable markets. It is worth noting that foreign governments are known to review country comparisons and use them as incentives to implement policies which make particular countries more attractive to international investment communities (Silva-Leander, 2005).

Figure 7 - Studies of Specific Investment Climate Features

Regulation
World Bank Doing Business series
International Institute for Management Development's (IMD) World Competitiveness Scoreboard
Corruption
Transparency International's Corruption Perception Index
Freedom
The Heritage Foundation's Index of Economic Freedom
Freedom House's Freedom in the World Index
Governance

EIU’s Democracy Index
The World Bank's Governance Indicators
Legal Issues
The European Bank for Reconstruction and Development's Legal Indicator Survey
Human Development
UNDP’s Human Development Index
Environment
The World Economic Forum's Environmental Sustainability Index
Transparency
Transparency International Index

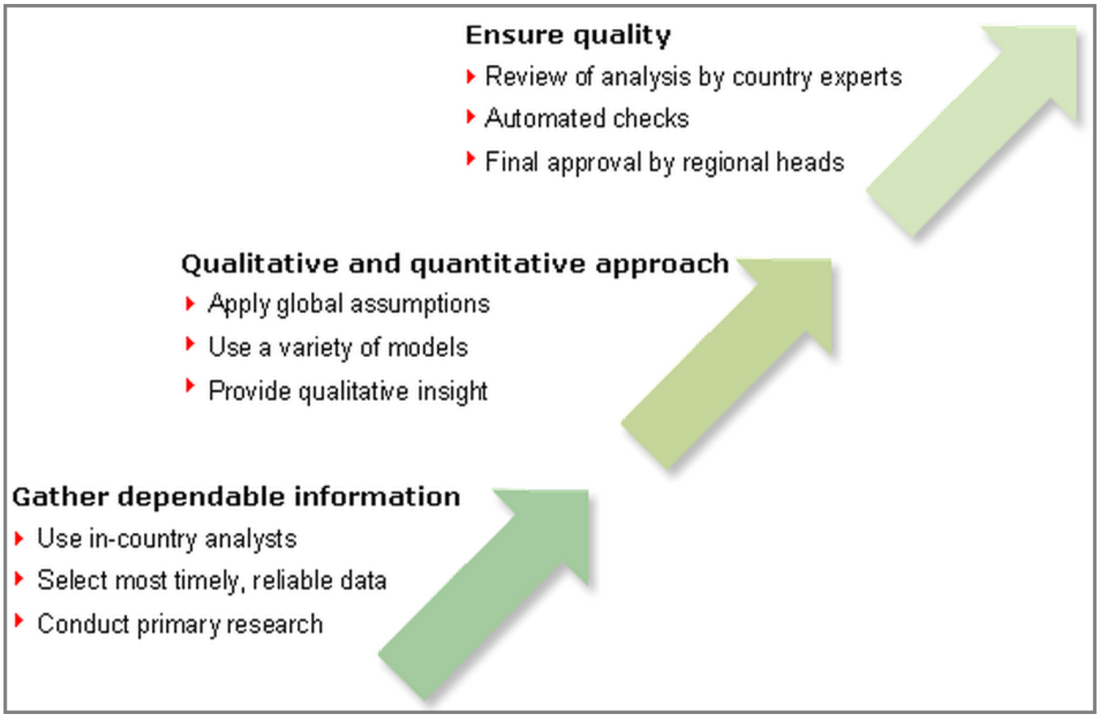
Information in part consolidated from: International Conference “Reforming the Business Environment", Cairo 2005, Silva-Leander and The Handbook of Country and Political Risk Fourth Edition, PRS Group

Economist Intelligence Unit (EIU)

The Economic Intelligence Unit (EIU) was established by the Economist Group in 1946 and has since served as a world leader in providing research, analysis and advisory services (EIU, 2010). Currently, the EIU provides analysis and forecasts for over 200 countries and six strategic industries. Valuable products for frontier market analysis are their five-year country economic forecasts, country risk service reports, and industry reports when applicable.

For purposes of this thesis, the EIU was selected for further examination since its methodology is not uncommon, and since its body of analysis and research encompasses almost all frontier markets. Most importantly, as entrepreneurs and multinational corporation professionals begin operating in frontier markets, a methodology like EIU does can serve as a framework to populate with information as a business collects information and develops.

Figure 8 – Economist Intelligence Unit Methodology



Source: EIU Website

EIU divides country risk into four types:

Table 15 - EIU Country Risk Categories and Weights

Risk Category	Percentage of the Composite
Political Risk	22%
Economic Policy Risk	28%
Economic Structure Risk	27%
Liquidity Risk	23%

Source: *The Handbook of Country and Political Risk*

The EIU model comprises 77 weighted questions; approximately one third are qualitative and two thirds are quantitative. Countries score from zero to four with four indicating the most risky of countries. Not all questions relate to or impact each risk category, however.

For example, the EIU describes that "variables related to the public finances and the level of public indebtedness have a heavy weighting in sovereign debt risk, while variables related to currency misalignment and the current account have a heavy weighting in currency risk ."

Political Risk Categories and Subcategories:

Table 16 - EIU Political Risk Categories and Subcategories

Political Stability	
	War
	Social Unrest
	Orderly Political Transfer
	Politically Motivated Violence
	International Disputes
Political Effectiveness	
	Changing Government Orientation
	Institutional Effectiveness
	Bureaucracy
	Transparency/Fairness
	Corruption
	Crime

Source: *The Handbook of Country and Political Risk*

There are 11 political risk questions in total within the EIU model. All of the questions are qualitative and are weighted equally. The country analyst assigns a score from 0 to 4 as per the following scale.

3.1.2 Capital Market Inquiry

It is imperative to gain a rudimentary understanding capital markets' nature prior to committing to a particular frontier market. The result of such analysis directly impacts whether or not a company may be interested in investing in a country as a potential frontier market. A frontier market that includes no real estate capital market whatsoever, for example, is less than ideal if a multinational corporation's goal is to gain exposure through successfully managing a small portfolio of real estate assets. As discussed later in this thesis, the absence of any functioning capital markets constitutes more than simply an institutional void.

In order to gain insight into the Capital Market, the framework consists of fifteen questions: twelve pertain to general Capital Markets and three relate to real estate capital markets in particular. While a complete listing of all inquiry questions can be found in appendix 1, the following is a representative example:

- How effective the country's banks, insurance companies, and mutual funds and collecting savings and channeling them into investments?
- Our financial institutions well managed? Is their decision-making transparent? Do economic considerations, such as family ties, influence their investment decisions?
- Is there a real estate Capital Market? If so, is there any use or concept of debt and equity financing? If so, what is a typical loan to value ratio for any asset class?

3.1.3 Macro Context Inquiry

The macro context pertains to the ability to create value as a result of political, historical, and cultural underpinnings of the host nation. The company's strategic approach will differ greatly depending on whether the economy is open or closed, if the people are governed through democracy or dictatorship, and whether or not an enforceable rule of law exists. All these factors affect the micro context of the market and its draw to investors when assessed.

Representative questions are as follows:

- To whom are the country's politicians accountable? Are there strong political groups that oppose the ruling party? Do elections take place regularly?
- Does the government extend beyond regulating businesses to the point of interference; does the government ultimately control companies altogether?
- Do the laws articulate and protect foreign companies’ ability to own land?

3.1.4 Premium for Risk Analysis

The *premium or risk* methodology is described by Harvard Business School professor Robert D. Stobaugh, Jr. in his notable 1969 publication entitled “How to analyze foreign investment climates" (Stobaugh, 1969). In this article, Stobaugh describes four company approaches: (1) go-no go (2) premium for risk (3) range of estimates and (4) risk analysis (Ibid).

The premium for risk analysis methodology was used by 80% of the 40 international companies Stobaugh interviewed. The analysis is based on the fundamental principle that companies engaging in business initiatives in underdeveloped markets demand higher returns and projects in developed markets. Though companies would use varying levels of sophistication when employing the premium for risk method, the concept nevertheless remains the same. Corporations would establish a rating scale to determine the country's investment climates. This method is incidentally similar to what many country and political risk analysis organizations currently use. For the purpose of this thesis, Stobaugh's example rating scale is utilized due to the relevance and ease of this method's implementation. The value gained from employing this rating scale lies in comparing the results from different countries. If an entrepreneur or business development manager were to modify the scale to better suit Iraq, a more austere frontier market, or the built environment, practitioners forfeit "apples to apples" comparisons. Luckily, data integrity is preserved when a questionnaire is used as a framework analysis tool, even when additional questions are included. The actual rating scale used when questioning interviewees is included in this thesis. Results can be found in the following chapter.

Figure 9 - Corporate Rating Scale for Determining the Country's Investment Climate

	Number of points				Number of points	
Item	Individual Subcategory	Range for Category		Item	Individual Subcategory	Range for Category
Capital repatriation				*Political stability:*		
No restrictions	12	0-12		Stability long-term	12	0-12
Restrictions based only on time	8			Stable, but dependent on key person	10	
Restrictions on capital	6			Internal factions, but government in control	8	
Restrictions on capital and income	4			Strong external and/or internal pressures that affect policies	4	
Heavy restrictions	2			Possibility of coup (external and internal) or other radical change	2	
No repatriation possible	0			Instability, real possibility of coup or change	0	
Foreign ownership allowed:				*Willingness to grant tariff protection:*		
100% allowed and welcomed	12	0-12		Extensive protection granted	8	2-8
100% allowed, not welcomed	10			Considerable protection granted, especially to new major industries	6	
Majority allowed	8			Some protection granted, mainly to new industries	4	
50% maximum	6			Little or no protection granted	2	
Minority only	4					
Less than 30%	2			*Availability of local capital:*		
No foreign ownership allowed	0			Developed capital markets; open Stock exchange	10	
				Some local capital available; speculative stock market	8	
Discrimination and controls, foreign vs. domestic businesses				Limited Capital Market; some outside funds (IBRD, AID) available	6	
Foreign treated the same as local	12	0-12		Capital scarce, short-term	4	
Minor restrictions on foreigners, no controls	10			Rigid controls over capital	2	
No restrictions on foreigners, some controls	8			Active capital flight unchecked	0	
Restrictions and controls on foreigners	6					
Some restrictions and heavy controls on foreigners	4			*Annual inflation for last five years:*		
Severe restrictions and controls on foreigners	2			Less than 1%	14	4-14
Foreigners not allowed to invest	0			1% to 3%	12	
				3% to 7%	10	
Currency stability:				7% to 10%	8	
Freely convertible	20	4-20		10% to 15%	6	
Less than 10% open/black market differential	18			50% to 35%	4	
10 to 40% open/black market differential	14			Over 35%	2	
40% 200% open/black market differential	8					
Over 100% open/black market differential	4			Total		8-100

Source: (Stobaugh, 1969), "How to analyze foreign investment climates: Four techniques for dealing with tricky questions of economic and political stability"

3.2 Operational Landscape

The previous *strategic investment analysis tools* were selected because of their utility in deciding which market best fits the strategic profile an expanding multinational company or entrepreneur. The following analysis tools are designed to be employed after selection has taken place. In other words, managers can use these analysis tools to gain an understanding of the business's *operational landscape*.

3.2.1 Sociopolitical and economic history – A search for the true growth story

What is the true growth story behind the economic indicators? When operating in a frontier market, it is important that all members of the multinational corporation who actually conduct business with host country nationals possess an understanding of that country's social, political, cultural and economic drives.

