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Final Report

VIETNAM - MORE THAN JUST CHEAP LABOR:

Why Cheap Labor is not the Most Significant Driver for Investing in
Vietnam

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EXECUTIVE SUMMARY

With Vietnam's accession to the WTO, many U.S. based companies are eager to invest in Vietnam. The conventional rationale for investing in Vietnam is to take advantage of its "highly literate and inexpensive" labor force (Quinlan, 2006). While wage costs in Vietnam are lower than in many other countries which compete with Vietnam for foreign direct investment, we believe this is not the most important driver for investing in Vietnam. *Based on our research and interviews, we argue that it is Vietnam's pro-growth policies, stable government and its recent improvements in the legal and regulatory environment that make it an attractive location to invest for companies based in the United States.* However, we recognize many risks remain. We will elaborate on the reasons why the conventional rationale is incomplete and provide a risk assessment framework for companies seeking to enter Vietnam to evaluate whether their unique business needs match with the benefits and risks presented in Vietnam. Finally, we use Intel's recent investment in Vietnam to apply this framework.

I. INTRODUCTION

Karl John, the CEO of Vietnam-based consulting firm TCK Consulting, said "you cannot do business in Vietnam without understanding its history and culture" (John, 2007a). Hence, in order to comprehend how an impoverished, reclusive, socialist nation could emerge into a vibrant and growing economy attracting billions of dollars in foreign investment, one must first understand Vietnam's recent political and economic history.

The Socialist People's Republic of Vietnam was founded in 1954 and unified in 1976 after the end of the Vietnam war. Unfortunately, political union did not bring economic prosperity, and the nation suffered under poor economic conditions for years. In an effort to stimulate economic growth, Hanoi instituted a new policy of gradual economic reforms in 1986 (known as "Renovation" or "Đổi mới" in Vietnamese) which permitted free market ventures for the first time and also began reversing the process of collectivization in favor of privatization (Binh, 2005). The Đổi mới reforms also reversed Vietnam's once-reclusive economic regime, as the government began to actively attract and recruit foreign investment (Vietnam Ministry of Foreign Affairs, 2007).

While the Vietnamese economy sustained an annual growth rate of 8% for most of the 1990s, the country was not fully insulated from the shock of the 1997 Asian financial crisis, and growth slowed considerably in the latter part of the decade. The nation experienced a dramatic economic rise after it signed a Bilateral Trade Agreement with the United States in 2001. Having normalized trade relations between the two countries, exports from Vietnam quickly surged and the U.S. soon became Vietnam's largest export market (Riedel, Quang, 2003; United States Central Intelligence Agency, 2007).

Vietnam continued its focus on economic growth and began to make a serious bid for membership into the World Trade Organization. Mr. Martin Rama, the World Bank's Lead Economist for the Vietnam country program, views Hanoi's bid for WTO membership as a way for the reform-oriented Socialist Party members to cement their policies by forcing the government to continue with its reforms (Rama, 2007).

Hanoi initiated numerous reforms in preparation for its bid and subsequent entry into the WTO (which occurred in January 2007), from a concerted push to improve the country's physical infrastructure to wholesale reforms of its legal statutes. Alongside efforts to align labor laws with international standards, the Government addressed the problems of inefficient bureaucracy, confusing legal system, lack of intellectual property protection and corruption which have hindered foreign investment and economic growth. The government has made considerable progress, and in so doing, has greatly increased the attractiveness of investing in Vietnam.

The structure of our paper is as follows. In Section II, we will define the framework which we will use to analyze the "critical factors" which should be reviewed as part of any decision on whether to enter the Vietnamese market. We identified four major categories of critical factors and then used the framework to analyze each of the categories in separate sections: labor (Section III), infrastructure (Section IV), government and economy (Section V), and legal environment (Section VI). Section VII outlines a concrete set of recommendations to multinational companies that should enable them to mitigate their risks. In Section VIII, we apply this analysis and recommendations to an actual U.S.-based company: Intel.

II. ASSESSMENT FRAMEWORK

A. Categories

Based on information from the American Chamber of Commerce in Vietnam, expert interviews, and research on investing in Vietnam, we identified four categories that we believe have the highest impact on investing in Vietnam.

(1) **Labor Resources:** Labor is inexpensive, but quickly rising in cost. There are also concerns of labor strikes, unions, and availability.

(2) **Infrastructure:** In deciding whether to invest fixed, companies should evaluate capacity and ease of use of ports, proximity to important markets, and other geographical issues.

(3) **Government and Economy:** The government's role has a significant influence on the overall business climate. The government's trade and macroeconomic policies, as well as the incentives it creates for foreign investment, have a direct impact on the attractiveness of the business climate in Vietnam.

(4) **Legal Environment:** Enforcing laws consistently and evenly, combating corruption and bribery, and enhancing transparency are key legal issues for businesses in Vietnam.

B. Methodology for Assessment

The methodology for measuring the critical factors is derived from a modified tool employed by various Fortune 100 companies as well as nonprofit agencies (Hayes, 2000).¹ Each factor within the category is assigned a "GREEN", "YELLOW" or "RED" status based on two criteria:

1. Is this factor likely to be a big risk or benefit for a U.S. based-company entering Vietnam?
2. How important is this factor to the overall success of the firm's entry into Vietnam?

The different color assignments are based on the following:

- **RED** = Based on our assessment, it is *highly likely* that this factor will be a risk for a company entering Vietnam, and if it occurs, it will have a *highly negative* impact on the company's operations and profits
- **YELLOW** = Based on our assessment, this factor has a *moderate risk* of occurrence and consequence.
- **GREEN** = Based on our assessment, this factor will *benefit* a company entering Vietnam, or present very *low risk*.

¹ As of 2005, Caterpillar used the Green, Yellow, Red assessment tool in its 6 Sigma program. A team member, Annie Moon, was responsible for the Green, Yellow, Red roll-up for the Logistics Division at Caterpillar in 2005.

III. LABOR RESOURCES

Vietnam's low-cost, diligent, educated and large labor force has been a major factor in its rapid rise as a destination of choice for foreign manufacturing firms. However, there are many risks ranging from labor turnover to the availability of skilled management. This evaluation of labor incorporates all these issues which may not be a major factor currently but would be prominent in near future and may affect long-term strategic decisions by foreign investors.

A. Wages

Vietnam's wages are believed to be among the lowest in the world (See Exhibit 1 & 2). In 2002, the average wage was VND 11,993 K (US \$750) per year for foreign owned enterprises (See Exhibit 4). Many foreign investors are currently lured by this low wages and foreign direct investment has increased drastically in last few years (See Exhibit 5). However, in early 2006, the government raised the minimum wage for Vietnamese employees at foreign invested enterprises and other foreign and international organizations by an average of nearly 40% (Economist Intelligence Unit, 2006). Though, wage is still low compared to most south Asian countries, it may not be the case in the next few years.

Risks: Vietnam may soon not be the source of the cheapest labor in Asia. Wages have increased 20% per year, on average, in last 5 years (Dutta et al, 2007). Many of the wildcat strikes that occurred in 2006 centered on higher wages and better working conditions (Doan, D., 2007). Senior executives in Vietnam have started to worry about this trend. According to Mr. John, Vietnam will no longer have a "cost advantage in labor" (John, 2007a). Vietnam's accession to the WTO is likely to prolong this trend. Moreover, skilled workers may demand wages several times the national average.

Assessment: We believe that Vietnam's competitive advantage in low-cost wages will soon be superseded by other countries, and so we assessed the risk as **YELLOW**.

B. Education and Training

According to International Labor Organization (ILO), compared to many other developing countries, Vietnam has an outstanding literacy rate of 90.3% and its educational expenditure is an impressive 3.5% of GDP as shown in Exhibit 3 (Dutta et al, 2007). Five years of primary

school education is compulsory, and 92% of eligible children were enrolled in primary school in 2000 (Dutta et al, 2007). The government is continuing to invest in the basic education system along with targeted improvements to its professional training programs and higher education institutions (TMC Net, 2007).

Risks: While the literacy rate is high, the state of higher education is worrisome. Although 200,000 students graduate from colleges annually, according to the Ministry of Education, many are barely employable (Tre and Dong, 2007). Mr. John’s observations corroborated this fact. He believes Vietnamese workers are “well-educated but not flexible thinkers” who are “very willing to follow orders and do mechanical work” but are not well-trained to do managerial work that often requires flexible, strategic, and proactive thinking (John, 2007a). Shortage of skilled labor is starting to become an issue. A recent survey of 2,300 businesses in Ho Chi Minh City confirmed that demand for skilled workers will rise by 30% year on year in 2007 (Dutta et al, 2007). Operations such as garment factories have been successful because they require few skilled workers, but if an operation requires workers with technical skills, the shortage will likely necessitate bringing them in from outside.

Assessment: With Vietnam’s accession to the WTO, shortage of skilled workers would likely be exasperated as more investors enter the market. For this reason, we assessed the risk as **RED**.

