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ABSTRACT

The region of South East Asia has developed over the past several years as one of the most rapidly growing aviation markets in the world. Despite the latest economic recession around the world, South East Asia is still reaching substantial growth. With the amount of flexible income increasing for the most inhabitants of the region, the aviation trade can expect to continue this movement. Singapore has been the dominant hub in the region for many years, however, Vietnam is contemplating the practicality of investing in a new airport that they hope would eventually challenge Singapore's current superiority.

KEY WORDS

Vietnam, Aviation, Aeronautical, Aerospace

INTRODUCTION

In 2006, the then Prime Minister of Vietnam, Mr. Phan Văn Khải, revealed the the construction of a new international airport for Ho Chi Minh City had been approved. The current airport, Tân Sơn Nhất International Airport (SGN), built in the 1930s, is to become the domestic terminal while, the newly announced airport, Long Thanh International Airport, will become Ho Chi Minh City's only international airport terminal, and also a hub passenger/cargo airport for Vietnam and, if all goes as planned, for all of the southeast Asian region. The original purpose was also targeted at making Long Thanh International Airport, the top airport hub for the entire region sometime during the second half of the 2030s. That is, an airport predicted to compete, or ideally replace the current regional hub status of Changi International Airport in Singapore (SIN), or the secondary hub status of Bangkok International Suvarnabhumi Airport (BKK) in Thailand and Hong Kong International Airport (HKG) in China's SAR (Thanhnie News, 2015).

Upon discovering this ambitious plan, this paper has been cultivated with the intention of researching the aeronautical viability of Vietnam's original objective in approving building Long Thanh International Airport. The airport was expected to be constructed in three separate phases over the span of 34 years. This paper examines the socio-economic dynamics of this mammoth undertaking. Particularly, in debating and evaluating the claimed intention and true practicality for this new airport to eventually be on a competitive level with the Singapore Changi International Airport (Greenman & Carreras, 2016).

Vietnam is a member of the following two regional organizations:

1. The Association of South East Asian Nations, ASEAN, where all 10 southeastern Asian countries belong with the pursuing objective (among other specified aims, purposes and fundamental principles) of accelerating

economic growth and social progress of member states through the expansion of trade, transportation and communications facilities, within a frame of close and beneficial international and regional cooperation. (ASEAN, 2015)

2. The Asia-Pacific Economic Cooperation, APEC, where 21 selected member nations located on each side of the Pacific Ocean, established in order to leverage a sustainable and integrated economic growth for the peoples of the region, by collaborating effectively in the greater use of the primary economic activities, and by expanding trade, improving transportation and communications facilities in order to raise the standards of living of peoples of member countries. It also promotes investment in goods and services across borders through the facilitation of trade and the alignment of regulations and standards across the region. (APEC, 2015).

As a participant in these two regional memberships, this research paper focuses on an analysis of the aeronautical industries of Vietnam. This study is framed on the premise that while Singapore developmental goals are aimed at maintaining its regional advantage in airport/airline socio-economics, Vietnam is considering the viability of investing in a new airport that will eventually challenge Singapore's current supremacy (Greenman & Carreras, 2016).

VIETNAM FRAMED

The Socialist Republic of Vietnam is a constitutional communist country stretching over 1,600 km along the eastern coast of the Indochina Peninsula in Southeast Asia. It is 331,210 sq. km in size, a population of over 93 million and a population density of 280 inhabitants per sq. km. The country was under Chinese 200 BC to AD 938. It was a feudal independent dynastic country from 938 to 1858. The French ruled it on-and-off from 1858 to 1954 when the country was divided into a Communist North Vietnam and a market-oriented (capitalist) US-supported South Vietnam. Eventually, with the departure of the American forces from South Vietnam in 1975, the country was unified into its present geographic and socio-political structure. The political capital of the country is Hanoi; the former capital of North Vietnam; however, the economic engine of the country Ho Chi Minh City, the former Saigon and capital city of South Vietnam. Other major cities are Haiphong (north), Can Tho (south), and Da Nang (Central Vietnam).