It may not be realistic or necessary to comprehensively research all potential markets retroactively as these markets span thousands of years. Instead, the framework provided in this paper may be more operational and less strategic in nature. Certainly as work ensues, it is important and applicable to understand, at a minimum, what developments drove a society to become *frontier market*. Were there recent changes in the social or political fabric of the country? Did the frontier market recently establish free trade agreements? Were there advances in urbanization and industrialization? Were natural resources just discovered or made accessible? Did a war end or did a regime change? Entrepreneurs and managers for multinational corporations must attempt to find patterns and establish meaning early through historical studies in order to make educated business decisions. Understanding the past is fundamental to understanding the present and future. Analysis and accurate interpretation of a country's history: (the political, social, cultural and economical factors which play a role), provide an essential context for evaluating present day institutions.

Since frontier markets are sometimes characterized by social and political unrest, it is particularly important in such cases to research how residents of this country perceive Western thoughts, people and products. History, although perhaps history may never be fully understood by ex-patriots, gaining a general understanding is an essential component to achieving business success.

3.2.2 Product Market Inquiry

The *product market* inquiry survey is comprised of twenty-one questions: twelve general product questions adopted from Khanna and Palepu (2010), and nine questions specific to which were created to gain insight into Iraq's built environment. At this point in the analysis, the specific frontier market should be selected, so more specific analysis is appropriate. Product market analysis addresses issues involving customer behavior, advertising and marketing, corporate impression management considerations, and corporate communications. This type of analysis also involves analysis of third-party independent quality assurance and information providers, consumer credit, wholesale and retail activity, as well as soft and hard infrastructure. A full list of the questions can be found in appendix 1; the following should again be considered representative questions.

- Can companies access raw materials and components of good quality? Is there a deep network of suppliers? Are there firms that assess suppliers' quality and reliability? Can companies enforce contracts with suppliers?
- How strong are the logistics and transportation infrastructures? Have global logistics companies set up local operations?
- Are city planning and urban design processes different? How so?
- Are there cultural work and life preferences that lead to different design elements? What are those preferences? What are those design elements?

3.2.3 Labor Market Inquiry

Analysis of the labor market sheds light on human resource practices in the frontier market. These human resource practices include aspects of educational practice, labor organizations, normal employment tendencies, etc. These factors hold huge implications for strategy and operations. For example, in most frontier markets, it cannot be taken for granted that the local workforce is trained on internationally accepted engineering and construction standards.

Nor can it be assumed that future employees and business partners can speak English or operate computers as efficiently as employees in developed countries. These limitations can create enormous challenges for the management teams on the ground, especially if not taken into account during the strategic planning phases of company initiatives. Representative questions in this section include:

- How strong is the country's education infrastructure, especially for technical and management training? Does it have a good elementary and secondary education system as well?
- Do people study and do business in English or in another international language, or do they mainly speak the local language?
- Does the local culture accept foreign managers? The laws allow a firm to transfer locally hired people to another country? Do managers want to stay or leave the nation?

3.2.4 Size up the Middle Class

To ensure success in frontier market built environments, multinational corporations and entrepreneurs should internalize the goal of satisfying the demands of the middle class. Satisfying these demands is especially important in frontier markets, where nepotism and corruption are unfortunately so common. When companies can sell directly to the masses, government intermediaries play less of a role in the supply chain; thus, the likelihood or extent of corruption or nepotism is minimized. An example of a less effective scenario would involve the government contracting municipal utility construction, infrastructure repair or simply the construction of government buildings. The society will benefit from those initiatives, albeit secondarily. (is benefiting secondarily acceptable? Your point is unclear to me). The role of the customer is manifested in the form of government representatives oversees a project throughout the construction process. In contrast, in developing residential units, the customer is de facto the end-user throughout the lifecycle of the project.

In the spirit of these realities, it is important for any multinational corporation or entrepreneur to identify and quantify the target market's middle-class as effectively as possible.

The model proposed by this researcher was initially developed by Kapas and Liang (2009) and illuminates some good points, yet is powered with comparatively common economic indicators. “What matters most is the number of people in those countries who are enough to use institutional-quality real estate and economic output degenerate” (Kapas & Liang, 2009).

In Kapas and Liang’s (2009) model, the term *middle class* is used to describe the middle and upper classes, as both our desired clients of real estate developers and investors. The standard Pareto model is used as the dispersion of wealth, income and productivity and depends on two economic variables: GDP per capita (GDH) and the Gini coefficient (Kapas & Liang, 2009).[8]

$$\mathrm{Pr}(\mathrm{GDH} > \mathrm{GHD_{mc}}) = \left(\frac{k}{k-1} \times \frac{GDH_{mc}}{\mu}\right)^{-k} \qquad (1)$$

Equation 1 above reflects the probability that GDH is greater than some lower number, call it $\mathrm{GDH_{MC}}$.

K = Some positive number

μ = Average GDP per capita

If $\mathrm{GDH_{MC}}$ represents the division between middle class and the lower class, then Equation 1 is the population share of the middle and affluent classes relative to the total population.

$$k = \frac{1}{2}\left(1 + \frac{1}{G}\right) \qquad (2)$$

The equation above represents the relationship between the Gini coefficient, G., and parameter k in Equation 1, which can therefore be rewritten as population share of the middle class:

[8] The Gini coefficient is a number between zero and one that measures the dispersion of income and wealth or economic productivity in a country. The higher number indicating more unequal distribution. Frontier markets tend to have more wealth inequality and developed nations.

$$= \left(\frac{G+1}{G-1} \times \frac{GDH_{mc}}{\mu}\right)^{-\frac{1}{2}\left(1+\frac{1}{G}\right)} \tag{3}$$

Total middle-class population

$$= (\text{population share of the middle class}) \times (\text{total national population}) \tag{4}$$

$$GDH_{mc} = \; Minimum\ GDP\ per\ capita\ that\ qualifies\ a\ person\ as\ middle\ class$$

The average GDP per capita for the middle class is higher than the minimum and equals:

$$Average\ GDH\ for\ middle\ class = \frac{G+1}{G-1} \times GDH_{mc} \tag{5}$$

The GDP produced by the middle class equals the average GDH for the middle class, which is the result of equation 5, times the middle class population. Thus, the percentage of the national GDP produced by the middle class equals the middle class's GDP divided by the national GDP.

$$\begin{aligned} &GDP\ share\ of\ the\ middle\ class \\ &\quad = (Population\ share\ of\ middle\ class) \\ &\quad \times (Population\ share\ of\ middle\ class)^{-\frac{2G}{1+G}} \end{aligned} \tag{6}$$

The next step in Kapas and Liang's (2009) methodology is to determine a minimum threshold output level (GDP per capita) to define the lower boundary of the middle class. After the minimum threshold output level is determined, this number will be used along with the Gini coefficient in the Pareto model. Rather than defining the minimum income level of the middle class in each country in terms of the respective national per capita GDP, Kapas and Liang instead set a global threshold level for all countries. This method allows the researchers to conduct "apples to apples" comparisons with other countries. To do this, they assume a current global cutoff of $10,000 as a starting point for the middle class. They then multiply a country's PPP by the $10,000 to create a minimum per capita GDP that they define as the middle class. For example, that definition of middle-class threshold returns $5,200 for China and $3,500 for India.

A loose interpretation of this analysis means: if you make $5200 or more, you are considered middle-class. Fully understanding that this is back in the envelope analysis is at least gives practitioners a baseline from which to deviate and serves as a valuable point of reference when strategizing their approach and operations in frontier markets.

CHAPTER 4: FRONTIER MARKET ANALYSIS FRAMEWORK APPLICATION – IRAQ'S REAL ESTATE INDUSTRY

Chapter 3 establishes the frontier market analysis framework, which is comprised of two fundamental categories: *Strategic Investment Climate* and *Operational Landscape.* The strategic investment climates category requires largely a top-down analysis which compares existing frontier markets; the operational landscape category describes analysis tools which prepare managers to operate in a frontier market business environment. The purpose of Chapter 4 is to test the existing framework by applying it to one of the most challenging, and risky business environments in the world: Iraq.

As mentioned before, four tools in the frontier market analysis framework are modifications of tools created by Harvard Business School professors Khanna and Palepu (2010). These are: *Macro Context, Capital Markets, Product Markets, and Labor Markets.* Each of these four tools is essentially comprised of 15 to 20 questions. In order to test the framework, the questionnaires were populated with *composite answers* from the following sources:

- A loan officer from the Iraq Middle-Market Development Foundation (IMMDF)
- The CEO of WACOL, an Iraqi construction and logistics company
- The CEO of Venture Ingenuity Partners, LLC. a US multinational construction and logistics firm with operations in Iraq
- The CEO of Dunia Frontier Consultants, a consulting firm specializing in frontier markets
- The Iraq Commercial Councilor, Iraqi Embassy in Washington DC

For real estate product market questions, the following individuals were polled:

- Burt Hill Managing Director, MENA Region, FAIA
- Two (2) Licensed Iraqi Architects, WACOL employees
- Principal at Iraq based Forex Reality Consultant

- MIT Herbert H. Humphrey fellow, architect, architectural entrepreneur, Iraqi national

For real estate capital market & financial market questions, the following individuals were polled:

The Iraq Commercial Councilor, Iraqi Embassy in Washington DC

- The CEO of Venture Ingenuity Partners, LLC.
- The CEO of WACOL, Inc.
- Aforementioned WACOL architects
- Aforementioned Herbert H. Humphrey fellow

4.1 Strategic Investment Climate

4.1.1 Industry Surveys, Studies and Indices

Chapter 3 highlights several valuable surveys, studies and indices which are available through public and private entities. As discussed, some reports are comprehensive aggregate indices, such as the World Economic Forum's Global Competitiveness Index. Other indices specify a particular climate feature, such as the World Bank's Governance Indicators or Freedom Houses Freedom in the World Index. Chapter 3 elaborates on one of the more popular and conventional organizations: the Economist Intelligence Unit (EIU). The purpose of this section is to actually review the data EIU contains regarding Iraq.

In March2010, the Economist Intelligence Unit published a twenty-four page Iraq Country Report, which is divided into five sections: Executive Summary, Outlook for 2010-11, and Monthly Review: March 2010, Data in Charts, Country Snapshot. The following summarizes elements that could be valuable when deciding which frontier market to penetrate.

Executive Summary

The outlook for 2010-11 claims that as the United States force’s draw-down will not likely result in violence returning to the levels which existed in 2006 and 2007. Commerce and economic growth continue to strengthen as foreign direct investment is channeled predominantly into the oil and infrastructure industries. Consumers believe that Iraq is progressing in terms of security stabilization, political solidarity, and economic rejuvenation. Iraq reported a deficit of $3 billion in 2009. Many believe that the fiscal account will move into surplus in 2010 as a result of oil revenues (EIU, 2010). The third election since Saddam Hussein's nomination was ousted was successfully held in early 2010. Voter turnout was high compared to last year's elections. This increased voter turnout is in no small part a result of greater Sunni Arab participation. The international monetary fund and the World Bank have announced loan programs for Iraq. The agreements are based on Iraq's capital spending needs. Iraq's Prime Minister, Nouri al-Maliki announced that the country's remaining oil fields will be harvested by national companies as opposed to foreign oil companies. The government hopes to export 2.one 5 million barrels of oil per day by the end of the year (EIU, 2010).

Political outlook

Domestic Politics

Iraq remains politically unstable and is expected to remain as such for the foreseeable future. Political instability is largely a result of efforts to integrate the Awakening Councils into the federal government. The Awakening Councils are Sunni dominated organizations, who are not necessarily on a unified political front, and many members used the insurgents. Many believe Prime Minister, Nouri al-Maliki's performance to be impressive throughout 2009. His platform is that of a nationalist "strong man," which has done little to foster nationalistic sentiment. Kurdistan, Iraq's northern region continues to dispute with the Baghdad-based central government regarding political and economic sovereignty.

