PROPERTY INFORMATION: A GUAM CASE STUDY

by W. Nicholas Captain, CRE

ABOUT THE AUTHOR

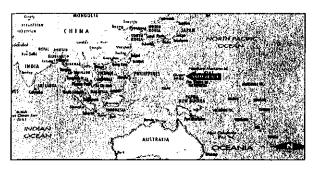
W. Nicholas Captain, MAI, CRE, is the president of the Captain Company, a real estate service corporation based on Guam. His firm specializes in providing valuation, consulting, brokerage and investment services. Mr. Captain is the only real estate expert in Micronesia to hold the prestigious Counselor of Real Estate, or CRE, designation. He also holds the Appraisal Institute's MAI designation and is licensed to appraise real estate in Guam, the CNMI and Hawaii.

The Island of Guam, although small in size, presents many interesting examples of the boom and bust cycles experienced in real estate markets. In completing a Guam property information case study, we considered Guam's physical and demographic characteristics, economic forces, historic market overview, prevailing market conditions and future expectations. Guam's current real estate market, as compared with other great financial disasters, is presented in this paper. Through the detailed study and investigation of Guam's real estate market, property information can be used to support acquisition, disposition, lending, foreclosure, litigation and other important real estate decisions.

Information is defined by Webster's Dictionary as, "...knowledge obtained from investigation, study, or instruction." Real estate market knowledge (or property information) is the critical asset to real estate service companies. A thorough understanding of property information by valuers and consultants can lead to more stabilized and efficient real estate markets. Professional real estate experts continuously strive to gain a better understanding of property information, typically within selected geographic boundaries.

Exhibit 1

Regional Map



The investigation of property data and the study of real estate markets in isolated locations can be both difficult and rewarding. The island of Guam, an unincorporated territory of the United States, involves a small, isolated real estate market which is highly susceptible to regional external forces; particularly from Japan. Although officially U.S. soil, Guam is "America in Asia" and U.S. economic influence is generally limited to interest rate policies and military activity.

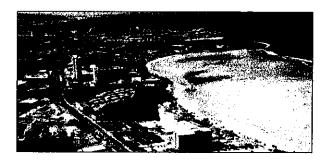
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PHYSICAL AND DEMOGRAPHIC CHARACTERISTICS

Guam is a tropical island located in the Western Pacific, almost due south of Tokyo and directly east of Manila (Exhibit 1). Guam is Micronesia's largest island and its land area of approximately 213 square miles is roughly the size of Singapore. Guam benefits from tropical weather, sandy beaches, clear water, and clean air. Geographically, the island involves two distinct areas: northern Guam involves a raised coral line plateau and the fairly level topography allows for intensive development, while southern Guam is mountainous and relatively rural in character. The island is located within the typhoon belt and earthquake zones, which provides occasional excitement.

The island population approximates 155,000 and includes a mix of indigenous Chamorros (43 percent), Filipinos (23 percent), and mostly other

Exhibit 2
South Tuman Bay, Guam



Asian ethnic groups. Guam's average household income in 2000 was a healthy US\$45,091. Ninetynine percent of the population speak English.

Tumon Bay, Guam's primary location of tourist related development, features warm, protected water and a sandy beach. These factors, along with close proximity to Japan, have resulted in the development of Guam as a tourist destination. Hyatt, Hilton, Marriott, Westin, Nikko, Holiday Inn, and other brands are found along Tumon Bay.

Guam also features one of the best deep-draft harbors in the Western Pacific (Exhibit 2). As a result of its geographic characteristics, Guam has historically attracted military interest. Most recently, the military presence has grown in importance as Japan's economy has waned and military activity related to anti-terrorist/"Axis of Evil" policy has grown significantly.

Guam's physical location characteristics combine to attract tourists and investment from Japan as well as a strong military presence. The island's demographics have allowed for development of both tourism and military industries. These factors, in extreme cyclical patterns, have shaped Guam's economic growth since the mid-1960s.