Political System

Even though as per the Constitution of 1992 it endows all Vietnamese with equal rights in all political, economic, social and cultural areas inclusive of religious choice, family affairs, and freedom of movement and residence, the country still has a monolithic political system where the Communist Party of Viet Nam establishes itself as the vanguard of all Vietnamese and of the whole nation. Yet, as from 1986, Vietnam has undergone a process of economic renovation by substituting the highly subsidized centrally-planned economic system with a socialist-oriented market economy (social capitalism) aimed at the industrialization, modernization, diversification of a multilateral development emphasized

with economic external relations with an open-door, world integration policy (Embassy, 2015).

State of the Economy

By 2009 Vietnam achieved economic growth of 5.93% exceeding its own national goals and for that year considered among the fastest growing economies in the world (Focus Economics, 2014). At an expected growth rate of 6.03% for 2015, Vietnam continues to show consistent growth rates in all sectors of the economy, inclusive of agriculture, forestry, fisheries, industry, construction, and services (Nguyen, 2015). Also, since the implementation of the open-door economic policy, Vietnam has signed numerous trade and economic agreements with the EU (1992), APEC membership (1998), ASEAN free trade agreement (2001), sealing a US-Vietnam bilateral trade pact (2001), and joining the WTO as its 150th member in 2007.

As a developing country, during the last decade Vietnam has been rising as a leading agricultural exporter and an alluring foreign investment destination. Vietnam's main agricultural exports are rice, high quality coffee and tea, black pepper, cashews, rubber, and fisheries; however, the manufacturing sector (furniture, garments and footwear), as well as information technology and high-tech industries (crude oil, telephones, electronics, and computers) continue to have an accelerated part in the growth of Vietnam's economy. The main destination markets of Vietnamese products are Japan, USA, China, Germany, South Korea, Malaysia, UAE, UK, and Thailand. On the other hand, Vietnam's main imports are machinery, transportation equipment, chemicals, fuel, livestock, and manufactured goods such as medicaments, cotton, and specialized machinery. The main imports are brought from China, South Korea, Japan, India, Singapore, Thailand, Malaysia, and USA.

Gross Domestic Product

For more than a decade GDP has consistently increased in a yearly basis, even though from 2002 onward, there were substantial decreases in GDP growth rates as from 2008. In 2007 the GDP growth rate was 8.46%, dipping to 6.18 % in 2008 and down to 5.93% in 2009. The growth rate touched bottom in 2012 at 5.01%, and began climbing up as from 2013 (Focus Economics, 2014). The 2015 expected growth rate is 6.03%. Nonetheless, the per capita GDP has been growing notably every single year for the past fifteen years; even during the period of world recession from 2008 to 2011. In 2002 the per capita GDP was US\$586.09 and consistently growing to a 2014 per capita GDP of US\$1,028.62. The overall GDP in 2013 was of US\$171.4 billion, and the 2014 growth projection of 5.4% is expected to bring it up for that year to US\$180.65 billion, with continued projections of around US\$194 billion (2015), US\$450 billion (2020), and US\$775 billion (2050).

ECONOMIC IMPACT OF THE AVIATION INDUSTRY IN VIETNAM

According to CAPA- Centre of Aviation (2015), the world's leading provider of independent aviation market intelligence, Vietnam's aviation market is considered to be undergoing extremely dynamic growth with high-potential for continued progression.

Even as Vietnam continues to face declining terms of trade for its agricultural products, and high levels of protection against manufacturers, as many other developing countries, Vietnam has turned to tourism and education as possible alternative sources of growth. Many of the resources of Vietnam have been devoted to the provision of airports, local transport infrastructure and hotels, all of these mostly aimed at attracting the international tourism market.