As the US coalition draws down, members of the former Baathist party, al-Qaida, and individuals with more extreme Islamic views may potentially regroup and organize attacks on the Iraqi government and Coalition. Attacks however go far to vilify the image of Al Qaeda and Iraq e.g. hunt groups in the eyes of the Iraqi citizens. To date, the Iraqi national police and military forces remain underdeveloped but continue to receive training and operational support from the coalition.

International relations

Iraq's primary political goal in the international community is to establish itself as its own sovereign country. The United States president has announced a decrease in their military presence from 30,000 to 50,000 troops by September 2010; a complete exit of United States forces from Iraq is mandatory by December 31, 2011. This mandate in turn has established a timeline for Iraq's government to achieve several of its milestones. These include the goal of strengthening ties with Arab neighbors throughout the Gulf region and northern Africa. Efforts are currently taking place with varying degrees of success. For example, largely as a result of United Arab Emirates (UAE) inflow, Iraq has fostered strong positive relations with the country. However, relations with Kuwait remain strained despite Iraq’s efforts, particularly as Kuwait continues to seek reparations for Iraq's 1990 invasion. Iraq's religious profile further complicates domestic politics and affects international relations. Saudi Arabia, Lebanon, Bahrain and Iran prefer that Iraq's government is influenced heavily by if not controlled unequivocally by Shiite Muslims. Other areas of the Arab world as well as some non-Arab countries (such as Turkey and Afghanistan) hold the contrary belief that their country should be influenced and controlled by Sunni Muslims. It is generally believed that Iran and Syria harbor insurgents who launch attacks throughout Iraq. This needless to say hinders their international relations. What is more damaging than the belief that Iran and Syria harbor insurgents who launch attacks is the inability to confirm whether or not these countries condone such operations.

Economic Outlook

Policy Trends

The primary focus of policymakers regarding economic policy trends will be toward improving project implementation, primarily in the areas of municipal infrastructure and security. This will be supported specifically with a focus on local participation and streamlining bureaucratic requirements. Progress remains slow due to weaknesses in the central government, corruption in the central and decentralized governments, and continued security threats.

The Iraqi government has certainly identified the political and economic importance of oil production, and has established a production goal of 12 million barrels/day by around 2016.

International oil companies were initially apprehensive to pursue licenses and penetrate the market. Oilfield production and oil revenue entitlements are enormous points of contention between Iraq’s central government in Baghdad and the Kurdish regional government.

Fiscal policy

The Iraq government is encountering difficulty in spending its capital budgets. This is particularly challenging for Iraq's provincial governments because they do not have access to the international contracting pool that is accessible to the federal government. . The fiscal deficit in 2009 was estimated to be $3.5 billion (4.6% of GDP). The 2010 budget is significantly higher partially because oil prices bounced back. Revenue growth has remained strong for the past three years and is expected to be 8% in 2011.

Monetary Policy

The Central Bank of Iraq (CBI) has generally been slow to develop since 2004. The banking sector is mostly weak, decentralized, uninsured, and fragmented. Still, CBI attempts to manage liquidity in the economy through introducing and facilitating interbank market, minimum reserve requirements, a government securities market, and a daily currency auction. As with any post-conflict environment, inflation remains a concern. However, comparatively speaking, Iraq has not suffered inflation rates characteristic of postwar markets. CBI has cut their dinar policy interest rate in half since February 2008.

Economic Forecast

International Assumptions

The following two tables estimate some key financial and economic indicators for the next year. Obviously, the global recession greatly affects these indicators. In particular, the GDP is expected to increase only moderately, despite significant planned increases in oil production. Note that in the tables below, the numbers are percentages unless otherwise indicated.

Table 17 – GDP Forecasts Summary

	2008	2009	2010	2011
Real GDP growth				
World	2.8	-0.8	4.1	3.5
US	0.4	-2.4	3.3	1.8
EU27	0.7	-4.2	0.8	1.0

Source: EIU country report June 2010

Table 18 - International Assumptions Summary

	2008	2009	2010	2011
Exchange rates				
¥:US$	103.4	93.7	93.2	93.0
US$:€	1.470	1.393	1.298	1.223
SDR:US$	0.629	0.646	0.666	0.684
Financial indicators				
¥ 3-month money market rate	0.85	0.38	0.22	0.31
US$ 3-month commercial paper rate	2.18	0.26	0.22	0.50
Commodity prices				
Oil (Brent; US$/b)	97.7	61.9	80.2	78.5
Total non-oil commodities (% change in US$ terms)	12.4	-22.5	12.0	0.4
Food, feedstuffs & beverages (% change in US$ terms)	28.3	-20.4	-2.8	-1.6
Industrial raw materials (% change in US$ terms)	-5.1	-25.6	35.6	2.7

Source: EIU country report June 2010

Economic growth

GDP will increase significantly in 2010 and 2011 as oil prices continue to stabilize, oil production increases, and the security situation allows for recovery in the wholesale and retail trades. Foreign direct investment is estimated to increase dramatically within the next twenty-four months. Investments will largely occur in oil and infrastructure projects. The Northern, Kurdish region of the country has experienced more stability, and as a result, more foreign direct investment (FDI). This trend is expected to continue and even increase as Kurdistan contains more fertile regions and is therefore expected to attract agriculturally-oriented revenue.

Oil production and exportation is expected to increase to almost 2.8 million barrels per day in 2011. This is an increase of 300,000 barrels per day in 2009. Iraq still relies heavily on imported consumer goods however, this remains a point of contention as imports efforts to rejuvenate Iraq's manufacturing sector. Real GDP growth is expected to rise from an estimated 4.5% in 2009 to 6.3% in 2010-11.

Inflation and Exchange Rates

Consumer prices declined by 2.8% in 2008. As a result of falling fuel and transportation costs due to the recession, Iraq did not suffer from inflation throughout 2009. Inflation was anticipated, but it was not realized, however - in part because of falling global commodity prices and lower import costs. The CBI kept the dinar at the ID1, 170: US$1 since January 2009 and that rate are expected to remain for the next year. The dinar will likely experience volatility dampened by CBI's get into substantial stock of foreign reserves. Most experts would agree that the inflation and exchange rates have been surprisingly favorable and will continue to improve in the foreseeable future.

External sector

Export revenues will continue to increase in the next several years as Iraq's oil exports begin to reach their potential. The trade surplus is expected to widen in 2010 from 5.1 billion (6.8% of GDP) in 2009 29.7 billion in 2010-11.

Table 19 – Forecast Summary

	2008[a]	2009[a]	2010[b]	2011[b]
Real GDP growth	7.8	4.5	6.0	6.5
Consumer price inflation (av)	2.8[c]	-2.8[c]	6.1	4.5
Oil production ('000 b/d; av)	2,384[c]	2,430[c]	2,588	2,759
Government balance (% of GDP)	13.3	-4.6	6.1	1.7
Exports of goods fob (US$ bn)	58.8	40.9	53.5	57.2
Imports of goods fob (US$ bn)	37.2	35.8	42.6	48.9
Current-account balance (US$ bn)	13.7	1.6	7.1	4.0
Current-account balance (% of GDP)	16.1	2.1	7.8	4.1
Exchange rate (av) ID:US$	1,193[c]	1,170[c]	1,170	1,170
External debt (year-end; US$ bn)	82.6	73.0	52.6	45.3

Source: [a]EIU estimates; [b]EIU forecasts; [c]Actual

A Closer Look at Major Sectors

In May of 2010, Iraq's central government approved a deal between the Iraq Ministry of oil and the Kurdish Regional Government (KRG). The deal stipulates that the revenue from Kurdish oil exports would accrue to the federal State Oil Marketing Organization (SOMO). SOMO would pay extraction costs.

The Iraqi government plans to award a fourth, 15-year national mobile phone license. Iraq's Communications and Media Commission has scrutinized existing license is over issues of quality and contract compliance. A great deal of the Al Anbar province has yet to receive cell phone coverage, and those who do receive coverage experience poor quality and cell phone service issues.

Iraq's state-owned air carrier, Iraqi Airways, declared bankruptcy in May 2010. Many believe the bankruptcy was largely a result of the pressure the Kuwaiti government applied when its officials claimed that the former Iraq regime seized $1.2 billion of Kuwait Airway’s property; they claimed this property was seized by Iraq during the country’s 1990 invasion of Kuwait. As part of its recovery efforts, Iraq's aviation authority plans to approve three more private airlines by the beginning of 2013.

Table 20 - Annual Data and Forecasts

	2005[a]	2006[b]	2007[b]	2008[b]	2009[b]	2010[c]	2011[c]
GDP							
Nominal GDP (US$ m)	34,007[b]	42,186	62,338	84,719	74,729	91,617	97,939
Nominal GDP (ID bn)	49,991[b]	61,845	78,234	101,078	87,433	107,192	114,589
Real GDP growth (%)	3.3[b]	6.2	1.5	7.8	4.5	6.0	6.5
Origin of GDP (% real change)							
Agriculture	14.1	-1.2	2.3	-8.5	1.1	5.0	4.0
Industry	-1.9	6.3	6.7	10.5	3.1	4.8	6.0
Services	10.0	10.2	-9.3	9.6	8.9	9.0	8.5
Population and income							
Population (m)	28.2	28.9[a]	29.5[a]	30.1[a]	30.7	31.3	32.1
GDP per head (US$ at PPP)	3,171[b]	3,400	3,477	3,750	3,888	4,093	4,314
Fiscal indicators (% of GDP)							
Public-sector revenue	99.0[b]	94.6	79.9	88.4	76.4	78.1	78.7
Public-sector expenditure	89.0[b]	80.5	68.2	75.2	81.0	72.0	76.9
Public-sector balance	10.0[b]	14.1	11.7	13.3	-4.6	6.1	1.7
Prices and financial indicators							
Exchange rate ID:US$ (end-period)	1,475	1,391[a]	1,216[a]	1,172[a]	1,170[a]	1,170	1,170
Consumer prices (av; %)	37.0	53.2[a]	30.7[a]	2.8[a]	-2.8[a]	6.1	4.5
Stock of money M1 (% change)	12.3	35.6[a]	27.5[a]	26.5[a]	29.6[a]	18.9	17.4
Stock of money M2 (% change)	19.8	43.6[a]	27.9[a]	29.5[a]	27.0	21.4	20.9
Lending interest rate (av; %)	7.0	16.0[a]	20.0[a]	15.0[a]	7.0[a]	8.5	8.5
Current account (US$ m)							
Trade balance	3,695	11,821[a]	22,964[a]	21,587	5,090	10,968	8,334
Goods: exports fob	23,697	30,529[a]	39,587[a]	58,806	40,857	53,532	57,197
Goods: imports fob	-20,002	-18,708[a]	-16,623[a]	-37,219	-35,768	-42,564	-48,863
Services balance	-5,740	-5,133[a]	-3,998[a]	-6,385	-4,380	-4,630	-4,925
Income balance	-4,527	-3,545[a]	-3,067[a]	-2,050	970	1,105	1,209
Current transfers balance	-941	-1,892[a]	-1,843[a]	500	-100	-300	-600
Current-account balance	-7,513	1,251[a]	14,056[a]	13,652	1,580	7,143	4,018
External debt (US$ m)							
Debt stock	110,800[b]	99,160	102,308	82,635	72,995	52,582	45,293
Debt service paid	215	1,297	1,203	994	894	1,005	2,463
Principal repayments	200	1,275	1,024	828	710	830	2,239
Interest	15	22	179	166	184	175	224
Debt service due	4,149[b]	4,718	6,924	7,334	3,016	2,682	2,859

Source: [a]Actual; [b]EIU estimates; [c]EIU forecast;
Gathered by EIU from the IMF International Financial Statistics.

EIU's Country Reports include the above chart which captures Iraq's GDP, population and income, currency, debt, and fiscal and financial indicators. Additional, more detailed country charts are included. They can be found in appendix 2.