ECONOMIC FORCES

As an unincorporated territory of the United States, Guam's economy is structured under U.S. laws. A history of political stability has allowed for significant economic growth over the past 20 years. Gross Island Product ("GIP") for Guam increased from US\$1.73 billion in 1988 (the first year analyzed) to US\$3.42 billion in 2000, nearly doubling in 12 years. Since 2000, job losses, deflation and fiscal mismanagement have contributed to painful economic contraction.

Table 1
Historic Japanese Visitor Arrivals to Guam and Yen/US\$ Exchange Rates, 1970-2000

Year	Visitor Arrivals From Japan	5-Year Periods	10-Year Periods	Yen/US\$ Rate	% Change
1970	44,234	-	-	360	-
1975	163,557	270%	-	297	-17.5%
1980	221,910	36%	502%	227	-23.6%
1985	301,690	36%	184%	238	4.8%
1990	637,569	111%	287%	145	-39.1%
1995	996,219	56%	330%	94	-35.2%
2000	1,048,813	5%	165%	108	14.9%

Sources: Guam Visitor's Bureau, Guam Department of Commerce and Federal Reserve Bank (St. Louis).

Guam's physical and demographic characteristics have historically attracted significant tourism and military related investment. Tourism is the largest private sector industry on Guam and reportedly accounts for approximately 35 percent of GIP. Military (defense services) reportedly accounts for approximately 25 percent of GIP. The remainder of the economy is comprised of local and federal government activities, services, and related sectors. Since the Asian economic crisis in the late 1990s, the economic impact from tourism has declined while the importance of the military sector has grown sharply.

Less than four hours air-time from Tokyo, Guam benefits from direct airline service to thirteen cities in Japan and serves as a regional hub for Continental Airlines. Approximately 3.6 percent of Japanese outbound tourists visit Guam annually, peaking at nearly 1.05 million during 2000. Annual visitor counts from Japan typically reflect between 75 and 85 percent of total arrivals. Although the Korean market has grown in recent years, Guam's popularity as a Japanese visitor destination was the critical component of economic development since 1985. Historic Japanese visitor arrival growth, along with corresponding Yen/US\$ exchange rates, are shown in Table 1.

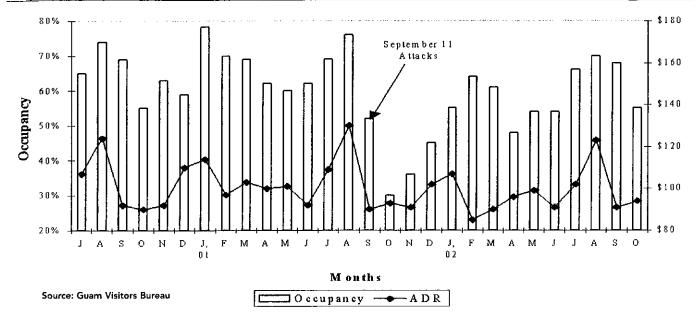
In the late 1980s, hotel and golf course development exploded along with the booming Japanese economy. Guam's hotel room inventory more than tripled from 2,900 in 1985 to 9,002 rooms by 2000. Several luxury hotels were constructed between 1988 and 1993, at costs of up to US\$400,000 per room. Three high profile golf courses were developed on Guam during the boom years. As pet projects of super-rich Japanese, these courses were constructed at costs of up to US\$4.0 million per hole. Nearly 1,000 golf course memberships were sold to Japanese nationals, mostly in the US \$200,000

range (current prices are significantly lower). During Japan's boom years, tourism appeared as the economic panacea for Guam.

However, reliance on tourism as a primary component of an economy has significant risk; particularly when that tourism involves a single market. The combined effects of the sputtering Japanese economy, the Asian economic crisis, and the terrorist attacks of September 11 resulted in sharp economic declines in recent years. As an example, total private sector jobs declined by nearly 18 percent between 1996 and 2002, with most losses in the construction and retail trade sectors. The economic impact of the September 11 terrorist attacks on Guam's tourism industry, projected to hit \$47 million by March 2003, is evident in occupancy and average room rate statistics summarized in Table 2.

