



EUROPEAN UNION ECONOMIC AND COMMERCIAL COUNSELLORS





Each year the Working Group of Economic and Commercial Counsellors of the European Union publishes a report on the economy of Vietnam. This "Green Book" aims to provide the private sector as well as European institutions and governments with an analysis of the recent economic performance of Vietnam as well as an overview of the development in certain sectors of the Vietnamese economy. The "Green Book" is not an official publication of the EU. It is a joint initiative of the EU Embassies and the Delegation of the European Union to Viet Nam.

The publication covers a wide range of issues and consists of three parts:

The first part is dedicated to a general overview of the most important developments in Viet Nam in 2010. It features an overview of the economic performance of Vietnam as well as an analysis of major economic indicators such as foreign trade, investment, employment as well as sectoral and monetary policies.

The second and third parts provide on the one hand information about industries (garments and textiles, footwear, fishery products, agro-industry, pharmaceuticals, machinery and financial services) and on the other hand the development of infrastructure (air traffic, land transportation, harbours and marine transport, IT and telecommunications, energy, the environment and construction and real estate).



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Asian Development Bank

ADSL Advanced Digital Subscriber Line

AFTA Asean Free Trade Area

ADB

AIA American Insurance Association

ASEAN Association of South East Asian Nations

BCC Business Cooperation Contract

BOT Built-Operate-Transfer BP British Petroleum

BTA Bilateral Trade Agreement C/O Certificate of Origin

CDM Clean Development Mechanism CDMA Code Division Multiple Access

CEPT Common Effective Preferential Tariff

CIEM Centre for Institutional and Economic Management

CIF Cost, Insurance, Freight
CNC Centre of Numeric Control
CPI Consumer Price Index

DANIDA Danish Agency for Development Assistance

DGPT Department General of Post and Telecommunications

DSL Digital Subscriber Line
DWT Dead Weight Tonnage
EC European Commission
EVN Electricity of Vietnam
EU European Union

FAO Food and Agricultural Organisation

FDI Foreign Direct Investment
FIE Foreign-Invested Enterprise
GDP Gross Domestic Product
GOV Government of Vietnam
GSO General Statistics Office

GSP Generalised Scheme of Preferences

HCMC Ho Chi Minh City

HSBC Hong Kong and Shanghai Banking Corporation

HP Horse power

IDA International Development Association
IFI International Financial Institution

IL Inclusion list

IMF International Monetary Fund

IMI Institute of Machinery and Industrial Instruments

IPR Intellectual Property Rights
ISP Internet Services Provider
IT Information Technology

JV Joint Venture KT Korea Telecom

LDC Least Developed Country

LEFASO Vietnam Leather and Footwear Association

MFN Most Favoured Nation MOT Ministry of Transport

MPI Ministry of Planning and Investment MPT Ministry of Post and Telematics NGO Non-Government Organisation

NPL Non-Performing Loan NTB Non-Tariff Barrier

ODA Official Development Assistance
OLAF European Anti-Fraud Office

OTC Over The Counter

PMU Project Management Unit

PNTR Permanent Normal Trade Relations

PPP Public Private Partnership

PRGF Poverty Reduction and Growth Facility
PRSC Poverty Reduction Support Credit

R&D Research & Development
SBV State Bank of Vietnam
SCB Standard Chartered Bank
SER Special Economic Region
SME Small and Medium Enterprises
SOCB State Owned Commercial Bank

SOE State Owned Enterprise

SRV Socialist Republic of Vietnam
SSC State Securities Commission
TBT Technical Barriers to Trade
TEL Temporary Exclusion List
TEU Twenty-foot Equivalent Unit

TRIPS Trade Related Aspects of Intellectual Property Rights

UCLAF Anti-Fraud Coordination Unit

UNCTAD United Nations Conference on Trade Development

UNDP United Nations Development Programme USBTA United States Bilateral Trade Agreement

VAT Value Added Tax WB World Bank

VINATEX Vietnam Garment and Textile Corporation VITAS Vietnam Textile and Apparel Association

VINACOAL Vietnam Coal Corporation

VNPT Vietnam Post and Telecommunications Corporation VIETTEL Vietnam Military Telecommunications Company

WTO World Trade Organisation

YOY Yean-On-Year

Currencies

EUR or € Euro

US\$ United States Dollar VND Vietnam Dong

1. GENERAL OVERVIEW

VIETNAM'S OVERALL ECONOMIC PERFORMANCE IN 2010 AND FIRST QUARTER 2011

Introduction

In 2010, Vietnam's economy performed relatively well despite heightened domestic and global economic uncertainty. Annual growth rates exceeded expectations and the economy saw significant increases in export revenue and industrial production value. However, such success was achieved at a price: Double-digit inflation, dwindling foreign reserves, erosion of public confidence in local currency and widening trade and budget deficits. This prompted the government to reshape its macroeconomic policy away from its traditional pro-growth approach in early 2011. A series of measures were taken, aimed at stabilising the economy, with tighter monetary and fiscal policies, strengthening the banking sector and re-energising the SOE equitisation process.