4.1.2 Capital Market Inquiry

General Capital Market

The panel of interviewees generally returned with details and stories regarding how Iraq's capital markets, and in particular Iraq's real estate capital market, is underdeveloped. For example, it is the resounding opinion of the panel that banks are not effective in collecting savings and channeling them into investments. For the most part, banks are used for transactional purposes only, not for savings. There are no reputable savings options, such as private pension or insurance funds. Many believe Iraq is preferred to invest money into business ventures.

Iraqi companies technically possess the ability to raise funds through the Iraqi Stock Exchange (ISX); however, since the exchange is only open two hours a day twice a week and is largely considered inefficient, this plan is hardly feasible The ISX not-for-profit organization started in June of 2004 and remains independent of the Ministry of Finance. Iraq also includes a Securities and Exchange Commission and Depository Operations Center that, among its other objectives, strives to improve the Iraq securities market so it is comparable to international market standards. Allegedly, steps are underway to open a stock exchange in Erbil as well.

Since venture capitalism does not exist in Iraq, outside investment is usually project centered. Some funds such as the Babylon Fund, the Marshall Fund and the Mesopotamian fund, are beginning to gain momentum. Fund managers generally lack the ability to conduct due diligence. There are no rating agencies, and only one or two consulting firms currently position themselves firms which hold financial analysis capabilities. Some consulting firms can research local companies, but businesses excel mostly based on their reputation in the market. Most companies do not keep accurate financial books.

Private companies are held by shareholders. Typically, the shareholders are comprised of relatives or close fellow tribesmen. Minority interests are not protected and standards in protecting shareholder interest are low and not enforced. Since companies consist of only a few owners, these owners typically function as board members as well. Despite these major limitations, company owners tend to conduct meetings that are recorded and filed when they affect changes in corporate structure. Larger and more established companies have a more normal board structure. Korek Telecom, one of Iraq's largest corporations, lists their board members listed on the company’s website (Korek, 2010).

Considering the many challenges Iraq continues to face, regulators are relatively effective in monitoring the banking industry and stock markets. Currently, Iraq's Commission on Integrity is spearheading efforts to eliminate fraud in this country. This commission's efforts to enforce compliance are relatively successful. Iraq currently implements a bankruptcy process which balances the interests of the owners, creditors and other stakeholders.

Real Estate Capital Market

There is no efficient real estate capital market. Real estate has traditionally existed as a favorite asset class for wealthy individuals. Since there are very few options for wealth management in Iraq, long-term real estate holdings are common. These holdings are essentially bought and sold in a manner that is not unlike processes found in the United States. However, there are no mortgages; real estate is almost always unregulated. The large real estate facilities throughout the country are often jointly owned by the government and an Iraqi or international firm. There is very little use of or understanding of the concept of cap rates or real estate valuation. Some buyers will instead conduct what is considered "back of the envelope valuation" using discounted cash flows. For those few who utilize cap rates, the practice is so new and infrequent that the actual cap rates vary between eight and 13%. Furthermore, there is no concept of tracking absorption rates among businesses in Iraq.

Real estate demand in Iraq is high at the moment. The government recognizes there is a housing shortage and is approving new development construction at a brisk pace. The current trend in the country is to buy large parcels of land, split them into smaller parcels and resell them. Cost is of course a function of location. However, as a crude frame of reference: villas in good condition in nice areas of Baghdad's red zone will rent at US$2500 per month and sell at $2000 per meter squared. Villas in poor quality areas such as Sadr City can be rented at around $150 per month and sell at $100 per meter squared. Since 2004, almost all real estate transactions in Iraq are conducted in United States dollars.

4.1.3 Macro Context Inquiry

Iraq's politicians are accountable to the citizens. However, political parties currently lack strong ideals and identities. Although elections take place regularly, on a political level, the country continues to evolve. However, most agree that as the coalition downsizes, a coup d'état and/or a revolution is unlikely. The government reaches beyond the scope of regulating businesses and instead interferes with them. Those guilty of such interference are typically political parties as opposed to government entities. This pattern allows Iraq's political leadership to remain in a state of plausible deniability.

The failure of Iraq's political leaders to admit accountability is often described as one of the biggest problems the country's private companies face. There are judicial regulatory institutions that set and enforce rules for business activities. They are relatively effective when one considers all of the obstacles these institutions continually surmount. The judiciary is independent but not secular. Courts adjudicate disputes and enforce contracts in a reasonable time frame. An example of these institutions' effectiveness is apparent in the case of the country's health inspectors, who are quite active throughout the community. Additionally, the Ministry of electricity seems to regulate municipal power effectively.

Although the judiciary is independent in theory, issues of corruption in the courts nevertheless exist. The courts are burdened with numerous insurgent trials as well as other more serious crimes; as a result, contract law is generally not given high priority, though some cases are tried in a court of law. Corruption remains a big problem throughout the government. Religious, cultural and ethnic tension and violence still tears at the fabric of society.

Iraq has adopted investor-friendly laws. For example, legislation was recently passed allowing foreign companies to own land in Iraq for exclusively residential purposes. Also, foreign companies can enjoy tax benefits for up to ten years. Iraq has realized that a key component necessary to achieving national success at a rapid rate is fostering a system where international investments are possible. Additionally, the Iraq government is active in advertising their country as an attractive emerging market. Multinational companies can make greenfield investments, acquire local companies and enter into joint ventures. However, a lot of investors continue to wait on the sidelines due to the unknown variables and immeasurable risks inherent in such ventures.

Tariffs aim to build the capabilities of local industries in Iraq. For example, the Kurdish Regional Government (KRG) has recently placed tariffs on a number of agricultural products during their growing seasons. Manufacturers continue to push the KRG government for a "buy local if available" policy. The central government continues to bolster its state-owned enterprises, hoping for joint ventures with foreign firms.

4.1.4 Premium for Risk Analysis

In terms of the methodology of this research, each interviewee was asked to rank Iraq as per the rating scale found in section 3.1.4. Results varied minimally, and averages were used to render Iraq with an overall score of fifty-two. It is important to note that this rating scale would be used to compare potential frontier markets, select which market fits the risk profile, and determine which market complements the risk appetite of the multinational corporation or entrepreneur. Thus, the score should not stand alone, but instead, but instead should be compared with other potential frontier markets. The itemized point breakdown can be found in appendix 3.

4.2 Operational Landscape

4.2.1 Sociopolitical and Economic History – Finding the True Growth Story

The United States led a multinational coalition invasion of Iraq on March 20, 2003. In February of 2009, President Barack Obama stated: "By August 31, 2010 hour combat mission in Iraq will end" (MSNBC, 2009). How will history remember our eight years, nine months, and eleven days of combat? Predicting the place the Iraq war will hold in history is as difficult as speculating what Iraq's future holds. This section covers the basic political and economic factors at play in one of the world's most sensitive countries. In addition, this section covers Iraq's evolution from a conflict environment to a frontier market.

Figure 10 - Map of Iraq

Source: CIA World Factbook

Brief Country History

The modern state of Iraq, consisting of three former Ottoman provinces, was established after World War I as a League of Nations mandate administered by Great Britain (Wikipedia, 2010). The British installed a constitutional monarchy that privileged the Sunni Arab minority at the expense of Kurds and Shiite Arabs. Sunni Arab political dominance in Iraq, which formally gained independence in 1932, continued after the monarchy was overthrown in a 1958 military coup. The Arab nationalist Baath party seized power in 1968. The new regime's de facto strongman, Saddam Hussein, formally assumed the presidency in 1979 (House, 2010).

Political Overview

Iraq's official name is the *Republic of Iraq.* In December of 2005, Iraq held elections for the Council of Representatives, which is essentially a parliament. Shortly thereafter in May of 2006 the Iraqi government established its cabinet (House, 2010).

Executive Branch

National executive authority lies with the prime minister and cabinet. The president and two vice presidents comprise the Presidency Council, which lacks a great deal of executive authority. The cabinet is comprised of 36 ministers appointed by the presidency Council, plus the prime minister and deputy Prime Ministers (House, 2010).

Legislative Branch

The Council of Representatives is comprised of 325 seats, consisting of 317 members elected by a closed-list, proportional representation system. The Council also reserves eight seats for minorities. Members serve four-year terms.

Judicial Branch

Iraq’s federal judicial power is comprised of the following:

- Higher Judicial Council
- Federal Supreme Court
- Federal Court of Cassation
- the Public Prosecution Department
- Judiciary Oversight Commission
- Other Federal Courts

Economic Overview

One of the effects of conflict on troubled countries is its creation of barriers between buyers and sellers. In high- functioning markets, buyers and sellers freely liaise through the Internet, telecommunications, etc. They commune, and negotiate in marketplaces, office buildings, and convention centers. In frontier markets, the national population at large only conducts essential, individual tasks. In a sense, buyers and sellers in frontier markets function lower on Maslow's hierarchy of needs than those in developed countries. Many people stop working; these countries are rife with schools, businesses, and even police stations which are abandoned by those who no longer work there. When no more money is accessible for people to sustain themselves and their families, many turn to looting. Ironically, many people loot the same facilities they have abandoned.

4.2.2 From Conflict Environment to Frontier Market – the Evolution of Iraq's Built Environment

The road to becoming a frontier market is different for each country. For some, newly found natural resources serve as a catalyst for economic growth and international attention. For other countries, internal investments made in education and financial infrastructure finally bear fruit. Still for some, being deemed a frontier market is a result of political change. Such profound political change, perhaps more often than not, involves military action.

Political and military theorists usually agree that there are three main pillars to success in counterinsurgency missions: security, politics, and economics.[9] This chapter focuses primarily on economics; specifically, built environments in Iraq's economic landscape. From 2003 to date, Iraq has undergone a tremendous amount of change. Economically, the change can be described as an evolution from conflict environment to frontier market. This chapter explores the nature of this evolution. Alpha can be obtained at any point in this evolution; however, companies must be aware that the framework they use to evaluate the business landscape must evolve just as the market evolves.

Business in Iraq's Conflict Environments

"War Profiteering" is a politically incorrect and largely inaccurate term for companies contributing to modern warfare and peacekeeping efforts. Military operations are complex and fast changing. For certain tasks, it is faster and more sensible for the U.S. military to contract-

[9] This opinion is gathered from years of experience working with political and military theorist who specialize in counterinsurgencies.

out products and services then it is to perform or provide them. These tasks can be predicted with varying degrees of success. Those willing to accept the security risks and make such predictions can earn high profits.

Stakeholders

In conflict environment, government entities are usually the only customers demanding products and services in mass. Therefore, businesses which operate in Iraq and Afghanistan do so almost exclusively on government contracts. The contracting "chain of command" extends towards any one of three ultimate clients: US Department of Defense, US Department of State, or USAID. These clients are headed by the Commanding General, the Ambassador, and the Mission Director respectively. These vastly different organizations encourage separations in companies as well. Companies tended to seek work with only one of the three.

Product and service providers are nearly always former military personnel who understand military customs, systems, and culture. Military and former military individuals yield disproportionately high percentages of risk seekers and entrepreneurs.

Supply in the built environment is largely provided by construction companies, or multidisciplinary companies with a 'construction' culture. Real estate development (RED) firms are not needed in conflict environments since the building process does not yet involve RED tasks.

Competitive Advantages

The marriage of supply and demand in a conflict environment is almost always unique since each conflict is almost always unique. This environment attracts small businesses and entrepreneurs and brings them on equal footing with large corporations. Corporate bureaucracy often slows the responsiveness of large, multinational companies. Despite how large a company is, involvement in war is almost always deemed a sensitive enough endeavor to command the attention of even the highest ranks of corporate management. More often than not, American C-level executive lack the military experience to realize their involvement inhibits their team's adaptability and competitiveness.