C. Labor Unions

In 2006, there were a number of wildcat strikes against foreign firms, mainly owned by foreign investors such as South Koreans, Japanese and Taiwanese (Thanh Nien, 2007). The primary reasons behind this sudden unrest were the low wages and lack of basic labor benefits, which has not kept up with the inflation and the increase in per capita income of the country. Ms. Amanda Tucker, the chief representative for Nike in Vietnam, believes these labor strikes were due to cultural differences in communication and management styles and a miscommunication between the government and the public about a minimum wage increase (Tucker, 2007).

Risks: Despite of the recent unrest and the high profile nature of the strikes, they are not very commonplace. Moreover, according to Mr. John, the government tends to publicly support labor but often privately negotiates with the management team to reach a compromise solution (John,

2007a). However, while the labor union provides leadership to negotiate with, since unions are an extension of the government, union management has a conflict of interest. So, worker's concerns are not always met and in response they strike to resolve grievances (Tucker, 2007).

Assessment: Labor unions in Vietnam are controlled by the Socialist party and the government, which can create a conflict of interest. However, they provide predictability in the workforce, which could be valuable for foreign investors. Therefore, we assessed this risk as **YELLOW**.

D. Labor Turnover

Historically, labor turnover has not been an issue in Vietnam. Most Vietnamese worked for state-owned enterprises, where turnover had never been a problem. However, things have changed and demand for workers has risen drastically, especially in high-skilled jobs (Dutta et al, 2007). In addition, many Vietnamese factory workers who live in distant villages but work in or near big cities like Ho Chi Min City often go home for holidays and fail to return. Worker absenteeism due to Tet (Lunar New Year holiday) was one major problem cited by the manager of the Vietnamese-owned factory Viet Tien (Bùi, 2007).

Risks: With the increasing shortage of talented workers, labor turnover has now become a major issue in Vietnam. The current turnover rate is estimated to be as high as 20-30% in professional and high skill jobs (Dutta et al, 2007). The shortage of talented workers in middle management and lack of higher educational institutes to feed the junior positions is worsening the problem. However, unlike many other developing countries, as many as 80% of Vietnamese students who go to foreign countries for higher education return to Vietnam (Dutta et al, 2007). In the future, this migration of well-educated Vietnamese back home may reduce the difficulty in filling up many positions.

Assessment: Labor turnover could be an issue for many foreign investors but the magnitude of this problem is not yet substantial. For this reason we assessed this risk as **YELLOW**.

E. Labor Laws

The development of labor laws and regulatory framework in Vietnam started as far back as the early 1990s. The 1994 Labor Code and the 2002 Revised Labor Code, which received technical

contributions from International Labor Organization experts, are considered major milestones towards improved labor practices in Vietnam. With the WTO accession, the labor code is expected to quickly catch up with international standards and practices, creating a legal framework relatively compatible to the international labor law, thus facilitating Vietnam's transition and integration in the field of labor (The World Bank, 2005).

Risks: Since it received significant high-profile media coverage of its substandard working conditions and poor labor practices in the past, Vietnam has made significant advances in implementing various labor laws and regulations in last decade. However, enforcement of labor laws remains inadequate because of low funding and shortages of trained enforcement personnel. Even so, there has been a major change in labor conditions in the last decade due to increased pressure from Western companies to follow international labor standards as well as meet Corporate Social Responsibility and labor Code of Conduct.

Assessment: Vietnam has well-defined and robust labor laws; however, it lacks in the ability to adequately enforce these laws. With accession to WTO, this issue is expected to get better and for that reason, we have assessed it as **YELLOW**.

F. Labor Practices & Auditing

During the late 1990s, cases of sweatshop labor, low wages, and substandard working conditions involving Vietnamese laborers working for well-known companies like Disney and Nike made headlines (CNN World News, 1997). With the rising popularity of the Internet, the 1990s greatly increased Western consumers' awareness of conditions under which some of their favorite products were made, which led to protests and pressure on the Western companies to reform their labor practices. Many NGOs focused on labor, environmental, and safety standards sprang up or moved into the region for the first time. Verité, an independent non-profit organization that monitors international labor rights abuses in off-shore production sites, is one such organization. Verité is employed by big companies such as Disney to regularly inspect all factories producing the company's products, as well as to offer advice and insights on ways to further improve employee working conditions and lessen the firm's environmental footprint (Spears, 2007).

Risks: Auditing of labor practices in Vietnam has improved drastically in last decade, but it still has a long way to go. Mr. Zesiger stated that Vietnam has only 30 official labor inspectors for the entire country and most investors must hire third party auditors to ensure compliance (Zesiger, 2007). Auditing is still an issue in sub-contracted manufacturing, which is the prevalent model in the footwear and garment industries and presents a substantial risk to brand image in the event of a scandal.

Assessment: Though this has been an issue in the past, Vietnam has made a significant stride in labor practices and is expected to continue this path. For this reason we have assessed this risk as **YELLOW**.

IV. INFRASTRUCTURE

Vietnam is rapidly becoming an important trading nation, with the U.S. being one of its main partners, in part due to its strategic location in Southeast Asia. Several experts noted Vietnam's strategic location near China and its long coastline as major strategic advantages for the country (John, 2007a; Doan, D., 2007). To aid and promote continued growth, 9-10% of the GDP has been invested in the country's infrastructure (BBC, 2007). However, despite high ongoing investment in transportation, power, and real estate, Vietnam's infrastructure must undergo significant improvements in order for the country to compete successfully with other neighboring nations. This section evaluates the country's current level of infrastructure support.

A. Roads

Efficient roads are vital to transportation. However, just under 19% of Vietnam's 220,000 km of roads are paved (United States Central Intelligence Agency, 2007), greatly complicating the process of transporting goods across the country. The government is taking steps to alleviate these problems. In 2004 the Vietnam Expressway Corporation was established and charged with constructing, maintaining, and running the country's expressway system (Asian Development Bank, 2005). The country hopes to build 150 km of modern expressways each year for 20 years (the project began in 2005), in hope of eventually creating a 3,000 km integrated network that will efficiently connect the country from north to south and from China to Laos (Vietnam News, 2004).

Risk: The road system in Vietnam is inadequate in meeting the needs of businesses which must transport goods around the country. The vast majority of the nation's roads are unpaved, while the remaining stretches do not necessarily conform to modern standards. The sub-par nature of this system adds both transportation time and vehicle cost, hampering growth and efficiency. The system is gradually improving, and is doing so most rapidly in and around the economic heart of the country, the Ho Chi Min City (Tucker, 2007). This improvement process is however starting from a very low base, and it will take at least a generation before an efficient, nation-wide network of expressways are constructed (Vietnam News, 2004).

Assessment: The national road network is in need of a great amount of work. However, localized networks surrounding the major cities are substantially superior, and continually improving. With most manufacturing operations located in or near these centers (Ho Chi Minh City, Danang, Hanoi, etc.), coupled with the government's concerted drive to improve transportation infrastructure nationwide, we assessed this risk as **YELLOW**.

B. Power

According to the *World Bank*, Vietnam currently has sufficient power to meet its domestic need (Alsop et al, 2006). However, with increasing industrialization, Vietnam's annual power generation of 53 billion kWh must grow at a rate of 10-15% to meet a projected 100 billion kWh demand by 2010 (Collier, 2006). To meet this demand, the government has approved a US\$ 20 billion investment by 2010 to fund an additional 37 power generation plants and the necessary infrastructure to support the new facilities (Collier, 2006). In addition, in 2006, Vietnam outsourced some of its power needs to China, which now supplies electricity to northern Vietnam as part of a 10-year power supply contract (Pasek, 2006). Long-term, Vietnam is working towards managing its power needs domestically with the government taking a proactive stance in managing power demands through the establishment of the new Electricity Regulatory Authority of Vietnam (ERAV) in 2006, passage of the ambitious Electricity Law in 2004 and 2025 Power Growth Plan.

Risk: The government has indicated a strong commitment in managing its power growth. However, government participation in the power industry may not necessarily be a benefit in the

long-run as most power generation will be regulated and only 20% will be allotted to foreign-investments (Collier, 2006). However, Vietnam is currently able to maintain supply for its power demand and has been meeting the milestone decision points towards its 2025 Plan. Projections indicate that there is a fairly reasonable probability that power capacity in the coming years will be sufficient for the projected industrial growth.

Assessment: While government intervention and overwhelming capacity demand are formidable issues to overcome, the appropriate framework, resources, and attention are being placed on the power issue. Therefore, we assessed power as a **YELLOW** risk because experts believe sufficient power will be available for Vietnam's future growth.

C. Real Estate

The real estate market is growing as rapidly as the rest of Vietnam's economy, at a rate of 8% annually (Batchelor, 2007). The pace of real estate development is expected to continue growing after Vietnam's entry into the WTO. Major investment firms like Dragon Capital believe this growth will continue through the next decade (Vietnam News, 2007). However, one major competitive disadvantage of Vietnam is that it has some of the highest real estate prices in Southeast Asia (John, 2007a).