Guam's physical characteristics have historically attracted military interest from the reigning regional powers. Mostly recently, proximity to North Korea, unique training facilities on strategic U.S. soil, and regional terrorist activity have combined to advance military initiatives in the region. Economic activity generated by the military sector on Guam involves its own set of risks and inherent negative consequences, but this component of the economy is far more stable than tourism.

Since 1995, annual federal expenditures have ranged from approximately US\$800 million to US\$1.0 billion. After a period of decline (there was strong objection to the military presence on Guam during the economic boom years) in the early to mid-1990s, Guam has generally experienced slow, but steady growth from the military sector. Most recently, massive supplemental budgets and long-term infrastructure projects allow for further, and potentially significant, personnel and military hardware increases. Economic forces on Guam,



most notably from the tourism and military sectors, provide the foundation for the local real estate market.

HISTORIC MARKET OVERVIEW

Guam's modern real estate history dates back to World War II. Following the United States victory, the federal government acquired a substantial portion of the island for strategic military purposes. The federal government today retains control over approximately 30 percent of the island. The local government owns another 30 percent, leaving approximately 40 percent in the hands of private landowners. Fee simple ownership prevails and real estate ownership by foreigners is allowed.

Historically, Guam's real estate market has experienced extreme volatility resulting from external market forces. Land values remained extremely low from the period following WWII until the late 1960s (U.S. Navy restrictions on access to the island were lifted by President Kennedy in 1963). As an outpost for the Vietnam War, military activity supported strong economic growth beginning in the late 1960s. In the early 1970s, foreign investment sparked by political fears in Taiwan (Nixon's visit to Beijing), combined with a relative explosion in tourism on Guam from Japan, fueled an incredible rise in real estate prices. During this period of frantic activity, Guam experienced its first \$1 million land deal, a surge in foreign investment (primarily from Japan and Taiwan), and an incredible shortterm spike in real estate prices.

In 1974, OPEC pulled the global economy into recession through a series of oil price hikes and Guam's first major real estate bust began. The market remained depressed during the early 1980s as U.S. interest rates above 20 percent crippled economic growth. Between February 1985 and December 1987, the value of the Japanese yen vs. U.S. \$ doubled and Guam real estate prices suddenly looked cheap. By 1988, real estate prices had increased back to pre-bust levels and Japanese foreign investment was beginning to fuel another spectacular rise in property prices on Guam.

During the peak of Guam's second real estate boom in 1990, the highest-demand land prices had increased nearly 10 times within a three-year period. The subsequent contraction of Japan's economy in the early 1990s started the longest downward spiral in real estate values in Guam's modern history. By 2002, numerous properties that sold during the 1989/1990 market peak subsequently resold at small fractions of original purchase prices. A summary of notable land resales on Guam during this last cycle is shown in Table 3.

In order to analyze the dramatic changes in Guam's real estate market over a 10-year period, we summarized aggregate market activity including total transactions, the US\$ volume of all transactions, and the same categories for transactions