The nature of government contracts and conflict environments is reactionary. Companies that respond quickly and operationally reorganize to fit the needs of the government (as well as adapt to new missions) are often rewarded with lucrative contracts. Again, this pattern lends itself to smaller, more nimble and entrepreneurial companies.

Contracting Mechanisms

Contracting officials often rely on pre-approved, indefinite delivery/indefinite quantity (IDIQ) contracted companies so as to streamline contracting actions (DoD, 2001). The IDIQ approach as outlined in the Federal Acquisition Regulation (FAR) allows the government to avoid the time consuming competitive-bid process.

Within the umbrella of IDIQ, contracting officers chose *time and materials* and *cost-plus* contracts to employ contractors. These contracting mechanisms allow contracting officers to contract work before knowing exactly what the whole of the work will entail. It is a streamlining function that alleviates contracting officers from establishing thorough statements of work (SOW's). Thorough SOW's would require contracting offices to deploy throughout war zones in order to gather valuable information to ensure greater flexibility. Prior to beginning work, there are many unknowns. Cost, plus and time and materials give the contractor-government team a chance to discover as the contract progresses, modifying expectations and procedures as needed to facilitate optimal results.

Time and materials and cost-plus contacts tend to shift financial risk to the government. This is appropriate in conflict environments because if the contractors bid on lump sum contracts, they would have to absorb all risks associated with unknowns, and the prices would become astronomical as a result.

Government contracting management staffs were filled largely with military personnel serving tours of duty in the conflict environments. The terms of their deployments ranged from six to eighteen months. This rapid personal turnover profoundly impacted the business climate. Institutional knowledge remained shallow. Companies continued to sell themselves to incoming contract managers. Impression management and customer liaison management were keys to success.

Construction during times of conflict tends to be design-build for the same reasons it tends to be cost-plus. This expedited process grants the government- contractor team greater freedom and adaptability.

Corruption and Transparency

Corruption and issues with transparency continue to be an enormous problem in Iraq. Transparency International's Corruption Perceptions Index (CPI) ranks Iraq 176 out of 180 nations (International, 2010). However, corruption seems to be on the slow decline. In 2006, Iraq was ranked 161 out of 163 (Ibid). Anecdotally, most agree that corruption was far worse at the beginning of the rebuild throughout the years of 2003 through 2005. Most attribute this increased corruption was due to the coalition's lack of existing systems and organizations at that time. "The first year of the Iraq reconstruction program was an 'Ad hoc-racy.' These were temporary agencies which exist today… 2003 to 2004 was a year of constantly shifting policies" (Bowen, 2009). The system's lack of checks and balances and corruption cases stemming from those early years continue to emerge.

Iraq established a Commission on Integrity in January 2004 (Commission on Integrity, 2010). Their latest report was in 2008, and stated that reported corruption cases totaling $1.3 billion were pardoned. That is only 11% of the corruption cases that were reported. The reports translation from Arabic to English is poor but the takeaway is certainly that corruption remains a huge national issue that's difficult to identify and combat as it is in part a cultural characteristic.

Products and Priorities

During conflict, priorities for the built environment are driven by the needs of the war effort. Private companies are hired to build police and military related facilities: military bases, landing strips, naval shipyards, police stations, border forts, etc.

Speed is more important than quality or cost during times of conflict. For example a police station under construction in Fallujah, Iraq may carry a great deal of strategic significance. Projects tend to slow down greatly when there is less work to do. If the project is lingering at 95% complete, contracting officials and quality assurance representatives face the decision to either hand the facility over to the police force, despite the fact that certain quality levels have not been met, or continue pushing the contractor to satisfy international building codes and standards.

Business in Iraq's Frontier Market

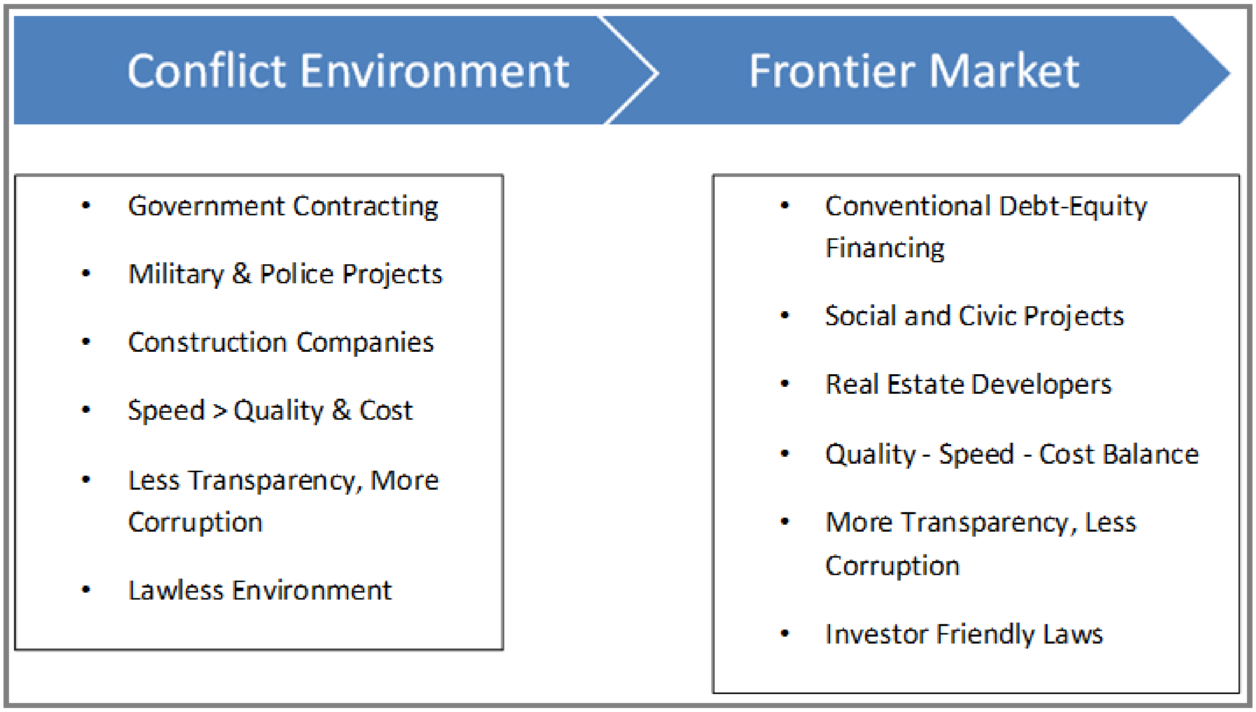
The built environment and business climate evolve as conflict subsides, security posture lowers and early signs of a free trade frontier market emerge. This increases client options, contracting tendencies, priorities of construction, and project durations, quality and cost.

More and diverse non-governmental organizations (NGO's) and private corporations begin seeking products and services in the built environment. Projects begin gaining a healthier balance between time, quality and cost. Corruption becomes less prevalent, political risk insurance premiums drop and workflow becomes more predictable. Foreign Direct Investment increases and priorities within the built environment shift from security related to more socially conscious endeavors. As peace is gradually achieved and money flows into the economy, infrastructure, office, retail, residential, even social and religious centers become more common.

The number of multinational security companies decrease and there is an increase in financial and business service related corporations. Iraq is being discussed more in international business and investment communities.

In the case of Iraq, the government began taking deliberate actions to increase its attractiveness to international investors. Public and private efforts have included participating in and holding international trade fairs with the hope of increasing FDI inflows. In June of 2009, the Iraqi government approved amendments to an investment law that allows foreigners to own Iraqi land and residential property.

Figure 11 - Conflict to Frontier Market Evolution



4.2.3 Product Market Inquiry

General Product Market

The interviewees carried a great deal of valuable information regarding Iraq's product markets. Everyone agreed that it is difficult to obtain reliable data on customer taste in purchasing behavior. This remains a barrier to market research and business operations. One reason reliable data is difficult to ascertain is because to date, customers do not behave as they would like. The population at large is in many ways living in a conflict environment. Their behavior is a function of the security posture, not their consumer tastes.

Iraqis are weary of poor quality products, and their weariness is well-founded. . Much of what they buy is imported from Iran or China, countries where manufacturing quality is notoriously bad. There are no independent consumer organizations or publications that provide information on quality of goods and services. Local companies have difficulty accessing raw materials and components of good quality. Many contests that Iraq's import tax is unnecessarily high. The government imposes a high tax on imports because imports are one of the few supply-chain points where the government maintains operational oversight. As products flow towards the end user, the Iraqi government loses the ability to tax, so they place the exorbitant taxes on poor quality imports. While global logistic companies operate in Iraq, they are nevertheless a product of the coalition rebuild. Almost none of these companies seek to fill voids in the consumer goods supply chain. There are no large retail chains in Iraq. Open air *Third World* markets are the retail presence. They exist mainly in major cities but to reach a large percentage of consumers. Furthermore, no other types of distribution channels exist which would include direct-to-customer channels and discount retail channels that deliver products to customers. It is not difficult for multinational companies to collect receivables from local retailers. This is especially true for larger purchases. It is difficult to receive high-quality deliverables on goods, and difficult to enforce quality on services.

Banks began to offer credit cards after 2005. The Wall Street Journal published a report claiming banks issued 15,000 cars by 2007 (Economy Watch, 2010). However, Iraq credit cards are not common among average Iraqis. Iraq is still a cash dominated country. There is still a lack of infrastructure, most Iraqis do not qualify for credit, and sharia does not promote credit systems.

Consumers have no realistic recourse against false claims by companies or defective products or services. There is little infrastructure to deliver after sales-service to customers. A nationwide service network or a third-party service providing network is an institutional void and potential business opportunity for multinational firm.

Fortunately, despite these adversities, customers are willing and eager to try new products and services. Researchers and investors understand that the quality of the products Iraqis receive from China and Iran are inferior and look forward to increased consumer choice.

General Product Market

There are cultural differences between architectural considerations in Iraq and the United States Perhaps the most significant of these differences revolve around traditions of the Muslim faith. Islam places a high value on modesty, decorum, and the differences between genders. This emphasis of the Islamic culture results in dichotomized real estate facilities which are designed based on the gender of those who utilize them. For example, hospitals are designed so functional areas are differentiated by gender, which requires careful consideration of circulation, patient waiting and patient treatment areas. Separate prayer rooms are provided in many non residential facilities. In urban design, it can be important that areas used by women, such as public parks, may not be seen by occupants in adjacent tall buildings.

The most popular upper-end residential units are called villas. These are single family detached residential units, often within gated communities. Villas are designed for large families and includes sleeping space for servants, such as maids and chauffeurs. Upper end villas can be in excess of 5000 ft.^{2} The predominant style might be considered Mediterranean, with stucco walls and tile roofs. There are some more urban venues, where a combination of townhouses and apartments are mixed with apartments and retail, restaurant or even light commercial uses. In general, there is a shortage of quality affordable housing in Iraq.

Throughout the Middle East, concrete which is haphazardly cast in place is the predominant method of construction; steel frame is very rare. Throughout the Gulf region, international codes are followed so the systems are not greatly different from other locations. In Iraq, however, systems do not very much because the supply chain is shallow and there are not a great deal of options when selecting building systems.

Despite the desert venue, saline ground water is often an issue, which makes waterproofing of paramount importance. Although rain is infrequent, it often falls dramatically via intense events. Designing buildings to withstand and manage storm water is therefore more vital than one might initially expect. There is no typical floor plate. In general, the size of the floor plates is similar to those found throughout the Middle East; 20,000 ft.^{2} is common.

Master planning work throughout the Middle East is much larger in scale than what is typically found in the United States. Although Iraq still has much room for evolution, their ideation of master planning will eventually be comparable with the level of master planning currently implemented in Dubai and Abu Dhabi. In order for Iraq to improve, large mixed-use communities must be established, many of which will be designed as self-contained entities with little connectivity among neighboring developments. Some experts believe that Iraq will adapt urban design concepts which are more pedestrian-oriented and less vehicle-centric.

