ECONOMIC DEVELOPMENT PROSPECTS FOR A SMALL ISLAND ECONOMY: THE CASE OF GUAM

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ABSTRACT

This paper focuses on key characteristics of a small island economy in order to evaluate its economic development prospects. In particular, this paper has chosen to study the economy of the island of Guam, identified its key characteristics and investigated the economic development challenges it faces and the opportunities available to it.

INTRODUCTION

Guam is an unincorporated territory of the United States. It is an island located in Western Pacific and provides the U.S. with a strategic advantage to secure the defense and stability of the Asia-Pacific region. As an economy, Guam is small and undiversified but is endowed with natural resources and a multicultural labor force. After World War II, Guam proved itself to be a resilient economy. However, in the more recent past which was, and still is, characterized by increased globalization, Guam faced many factors that were beyond its control, which when combined with having to deal with natural disasters, took a toll on the well-being of its people. Of course, globalization and natural disasters are among many other challenges that Guam continues to face. The key is to find a balance between the positive and negative aspects of the economy and society and to transform these challenges into opportunities that will improve the current situation. Doing so will put Guam in a position of strength as it forges ahead in its pursuit of economic development.

ENVIRONMENTAL ANALYSIS

An analysis of the environmental factors or conditions that are relevant to Guam's prospects for economic development is a good starting point for evaluating the challenges and opportunities that are available to Guam. In this regard, several descriptors have been identified to describe key characteristics of the Guam economy, with this paper focusing on the following six: (1) a small island economy that is relatively open that is (2) currently lacking economic diversification but (3) endowed with natural resources and a (4) multicultural society. It is (5) an unincorporated U.S. territory (6) located strategically in Asia-Pacific. Each descriptor presents Guam with challenges and at the same time opportunities. These descriptors and their implications for challenges and opportunities in economic development are discussed in the next section in turn.

SMALL ISLAND OPEN ECONOMY

Small Domestic Economy

Guam's smallness can be measured in several ways. First is in terms of its small population, which is estimated to be around 175,000 people and, consequently, a small labor force of around 74,950, of which 64,970 (86.7%) are employed and 9,970 (13.3%) are unemployed based on the latest unemployment report in March 2011(Guam Bureau of Labor Statistics). During stronger economic periods when labor demand exceeds the available labor force, Guam has supplemented its local labor force with those from the U.S., neighboring island that are freely associated with the U.S. ((i.e. the Commonwealth of Northern Marianas, Federated States of Micronesia, Republic of the Marshall Islands and Palau) and the use of foreign workers.

Guam is also small in terms of economic size. The latest estimate of its overall economy, its Gross Domestic Product, GDP (also referred to as Gross Island Product, GIP) is for the year 2007 and valued at around \$4 billion (U.S. Department of Commerce-Bureau of Economic Analysis, 2010). Combining estimates of GIP and population gives rise to per capita income, which is a measure of purchasing power, of around \$23,000.

Guam's small population and relatively lower per capita income have prevented many businesses from achieving economies of scale and producing goods and services to local residents at lower prices. Not surprisingly, the cost of living on Guam is high but not different from other small island economies, including Hawaii. Guam's lack of economies of scale also presents challenges to autonomous government agencies that provide utilities and is also an obstacle from current efforts toward recycling, which have required recyclable materials to be gathered and then shipped off-island for recycling.

Guam's smallness also manifests itself in terms of its limited productive resources. The prospects of significant economic growth from the pending expansion of the U.S. military presence on the island have created expectations of shortage in available resources, including labor of different skills (including construction-related) as well as physical, social and institutional infrastructure. In addition, the limited productive resources available to Guam can be viewed as both cause and consequence for the island's lack of economic diversification (More on this later; see also Duncan and Nakagawa, 2006).

Open Economy

Like many small economies, Guam is a relatively open economy, especially in trade of goods and services. Guam imports around 36% of its GIP, showing a high dependence on imported supply but not quite uncommon among small island economies in the Pacific. Guam's exports have primarily come from services to tourists, which account for 16.5% of its GIP (U.S. Department of Commerce-Bureau of Economic Analysis, 2010). The heavy reliance on tourism makes Guam vulnerable to external shocks that affect its main tourist markets, primarily Japan, including most recently the March 2011 earthquake and tsunami that devastated the northeastern part of Japan and led to a significant decline in tourist arrivals from Japan. These external

shocks could also be positive for Guam such as the appreciation of the Japanese yen and Korean won against the U.S. dollar which made tourism on Guam more affordable to Japanese and Korean visitors.