 Table 3

 Analysis of Land Price Declines, Island of Guam

			Change from Market Peak		
Land Area (acres)	1989/90 Peak Sale Price	Recent Sale Price	\$	%	
ont					
24.7	\$63,000,000	\$7,500,000	(\$55,500,000)	-88%	
1.0	\$10,000,000	\$3,500,000	(\$ 6,500,000)	-65%	
10.4	\$21,008,000	\$4,201,600	(\$16,806,400)	-80%	
20.2	\$40,500,000	\$2,000,000	(\$38,500,000)	-95%	
Road Frontage					
0.6	\$ 5,582,000	\$2,140,000	(\$ 3,442,000)	-62%	
2.5	\$ 3,000,000	\$1,087,000	(\$ 1,913,000)	-64%	
1.0	\$ 3,156,660	\$ 680,000	(\$ 2,476,660)	-78%	
1.2	\$ 2,300,000	\$ 130,000	(\$ 2,170,000)	-94%	
1.0	\$ 2,731,240	\$ 500,000	(\$ 2,231,240)	-82%	
14.7	\$ 7,000,000	\$ 500,000	(\$ 6,500,000)	-93%	
rse Potential					
605.4	\$40,000,000	\$5,000,000	(\$35,000,000)	-88%	
	24.7 1.0 10.4 20.2 Road Frontage 0.6 2.5 1.0 1.2 1.0 14.7 rse Potential	24.7 \$63,000,000 1.0 \$10,000,000 10.4 \$21,008,000 20.2 \$40,500,000 Road Frontage 0.6 \$5,582,000 2.5 \$3,000,000 1.0 \$3,156,660 1.2 \$2,300,000 1.0 \$2,731,240 14.7 \$7,000,000	24.7 \$63,000,000 \$7,500,000 1.0 \$10,000,000 \$3,500,000 10.4 \$21,008,000 \$4,201,600 20.2 \$40,500,000 \$2,000,000 Road Frontage 0.6 \$5,582,000 \$2,140,000 2.5 \$3,000,000 \$1,087,000 1.0 \$3,156,660 \$680,000 1.2 \$2,300,000 \$130,000 1.0 \$2,731,240 \$500,000 rse Potential	Land Area (acres) 1989/90 Peak Sale Price Recent Sale Price \$ ant 24.7 \$63,000,000 \$7,500,000 (\$55,500,000) 1.0 \$10,000,000 \$3,500,000 (\$6,500,000) 10.4 \$21,008,000 \$4,201,600 (\$16,806,400) 20.2 \$40,500,000 \$2,000,000 (\$38,500,000) Road Frontage 0.6 \$5,582,000 \$2,140,000 (\$1,913,000) 2.5 \$3,000,000 \$1,087,000 (\$1,913,000) 1.0 \$3,156,660 \$680,000 (\$2,476,660) 1.2 \$2,300,000 \$130,000 (\$2,170,000) 1.0 \$2,731,240 \$500,000 (\$2,231,240) 14.7 \$7,000,000 \$500,000 (\$6,500,000)	

Source: Department of Land Management and The Captain Company

reflecting prices over US\$ 1.0 million. The data was summarized on an annual basis and compared at 10 year intervals for the 1989 to 1991, and 1999 to 2001 time frames as shown in Table 4.

To a great extent, as goes Japan, so goes Guam. The combination of close geographic proximity, tropical weather and U.S. soil has historically attracted investment from Japan. Guam's real estate values, to some extent, have tracked Japan's since 1985. The correlation between selected Japan and Guam real estate values (1990 Base Year) is shown in Table 5.

It appears from the table that the risk associated with changes in real estate prices on Guam may be half an order of magnitude greater than in Japan. Note that current identified land values in both Japan and Guam are lower than 1985 levels. The decline in Guam land values during the 1990s was so severe, it dominates some of the world's other great financial disasters as shown in Table 6.

Guam's real estate market is highly susceptible to volatility due to external pressure. The first boom in the early 1970s was fueled by Vietnam War activity, political and tourism-related factors, and ended with the global recession initiated by the OPEC oil price hikes. The second boom resulted from a spillover of Japanese economic growth and

ended with the slowdown in Japan, the economic crisis in Asia and the terrorist attacks in the U.S. mainland.

PREVAILING MARKET CONDITIONS

Prevailing real estate market conditions on Guam remain relatively soft. The devastating impact of Supertyphoon Pongsona in December 2002 severely restricted economic and real estate market activity through the remainder of the year and into 2003. A summary of aggregate price activity by sector, since 1999, is shown in Table 7.