4.2.4 Labor Market Inquiry

Iraq's educational infrastructure is damaged from years of conflict. However, some murmurings of a solid educational framework are beginning to emerge. Curriculum is essentially compliant with international standards. Education is required through high school for Iraqi children. English is widely spoken in study. As expected, the English language is more commonly exercised by the younger generations whereas it is rarely spoken among older Iraqis. Iraq does include a Ministry of Education and a Ministry of Higher Education. The international education community has largely applauded Iraq’s their efforts to modernize, standardize and internationalize the country’s educational curriculum. Each year, Iraq holds the International Education Conference in Erbil.

When multinational corporations penetrate the Iraq market and employ local nationals, significant post-recruitment training occurs. Often times included in this training are curricula that cover international codes and standards - especially in the case of design, construction and engineering. Iraqis are generally computer literate and require little additional guidance on using industry accepted software suites. Multinational managers have been widely accepted in Iraq's business landscape. Iraqi managers themselves typically would like to leave the country for security reasons. Currently, hiring Iraqis is a requirement for many government sponsored contracts. Typically, there is a professional development component to most government contracts.

Seniority is given a great deal of priority in the corporate as well as the social context. Commission is rare, and employees can expect career advancement to be largely a function of time. Workers rights are not protected. There are no trade unions, stock options or stock-based compensation schemes to motivate employees. There are no laws regulating the firm's ability to restructure or downsize.

4.2.5 Sizing Up the Middle Class

When analyzing frontier markets for potential investment or real estate development opportunities, it's important to conduct at least a rudimentary assessment that attempts to characterize the middle class. This section contains the results of one such analytical tool applied to Iraq.

Table 21 - Iraq GDP per Head for Middle Class Forecast

	Iraq Economic Indicators and Share of Middle Class (Forecast as of 2010)					
	2010	2011	2012	2013	2014	2015
GDP (in million USD)*	80,290	92,840	106,150	117,220	129,480	143,170
GDP (in PPP)*	120,420	131,790	144,300	157,530	171,400	186,220
GDP/GDP in PPP	0.67	0.70	0.74	0.74	0.76	0.77
Population (in million)*	32.05	32.85	33.63	34.41	35.17	35.9
GDP (in PPP) per Capita	$3,757	$4,012	$4,291	$4,578	$4,873	$5,187
Middle class GDP threshold	$6,667	$7,045	$7,356	$7,441	$7,554	$7,688
Population share of middle class (3)	8.3%	8.4%	8.7%	9.5%	10.2%	11.0%
Middle class population (in million)	2.65	2.76	2.94	3.27	3.59	3.94
Average GDP per head for the middle class (5)	$18,493	$19,539	$20,403	$20,639	$20,952	$21,324
GDP produced by middle class (in million USD)	49,029	53,979	59,905	67,393	75,315	83,921
% Share of GDP produced by middle class	40.7%	41.0%	41.5%	42.8%	43.9%	45.1%
Assumptions						
1) Gini coefficient (G)**	0.47					
2) Middle Class Threshold***	$ 10,000					
3) No change in Gini coefficient durning forecast period						
Source:						
*International Monetary Fund						
**2005 Gini Coefficient published by the Central Organization for Statistics and Information Technology						
Iraq Ministry of Planning and Development Cooperation						
***Sizing Up the Middle Class in Developing Countries (based on world benchmark)						

In the chart above, the input is GDP (in PPP), the Gini coefficient and the middle-class threshold of $10,000. The output is: GDP (in PPP) per capita, middle-class GDP threshold, population share of middle-class, middle class population, average GDP per head for the middle-class, GDP produced by middle-class and percent share of GDP produced by middle-class.

The Gini coefficient was assumed to be .47 based off of the comparable frontier economies of Iran and Oman. The analysis steps were covered in the previous chapter. The important take-away from this *back of the envelope* analysis is that practitioners begin gaining an understanding of the nature of the frontier markets middle class.

CHAPTER 5 – CONCLUSION

The purpose of this thesis is to explore the value of using framework to strategically plan for and operate in frontier market built environments. To this end, this research investigated several tools by which multinational corporation managers and entrepreneurs can compare potential frontier markets as well as analyze selected markets. Frontier markets are inefficient, and as a result, they lack data that is deemed necessary to make educated choices regarding real estate business strategy. Sophisticated models are not possible. Attempting to populate one would only result in *garbage in-garbage out.* So, was the proposed frontier market analysis framework effective? Unfortunately, this thesis fails to prove its utility. However, by going through the exercise of populating the framework using Iraq's built environment as an example, particular *institutional voids* do begin to surface. Understanding the breadth and depth of these institutional voids could be the competitive advantage a company needs in order to succeed in a frontier market.

In chapter 3, table 14 is entitled Institutional Infrastructure Model. The model identifies the six different types of institutions as well as the functions they perform. The *Examples in (the) Markets* columns are blank. Below those columns have now been populated based off of the Iraq analysis framework. Each cell has two entries: 1) the example of what Iraq currently has in place, and 2) in ***bold italics*** what equivalents are present in the US market.

Table 22 - Institutional Infrastructure Model II

Type of Market Institution	Function it performs	Capital Markets	Product Markets	Talent Markets
Credibility Enhancers	Third party certification of claims by suppliers or consumers	Government Auditing agencies ***(Audit committees, Auditors)***	None ***(ISO certification, CMM level certification)***	PE-equivalent System, HR Firms' Efforts ***(Trade Certifications)***
Information analyzers and advisers	Collect and analyze information on producers and consumers in a given market	None ***(financial analysts, credit rating agencies for companies and individuals, financial press, financial planners, investment***	1 or 2 consulting firms, NGO reports ***(Consumer Reports magazine, JD power ratings, press, industrial analysts, market research firms,***	HR Firms ***(publications that rank universities and professional schools, career counselors, HR consultants)***
Aggregators and distributors	Provide low cost matching and other value added services for suppliers and consumers through experience and economies of scale	Banks ***(insurance companies, mutual funds, venture capital and private equity funds)***	Open-air markets, ad hoc distributors ***(trading companies, mass retailers)***	Universities, ***professional training institutions, labor unions***
Transaction facilitators	Provide a platform for exchange of information, goods, and services, support consummating transactions	Stock brokers ***(stock, bond and futures exchanges, brokerage houses)***	Open-air markets ***(eBay, commodities exchanges, credit card issuers, PayPal)***	HR Firms, Business Centers ***(executive recruiters, online job announcement websites)***
Adjudicators	Resolve disputes regarding law and private contracts	Courts and quasi-government arbitrators ***(bankruptcy specialists)***	Courts and quasi-government arbitrators	Courts and quasi-government arbitrators ***(union arbitration specialists)***
Regulators and Other Public Institutions	Create and enforce appropriate regulatory and policy frameworks	Securities and Exchange Commission, Depository Operations Center	Commission on Integrity ***(FDA, EPA, Consumer Product Safety Commission, FCC, FTC, FAA)***	None ***(OSHA, equal employment opportunity commission, unemployment insurance agencies)***

Arranging the information as such allows for a vivid contrast between the institutions successfully operating in Iraq versus those found in a developed market. Understanding this contrast serves as the next step in strategic planning, as these institutional voids can be seen as business opportunities. Only through the rigorous analysis conducted in this paper are these conclusions apparent. Essentially, if conventional real estate investment or development is not possible or not lucrative due to actual or perceived risk, perhaps inflating return expectations beyond what the market can return, then in order to succeed in Iraq's frontier markets, entrepreneurs and multinationals must take advantage of the entrepreneurial opportunities inherent in the table above.

In addition, the analysis allows certain truisms to become apparent. First, such is that in the context of a reason to believe well developed, fast-growing economy, companies will look for specific institutional voids to fill. However in an inefficient, unregulated frontier market, a more generalized approach is best. To illustrate this point, take for example a large U.S. real estate development company that does work in a frontier market. As a publicly traded company on the New York Stock Exchange, US company fills a general 'quality' and 'opportunity' void. If for example the country is run by a relatively lawless system of dictatorial-governing, the U.S. real estate company provides enough of a guarantee to make people want to work there in a stable environment. Also, it provides de facto insurance for local contracting partners who would like to sink in some investment in conjunction with a real estate project. The locals are perhaps worried about the dictator stealing assets, and know this is less likely because of the large US real estate developer. Their rationale is that if the government tries to steal assets, the large US firm will help push back (Khanna, Dr., 2010).

Another version of that data is the example of branding. In frontier markets, many family-run businesses will create a brand over which many products and services are provided. An example of this is Samsung in Korea. The void they fill is essentially a quality assurance or 'get things done' assurance within ethical norms. In a frontier market, it's possible to have a brand that transcends several diverse products and services. The absence of market efficiency come information and institutions lends itself to more generalized capabilities. As markets develop, corporate strategies change and must adapt to keep competitive and companies often commit to a narrower menu of products or services (Khanna, Dr., 2010).

Lastly, based on this study, it is discernible that multinational corporations intending to penetrate frontier markets can benefit greatly from operational flexibility and adaptability. This benefit can only derive from empowering managers on the grounds with the authority to commit company resources as needed. This serves two purposes. First, the company can capitalize on first-mover advantages. Second, the frontier market clients (particularly post-conflict market) place a huge premium on company responsiveness because of the urgency of the country's situation and the role that the built environment plays in securing its actual physical safety. Companies needing approval from stateside bureaucracies are at a competitive disadvantage.

Frontier markets are dynamic and transcend geography, industry and society. For many risk-accepting investors, frontier markets are an attractive possibility to diversify in an uncorrelated, exciting venture. Thomas Friedman (2005) points out that the world is flat. One aspect of that reality is that frontier markets will be accessible to exponentially more investors in the years to come. The framework compiled and tested in this thesis is intended to help them explore the exciting growth potential in frontier markets.

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APPENDIX 1: TOOLKIT 2-3 SPOTTING INSTITUTIONAL VOIDS IN AN EMERGING MARKET

Product Markets

1. Can companies easily obtain reliable data on customer tastes and purchase behaviors? Are there cultural barriers to market research? Do world-class market research firms operate in the country?

2. Can consumers easily obtain unbiased information on the quality of goods and services they want to buy? Are there independent consumer organizations and publications that provide such information?

3. Can companies access raw materials and components of good quality? Is there a deep network of suppliers? Are there firms that assess suppliers' quality and reliability? Can companies enforce contracts with suppliers?

4. How strong are the logistics and transportation infrastructures? Have global logistics companies set up local operations?

5. Do large retail chains exist in the country? If so, do they cover the entire country or only the major cities? Do they reach all consumers or only wealthy ones?

6. Are there other types of distribution channels, such as direct-to-customer channels and discount retail channels that deliver products to customers?

7. Is it difficult for multinationals to collect receivables from local retailers?

8. Do customers use credit cards, court is cash dominate transactions? Can consumers get credit to make purchases? Is data on customer creditworthiness available?

9. What recourse do consumers have against false claims by companies or defective products and services?

10. How do companies deliver after sales-service to customers? Is it possible to set up a nationwide service network? Are third-party service providers reliable?

11. Are customers willing to try new products and services? Do they trust goods from local companies? How about foreign companies?

12. What kind of product-related environment and safety regulations are in place? How do the authorities enforce regulations?