Risk: The rapid growth has led to high prices and a shortage of available rental facilities. Office rental prices have risen to \$35.50 a square meter due to a shortage of space in areas like the commercial hub of District 1 in Saigon (Batchelor, 2007). According to HCMC Real Estate Association, the price can actually be as high as \$38 a square meter monthly (Vietnam News, 2007). Real estate firm Jones Lang LaSalle ranks the price of Vietnamese corporate rentals in its central business district as high as those in Bangkok, Jakarta, Kuala Lumpur and Manila, and only slightly less than Singapore (Batchelor, 2007).

Additionally, real estate developers have a myriad of legal requirements that must be met in order to begin new building projects. So much so that one major domestic developer, the Phu Hung Gia Group said, "We are very confused with legal documents and procedures." (Vietnam News, 2007). Foreign companies face even greater legal roadblocks in owning real estate - with over 600 legal documents needed to request their building project permits. Another point of

contention is corruption, where Jones Lang LaSalle ranked Vietnam 56th (the bottom) in its 2006 Real Estate Transparency Index report (Vietnam News, 2007).

Assessment: Government red-tape, corruption, and lack of available real estate present incredible risks for U.S. based companies entering Vietnam. Coupled with the long-term issues of land ownership and difficulties in expanding facilities due to the lack of land, real estate presents a risk factor of **RED**.

D. Ports

Port facilities are the essence of any coastal nation's trading system, yet most of Vietnam's 114 sea ports are small and relatively obsolete. Even the major ports, including the nation's main Saigon port located in Saigon is substandard in comparison to its East Asian contemporaries (Runckel, 2006b). Both the size of the facilities and their maximum capacity is diminutive when contrasted with those of nearby Malaysia and Thailand, both of which can accommodate many more ships that are much larger (see Exhibit 6), according to former State Department official Christopher Runckel (Runckel, 2006b). In addition to the capacity issues, vessels face at least seven different types of fees compared to most other ports in the Southeast Asian region, which charges just one uniform rate per vessel (Runckel, 2006b).

Risk: Although the government is seeking to ease the capacity and technological constraints of the port facilities, this process will take several years to complete. As important, the Hanoi government directs the development and improvement of port facilities to suit its geopolitical needs. While manufacturing businesses may find it essential to have efficient facilities close to existing or preferred sites of their facilities, the government's response is to point out that fine facilities exist in other areas of the country (i.e., undeveloped areas of the north), and to suggest that the company in question should consider locating its operations in those areas in which Hanoi seeks to grow the local economy (Tucker, 2007). Although the government (just as in the U.S.) offers a variety of fiscal incentives in an effort to encourage such relocation, for a company such as Nike these are often outweighed by existing factors including labor (both quantity and quality thereof) and proximity to current facilities (Tucker, 2007). It can be surmised that the substandard road networks outside of the main areas of the country result in companies' considerable hesitation to relocate outside of the main areas.

Assessment: Although the ports system is rapidly improving, it is nonetheless regarded by interested third-parties as one of the weakest links in the Vietnamese economic system such that it is often necessary to ship goods from Vietnam to the ports of neighboring countries before they can be sent on to the end market (Runckel, 2006b). Given Vietnam’s export-driven economy, and the high negative impact of the inefficient port system, we assessed this risk as **RED**.

V. GOVERNMENT AND ECONOMY

Arguably, the stability of a country’s government and its macroeconomic policies and conditions has the greatest impact on the foreign investment in the country. In this sense, Vietnam still faces significant challenges. The “evolving nature of Vietnam’s regulatory regimes and commercial law, combined with overlapping jurisdiction among government ministries, often results in a lack of transparency, uniformity and constancy in government policies and decision on commercial projects.”(Dutta et al, 2007). This section will take a deeper look into the governmental, financial and legal systems of Vietnam.

A. Government Stability and Predictability

The country is governed exclusively by the Communist Party of Vietnam whose major priority for the last 20 years has been to increase economic development and transform a state-owned and directed economy to a market-based economy (Dutta et al, 2007). Since the introduction of the Đổi mới reforms in 1986, the Hanoi government has been committed to simplifying regulations and reducing trade barriers, state monopoly trade, and import and export taxes in order to form a more capitalist economy.

Both Dana Doan and Karl John agreed that the Vietnamese government is very stable (Doan, D., 2007; John, 2007a). The risk for political opposition is minimal as only organizations affiliated with the Communist Party can contest elections (Dutta et al, 2007). Mr. John hinted that while Vietnam is politically stable, there are disadvantages, as the Communist Party controls the national agenda and though the government provides a fair amount of freedom, it retains control and often interferes in business matters (John, 2007a; Dutta et al, 2007). While the government has proven itself willing to consider and implement changes to entice investors, its actions can be unpredictable. A recent example is cited by Christopher Runckel:

“[the] government attempted to severely raise taxes for motorcycle and car spare parts after encouraging investment in these areas with promises to not inhibit these investments. Although these decisions were ultimately reversed by the Prime Minister after strong lobbying...such reversals of business policy unfortunately occur all too frequently.” (Runckel, 2006a).

Risk: The current administration provides continued “political stability and a consensus on reform and liberalization” which is critical if Vietnam plans to continue on its current growth trajectory (Dutta et al, 2007). While the government is stable and their power meets little opposition, there are few checks and balances. Mr. John warns investors to be cognizant of the political environment, understand that the general population is fearful of the government and that foreigners are still thought to be monitored and spot checked frequently. However, since Mr. John’s arrival in 1994, the government has reduced its temperamental flip-flopping of policies and forming strong connections with government officials and local business leaders can secure one’s business with a measurable degree of protection (John, 2007a).

Assessment: Overall, Vietnam’s current government is stable and intensely reform-oriented. There exists a small risk of reactionary change in government policies since there are no checks on the government’s power, but this risk remains low, and so was assessed as **GREEN**.

B. Economy and Financial Stability

Since 1993 Vietnam has achieved incredible annual growth ranging from 6.9% to 8.4%. In 2005, the GDP reached \$53 billion and per capita income \$636 per year, an impressive increase over the 1993 GDP which totaled \$21 billion and per capita income of \$305 per year (Kyodo News International, 2006; Gross, 1994). In 2006, FDI reached USD \$10 billion, the highest rate since Vietnam first began accepting FDI (Runckel, 2006a). 2007 GDP is on pace for a 7.5% year on year growth and all indicators suggest that this trend is unlikely to change in the coming years. The caveat here is that the rapid growth is tempered by a high 7.5% inflation rate. Nevertheless, high revenue collection and a stable budgetary position have helped the government to maintain a relatively low fiscal deficit of only 1% over the past five years (Dutta et al, 2007).

Investors should keep an eye on the rapidly growing banking system, as Vietnam moves from its current cash-based economy with very low consumer credit to an investment intensive market-based global economy (Dutta et al, 2007). The rapid pace of this change can be most visibly observed by noting the Vietnamese stock market, which has far exceeded expectations growing remarkably from a valuation of \$460 million (32 trading companies) in January 2006 to \$8.7 billion (92 companies trading) by December 2006 (Runckel, 2006a). As expected of any emerging economy, the market is highly volatile and market prices are inflated and the market will eventually correct itself (John, 2007b). On April 16th, 2007, the stock market took a major dip below 1,000 points, where 97 out of 109 companies saw losses worrying investors of continuing losses (Deutsche Presse-Agentur, 2007). This rapid and highly unstable growth have led venture capital investors, like Sonny Vu, to express caution about the perceived market bubble and invest carefully as there is a flood of capital without enough NPV-positive projects (Vu, 2007).

Risk: Vietnam's growth potential is soaring and looks as though it will continue to grow and is even outpacing the high 7.5% inflation rate. On the downside, the Vietnamese government has relatively little experience dealing with an economic slowdown, and it is unclear how they would respond, which could have a profound effect on the current trajectory of the economy (Dutta et al, 2007). In addition, a highly volatile stock market that has few regulations means unpredictable returns on local investment and little recourse in the event of fraud.

Assessment: The economy is booming; however, the government's inexperience with a market-based economy as well as a volatile stock market poses moderate risk to companies. Hence we assessed this risk as **YELLOW**.

C. U.S. Trade Relations

After the Vietnam War, the U.S. ended virtually all bilateral trade, humanitarian aid, and financial aid. In 1987, the Vietnamese National Assembly passed the Law on Foreign Direct Investment (FDI), which was a turning point in the development of the country's foreign economic relations (United Nations, 2007). By the early 1990s the U.S. and Vietnam began discussing the renewal of trade relations (Manyin, 2001). Under President Clinton, the U.S. removed the U.S. trade embargo and began talks towards the implementation of a bilateral

agreement (1994-5). In 2001, Vietnam and the U.S. signed a Bilateral Trade Agreement, which was a major step in Vietnam's desire to enter the WTO and join the global market.