As Japanese property owners continue to dispose of assets and Japan's economy remains weak, prices are expected to remain low. However, the dramatic real estate price declines have attracted growing interest from foreign investors (including some from Japan). Investors from Indonesia recently acquired the Palace Hotel at a price of less than \$10 million, a 90 percent discount off of the development cost, which was reported to be approximately \$100 million. The \$40 million Accion Guam hotel recently sold at under \$2 million, and the buyer converted its use to a seminary. The Dai Ichi Guam hotel also sold recently at a leasehold price of under \$8 million and more hotel sales are pending. Cocos Island Resort and a Saipan shopping center (La Fiesta) recently sold to Japanese billionaire Masafumi Miyamoto, developer of the popular

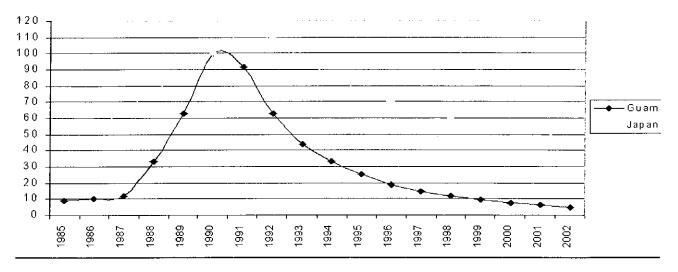
 Table 4

 Analysis of Guam Real Estate Market Activity By Decade

	All Tr	ansactions	Transaction	Transactions > \$1.0 Million		
Year/Item	No. of Trans.	Total \$ Volume (\$ millions)	No. of Trans.	Total \$ Volume (\$ millions)		
1989	1,448	\$1,067	166	\$ 795		
1999	<u>1,101</u>	\$ 173	11	\$ 28		
% Change	-24%	-84%	-93%	-96%		
1990	1,771	\$ 806	115	\$ 464		
2000	<u>1,119</u>	<u>\$ 128</u>	<u>_11</u>	\$ 31		
% Change	-37%	-84%	-90%	-93%		
1991	1,554	\$ 375	47	\$ 145		
2001	<u>950</u>	<u>\$ 143</u>	9	<u>\$ 17</u>		
% Change	-39%	-62%	-81%	-88%		
1989 to 1991 Aggregate Totals		\$2,248	328	\$ 1,404		
1999 to 2001		:	:			
Aggregate Totals	3,170	<u>\$ 444</u>	_31	\$ 76		
% Change	-34%	-80%	-91%	-95%		

 Table 5

 Correlation Between Japan and Guam Land Values; Base Year 1990 = 100



Source: Japan Real Estate Insitutue (all urban area, commercial land) and The Captain Company (Guam, Tumon interior Land

"Final Fantasy" video game. Many local market players that watched from the sidelines for over 10 years, are now getting back into the investment game, perhaps signaling a market bottom.

From a valuation perspective, the dramatic real estate price declines require a detailed analysis of depreciation, or an abandoning of the cost approach as a reliable indicator of value. In most cases, support for economic and functional obsolescence involve esoteric analyses that are appropriate for academic, but not potential investor due diligence purposes. Sophisticated investors are focused primarily on potential income and, from our perspective, the cost

Table 6 Historic Global Financial Disasters

No.	Financial Disaster	Where	When	Price Increase	Subsequent Decline
1	Tumon Land	Guam	1985-90	1,100%	95%
2	Tulip Bulbs	Holland	1634-37	5,900%	93%
3	Silver	U.S.	1979-82	700%	88%
4	U.S. Stocks	U.S.	1921-29	500%	87%
5	Japanese Stocks	Japan	1965-89	3,270%	78%