Additional Product Market Questions

13. Generally describe the real estate demand
14. How much does real estate cost in Baghdad to buy? To rent? Residential? Office? (Any unit is fine, e.g. Dinar / sq meter). And/or any other location?
15. How much does real estate cost in Baghdad to build? Residential? Office? And/or any other location?
16. Stock: any idea how many square meters of office space exists in Baghdad? And/or any other location?
17. Vacancy: any idea what the vacancy percentages for any location? Baghdad? Erbil? Basra?
18. Are there cultural work and life preferences that lead to different design elements? What are those preferences? What are those design elements?
19. In the Middle East, what residential design styles are popular? Unpopular? Economical?
20. How big a family do you design homes for?
21. Are most homes built out of CMU or concrete? Is steel ever used?
22. Do system types or requirements differ? Foundation? HVAC? Electrical, plumbing, fire protection? Interiors? Envelope?
23. In the Middle East, what's the office area per worker?
24. Is there a typical floor plate? What are the dimensions?
25. Are most homes built out of CMU or concrete? Is steel ever used?
26. Do system types or requirements differ? Foundation? HVAC? Electrical, plumbing, fire protection? Interiors? Envelope?
27. Are city planning and urban design processes different? How so?

Labor Markets

1. How strong is the country's education infrastructure, especially for technical and management training? Does it have a good elementary and secondary education system as well?

2. Do people study and do business in English or in another international language, or do they mainly speak the local language?

3. Is data available to help sort out the quality of country's educational institutions?

4. Can employees move easily from one company to another?

5. What are the major post-recruitment training needs of the people whom multinationals hire locally?

6. Is pay-for-performance standard practice? How much weight do executives give seniority, as opposed to merit, in making collection decisions?

7. Would a company be able to enforce employment contracts with senior executives? Could it protect itself against executives who leave the firm and compete against it? Could it stop employees from stealing trade secrets and intellectual property?

8. Does the local culture accept foreign managers? The laws allow a firm to transfer locally hired people to another country? Do managers want to stay or leave the nation?

9. How are the rights of workers protected? How strong are the countries trade unions? Do they defend workers interests or only advance a political agenda?

10. Can companies use stock options and stock-based compensation schemes to motivate employees?

11. Do the laws and regulations limit the firm's ability to restructure, downsize, or shut down?

12. If a company were to adopt its local rivals of suppliers business practices, such as the use of child labor, with that tarnished its image overseas?

Additional Labor Market Questions

13. In the built environment, what professional certifications are available? What are required on project sites?

14. What are the employment considerations when deploying individuals from two different sects?

15. What other security considerations with regards to human resource management?

Capital Market

1. How effective are the country's banks, insurance companies, and mutual funds in collecting savings and channeling them into investments?

2. Are financial institutions managed well? Is there decision-making transparent? Do noneconomic considerations, such as family ties, influence their investment decisions?

    Modified to: "Are there financial institutions? What kind? Is there decision-making transparent?"

3. Can companies raise large amounts of equity capital in the stock market? Is there a market for corporate debt?

4. Does the venture capital industry exist? If so, does it allow individuals with good ideas to raise funds?

5. How reliable are sources of information on company performance? Do the accounting standards and disclosure regulations permit investors and creditors to monitor company management?

6. Do independent financial analyst, rating agencies, and the media offer unbiased information on companies?

    Modified to: Do independent financial analyst, rating agencies, and the media offer information on companies? Is it unbiased?

7. How effective are corporate governance norms and standards in protecting shareholder interest?

    Modified to: Are private companies structured as such to where there are shareholders? How effective are corporate governance norms and standards in protecting shareholder interest?

8. Are corporate boards independent and empowered, and do they have independent directors?

    Modified to: Are private companies structured as such to where there are corporate boards? Are corporate boards independent and empowered, and do they have independent directors

9. Are regulators effective in monitoring the banking industry and stock markets?

10. How well do the courts deal with fraud?

11. Do the laws permit companies to engage in hostile takeovers? Can shareholders organize themselves to remove entrenched managers through proxy fights?

Modified to: Do the laws permit companies to engage in hostile takeovers? Can shareholders organize themselves to remove entrenched managers through proxy fights?

12. Is there an orderly bankruptcy process that balances the interests of owners, creditors, and other stakeholders?

Additional Real Estate Capital Market Questions

13. Is there a real estate capital markets? Are buildings bought and sold? If so, is there any use or concept of debt and equity financing? If so, what is a typical loan-to-value ratio?
14. Who owns the large real estate facilities throughout the country?
15. Is there any use or concept of cap rates? If so, what are they (any product type, any location)?
16. Is there any use or concept of Real Estate valuation? What method is used? Discounted cash flow?
17. Is there any use or concept of absorption rates? If so, do you have any for any asset class and/or location?

Macro Context

1. To whom are the country's politicians accountable? Other strong political groups that oppose the ruling party? Elections take place regularly?
2. Are the roles of the legislative, executive, and judiciary clearly defined? What is the distribution of power between the central, state, and city governments?
3. Does the government go beyond regulating businesses to interfering with them or running companies?
4. Do the laws articulate and protect private property rights?
5. What is the quality of the country's bureaucrats? What are the bureaucrats' incentives and career trajectories?
6. Is the judiciary independent? Do the courts adjudicate disputes and enforce contracts in a timely and powerful manner? How effective are the quasi-judicial regulatory institutions that set and enforce rules for business activities?

Modified to: Are there quasi-judicial regulatory institutions that set and enforce rules for business activities? Are they effective? Is the judiciary independent? Do the courts adjudicate disputes and enforce contracts in a timely and powerful manner?

7. Do religious, linguistic, regional, and ethnic groups coexist peacefully, or are there tensions between them?

8. How vibrant and independent is the media? Are newspapers and magazines neutral, or do they represent sectarian interests?

9. Our nongovernmental organizations, civil rights groups, and environmental groups active in the country?

10. Do people tolerate corruption in business and government?

11. What role do family ties play in business?

12. Can strangers be trusted to honor a contract in the country?

13. Are the country's government, media, and people receptive to foreign investment? Do citizens trust companies and individuals in some parts of the world more than others?

14. What restrictions does the government place on foreign investment? Are those restrictions in place to facilitate the growth of domestic companies, to protect state monopolies, or because people are suspicious of multinationals?

15. Can a company make greenfield investments and acquire local companies, or can it break into the market only by entering into joint ventures? Will that company be free to choose partners based purely on economic considerations?

16. Does the country allow the presence of foreign intermediaries such as market research and advertising firms, retailers, media companies, banks, insurance companies, venture capitalist firms, auditing firms, management consulting firms, and educational institutions?

17. How long does it take to start a new venture in the country? How cumbersome the government's procedures for permitting the launch of the wholly foreign-owned business?

18. Are there restrictions on portfolio investments by overseas companies or on dividend repatriation by multinationals?

19. Does the market drive exchange rates, or does the government control them? If it's the latter, has the government tried to maintain a stable exchange rate, or does it try to think of domestic products over imports by propping up the local currency?

20. What would be the impact of tariffs on a company's capital goods and raw materials imports? How would import duties affect that company's ability to manufacture its products locally versus exporting them from home?

21. Can a company set up its business anywhere in the country? If the government restricts the company's location choices, are its motives political, or is it inspired by a local regional development strategy?

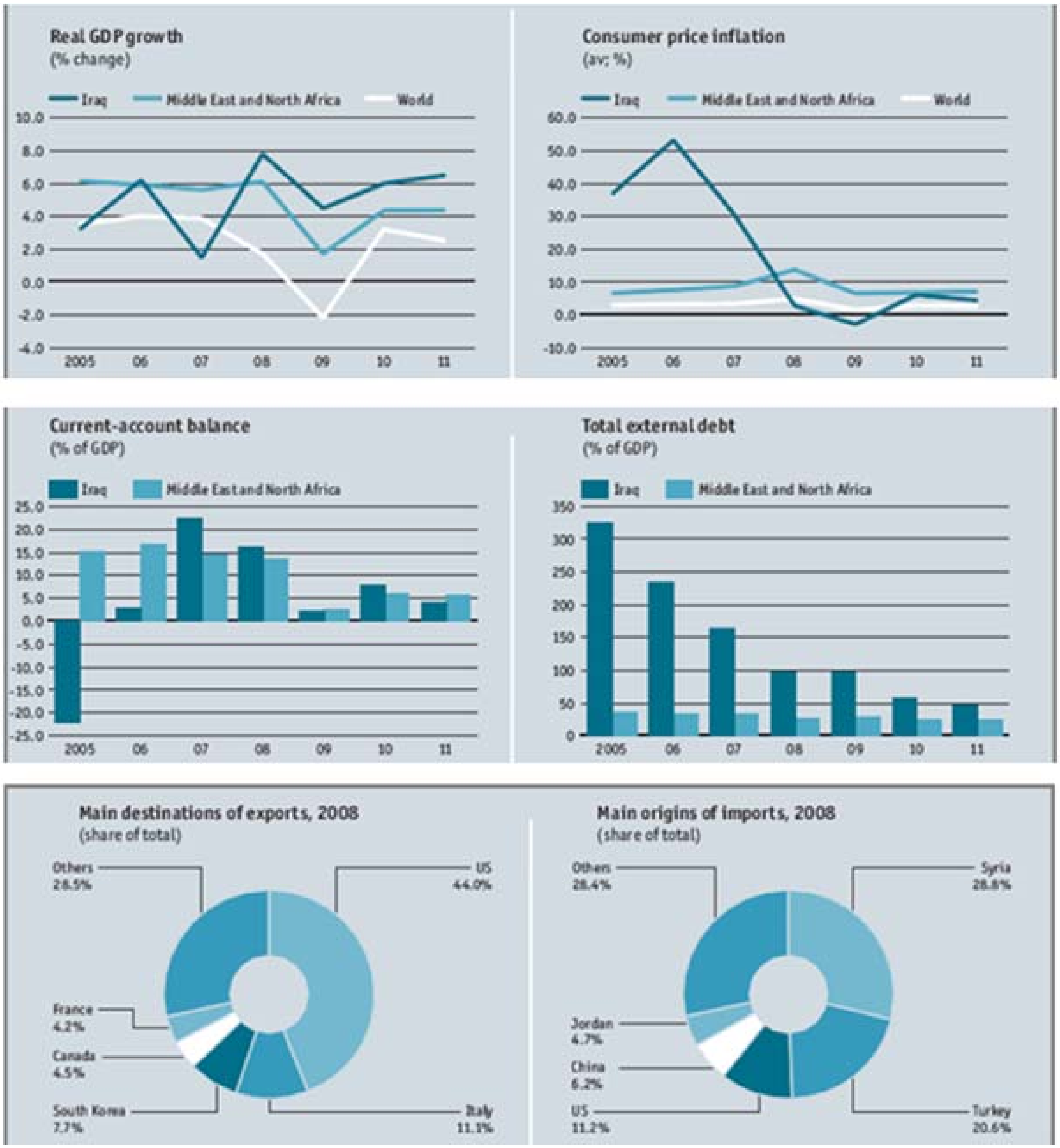
22. Has the country signed free-trade agreements with other nations? If so, do those agreements favor investments by companies from some parts of the world over others?

23. Does the government allow foreign executives to enter and leave the country freely? How difficult is it to get work permits for managers and engineers?

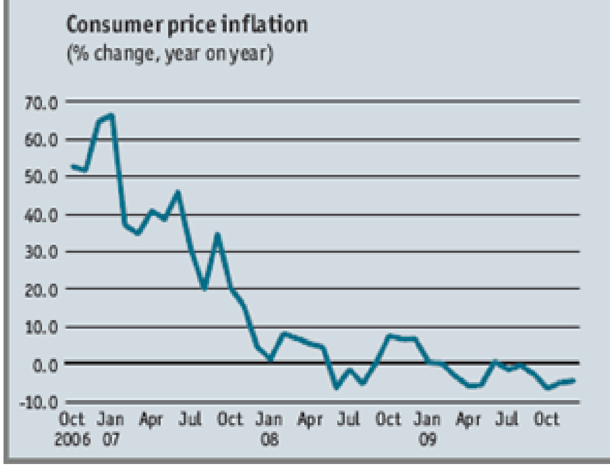
24. Does the country allow its citizens to travel abroad freely? Can ideas flow into the country unrestricted? Are people permitted to debate and accept those ideas?