Tourism

The ASEAN Open Skies policy came into effect on January 1, 2015 intended to increase regional and domestic aviation connectivity among its ten member nations. The main purpose is to integrate production networks and enhance regional trade and tourism by allowing the airlines of these ten countries to fly freely throughout the region via the liberalization of air services under a single, unified air transport market. The aviation industry in Southeast Asia has seen strong growth due to the popularity of budget carriers in the region, as well as to the continued growth of an educated middle class with an increasing appetite for travel at affordable prices that have been kept down due to the ongoing low oil prices keeping rising costs at bay. For countries such as Vietnam, the Journal of Development Studies points out that tourism has become a major economic activity contributing at least as much foreign currency than traditional primary commodity exports such as agriculture, livestock, fisheries, forestry, and mining. In essence, travel and tourism are activities that enormously impact the economic and social development of a country; opening it up for business, trade and capital investment, creating jobs and a more entrepreneurial-minded workforce while, at the same time, valuing heritage and cultural worth.

Employment

In essence, the Air Transport Action Group (ATAG, 2015) recognizes how the aviation industry is a vital contributor to sustainable economic development. It does this by facilitating tourism and trade, by generating economic growth, by creating and providing jobs, by increasing revenues from taxes, and by fostering the conservation of protected areas. In Vietnam there are scarce labor related statistics directly associated to the aviation industry, however, there is a clear awareness by researchers at the University of Economics in Ho Chi Minh City, that there have been direct impacts in employment expansion in airline and airport operations, aircraft maintenance, air traffic control and regulation, and in all activities serving air passengers such as check-in, baggage handling, on-site retail and catering activities. Additionally, there have been indirect labor benefits of jobs linked to aviation fuel suppliers, construction companies, shuttle and taxi services, IT services, accountancy services, etc.

Socio-Economic Contributions

The International Air Transport Association (IATA, 2007) forecasters estimate that Vietnam's aviation market to be the world's 7th fastest-growing; with growth picking up in 2013 and expected to continue unabated up to 2017 and beyond. Vietnam has seen annual growth rates of nearly 7% for international passengers, and over 6.5% in freight. According to the general director of IATA, Vietnam is not only a dynamic and rapidly growing aviation market, but that the continued successful development of its aviation

industry will eventually pay big dividends to the Vietnamese economy beyond the 2014 contribution of US\$6 billion to the GDP of the country while supporting close to 250,000 Vietnamese jobs. By 2014, Vietnam's passenger traffic had grown over 96% since 2008 (CAAV, 2015).

Nonetheless, the continued growth challenges for Vietnam in the air transport sector are to concentrate improvement strategies in three main areas: airport infrastructure, passenger experience, and cargo shipment and delivery. To improve the current low ranking of Vietnam in IATA's Infrastructure Index, the government is investing in expansion programs at the Hanoi, Da Nang, and Ho Chi Minh City airports, with the vision of a brand new international airport expected to be ready by 2025 just 50 km south of Ho Chi Minh City. Additionally, the central government in Hanoi is considering some degree of airport privatization in Vietnam so as to ensure access to direct capital investment and management.

Regarding enhanced passenger experience, Vietnam is in the process of improving viability of domestic and international routes and to reap further benefits from enhanced connectivity and increased traffic. Furthermore, there are suggestions to implement a Fast Travel Program that will not only ease present cumbersome visa requirements for international passengers, but by also implementing all six Fast Travel initiatives covering check-in, self-tagging of baggage, document checks, flight rebooking, self-boarding, and bag recovery.

Finally, freight services may also see improvement with the implementation of e-freight through the adoption of e-Air Waybill (e-AWB) which will bring about greater efficiencies with the use of electronic document of carriage, and paving the way for freight forwarders to increase cargo volumes at lowered costs of air transport. Currently, cargo movement in Vietnam represents 25 percent of overall trade by value, or around US\$30 billion (Tuoi Tre News, 2014).