Since the Bilateral Trade Agreement, Vietnam's international trade level has increased dramatically, reaching over \$6 billion annually by 2004. Vietnam's exports increased by 128% in 2002 and 99% in 2003; meanwhile the country's imports of U.S. goods also doubled (Runckel, 2005a). In 2006 the U.S. and Vietnam signed a Permanent Normal Trade Agreement and the country received a "Most Favored" nation status which increased U.S. support for Vietnam's eventual entry into the WTO in January 2007.

Risk: The Bilateral agreement signed in 2000 solidified strong investor relations between the U.S. and Vietnam. The 2006 Bilateral Market Access agreement and Vietnam's now-official WTO status reinforce a strong and growing trade relationship between the United States and Vietnam (Runckel, 2006a).

Assessment: Trade relations between the U.S. and Vietnam do not pose a risk to new investors, leading us to assess this risk as **GREEN**.

D. Government Incentives for Foreign Investment

The government has proven itself willing to consider and implement a wide range of changes in order to attract capital, advanced technology and management skills (Russin & Vecchi, 2005). The Ministry of Planning and Industry (MPI) is loosening its control of investment licensing, making it possible for investors to go directly to local levels to file forms (Runckel, 2005b). The government has also offered generous tax exemptions and reductions or payment of compensation. Typically companies receive a two-year tax exemption followed by a two-year reduced tax rate. In line with the goal of attracting advanced technology, Vietnam strongly encourages high-tech firms through additional tax incentives and preferential treatment (Russin & Vecchi, 2005).

Risk: The government greatly simplified the process for foreign investment; however, there is still room for improvement. Companies such as Temasek Holding, do not invest heavily in Vietnam due to the slow regulatory processes (Lee, 2007). Although Vietnam offers attractive

incentives to high-tech industries, these incentives are not as lucrative as those offered by Thailand and China. Given the fierce competition among developing countries to attract foreign investment, Vietnam will have to enhance and restructure its incentive plans to gain a more competitive edge (Runckel, 2005b). Christopher Runckel, believes that if Vietnam can continue to liberalize its foreign investment licensing and open up its economy to investment and trade, “even greater levels of U.S. investment will come to Vietnam” (Runckel, 2005b).

Assessment: While Vietnam has a codified FDI Law, inconsistent enforcement and government actions often create uneven results, which pose a moderate risk to investors. Hence we assessed government incentives as **YELLOW**.

VI. LEGAL ENVIRONMENT

Vietnam’s business culture is heavily based upon relationships and connections (Doan, T., 2007). This relationship-based business culture can foster more corruption due to the resultant lack of transparency. Corruption is a major problem in Vietnam and is often cited as a major impediment to conducting business there (Dutta et al, 2007). Similarly, consistent and even enforcement of existing laws regarding commercial practices and intellectual property remain a significant challenge. However, there has been recent improvement in this area, especially from the highest branch of government.

A. Corruption and Transparency

Studies on corruption and transparency conducted by six different agencies have repeatedly confirmed that Vietnam is one of the most corrupt countries in the world (See Exhibit 7). For example, Transparency International’s Corruption Perceptions Index in 2006 ranked Vietnam 111 out of 163 countries in terms of its perceived level of corruption (Dutta et al, 2007) (See Exhibit 7). Within the Southeast Asian region, only Cambodia and Indonesia were perceived as being more corrupt than Vietnam (See Exhibit 7). In a recently published report on corruption in Vietnam, 77% of enterprises said corruption was the most significant socio-economic problem and 8% of companies estimate informal payments to officials amounted to 1%-10% of total expenditures (Business Anti-Corruption, 2007). The government itself estimates that if it were not for corruption, Vietnam would be growing at 11% per year (Vardy, 2007).

To combat this widespread problem, the new leadership in Hanoi has come out strongly against corruption and further investigations are moving forward. In 2006, Prime Minister Nguyen Tan Dung created and currently heads the new and fairly powerful National Anti-Corruption Committee (Business Anti-Corruption, 2007). Prime Minister Nguyen is a credible and trustworthy figure to lead this effort since he has a reputation of being “Mr. Clean” (John, 2007a). Since this time, his administration has brought a number of bribery and corruption scandals to public attention (John, 2007a).

Risk: Despite the recent, high-profile anti-corruption efforts by the government, the level of corruption in Vietnam is still one of the highest among all Southeast Asian countries. In a study conducted by the IMF, nearly half of foreign and domestic businesses cited the need to better prevent and control corruption as one major area of improvement (Runckel, 2005a). Part of the problem lies in the cultural perception and definition of graft and corruption. Many civil servants, whose wages are very low compared to the private sector, view taking bribes as a way of supplementing their meager income (Doan, D., 2007).

Assessment: Since corruption has such a venomous and chilling effect on business, it remains one of the biggest challenges of conducting business in Vietnam. The likelihood that a company will face corruption, and its highly negative impact, necessitates a risk assessment of **RED**.

B. Commercial Law

As is common with emerging economies, Vietnam’s commercial laws are often nascent, unclear or differently applied (Dutta et al, 2007). In an effort to comply with international legal practice, Vietnam enacted the so-called “2006 Commercial Law” on June 14th, 2005. Two provisions of the 2006 Commercial Law are particularly beneficial for foreign business. An older, 1997 law required foreign businesses to set up only representative offices and/or branches to conduct their commercial activities, but the new law enables foreign businesses to set up foreign-invested enterprises, including joint-ventures and 100% foreign-owned enterprises in Vietnam (D&N International, 2005). Finally, the new law provides for more types of legal remedies in case of breach of commercial contracts (D&N International, 2005).

Risk: While Vietnam has made great strides in efforts to enhance its commercial laws and reduce cumbersome regulations, the government has had considerable difficulty enforcing its current laws. A recent survey conducted by the MPI and International Finance Corporation of 200 foreign and Vietnamese businesses uncovered significant concerns from existing businesses of uneven rules and regulation, bureaucracy, and poor legal enforcement (Runckel, 2005a). There is still a general lack of trust in the legal system, as businesses in Vietnam tend to rely first on negotiated settlements and second on intervention by local bureaucrats or police. Local court systems also tend to rule in favor of Vietnamese companies over foreign companies in 90% of the cases brought to court for myriad reasons (Doan, D., 2007). One reason is that if there is a discrepancy between the Vietnamese and the English versions of a contract, the Vietnamese version (which the judges can read and which are often more favorable to the local party) will prevail (Doan, D., 2007)

Assessment: While the 2006 Commercial Law has removed many legal and administrative barriers for investing in Vietnam, inconsistent enforcement and a corrupt and partial judiciary remain significant obstacles for foreign companies, thus we assessed the state of commercial laws as **RED**.

C. Intellectual Property

On July 1, 2006, Vietnam's new Law on Intellectual Property (the IP Law) came into effect (D&N International, 2006). The new law brings Vietnamese IP law up to international standards and also expands IP protection to govern copyrights, industrial property rights, and plant variety rights, industrial property and copyright (D&N International, 2006). Most importantly, the law significantly increases the enforcement of IP rights and the prosecution of violations of those same rights, which has traditionally been the weakest point of the current IP laws (D&N International, 2006). Prime Minister Nguyen has requested both ministries and provinces to employ concrete measures to improve software copyright protection, which has recently led to a significant crack down (D&N International, 2007). In September 2006, the Inspector of the Ministry of Science and Technology imposed a fine of VND 10.5 million in the first "unfair competition" case on a Vietnamese pharmaceutical company who had used packaging on one of their OTC products that is confusingly similar to a popular drug produced by a French pharmaceutical company (D&N International, 2007).

Risk: Notwithstanding the recent laws and focus made by the government to protect IP, the current state of IP protection in Vietnam is weak. Throughout Vietnam, cheaper and more sophisticated imitations of Western goods, from perfume to bags to apparel, can be readily found. It is likely that this cultural perception that imitation of copyrighted or patented technology or brands is acceptable will extend even to the level of advanced technologies.

Assessment: The government has shown a recent, renewed focus on enforcing the intellectual property rights, however, IP rights are very difficult to enforce. Since many Western companies' core advantage lies in their technology, lack of adequate IP protection can pose a significant risk to its business, thus we assessed this factor as **RED**.

VII. CONCLUSION and RECOMMENDATIONS

While the conventional rationale for investing in Vietnam is to take advantage of its cheap and diligent labor force, we contend this is not the most compelling long-term rationale for investing in Vietnam. Relative to its neighbors, Vietnam possesses unique characteristics that can translate into long-term competitive advantages, in particular its government. The current leadership is stable, pro-growth and favorable to reforms, foreign investment and trade. The labor cost advantage is a reality today, but is quickly disappearing as Vietnam develops. Major challenges also remain for foreign investors in Vietnam, especially in the realm of labor, economy, and the legal environment. We believe a company considering an investment could use our framework to evaluate how the value of the benefits Vietnam offers versus the vulnerability of their individual business model to its issues. For companies that make the decision to invest in Vietnam, we offer the following recommendations to mitigate their risk:

Mitigation against labor issues:

- **Hire and train local college graduates immediately to cultivate talent for managerial positions in future years:** In the labor front, increasing wages, shortage of skilled workers and high turnover in professional jobs are growing concerns, thus companies should have a long-term strategy to increase its pool of managerial talent. In the mean time, they should actively seek expatriates who are willing to move back to Vietnam and consider utilizing the Singaporean

government's "indentured employee" model whereby the government pays for student's higher education in exchange for 4 to 7 years of service.