To some extent, Guam's openness applies to its labor market and migration, allowing from a free movement of labor among other island economies in Western Pacific which have free association with the U.S. and the fifty states of the U.S. As already noted, this labor market arrangement has supplemented Guam's small labor force during times of high labor demand but has caused high unemployment during slower economic times as would explain the high unemployment rate of 13.3% reported in March 2011 (Guam Department of Labor, 2011).

Island Economy

Guam is the largest island in the Micronesian region and is located in the Western Pacific Region. Being an island is significant in that it implies some level of geographic isolation and distance from larger markets. It also suggests exposure to natural disasters such as typhoon, earthquakes and tsunamis.

Guam's smallness, openness and island-setting suggest benefits from attracting more resources, including foreign investments, to supplement its limited productive resources and also balance out the island's high imports. This descriptor of Guam, especially its implication for the lack of economies of scale, points to the absence of mass production of many products but suggests opportunities for niche markets and for small business participation. Although the government sector (a combination of U.S. Federal government agencies and local government agencies) continue to make up a significant share of the economy (48% of Gross Island Product in 2007, U.S. Department of Commerce-Bureau of Economic Analysis), the economy has made a notable shift toward a larger role of the private sector, including small businesses. Recent employment estimates show that 75% of jobs are provided by private businesses, 19% by the local government and 6% by the U.S. Federal government (Guam Department of Labor-Bureau of Labor Statistics, December 2010). In terms of numbers, the private sector is comprised of 3,143 business establishments (U.S. Bureau of Census, 2007), with more than 90% of them classified as "small businesses" using the U.S. Small Business Administration definition.

LACK OF ECONOMIC DIVERSIFICATION

Guam's limited productive resources and lack of economies of scale prevent it from achieving the type of economic diversification that larger economies are able to enjoy. It would not be much of an over-simplification to view Guam's economy as a triad, comprised of three industries (tourism, military and local economy) or serving three groups of customers (tourists, military personnel and families, and local residents).

Tourism

Tourism was very strong in 2010, with approximately 1.2 million tourists who visited Guam (Guam Visitors Bureau, December 2010). As already noted, tourism decreased this year,

largely due to the lower number of Japanese visitors. Prospects for tourism-related economic activities are not optimistic for the remainder of the year. It is too bad that Guam's comparative advantage as an island is in tourism, which happens to be very unstable because it is hostage to factors outside of Guam's control and to external shocks. Tourism is an industry that is very sensitive to the income of tourists and tourist activities would be one of the first to be reduced when times are tough) as well as health and safety threats that affect travel (9-11, SARS, H1N1, etc.). It is in many economies, not only on Guam, a relatively low-paying, low-productivity service sector with little opportunity for innovation. It also puts Guam in direct competition with neighboring islands, including Hawaii. Guam's tourism agency, the Guam Visitors Bureau, has not fallen short of exploring ways to further develop and diversify our tourism sector. While these efforts must be recognized and encouraged, we must consider other viable economic activities that can provide the island with an alternative source of income, especially during times when our tourism sector is on a decline.

Military

The military market is also significant in Guam. Expectedly, it claimed a larger share of the economy in the aftermath of World War II and has since decreased, although still notable. It usually reflects itself in construction and engineering services industries, although there are opportunities to get involved in military bases' maintenance and operation. The concern here is that decisions affecting the military presence on Guam are made externally, in this case, by the U.S. Federal Government, in consultation with foreign government(s). For instance, the U.S. and Japan entered an agreement in 2006 to realign U.S. military forces in Asia. Of particular interest to Guam is the proposal to relocate 8,000 military personnel and their families from Okinawa, Japan to Guam. Such military build-up on Guam was originally valued in excess of \$10 billion (2.5 times the size of the current Guam economy) and was originally planned to take place over a short four-year period, after which the military-related construction boom would be expected to decline. More recently, there has been uncertainty regarding the terms, magnitude and timing of this military build-up, in part due to the recent natural disasters in Japan as well as to new developments in the U.S. Congress. Much depends on the fiscal health of both the U.S. Federal Government and the Government of Japan, which initially agreed to share the cost of the military buildup on a 40-60 basis (approximately). That delays likely increase earlier estimates of costs worsens this fiscal concern.