AIRLINES SERVICING VIETNAM

The Civil Aviation Administration of Vietnam (CAAV, 2015) is the aviation authority under the Ministry of Transportation of Vietnam, handling and regulating civil aviation matters throughout the country by managing airports and regulating airlines flying Vietnamese skies. Not long ago, flying in Vietnam was constrained mostly to two available options, boarding Vietnam Airlines, the state-owned flag carrier, or the budget airline it mostly owns, Jetstar Pacific. Nonetheless, as new private Vietnamese airlines have entered the air transport market, more international airlines are choosing to fly into/from Vietnam, and with the introduction of the Single Aviation Market (SAM) for the 10 member nations of ASEAN, Vietnamese aviation authorities are finding new challenges in properly managing and regulating the growing number of airlines servicing the country.

Domestic Carriers

Currently, there are four major Vietnamese airlines servicing domestic and international cargo and passenger routes for Vietnam. These four airlines are the following:

Vietnam Air Services Company (VASCO)

Headquartered in Ho Chi Minh City since 1987 and now independent of its original parent company Vietnam Airlines, VASCO operates scheduled passenger transportation mostly throughout Vietnam's southern provinces. Also, aside of transportation of passengers on domestic routes, VASCO is available for providing domestic and international cargo transportation routes upon request, as well as charter domestic and international air service on request by airplane or helicopter. Additionally, VASCO flights are made available for scientific research, aerial photography, geological surveys, search & rescue missions, oil industry, environmental survey, calibration for air navigation equipment, power line development, etc.

Jetstar Pacific Airlines

With its hub in Ho Chi Minh City from where it operates since 1991, along with chartered flights, scheduled domestic and international services. The airline was originally operated under the government-owned Vietnam Airlines Corp., but in 2007 sold a 30% minority stake to the private Qantas Airlines Company of Australia. As a low carrier air service provider Jetstar Pacific only operates domestic routes inside Vietnam; however, it has plans to eventually establish international routes to Cambodia and Thailand. Jetstar Pacific has embarked on a fleet modernization plan since 2009.

VietJet Air

With hub in both Hanoi and Ho Chi Minh City, and a focus interest in the central city of Da Nang, VietJet Air is a private low-cost airline established in 2007 but actually launched until December 2011 due to the four-year long global economic slowdown; however, as of 2014, the carrier has serviced over 10 million passengers in 13 domestic routes and 6 international destinations. In 2013 VietJet became the first private Vietnamese airline to enter the international market with direct flight to Bangkok. The airline's mission is to "meet the increasing travel demands of domestic and international travelers by providing punctual flights and a high quality of service, helping to lead the Vietnam aviation industry into a new era."

Vietnam Airlines (VN)

Headquartered in Hanoi, VN was established in 1956, but becoming a state-owned enterprise until 1989. At its inception VN was a minor carrier within the aviation industry because it was severely hampered by detrimental socio-economic and political factors affecting Vietnam. These factors positively changes after the normalization of diplomatic relations with the US late in 1995. Currently, VN has a growing fleet size of close to 100 carriers servicing 3 seasonal destinations, 21 domestic destinations and 28 international destinations. Currently, VN has continued diversification of its investments in the aircraft-leasing and airport ground-servicing industries, and is evaluating the viability of

manufacturing aircraft components. Additionally, VN operates Vietnam’s biggest air cargo division through its subsidiary Vietnam Airlines Cargo (Vietnam Airlines, 2015).

International Carriers

A growing number of international carriers have chosen Vietnam as a destination to be serviced on scheduled passenger and cargo flight in all three designated international airports; in Hanoi, in Ho Chi Minh City and in Da Nang. Some international charter flights are allowed to service other airports in Vietnam, but under strict regulations set up by CAAV. With the increasing participation of international airliners, competition is heating up in Vietnam’s aviation sector just as VN is considering the option for share public offerings. Analysis in growing air carrier competition has become a viable bellwether of how Vietnam’s economic reform agenda toward a more open economy may continue to take shape in the mid and longer terms.