- **Focus on retention effort to minimize high turnover in high-skill and professional jobs:**

Companies should consider retention effort and design incentives to lock in workers for long term. If an investor's operation requires workers with technical skills, the existing shortage may necessitate bringing temporary workers from outside. Companies may need to arrange extensive training programs for the local workforce and should incorporate this extra cost before deciding to invest in Vietnam.

- **Alternatively, small or mid-sized companies with little international experience should strongly consider sub-contracting manufacturing operations to local companies:**

Medium sized companies, who may not have much international experience, would be advised to follow this practice. One issue with sub-contracting, however, is to ensure that the sub-contractor follows proper rules and guidelines in regards to labor practices. If a firm is looking to sub-contract from Vietnam, it should engage outside NGOs and/or private audit firms to ensure that these rules and guidelines are actually followed.

Mitigation against hiccups in production and distribution due to weak infrastructure:

- **When possible, proactively engage the government in infrastructure planning:**

Amanda Tucker gave anecdotal testimony of her meetings with government officials in Hanoi where she clearly laid out road plans and port projects necessary for Nike's business in Vietnam. Through open dialogue with the government, Nike could ensure its infrastructure needs were prioritized and worked on (Tucker, 2007).

- **In-country real estate consultant/expert may be a wise investment when dealing with real estate contracts:**

According to John, if there are differences in contract interpretation between the English and Vietnamese version, the courts uphold the Vietnamese contract.

Employing an in-country consultant/expert in real estate would help mitigate risk to your high real estate investment due to legal nuisances (John, 2007a). And in general, you should consider having an in-country expert in situations where contracts are deemed necessary.

Mitigation against government unpredictability and corruption:

- **Hire a well-connected consultant to navigate Vietnam's relationship-centric business culture:** In Vietnam's business culture, forming close relationships and gaining influence with government officials and businesses can help safeguard against unpredictability and corruption (John, 2007a).
- **Within legal and ethical guidelines, find alternative ways of dealing with bribery or corruption:** Mr. John advocates creativity and flexibility when approached for bribes by government officials. Refusing to pay bribes could have serious consequences for his business, instead Mr. John agrees to pay "consulting fees" contingent on the official's willingness to write a receipt with details services provided. This approach enables Mr. John to keep an account of his funds, and to protect himself (John, 2007a).

Mitigation against financial volatility:

- **Don't rush into investment projects:** An emerging market such as Vietnam offers invests the potential for high returns at a high risk premium and presents a classic opportunity to diversity a portfolio. Sunny Vu (2007) recommends keeping a close eye on the market and carefully analyzing investment opportunities. There is a flood of capital onto the market, but few NPV-positive projects.
- **Use available market data and insist that potential Vietnamese JV partners provide financial data before entering into a partnership:** Vietnam recently passed new securities rules aimed at improving corporate transparency and curbing market excesses (Vietnam's Stock Market Madness, 2007). Among other measures, the law requires all unlisted companies available for purchase to be audited, to post annual financial reports, and to register stock transfers.

Mitigation against IP issues:

- **Set up a JV with a local Vietnamese party:** One strategy to mitigate IP appropriation or privacy is to set up a joint venture with a local partner. To ensure the partner does not have an incentive to steal ideas and break the partnership, require the party to make its own capital investment in the joint venture.

- **Obfuscate the technology so that it cannot be easily copied:** Spread processes across different plants or even different countries. Produce only a very specialized piece of a technology that cannot be used as a stand-alone and requires other parts.
- **Structure the investment in multiple stages:** In a multi-stage investment, trust and reputation play a big role in the continuation of the project and give Vietnamese partners more incentive to cooperate. Investors should maintain leverage over its Vietnamese partner. For example, an investor might require the Vietnamese company to invest labor or land in exchange for the U.S. capital or technology.

Mitigation against legal uncertainty:

- **Obtain trustworthy and competent local counsel:** Mr. John recommended seeking and obtaining trustworthy Vietnamese legal counsel who can understand the laws, the language and can represent the companies interests (John, 2007a). As Dana Doan (2007) explains, in the instance of two contract versions, one in Vietnamese and one in a foreign language, the courts usually uphold the Vietnamese contract and rule in favor of local companies.
- **Develop a strong labor arbitration council within the company:** By law, labor is required to first resolve their problems through the company's labor arbitration council. The lack of such a council makes it easier for labor to plan a work stoppage.

VIII. CASE STUDY: INTEL IN VIETNAM

On February 28, 2006 Intel announced that it would invest US\$300 Million to build a test & assembly facility on the outskirts of Saigon. Later, Intel announced it will triple the size of the facility with a US\$1 billion investment (Intel, 2006). This investment was the first of such large scale by a technology company in Vietnam and industry analysts questioned the wisdom of this strategy (Balfour, 2006). This case study analyzes the investment rationale and potential risks for Intel's investment decision and the implications for other corporations considering manufacturing investments in Vietnam.

Microprocessor chip manufacturing encompasses two major sets of activities: wafer fabrication and test & assembly. Wafer fabrication plants are highly capital-intensive, costing US\$3-5 billion to construct (Intel, 2005; Semiconductor Fabtech, 2007). Test & assembly plants, in

contrast, are highly labor intensive and employ several thousand workers, but cost a lot less to build (Micron Technology, 2007; National Semiconductor, 2004). As a result, semiconductor manufacturers typically locate their test & assembly plants in countries with low labor costs such as China, Malaysia and the Philippines.

The finalized 500,000 square-foot test and assembly facility for Vietnam will be a world-scale plant when completed. Intel justifies its expanded investment in Vietnam based on economies of scale (Intel, 2006). However, it also reflects a calculation of continued (or heightened) profitability from investment in Vietnam seven months after the initial announcement.

Investment Rationale: At first glance, it appears that Intel's decision to locate in Vietnam might have been driven almost entirely by low labor costs. But we argue that financial incentives from the government and other factors are likely of greater importance. Additionally, factors such as infrastructure or other labor issues outlined in the framework of this paper can introduce risk and increase cost, possibly to a level that might outweigh incentives. We analyze the characteristics of Intel's business model that mitigate these risks for this investment.

Assuming Intel could have chosen to expand its existing site in the Philippines where the per capita Gross National Income is approximately twice that of Vietnam (The World Bank, 2005) and assuming this translates into direct labor costs, the cost savings for the plant's estimated 4,000 employees would amount to US\$2.7 Million per year due to its location in Vietnam. This figure represents less than 0.3% of the estimated capital cost and only 0.05% of the estimated annual turnover of US \$5 billion. So while savings in direct labor is a benefit of locating in Vietnam, it is surprisingly small relative to the scale of the proposed operations. We find it unlikely that the genesis for such a large investment would lie with such marginal savings, considering the inherent advantages of the Philippines such as widespread fluency in English and Intel's in-country operating experience. Thus, we believe the main driver for Intel's investment is not solely due to cheap labor costs.

The nominal corporate tax rate in Philippines is 35%, while the rate in Vietnam is 28% (KPMG, 2006). However, it is very common for developing countries to offer generous tax incentives to

attract foreign direct investment. Consider an illustrative calculation where Intel was offered a corporate tax rate 5% lower than its best alternative and assuming a conservative 10% gross margin on previous estimate of US \$5 billion per year in finished goods, the impact of a 5% reduction in the tax rate is US \$25 million per year. This number is nearly an order of magnitude greater than the estimated savings from direct labor. Therefore, we believe a superior package of government and tax incentives more likely attracted Intel to locate and then expand its investment in Vietnam. Moreover, while the example above is only illustrative, the estimate may actually be conservative when one considers the perceived importance of the first major investment by a foreign technology company in Vietnam and the “badge value” associated with Intel. While incentives to attract investment are common throughout the developing world, we believe that the Intel case indicates that the current climate is particularly accommodating in Vietnam for projects with high prestige value.

Risk Assessment: As highlighted in the Assessment section of the paper, the lack of high-capacity port facilities, poor quality of roads and difficulty in finding professional/technical workers can be serious barriers to foreign investment in Vietnam. However, we argue, that Intel’s business model mitigates these risk factors. Intel’s microprocessors typically sell for several hundred dollars apiece and occupy only a few cubic inches. Similarly, several hundred thousand dollars worth of the wafers used as inputs could be packaged in a cubic foot of space (Intel, 2007). The high value-density of the inputs and outputs make air freight viable. This is reinforced by the rapid depreciation of semiconductor components due to the pace of change in the industry – the high transit time of ocean freight would add substantial cost to the business model. Saigon, where Intel’s plant will be located, is well-served by air carriers whose cargo capacity is currently underutilized (Putzger, 2006). The lack of sophisticated port facilities is not an issue for Intel, as they would not be expected to substantially rely on them. Poor roads are also not a problem because of the proximity of Tan Son Nhat airport to Intel’s proposed facility.