Source: Forbes ASAP and The Captain Company

Table 7
Guam Aggregate Real Estate Market Activity, 1999-2002

	1999	2000		2001		2002	
Category	Total \$ Millions	Total \$ Millions	% Change	Total \$ Millions	% Change	Total \$ Millions	% Change
Land	\$ 44.6	\$ 42.9	-3.8%	\$ 23.7	-44.8%	\$ 30.7	29.5%
Commercial	\$ 11.1	\$ 12.9	15.5%	\$ 9.1	-28.9%	\$ 6.5	-29.2%
Industrial	\$ 4.5	\$ 7.8	73.9%	\$ 5.7	-26.3%	\$ 3.2	-45.0%
Apartment	\$ 4.8	\$ 4.0	-18.5%	\$ 2.0	-49.0%	\$ 3.4	67.5%
SFD	\$ 81.5	\$ 57.0	-30.1%	\$ 69.6	22.1%	\$ 64.2	-7.8%
Condominium	n \$ 21.8	\$ 21.6	-1.1%	\$ 18.6	-13.7%	\$ 15.0	-19.4%
Totals:	\$168.4	\$146.1	-13.2%	\$128.9	-12%	\$122.9	-4.6%

Source: The Captain Company

approach has become temporarily obsolete, even for most recently constructed improvements.

FUTURE EXPECTATIONS

The near-term future of Guam's real estate market remains unstable and susceptible to external forces in the region. Although dramatic declines have already occurred in most sectors, economic support for a market bottom remains elusive. Economic problems in Japan and a growing trend toward domestic travel could further contribute to Guam real estate price declines. Most recently, deflationary forces emanating from China have contributed to further price declines. Global military conflicts and terrorism increase risk associated with investing in any substantially tourismdependent economy. The recapitalization of real estate prices during a period of declining interest rates has effectively passed and risk associated with future increases has swelled. However, the fundamentals of Guam's real estate market will

ultimately lead to recovery. Guam's market fundamentals, which may have lost some luster in recent years, include:

- U.S. Laws and Currency
- Close Proximity to Japan/Asia
- Political Stability
- Tropical Weather
- Adequate Tourist Infrastructure
- Strong Military Presence

The recent and proposed increases in military activity will generate badly needed economic growth. Foreign investment, although at low prices, will also contribute to the economy through renovation projects and capital infusions. The combination of Guam's fundamentals, military growth and foreign investment will lead to the long-term recovery of Guam's real estate market. We expect that Guam's next boom will occur between 2015 and 2020, as newly rich Chinese look for vacation

properties, and Japanese, Korean, and Taiwanese investors return in earnest. As the century progresses, China will play an increasing role in local economics and real estate pricing models.

CONCLUSION

Through the detailed investigation and study of local real estate markets, property information can be obtained. Property information is the critical asset for real estate service organizations. Real estate market knowledge, or property information, provides a foundation for the analysis of real estate problems by valuers and consultants. Property information, or the knowledge obtained through detailed study of property data, can be used to support more stabilized and efficient real estate markets; particularly in isolated locations such as Guam.

Guam's physical and demographic characteristics have historically attracted tourism-related and military investment. The local real estate market is highly susceptible to volatility due to external pressures; particularly from Japan. Guam real estate values peaked in 1989/1990 and subsequently declined dramatically. Prevailing market conditions remain weak and recovery remains elusive. However, the fundamentals of Guam's real estate market, including military expansion and a return of foreign investment, will lead to long-term economic growth and real estate market recovery. Opportunistic investors, armed with this property information, should consider Guam as an attractive investment option.

ABOUT THE AUTHOR (Continued)

His background includes seven years of training at one of Hawaii's most experienced real estate consulting firms. He currently serves as the Appraisal Institute's Ambassador to Micronesia, the Philippines, and Indonesia, and he holds a seat on the Institute's International Relations Committee. Mr. Captain recently completed several major international real estate studies including an analysis of three remote atolls in the Marshall Islands, the appraisal of nearly all public lands in the Republic of Palau, and the appraisal of the Rainmaker Hotel in American Samoa. In the early 1990s, Mr. Captain completed the appraisal of all privately owned real estate on Guam for government property tax purposes. He is the author of The Captain Company News, host of the Micronesia Real Estate Investment Conference and he periodically instructs seminars and publishes articles on real estate (E-mail: nick@thecaptaincompany.com).