The introduction of more and more international carriers in Vietnam has brought an overall expansion in traffic in the industry, and it has proven to be good for passengers because of the availability of more choices. Aside of international regular-cost carriers, the rise of low-cost carriers in Southeast Asia reflects pent-up demand for flying in a socio-economically increasing part of the world. However, the expansion of low-cost airline capacity appears to be getting ahead of the concomitant growth in demand. Some regional budget airlines are struggling to fill their seats, starting to hurt short-haul flights, and negatively affecting profitability. Nonetheless, in Vietnam alone, the following are the international carriers currently servicing the country either directly, or through code-sharing marketing schemes (Skyscanner, 2015):

Aeroflot (Russia)	Air China
Air France	American Airlines (USA)
ANA – All Nippon Airways (Japan)	Asiana Airlines (South Korea)
Cathay Pacific (Hong Kong)	China Airlines (Taiwan)
China Eastern	China Southern
Delta (USA)	Emirates (Dubai, UAE)
Etihad (Abu Dhabi, UAE)	EVA Air (Taiwan)
Japan Airlines	Jet Airways (Singapore)
Korean Air	Philippine Airlines
Qatar Airways	Singapore Airlines
Thai Airways	Turkish Airlines
United (USA)	

AIRPORTS SERVICING VIETNAM

It is said that the aviation industry is the “real” World Wide Web. Through an ever-expanding vast network built with hundreds of airlines, thousands of airports, and a myriad of traffic control organizations, major urban centers, medium-size cities, small communities and isolated villages around the globe are being linked 24/7 with advanced

aircrafts built with continued improved engineering techniques and designs. However, airports are the hearth from which the entire aviation transport industry finds its economic symbolism as it becomes a crucial variable measuring a country's growth and development.

Even though airports are asset-intensive businesses requiring a very long time to recover its enormous capital investment in terminals, runways, support facilities and access roads, they are still constituent parts of the economy of a country. Airports must be capable to generate enough revenues to cover their operations and investments while, at the same time, guaranteeing a professional level of service satisfying the needs of passengers, cargo, and aircraft operators. Concomitantly, airports are expected to fully support and enhance the economic interests of the community they are located in, as well as those of neighboring servicing areas.

Airports Corporation of Vietnam (ACV)

With headquarters in Ho Chi Minh City and founded in January 2012, the ACV is the product of the merging of the original three companies operating airports in the north, the middle, and the south of Vietnam. The purpose of ACV is to manage and operate all 21 civilian airports in Vietnam, including 8 international and 13 domestic airports (ACV, 2015).

With a mission to build an image of peace, civility, friendliness and dynamism for the country and the peoples of Vietnam, the ACV strives to maintain and ensure modernization, security and safety of all airports in the country. Their political task and corporate culture is aimed at expanding cooperation in investment, construction and development of aviation services, to play an important role in promoting socio-economic development for Vietnam, and to actively participate in the security defense of the nation.

Supporting the mission of the ACV, there is a calculated corporate determination to achieve proper industrialization of Vietnam through an ongoing vision of modernization of the nation's entire airport system on the basis of inherited resources available to promote the power of human and financial assets. ACV is geared at meeting the needs of airport operators by providing adequate aviation services, by ensuring efficient production and the best quality of passenger service, and by placing Vietnam's aviation industry in the path for taking off on a journey of national integration, cooperation, and socio-economic development.

Airports as Economic Engines of Progress

Historically, Vietnam developed as an agricultural-based civilization concentrating in raising wet rice cultivation. The Vietnam Wars (1954-1975) destroyed much of the country's economic infrastructure and, upon the Communist government taking power; they created a centrally-planned economic system for the newly unified Vietnam. These years of communist mandate brought about collectivization of farms and factories as the Vietnamese people and the nation's capital were put to work in government programs. For over a decade, Vietnam's economy suffered of inefficiency, underproduction, restrictive trade and economic activities, and from massive corruption. It also suffered from

American and some European trade embargos, and the eroding support of the Soviet bloc, and short wars with China and with Khmer Rouge Cambodia.