Finally, tapping the large network of western-educated overseas Vietnamese (called Viet Kieu) who may be attracted to return to their home country is a viable alternative to the availability of skilled labor problem. Intel’s Vietnam Country Manager is such an individual, and stated that he

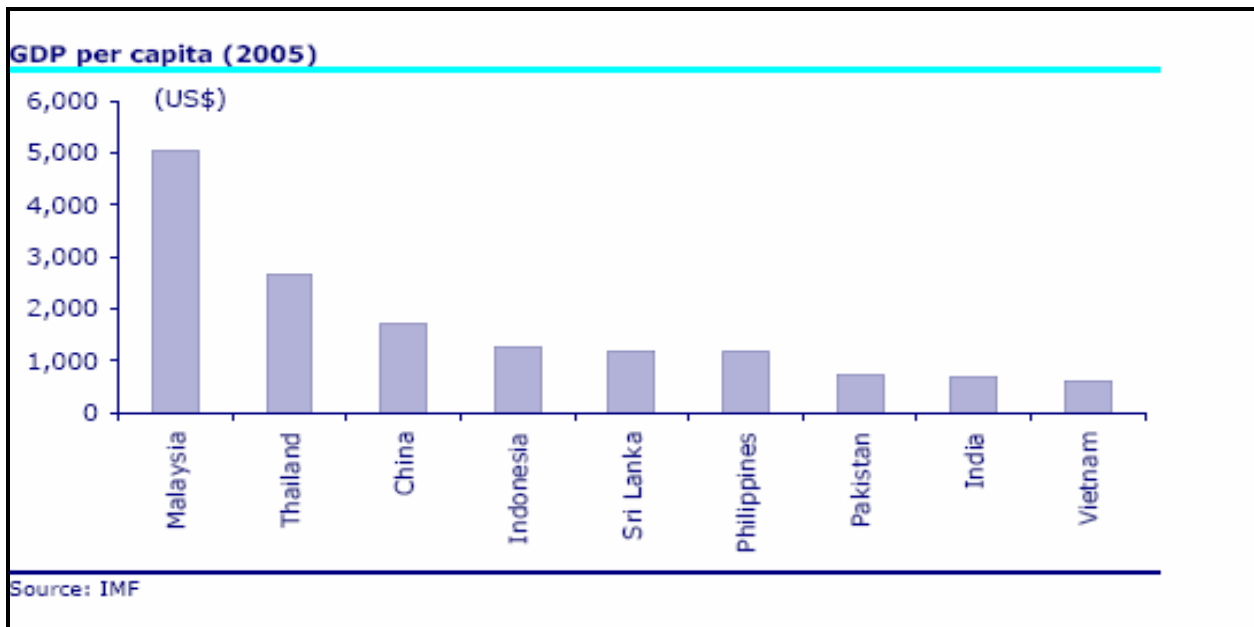
had “already begun receiving e-mails from overseas Vietnamese within Intel looking to come back to the country” (Balfour, 2006).

Low standards for intellectual property protection and enforcement in Vietnam would appear to be a major issue for a technology company such as Intel. While this would certainly be a concern for them, most of the intellectual property resides in the design and manufacture of the microprocessor, which occurs outside Vietnam. The manual nature of the test and assembly operation means that there is relatively little intellectual property at risk. Indeed, Intel operates these has successfully operated test and assembly plants in China where intellectual property protection is also a major concern.

Conclusion and Application to a Potential Investor: We conclude that in addition to the low labor costs that represent the “conventional wisdom” for manufacturing investments in Vietnam, the government is also currently motivated to grant incentives for businesses with high “badge value”. Other marquee Western brands should consider negotiating with the government for placing their next capacity expansion in Vietnam. This consideration, however, should be subject to an evaluation of their sensitivity to the major issues of port capacity, road quality, availability of skilled labor and other risks outlined in this paper.

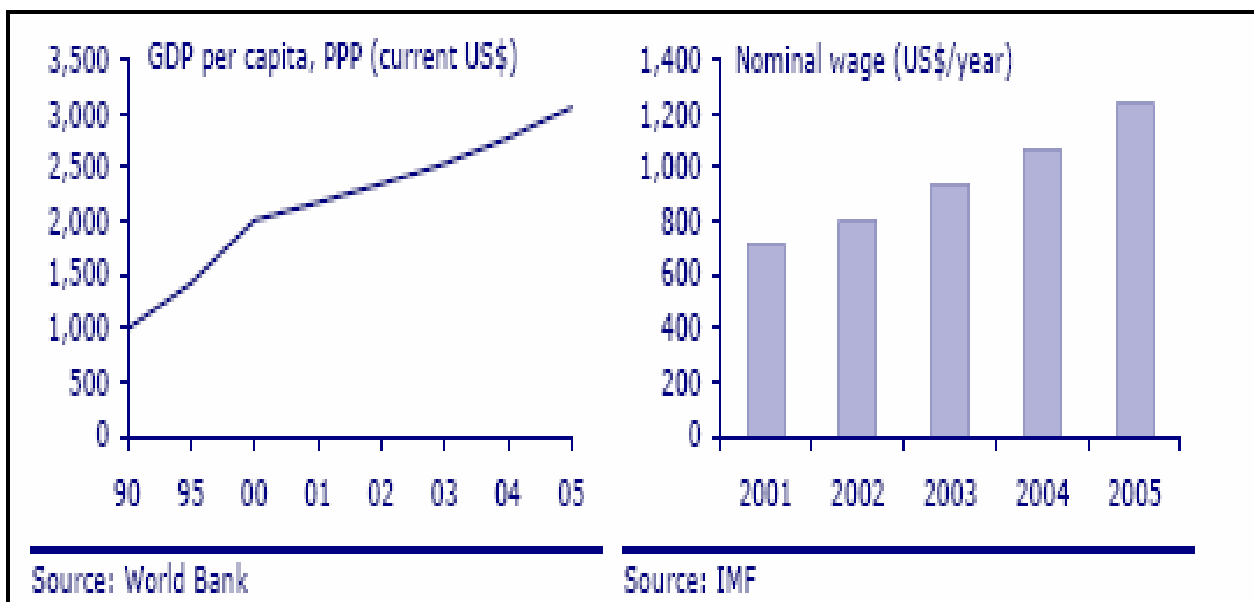
Dell’s notebook computer assembly operation is an example of a good candidate for investment in Vietnam. Dell currently assembles sits notebooks in Malaysia and Ireland (Krazit, 2006). The strength of the Dell brand and its position as a downstream addition to the computer value chain would likely be highly attractive to the Vietnamese government. Notebook assembly operations are highly labor intensive, but require very few of the workers to be skilled. Dell might be able to employ a similar strategy as Intel to recruit the Viet Kieu within their organization. Its “build to order” business model also necessitates air freight, and it could co-locate with Intel in the Saigon Hi-Tech Park. Co-location would allow pooling of resources for land shipments from the airport and near-zero lead time for its microprocessor supply needs. Moreover, Dell’s strategic location in Vietnam would give it close access to the large emerging population of young, middle-class consumers who are eagerly embracing technology located in Vietnam, China, India and other Asian countries.