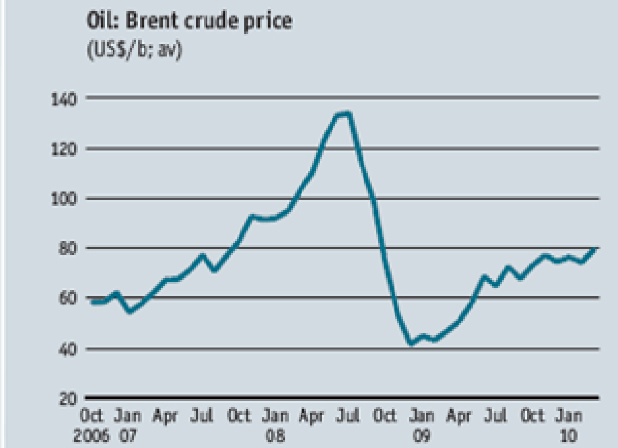
APPENDIX 2: IRAQ DATA AND CHARTS

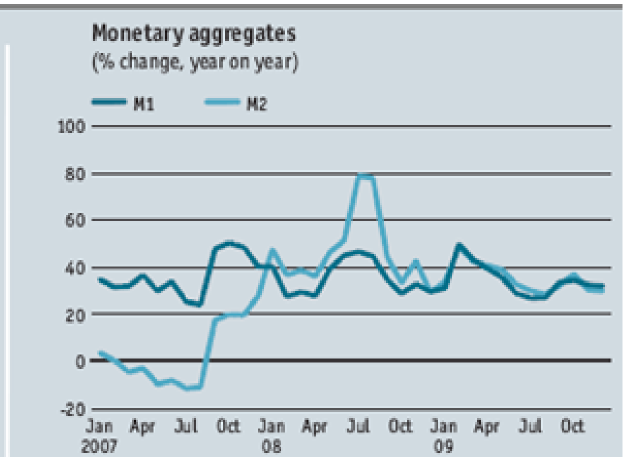
Annual Chart Trends

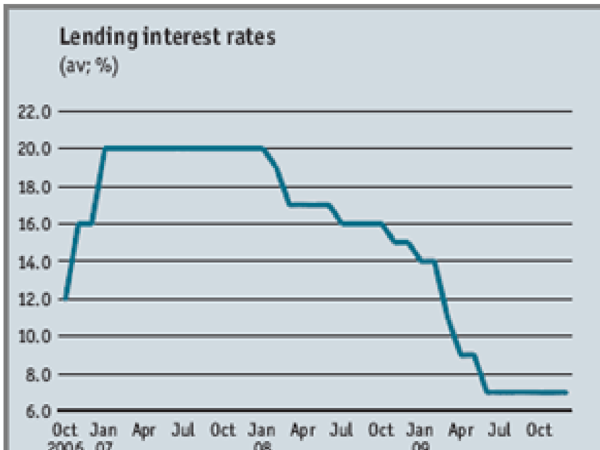


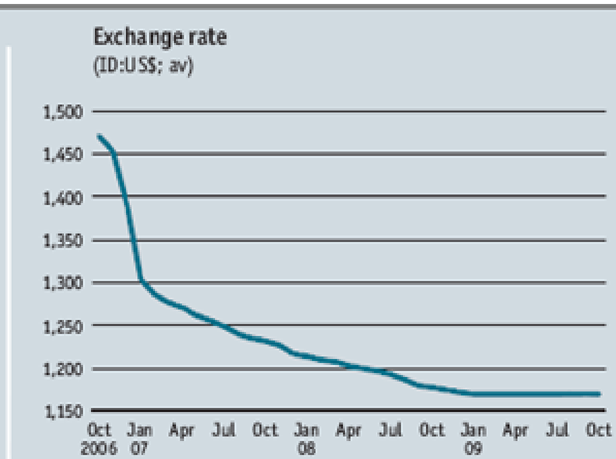
Monthly Trend Charts



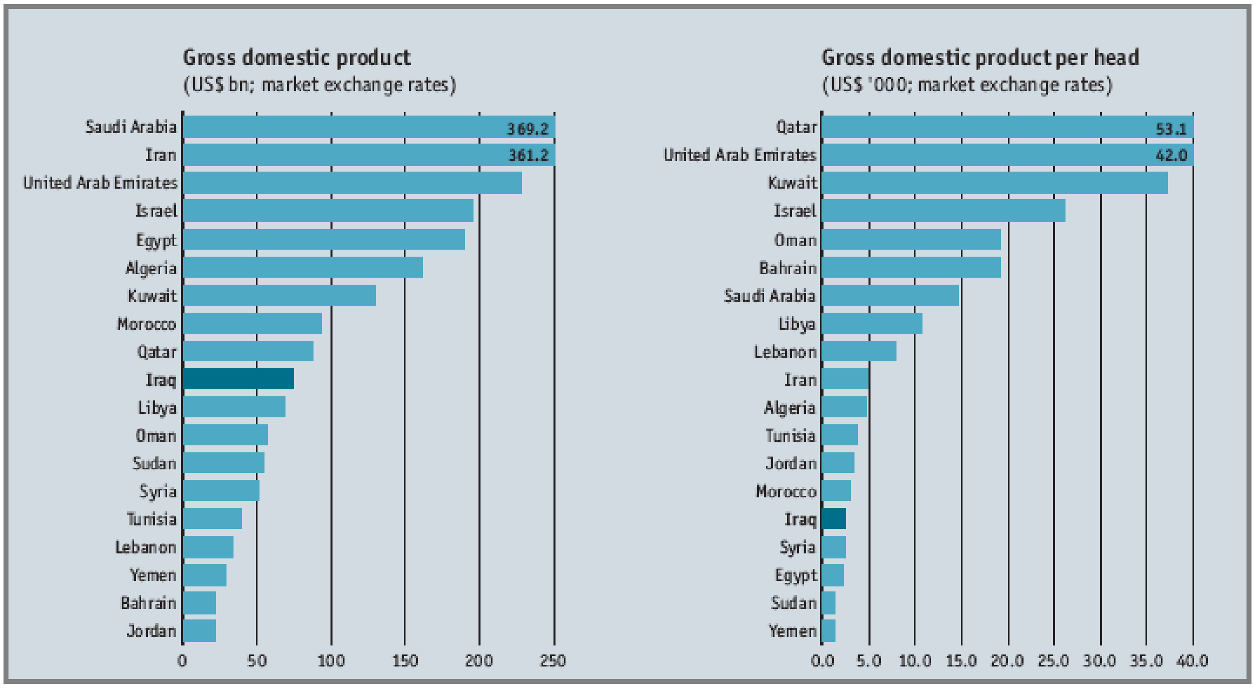


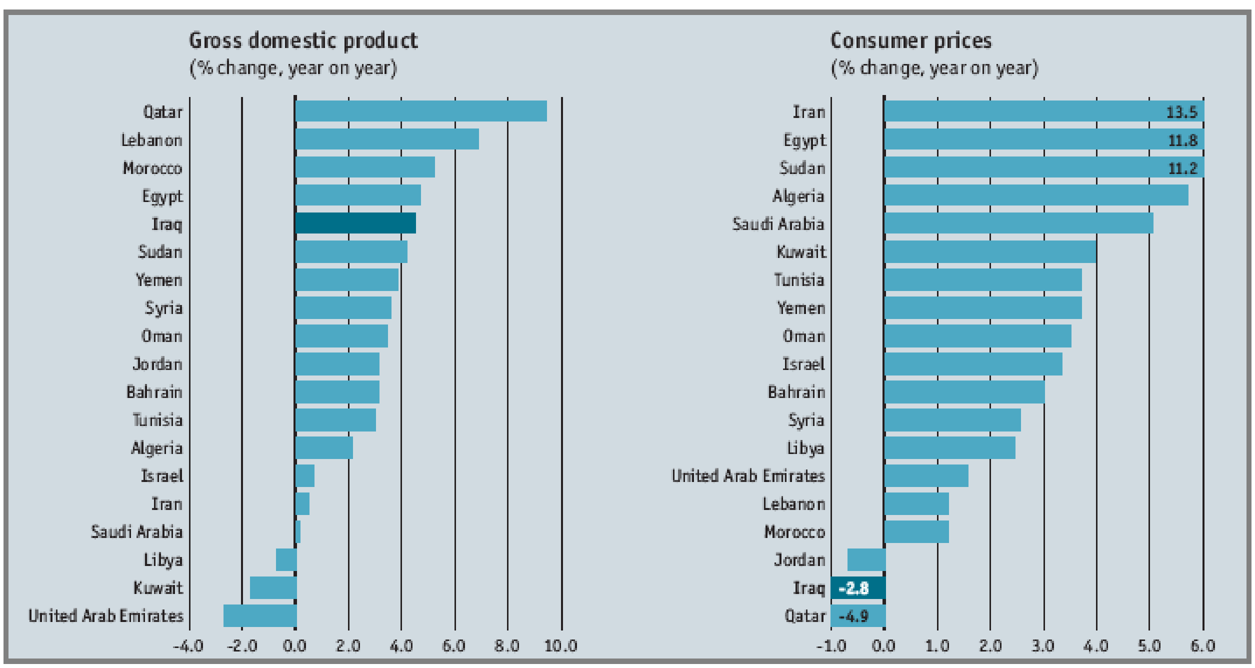






Comparative Economic Indicators, 2009





APPENDIX 3: PREMIUM FOR RISK RATING SCALE RESULTS

	Number of points				Number of points	
Item	Individual Subcategory	Response from Panel		Item	Individual Subcategory	Response from Panel
Capital repatriation				*Political stability:*		
No restrictions	12	**12**		Stability long-term	12	**2**
Restrictions based only on time	8			Stable, but dependent on key person	10	
Restrictions on capital	6			Internal factions, but government in control	8	
Restrictions on capital and income	4			Strong external and/or internal pressures that affect policies	4	
Heavy restrictions	2			Possibility of coup (external and internal) or other radical change	2	
No repatriation possible	0			Instability, real possibility of coup or change	0	
Foreign ownership allowed:				*Willingness to grant tariff protection:*		
100% allowed and welcomed	12	**10**		Extensive protection granted	8	**3**
100% allowed, not welcomed	10			Considerable protection granted, especially to new major industries	6	
Majority allowed	8			Some protection granted, mainly to new industries	4	
50% maximum	6			Little or no protection granted	2	
Minority only	4					
Less than 30%	2			*Availability of local capital:*		
No foreign ownership allowed	0			Developed capital markets; open Stock exchange	10	**4**
				Some local capital available; speculative stock market	8	
Discrimination and controls, foreign vs. domestic businesses				Limited Capital Market; some outside funds (IBRD, AID) available	6	
Foreign treated the same as local	12	**9**		Capital scarce, short-term	4	
Minor restrictions on foreigners, no controls	10			Rigid controls over capital	2	
No restrictions on foreigners, some controls	8			Active capital flight unchecked	0	
Restrictions and controls on foreigners	6					
Some restrictions and heavy controls on foreigners	4			*Annual inflation for last five years:*		
Severe restrictions and controls on foreigners	2			Less than 1%	14	**6**
Foreigners not allowed to invest	0			1% to 3%	12	
				3% to 7%	10	
Currency stability:				7% to 10%	8	
Freely convertible	20	**6**		10% to 15%	6	
Less than 10% open/black market differential	18			50% to 35%	4	
10 to 40% open/black market differential	14			Over 35%	2	
40% 200% open/black market differential	8					
Over 100% open/black market differential	4			Total		**52**