Growth

Gross domestic product (GDP) expanded by 6.78% in 2010, exceeding the National Assembly's annual target of 6.5% growth. These results showed a near return to pre-crisis economic growth levels, where real GDP expansion averaged 7.2% per annum between 1999 and 20 Higher-than-expected growth is one of the main indicators of Vietnam's continued good economic performance in a year of both domestic and global economic uncertainty.

Figures provided by the Vietnam General Statistic Office (GSO) showed that growth accelerated throughout 2010, expanding in the fourth quarter by an annualised 7.3 percent. The industrial sector posted the strongest overall growth rate of 7.7%, followed closely by a 7.5% expansion in the service sector. Key drivers behind expansion in the industrial sector were manufacturing, construction and electricity, gas and water supply, which grew by 8.4%, 10.1% and 11.3% respectively year-on-year. The service sector witnessed impressive growth rates in all sub-sectors, with trade, hotel and restaurants, and finance and banking expanding by 8.1%, 8.7% and 8.4% respectively. The agro-forestry-fishery sector continued to lag behind with a 2.8% expansion in 2010 as a whole, partly reflecting natural disasters that struck the country in 2010.

Inflation

Exceeding annual growth targets came at a cost to the Vietnamese economy in 2010, particularly with regards to inflation. The Consumer Price Index (CPI) climbed to a 22-month high, rising by 11.75% year-on-year in December, overstepping the government's target to contain price rises under 8% for 2010 as a whole. Having seemingly reined in inflation for much of 2010 - CPI averaged a month-on-month increase of 0.18% from March through to August - inflationary pressures returned once

^{1.} Growth rates fell in 2008 and 2009 to 6.3% and 5.3% respectively, as the impact of the global downturn took hold.

again in the closing months of the year. A 1.98% month-on-month rise registered in December followed on from a 1.86% rise in November and a 1.05% rise in October.

Inflationary pressure continued into the first quarter of 2011. CPI rose by 6.12% during the first quarter alone, fuelling a 13.89% year-on-year increase and pushing CPI to its highest level in the past 25 months. Inflation was stoked by the traditional increase in spending by Vietnamese consumers ahead of the Tet (Lunar New Year) festival, the 9.3% devaluation of the local currency in early February and a hike in retail fuel prices (ranging from +16% to +25%) in early March. Price pressure was further exacerbated by rising food and foodstuff coster reflecting not only rising global prices of key commodities, such as rice and coffee, but also poor harvests and natural disasters which affected the central region. Rising food prices are of particular concern to the government and were a significant factor in the decision to tighten monetary policy after the Party Congress in January 2011.

Credit and Currency

In response to rising inflation, the State Bank of Vietnam (SBV) belatedly raised the benchmark interest rate by one percentage point from 8% to 9% in November 2010, the first increase of the base rate since December 2009. Monetary tightening measures continued to be introduced in Q1 2011 with SBV incrementally increasing the annual re-financing rate by four basis points to 13% and the discount rate from 7% to 12%, thereby reducing the cash available in the economy. In Q1 2011, the government announced that credit growth targets would be revised downwards to under 20% in line with the new macroeconomic policy stance. In 2010, credit growth had reached 27.65% - far in excess of the government 25% threshold.

In an attempt to boost exports and curb the trade deficit, SBV took a decision to devalue the currency in August 2010 at a time when inflationary pressure appeared to be relatively benign. The dong was devalued by 2% against the US dollar, bringing the overall depreciation from November 2009 to the end of 2010 to over 10%. Having stated that no further devaluation would take place before the Tet holiday in late January, SBV announced a further devaluation of 9.3% in early February 2011, together with a narrowing of the daily trading band against the US dollars from +/-3% to +/-1%. The devaluation had been expected by international and local analysts in light of the persistent trade deficit, dwindling FOREX reserves and a widening gap between the official dong-dollar exchange rate and the free-floating "black market" rate.

While the currencies of most other Asian countries have appreciated against the US dollar since the global financial crisis, as investors have sought better returns, the devaluation in Vietnam in February 2011 represented the fourth and the biggest such devaluation in the past 15 month. The frequency with which the government has resorted to currency devaluation as a policy tool has led to an erosion of confidence in

^{2. +18%} year-on-year in December 2010, +2.74% month-on-month in January, +4.53% month-on-month in February and 1.98% month-on-month in March 2011.

^{3.} The Vietnam dong was devalued by 5.44% in November 2009, by 3.35% in February 2010 and by 2% in August 2010.

the dong, and prompted widespread precautionary hoarding of gold and dollars among the Vietnamese population. In an attempt to curb dollarization the State Bank introduced a series of policy measures in Q1 2011 to reduce the attractiveness of holding foreign currencies. Commercial banks' foreign currency compulsory reserve requirements were raised and dollar deposit interest rates were capped, while a crackdown on illegal gold and foreign currency trading was launched in parallel.