In 1986, however, Vietnam saw the introduction of significant economic reforms with the inclusion of free-market economic elements, and with governmental support for private ownership in industry, commerce, tourism, fisheries, and agriculture. In 1994 the US lifted the trade embargo on Vietnam, and full diplomatic relations were finally established in 1997. On that year, the country's GDP was a mere US\$ 27 billion, with little over US\$ 360 per capita income. By 2014 the GDP had grown to over US\$ 180 billion, with near US\$ 2,000 per capita income (Focus Economics, 2014).

According to the UK Trade & Investment Report (2011), between 2005 and 2010 Vietnam invested more than US\$ 1.3billion in airport modernization, expansion and rehabilitation; and amount reaching close to US\$ 2billion by 2014. Unfortunately, however there are few foreign investors in Vietnam's airport development industry due to limited profitability because of the continued reluctance of the government to accept foreign direct investment for projects perceived as of key national interest. Nonetheless, even though Vietnam's biggest and busiest airport in the country located in Ho Chi Minh City (Tan Son Nhat Airport) had a new terminal constructed between 2004 and 2007, with a second phase expansion completed in 2010 giving a capacity of 15 million passengers a year, it has soon become obsolete and without the possibility of further expansion within its current location. Consequently, the Vietnamese government approved the construction of a brand new mega airport at Long Thanh to supersede completely Tan Son Nhat.

Long Thanh International Airport (LTIA)

To be located 50 km northeast of Ho Chi Minh City, it was originally intended to become operational by 2020 and to serve over 100 million passengers annually when fully built to its maximum designed capacity upon completion of Phase 3 (2035-2050). The Master Plan for LTIA was approved in 2006, and several adjustments have been made since then. The project was well-received; however, several critics find it too expensive and too far from downtown.

Originally, the project developed by the French Consortium ADPI, was to be developed in three phases, with Phase 1 subdivided in 3 sub-phases. Phase 1 (2016-2025) had an original estimate of US\$ 7.8 billion; now downscaled to US\$ 5.6 billion and with expected operation starting in 2023. However, the original breaking-ground for the airport scheduled for 2016, has already been pushed forward to 2018. Yet, at the moment, researchers at the University of Economics in Ho Chi Minh City, and staff members at CAAV, are unsure of when the breaking-ground ceremony for LTIA will happen, or if it is a viable project under present economic considerations.

Nonetheless, the government in Hanoi still supports the plans for building LTIA aimed at eventually becoming an international aviation hub, expected to meet the rapid growth of the Vietnamese aviation market, and serving socio-economic development in the southern key economic regions. These political expectations are geared to enabling

Vietnam to make the most of its economic and tourism advantages in the geographic heartland of Southeast Asia, considered a strategic location to serve the transition of passengers and cargo for the entire ASEAN region. By 2020, the International Civil Aviation Organization (ICAO) estimates that Vietnam will rank third among the 10 Asia-Pacific countries to see highest number of air passengers (ICAO, 2013).

CONCLUSION

This research was planned around the idea that Vietnamese authorities were planning to build a new airport in hopes of competing with Singapore as the aviation hub in the South East Asian region. This paper has focused on the aeronautical industries in Vietnam. With the overall analysis complete, the researchers found that while Vietnam has many plans, they are far behind Singapore due mainly to lack of investment capital. The new airport was first announced in 2000 and was to open by 2008. This was eventually extended to 2010, then 2015, now authorities are saying 2023. Some of their other large-capital projects have followed similar paths; the high speed rail system, for example. Some aviation experts have been vocally opposed to the Long Thanh Airport project, calling them unnecessary. Vietnamese authorities announced their intentions to sell the operating rights to several of their airports. They have requested the AAV to submit a plan to buy out the rights. Thus far, private investors have been restricted from aviation infrastructure projects, however, now would be a perfect time to invest in such youthful, energetic, tech-savvy country. Exports to North America are up, their inflation rate is down and the strategic importance and commercial opportunities are great for investors. Further research should be done and focus on the plans and the economic impact of those aviation related improvements that have already been completed. Also, the possibility of obtaining financing from World Bank.