Local Economy

The instability of tourism, the unpredictability of the military build-up and the inability of Guam to significantly influence both economic sectors have made the third sector, which caters to the local residents, the more attractive sector. This sector provides strong support for retail trade and many different services including health, education, financial, legal, etc. This is also the most promising area for the strong majority of local businesses, which are small businesses.

All of the above brings to light the importance of self-reliance: the need to rely on the local economy, to develop it by identifying new industries, to enhance its purchasing power so

that it will be the engine of growth that propels the entire economy into a sustainable and participatory development path that improves Guam residents' standard of living.

Opportunities for economic diversification would include those products that have potential to be exported but Guam's territorial status and the high transaction costs (including shipping) have presented challenges in this area. The more realistic option appears to be on the import side of trade where a search for ways to produce goods and services locally to reduce the current dependence on imported supply offers more promise. As discussions continue regarding the prospects of new industries on Guam, it would be helpful for these discussions to be guided by what emerged to be truly important to the island community

- Increase in the standard of living and ability to provide materially for families
- Smart management of the environment to ensure sustainability
- Resurgence of pride in our indigenous culture and resources

and pursue those new industries that are not economically viable but also encourage

- High productivity and value-added, intensive use of human capital and technology
- Use of "green" technology and practices, non-carbon printing and, if possible, carbon-reducing
- Intensive use of indigenous resources including human talents and local materials.

Efforts to replace imports in a cost-effective manner will provide a boost to the local economy. Assuming a spending multiplier of 1.5, one is able to illustrate how significant the economic impact would be of shifting 10% of what is currently imported to a local source in terms of an increase in GIP by 25% (or \$1 billion), an increase in the local government's revenue in terms of Gross Receipts Tax by 4% of \$1 billion (or \$40 million), and an increase in local jobs by 23% (or 14,000 jobs).

NATURAL RESOURCE ENDOWMENT

Guam's abundance in beaches, beautiful scenery, natural forests and marine life has made it an attractive site for tourism, military operations and research and development. Opportunities exist in developing ecotourism that caters to all three segments of consumers, tourist, military and local residents. The availability of land, along with government incentives to use them productively, points to a continuous evaluation of prospects for expanding the agricultural sector. Of course, as natural resources are used to support economic activities, there is a need for effective management of natural resources in order to preserve their quality and sustain their usefulness. Guam has a long history of community activism to ensure that uses of natural resources are kept in check.

MULTICULTURAL SOCIETY

Guam's population is composed of with 37% Chamorro (Guam's native culture), 27% Filipino, 7% other Pacific Islander, 6% non-Filipino Asians, 7% Caucasian, 2.2% all others (Guam Bureau of Statistics and Plans, 2010). One advantage of having a multicultural society is that the island becomes a melting pot of different ideas and talents. It also possesses a richness in culture, which provides opportunities to incorporate "experience" in tourism, and a greater understanding and appreciation for diversity. All of these create flexibility, creativity and economic resilience. On the other hand, challenges arise as they are many differing opinions, perspectives and approaches, thus making reaching a consensus more difficult and time-consuming.

UNINCORPORATED U.S. TERRITORY

Guam's status as an unincorporated U.S. territory is both a blessing and a curse. On the positive side, it provides an attraction for both tourists and foreign investors, who benefit from having a English-speaking population, the presence of U.S. legal infrastructure, an economically free environment to do business, a democratic political structure and the presence of labor protection (e.g., minimum wage laws). As a territory, Guam receives funds from the U.S. Federal government that finances a significant portion of its physical infrastructure that are conducive for business. Guam also uses the U.S. tax system and is able to keep taxes collected from local residents as well as from U.S. military personnel who are stationed on Guam.

The downside of being a U.S. territory includes limits on the economic policy tools available to local policymakers and economic planners. As regards fiscal policy, Guam has its own elected legislatures that make budget decisions, with a lot of flexibility on spending decisions but have less flexibility on making revenue decisions because the primary source of revenue (income taxes) are set to follow the U.S. Federal system. Unlike politically-independent economies, Guam has no monetary policy to use to effectively manage the local economy and is subject to decisions made by the Washington, D.C.-based central bank, the Federal Reserve. This policy limitation extends to currency matters and exchange rate determination. In addition, being a U.S. territory has made Guam ineligible to access financial and technical assistance from international organizations, resources that other countries have used to support their economic development. For better or worse, Guam's minimum wage laws have priced it out of the of many labor-intensive industries in nearby Asian economies, effectively limiting the number of possible industries it could develop and, to some extent, forcing it to look at higher-paying industries that often require higher levels of human capital.