Exhibit 1: Per Capita GDP comparison for Asian countries



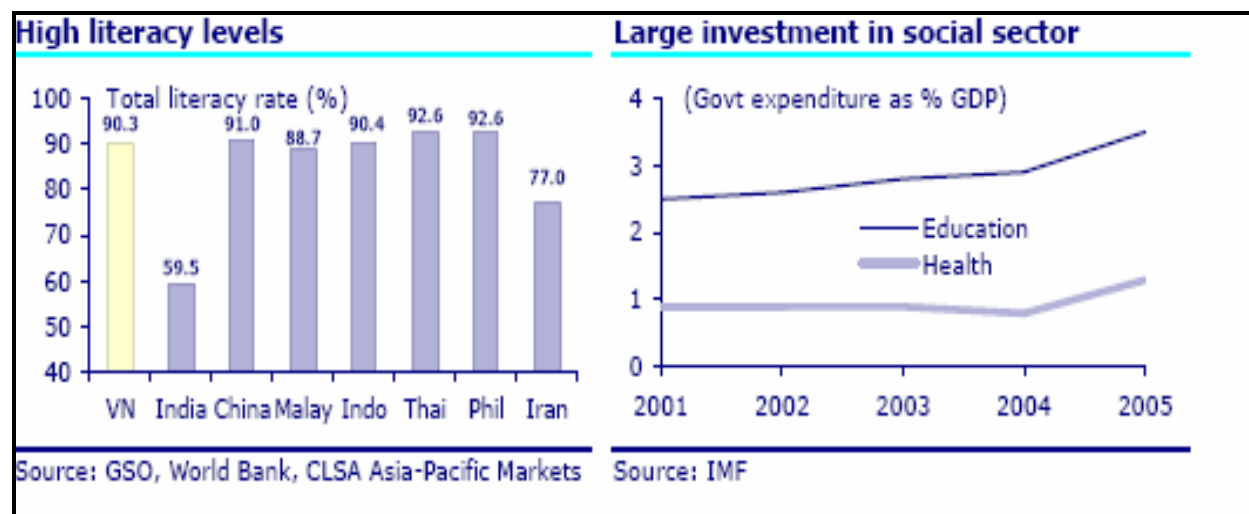
Source: Dutta et. al, p.78

Exhibit 2: Per Capita GDP and Wage Growth in Vietnam



Source: Dutta et. al, p.14

Exhibit 3: Literacy Rate Comparison & Vietnam's Educational Expenditure



Source: Dutta et. al, p.13

Exhibit 4: Wage Distribution in Vietnam

	In Government	Out of Government	SOE's	Private Firms	Foreign Enterprises	Self-Employed
All	9,568	3,099	10,572	5,143	11,993	1,788
Professionals	10,107	13,539	13,737	14,581	21,201	4,532
Administrative	5,971	11,515	10,016	9,025	13,770	12,088
Technicians	9,574	6,483	10,244	6,457	10,099	4,864
Workers	6,095	2,206	6,915	4,013	9,853	1,598
Agriculture	7,230	3,981	8,173	5,767	6,000	3,412
Employment Share (%)	5.8	94.2	4.7	22.2	0.7	66.5

Reproduced from Vietnam Development Report 2005 published on November 22, 2004 by Poverty Reduction and Economic Management Unit (East Asia and Pacific Region) of World Bank.

World Bank's own calculations based on 2002 Vietnam Household Living Standard Survey (VHLSS)

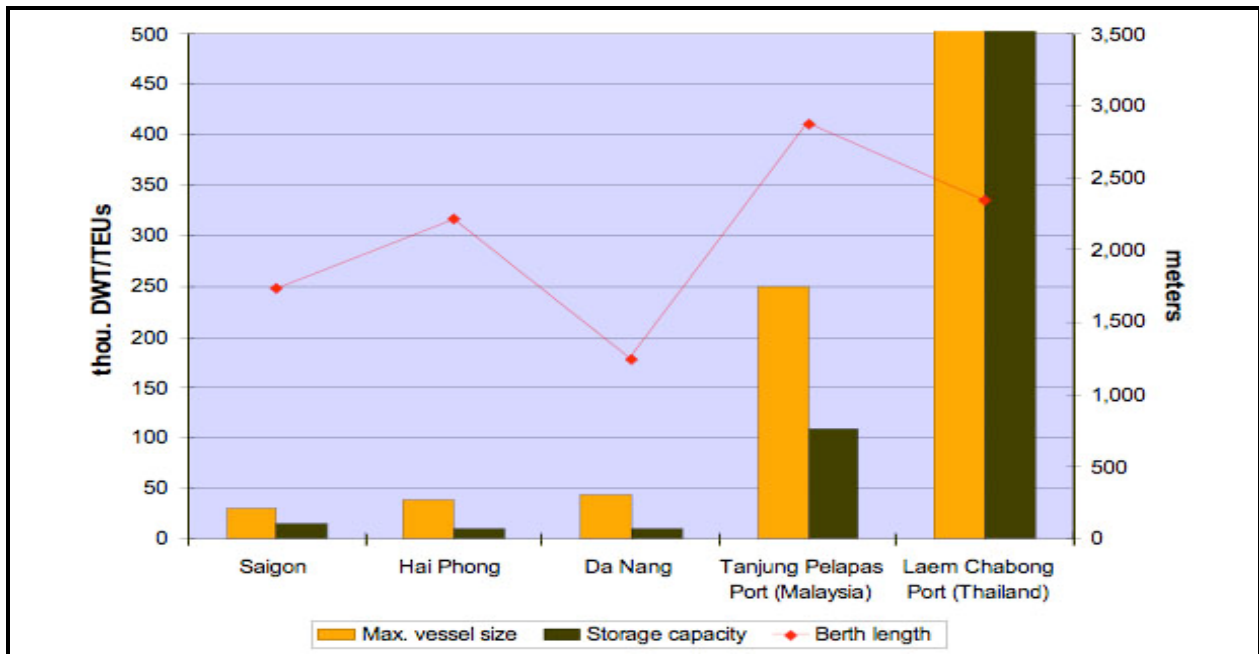
Note: Figures include wages and cash benefits, and are expressed in VND 1000 per year (1 USD = 16,000 VND). Farmers and unpaid family workers are excluded from the analysis.

Exhibit 5: Foreign Direct Investment



Source: Dutta et. al, p.79

Exhibit 6: Comparison of Seaports in Southeast Asia

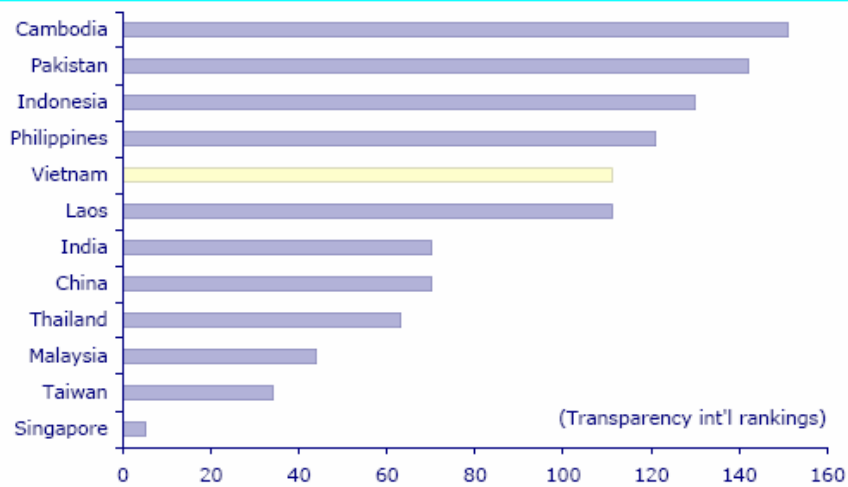


* A vessel's storage capacity is measured by dividing its deadweight tonnage (DWT) by the number of 20*8*8 containers (or equivalent) that it can carry. The results of this measurement can be examined by comparing the 'Storage Capacity' bar with the scale along the left side of the graph. Similarly, a vessel's maximum size is determined by its length, which can be examined by comparing the 'Max. Vessel Size' bar with the scale along the right side of the graph.

Exhibit 7: Corruption in Vietnam

Figure 91

Corruption remains high . . .



Source: Transparency International (2006)

Vietnam's global scorecard is less than spectacular

Organisation	Survey	Ranking
Heritage Foundation	Index of Economic Freedom, 2007	138/157
The Economist	Worldwide Quality-of-life Index, 2005	61/111
Reporters Without Borders	Worldwide Press Freedom Index, 2006	155/167
Transparency International	Corruption Perceptions Index, 2006	111/163
United Nations Development Programme	Human Development Index, 2006	109/177
World Economic Forum	Global Competitiveness Report, 2006	77/125

Source: CLSA Asia-Pacific Markets

Source: Dutta et. al, p.28-29

REFERENCES

- Abu Bakar, Mohamad Ismail (2007), *Interview*. Kuala Lumpur, Malaysia, 20 March 2007
- Alsop, R, Bertelsen, M, and J. Holland. "Power Strategy Managing Growth" 2006. April 2007. <<http://siteresources.worldbank.org/INTEAPINFRASTRUCT/Resources/Electricity.pdf>>.
- Asian Development Bank. "Technical Assistance. Socialist Republic of Viet Nam Expressway Network Development Plan Project" November, 2005. Asian Development Bank. April 2007 <<http://www.adb.org/Documents/TARs/VIE/38023-VIE-TAR.pdf>>
- Balfour, Frederik (2006), "Intel: Good Morning, Vietnam", BusinessWeek Online, 28 February 2006.
- Batchelor, M. "Real estate in Vietnam a big attraction for developers" 2007. International Herald Tribune. March 2007. <<http://www.iht.com/articles/2007/03/19/bloomberg/sxindochina.php>>
- BBC News. "Vietnam's WTO membership begins" 2007. BBC News. March 2007. <http://news.bbc.co.uk/1/hi/business/6249705.stm#>
- Binh P. "Doi Moi - A Selected Bibliography of Vietnam's Economic Transformation 1986-2000" 2005. The Australian National University. April, 2007 <coombs.anu.edu.au/Biblio/biblio_doi_moi.html>
- Bùi, Van Tien (2007), *Interview with authors*, Ho Chi Minh City, March 2007.
- Business Anti-Corruption Portal. "Vietnam Country Profile." April 2007. <http://www.business-anti-corruption.com/normal.asp?pageid=148>
- CNN World News. "Nike reveals problems at Vietnam Nike factory" November 1997 <<http://www.cnn.com/US/9711/08/nike.vietnam/index.html>>
- Collier, A. "Electric Power Trade Mission to Philippines, Vietnam & Thailand" 2006. US Commercial Service. April 2007. <<http://www.buyusa.gov/kern/trademission2006power.html>>.
- Deutsche Presse-Agentur. "Vietnam stock exchange slides 3 per cent to below 1,000 benchmark" 2007. Deutsche Presse-Agentur. <http://news.monstersandcritics.com/business/news/article_1292037.php/Vietnam_stock_exchange_slides_3_per_cent_to_below_1000_benchmark>
- D&N International, "Vietnam Intellectual Property Law: A Major Milestone in its International Integration process" January 2006. D&N International. April 2007 <<http://www.dnlaw.com.vn/Home/index.php?mdl=NE&typ=news&id=45>>