REFERENCES

- ACV Airport Corporations of Vietnam. (2015) <http://en.vietnamairport.vn/>
- ADPI Aéroports de Paris International Group. <http://www.adp-i.com/en/long-thanh-international-airport-master-plan>
- APEC Asia-Pacific Economic Cooperation Website (2015) <http://www.apec.org/>
- Asia-Pacific Economic Cooperation (APEC). U.S. Department of State. <http://www.state.gov/p/eap/regional/apec/>
- Asian Airlines: Having Fun and Flying High. (2004) <http://www.economist.com/node/2502539>
- Association of Southeast Asian Nations (ASEAN). U.S. Department of State. <http://www.state.gov/p/eap/regional/asean/>
- Airport Technology Market & Customer Insight. Long Thanh International Airport, Vietnam (2014) <http://www.airport-technology.com/projects/long-thanh-international-airport/>
- Air Transport Action Group, ATAG. The Economics & Social Benefits of Air Transport.(2005) http://www.icao.int/Meetings/wrdss2011/Documents/JointWorkshop2005/ATAG_SocialBenefitsAirTransport.pdf. Geneva, Switzerland.
- ASEAN-BRIEFING Business Intelligence. ASEAN Open Skies Policy To Be Implemented in 2015. (2015). <http://www.aseanbriefing.com/news/2015/01/02/asean-open-skies-policy-implemented-2015.html>
- ATAG- Air Transport Action Group. Commercial Aviation Speaking with One Voice. (2015) <http://www.atag.org/>
- AviReal Aviation. Airport Economics: Understanding Airports. (2008). Zurich-Airport, <http://www.unisg.ch/~media/internet/content/dateien/instituteundcenters/cfac/oeffentliche%20vorlesungen/2008/6%20offentliche%20vorlesung%202008gastvortrag%20avireal.pdf>
- Barbour-Lacey, Edward. Vietnam's Airline Industry Takes Off. (2013) <http://www.vietnam-briefing.com/news/vietnams-airline-industry-takes.html/>
- Business in Asia. Airports in Vietnam.(2006) http://www.business-in-asia.com/airports_vietnam.html

CAAV. Civil Aviation Authority of Vietnam. Ministry of Transport. (2015)
<http://www.caa.gov.vn/eDefault.aspx?tabid=8>

CAPA. Centre for Aviation. Long Thanh International Airport. (2015)
<http://centreforaviation.com/profiles/newairports/long-thanh-international-airport>

Embassy of Vietnam Website. (2015) <http://vietnamembassy-usa.org/>

Focus Economics. Vietnam GDP. (2014). <http://www.focus-economics.com/country-indicator/vietnam.gdp>

Global Edge. Vietnam Economy (2013)
<http://globaledge.msu.edu/countries/vietnam/economy>

Global Edge. Vietnam Statistics. (2013)
<http://globaledge.msu.edu/countries/vietnam/statistics>

Greenman C. & Carreras, R. (2016). Economic Impact of Aviation in the South East Asian Region. Journal of American Academy of Business, Cambridge.
<http://www.jaabc.com/jaabcv21n2preview.html>

IATA Aviation Economic Benefits. (2007). Economic Briefing No. 08 by Mark Smyth & Brian Pearce.
https://www.iata.org/whatwedo/Documents/economics/aviation_economic_benefits.pdf

Immense potential of \$80 billion African aviation market in the spotlight at inaugural event in Dubai. (2015). <https://www.homestrings.com/news-and-analysis/2015/may/06/immense-potential-of-80-billion-african-aviation-market-in-the-spotlight-at-inaugural-event-in-dubai/#.VYgslvIVhBc>

Nguyen, Thu Thuy, et.al. Exploring Vietnam's Progress in Economic Growth. (2015) Swiss Program for Research and Development. World Trade Institute.