STRATEGIC LOCATION IN ASIA-PACIFIC

Guam's location in the Asia-Pacific region has been described to be strategic, thus making it an attractive site for military operations. In fact, the 2006 military forces agreement between the U.S. and Japan is motivated largely by Guam's strategic location. This attractiveness to military operations brings with it both benefits and costs and hence requires a

careful balance of these two effects. For example, the proposed military build-up on Guam has received numerous scrutiny from those in favor of it as well as those opposed to it that achieving the balance has called for a need for strategically pacing the resulting economic development (e.g., adaptive program management) in order to match up the required resources (infrastructure, human capital) with their availability. Evaluating the benefits and costs of the military build-up (as well as other proposals for economic changes) have brought to light the need for current, reliable and relevant socio-economic data and models that can be used to accurately estimates the benefits and costs of military (as well as non-military) proposals/projects and to serve as evidence for effective policymaking.

Guam's location puts it in close proximity to the dynamic Asian markets, with several of them within a 3-5 hour direct flight distance. These point to opportunities to enhance travel infrastructure, for example, to explore additional air routes between Guam and important regional markets, thus having the effect of increasing competition among air carriers and potentially making travel more affordable to local residents as well as to tourists. On the other hand, proximity to Asia brings with to Guam the challenge of competing with other tourist destination in Asia. It also causes a leakage from the local economy as local residents travel to the neighboring Asian destination to shop at much lower prices and enjoy a wider variety of goods and services.

Table 1 summarizes the challenges and opportunities associated with each characteristic/descriptor of Guam's economy.

Table 1: Summary of Challenges and Opportunities in Guam's Economic Development		
Characteristics/Descriptors of Guam	Challenges Faced by Guam	Opportunities Available to Guam
(1) Small, island, open economy	 Economic instability/vulnerability or exposure to external factors and external shocks Small labor force and limited 	Increased outward orientation with regards to tourism, imported goods and services, foreign investment and military hosting
	 Inability to engage in mass production has led to higher cost to operate business, provide utilities, recycle 	Opportunity for niche markets and greater small business participation
(2) Lack of economic diversification	Heavy reliance on three sectors: tourism, military and local economy and increase exposure to shocks that negatively affect at least one sector	 Opportunity to explore new industries to supplement, complement and/or substitute existing industries Opportunity to incorporate island
		community values to "designing" new industries

Table 1: Summary of Challenges and Opportunities in Guam's Economic Development		
Characteristics/Descriptors of Guam	Challenges Faced by Guam	Opportunities Available to Guam
(3) Endowed with natural resources	Need for effective management of natural resources	 Opportunity for more eco-tourism Opportunity to further develop the agricultural sector and other natural resources
(4) Multicultural society	Many different opinions and difficulty to reach consensus	Different ideas and talents, a richness in culture, an understanding and appreciation of diversity, economic flexibility/resilience
(5) An unincorporated U.S. territory	 Limited economic policy tools Ineligibility for international development assistance Inability to compete directly with low-waged Asian countries in many labor-intensive industries 	Opportunity to strengthen Guam's image as an attractive business/investment site and tourist destination
(6) Located strategically in Asia-Pacific	 Need for strategically pacing economic development Need for current, reliable and relevant socio-economic data and models to accurately evaluate impacts of military and other economic changes Direct competition with Asian markets 	 Opportunity to benefit from hosting existing and increased military operations Opportunity to access nearby Asian markets and to enhance travel infrastructure

CONCLUSION

This paper presented an in-depth evaluation of the environmental factors that affect Guam's economy and its future development prospects. Challenges and current realities were presented to see what might be obstacles to transforming Guam's economy but opportunities for future economic development were also highlighted to see what Guam's economy could be and where options to develop it are available. One thing is clear: the island community needs to make the choice to be willing to work collectively toward addressing the challenges in developing its economy and moving forward. Perhaps an obvious point but one that is worth stating: Guam is not unique in as far as having to face challenges. However, its population can

distinguish itself from those in many economies facing similar challenges in the way that it collectively responds to these challenges and to bring about improvements in economic and social conditions for the people of Guam.

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