D&N International, “Vietnam’s New Commercial Law: More Integration into the World Economy” September 2005. D&N International. April 2007
<<http://www.dnlaw.com.vn/Home/index.php?mdl=NE&typ=news&id=18>>

D&N International, “Vietnam to Improve Protection of Software Copyright in State Organ,” D&N International. March 2007. April 2007
<<http://www.dnlaw.com.vn/Home/index.php?mdl=NE&typ=news&id=85>>

Doan, Dana (2007), *Interview*. Ho Chi Min City, Vietnam, 14 March 2007

Doan, Tom (2007), *Interview*. Ho Chi Min City, Vietnam, 14 March 2007

Dutta, A. et al., “On the Road in Vietnam; Sizing up the next Asian Tiger” (2007) CLSA Asia-Pacific Markets.

Economist Intelligence Unit – Vietnam Country Commerce Report (April 2006)
<http://www.eiu.com/report_dl.asp?issue_id=390371224&mode=pdf>

Gross, A. “Vietnam - A Hot Prospect For The Medical Device Industry” 1994. Pacific Bridge Medical. April 2007.
<<http://www.pacificbridgemedical.com/publications/html/VietnamDec1994.htm>>

Hayes, Bruce J. “Six Sigma Critical Success Factors” 2000-2007
<<http://www.isixsigma.com/library/content/c020415a.asp>>

Intel, Inc., “Intel To Build New 300 mm Wafer Factory In Arizona”, 25 July 2005. Company Press Release, 11 April, 2007.
<<http://www.intel.com/pressroom/archive/releases/20050725corp.htm>>

Intel, Inc., “Intel Expands Investment in Vietnam”, 10 November 2006. Company Press Release, 11 April, 2007. <<http://www.intel.com/pressroom/archive/releases/20061110corp.htm>>

Intel, Inc. (2007), Intel investor relations, Accessed 11 April 2007. <<http://www.intel.com>>

John, Karl (2007a), *Interview*. Ho Chi Min City, Vietnam, 14 March 2007
<<http://www.tckgroup.com>>

John, K. “Shares on a tear in Vietnam”. 2007b. Asia Times Online. April 2007. <http://www.atimes.com/atimes/Southeast_Asia/ID19Ae01.html>

Lee, Bridget (2007), *Interview*. Singapore, 22 March 2007

KPMG International (2006), “KPMG’s Corporate Tax Rate Survey, An International Analysis of of Corporate Tax Rates from 1993 to 2006”, Accessed 11 April 2007.
<<http://www.kpmg.com/NR/rdonlyres/D8CBA9FF-C953-45FA-940A-FAAC86729554/0/KPMGCorporateTaxRateSurvey.pdf>>

Krazit, Tom “Dell bucks the notebook-outsourcing trend”, 10 November 2006 CNET news.com. 11 April 2007. <http://news.com.com/Dell+bucks+the+notebook-outsourcing+trend/2100-1005_3-6134256.html>

Kyodo News International. “Vietnam posts 8.4% GDP growth in 2005, Kyodo News International” (December 2006) April 2007 <http://www.findarticles.com/p/articles/mi_m0WDP/is_2006_Jan_2/ai_n15991061>

Manyin, M. “CRS Report to Congress: The Vietnam-U.S. Bilateral Trade Agreement” December 2001. Congressional Research Service. The Library of Congress. April 2007 <<http://www.usvtc.org/info/crs/bta-dec01.pdf>>

Micron Technology Inc., (2007) “Micron Technology Opens New Manufacturing Facility in China”, Company Press Release, April, 2007. <<http://www.micron.com/about/news/pressrelease?id=668B344AEFA2B68E>>

Pasek, A. “China-Vietnam Power Transmission Line Operational” (2006) Xinhua News. April 2007. <<http://www.china.org.cn/english/international/182279.htm>>

Putzger, I. “Vietnam Rising”, May 2006. Air Cargo World Online. 11April, 2007. <http://www.aircargoworld.com/regions/pacific_0506.htm>

Rama, Martin (2007), *Telephone Interview*. Evanston, USA, 28 February 2007

Riedel, James, and Quang, Phan. “Update of Bilateral Trade in 2003 Between Vietnam and the United States” 2003. Embassy of the United States of America in Hanoi, Vietnam,

Runckel, C. “12 Economic Highlights in Vietnam in 2006” 2006a. Runckel & Associates. Business-in-Asia. April 2007 <http://www.business-in-asia.com/vietnam_economic_highlights.html>

Runckel, C. “Ports in Vietnam: Stunting Amid Economic Development” 2006b. Runckel & Associates. Asia-in- Business. April 2007. <http://www.business-in-asia.com/ports_in_vietnam.html>

Runckel, C. “Vietnam’s Business Outlook for Early 2005” 2005a. Runckel & Associates. Business-in-Asia April 2007. <http://www.business-in-asia.com/vietnam_business_2005.html>

Runckel, C. “Vietnam – Open for Business” Runckel & Associates. 2005b Business-in-Asia April 2007. <http://www.business-in-asia.com/vn_industrial.html>

Russin & Vecchi (2005) “Setting UP and Operating In Vietnam” 2005. Russin & Vecchi, Ilc. April 2007. <http://www.amchamhanoi.com/site/downloads/Biz_setup.pdf>

Semiconductor Fabtech, “UMC breaks ground on \$5 billion 300mm fab”, 08 January 2007. Semiconductor Fabtech, April 11, 2007. <<http://www.fabtech.org/content/view/2331/2/>>

Spears, Mark (2007), *Telephone Interview*. Evanston, USA, 16 February 2007

Thanh Nien News “Labor strikes hit South Vietnam”, April 2007. Thanh Nien News. April, 2007. <<http://www.thanhniennews.com/business/?catid=2&newsid=26786>>

United Nations (2007) “Foreign Direct Investment in Vietnam: An Overview”, April 2007 <http://www.un.int/vietnam/dev_bus/Foreign%20direct%20investment%20in%20Vietnam.htm>

The World Bank, Vietnam Data & Statistics, 2005; Philippines Data & Statistics, 11 April 2007. <<http://go.worldbank.org/KPB5TK9CF0>>

TMC Net. “Labor and Education: Vietnam Targets 40% Increase in Trained Workforce by 2010”, January 11, 2007. TMC Net. <<http://www.tmcnet.com/submit/2007/01/11/2239261.htm>>

Tre, Tuoi and Dong, Nguoi Lao, “Vietnam Education set for Overhaul to Meet Employer’s Needs”. February, 2007. Thanh Nien News April 2007 <<http://www.thanhniennews.com/education/?catid=4&newsid=24930>>

Tucker, Amanda (2007), *Interview*. Ho Chi Min City, Vietnam, 14 March 2007

United States Central Intelligence Agency. April 2007. *CIA World Factbook*. April, 2007. <<https://www.cia.gov/cia/publications/factbook/geos/vm.html>>

Vardy, N. “Investing in Vietnam: Good Morning” 2006. The Global Guru, April 2007. <<http://www.theglobalguru.com/article.php?id=72&offer=GURU001>>

Vietnam Ministry of Foreign Affairs. “General information about Vietnam’s economy”, April 2007 <http://www.mofa.gov.vn/en/tt_vietnam/nr040810155228/index_html/view>

Vietnam News. “Higher Income heats up Real Estate Market” 2007. Vietnam News. Accessed April 2007. <<http://vietnamnews.vnagency.com.vn/showarticle.php?num=02ECO310307>>

Vietnam News. “VN Plans to Ramp up Highway Construction” 2004. Vietnam News. Accessed April 2007. <<http://vietnamnews.vnanet.vn/2004-12/07/Stories/05.htm>>

Vu, Sonny (2007), *Interview*. Chicago, USA, 25 February 2007

Zesiger, Carey (2007), *Interview*. Ho Chi Min City, Vietnam, 14 March 2007