Schofield, A. (2015). Profits Elusive for Asia's Long-Haul LCCs.
<http://aviationweek.com/commercial-aviation/profits-elusive-asia-s-long-haul-lccs>

Skyscanner. Airlines to Vietnam (VN). (2015) <http://www.skyscanner.net/flights-to/vn/airlines-that-fly-to-vietnam.html>

Southeast Asia airline market sees more rapid growth & high international low-cost penetration rates. (2013). <http://centreforaviation.com/analysis/southeast-asia-airline-market-sees-more-rapid-growth--high-international-low-cost-penetration-rates-131369>

Sratfor Global Intelligence. The emerging economy of Vietnam: Pitfalls, problems and the relevance of business education. (2013) https://www.stratfor.com/the-hub/emerging-economy-vietnam-pitfalls-problems-and-relevance-business-education?0=ip_login_no_cache%3Dc43968b85d239991b2b07b32323f2aa9

Sustainability of Air Transport. (2013). http://www.icao.int/Meetings/atconf6/Documents/WorkingPapers/ATConf6-wp078_en.pdf

Thanhniên News. Vietnam lawmakers urge green light for huge hub airport. (2015) <http://www.thanhniennews.com/business/vietnam-lawmakers-urge-green-light-for-huge-hub-airport-46275.html>

The economic & social benefits of air transport, Air Transport Action Group. (2005). http://www.icao.int/Meetings/wrdss2011/Documents/JointWorkshop2005/ATAG_SocialBenefitsAirTransport.pdf

The Malaysian Insider. Vietnam airlines taking off in a big way, servicing world's third-fastest growing market. (2013) <http://www.themalaysianinsider.com/business/article/vietnam-airlines-taking-off-in-a-big-way-servicing-worlds-third-fastest-gro>

The World Factbook. Vietnam. Central Intelligence Agency. (2015) <https://www.cia.gov/library/publications/the-world-factbook/geos/vm.html>

Trading Economics. Vietnam. (2015) <http://www.tradingeconomics.com/vietnam/indicators>

Tuoi Tre News: The News Gateway. Vietnam to be world's 7th fastest-growing aviation market by 2017: IATA. (2014) <http://tuoitrenews.vn/business/22056/vietnam-to-be-worlds-7th-fastestgrowing-aviation-market-iata>

UK Trade & Investment. The Airport Sector in Vietnam. (2011) http://www.britisheexpertise.org/bx/upload/Newsletter/Airports_Vietnam.pdf

VASCO. Vietnam Air Services Company. (2015) <http://www.vasco.com.vn/>

VietJet.Com. (2015) <http://www.vietjetair.com/Sites/Web/en-US/Home>

Vietnam Airlines. (2015) <http://www.vietnamairlines.com/>

Vietnam Briefing. Construction of Mui Ne Airport Expected to Boost Regional Tourism . (2013) <http://www.vietnam-briefing.com/news/construction-of-mui-ne-airport-expected-to-boost-regional-tourism.html/#sthash.qeeCdzvk.dpuf>

Vietnam Economic Indicators. The Wall Street Journal. (2015) <http://www.tradingeconomics.com/vietnam/indicators>

Vietnam Plans New Airport as Indochina Mega Hub (2015).
http://www.airliners.net/aviation-forums/general_aviation/read.main/6418672/

World Travel & Tourism Council. Travel & Tourism Economic Impact 2015. Vietnam.
<http://www.wttc.org/-/media/files/reports/economic%20impact%20research/countries%202015/vietnam2015.pdf>

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URL: <https://commons.erau.edu/publication/740/>