A debt scandal surrounding a flagship state-owned enterprise (SOE) struck a blow to Vietnam's international creditworthiness, increasing the cost of overseas borrowing at a time when government is looking to raise funds to improve the country's infrastructure. In mid-2010, it was revealed that the State-owned Shipbuilding group (Vinashin) was on the verge of bankruptcy, with debts in excess of US\$ 4.6 billion. Having dismissed, and subsequently arrested, senior Vinashin officials for alleged gross mismanagement of public funds, the government approved an emergency corporate restructuring plan in November 2010 aimed at improving management and oversight, stabilising production and reshaping the group's financial structure. Nevertheless, Vinashin was still unable to secure sufficient funds to cover its immediate liabilities, and in December it was forced to default on the first repayment of US\$60mn on a US\$600mn international loan, issued through Credit Suisse in 2007. In a move widely seen as an attempt to send a clear message to other SOEs, the government chose not to directly intervene, insisting that Vinashin must settle its own debts.

In light of these developments, credit ratings agencies Moody's and Standard & Poor's both downgraded Vietnam's creditworthiness in late December 2010: the former dropped Vietnam's government bond rating from Ba3 to B1, while the latter lowered Vietnam's foreign-currency sovereign credit rating from BB to BB- and the local currency rating from BB+ to BB. As a result, the cost of insuring Vietnam's existing debts against default soared, with credit-default swaps on Vietnamese government's debt rising to their highest level since mid-July 2009.

Employment and Poverty

Vietnam has made big efforts in employment generation and achieved very encouraging results. Sustained growth in the past years has helped Vietnam create enough jobs for some 1.5 million people joining the workforce annually. During 2007-2010, around 7.8 million jowere generated. The official unemployment rate was 2.88% in 2010 (of which, unemployment in urban area was 4.43%, and that in rural area was 2.27%).

Official data shows that Vietnam managed to bring down the poverty rate to 10.6% in 2010 from 12.3% in 2009. It should be noted that the actual poverty might be more serious than the official figures because the poverty threshold of Vietnam is far lower than the international norm. Vietnam's official poverty line corresponds to monthly earning of VND400,000 (around US\$19) or less in urban areas and VND220,000 (around US\$10.50) in rural areas while the international poverty line is

^{4.} This information was released on 25 March 2011 at the 9th session of the 12 National Assembly meeting by the Chairman of the National Assembly's Committee on Science and Technology Mr. Nguyen Dang Vang.

Investment

In 2010 Committed Foreign Direct Investment (FDI), although totalling US\$18.6bn, had declined by 17.8% year-on-year, largely as a result of the global economic crisis in 2008 and 200. It appears that the trend has not yet bottomed out despite some initial encouraging signals that more investors are returning to the key sectors of the economy. According to the Ministry of Planning and Investment, by 21 December 2010, 969 new FDI projects with committed capital worth US\$17.2bn had been licensed. The remaining US\$1.4bn related to additional capital pumped into the 269 FDI projects whose licenses were granted before 2010. Real estate projects continued to be the most attractive field of investment for foreign investors, luring as much as US\$6.8bn, followed by the industrial manufacturing sector (attracting US\$5bn) and electricity/gas/water production & distribution (attracting nearly US\$5bn).

In Q1 2011, Vietnam attracted committed FDI worth US\$2.371bn, a decline of 33.1% year-on-year. Of this figure, 173 new FDI projects with committed capital worth US\$2.0376bn had been licensed, with a further US\$334.1mn committed to 37 FDI projects licensed before January 2011.

Whereas committed FDI decreased in 2010 overall, FDI disbursement increased by 10%, year-on-year, to US\$11bn. Capital disbursed represented 59.1% of the FDI committed in the year, a further improvement on the 46.5% commitment/implemented ratio in 2009 and the 17% in 2008. In Q1 of 2011, FDI disbursements amounted to US\$2.54bn, which was a 1.6% increase against Q1 of 2010.

Investors from the EU made a surprising return in 2010 with committed FDI worth US\$2.25bn (accounting for more than 12% of the total committed figure), being the second biggest investor in Vietnam after ASEAN (committed FDI of US\$4.89bn). Capital committed from the Netherlands of more than US\$2.1bn for a single thermal power generation project in Mong Duong of Quang Ninh Province was behind this increase. Other major FDI partners of Vietnam in 2010 included Japan (US\$2.04bn), South Korea (US\$2.03bn), the US (US\$1.83bn), and Taiwan (US\$1.18 billion).

Given the current macroeconomic climate, Official Development Assistant (ODA) remained an important source of investment for the economy of Vietnam. Estimated data indicates that around US\$3.65bn out of over US\$8bn committed by foreign donors to Vietnam was disbursed in 2010. The EU continued to be a crucial source of ODA for Vietnam in 2010 and 2011. Out of the US\$7.9bn ODA committed for Vietnam in 2011 by foreign donors at the Consultative Group Meeting in December 2010, the European Commission and Member States committed a total ODA worth

^{5.} FDI into Vietnam decreased sharply in 2009 with committed capital plunging by 70% y-o-y to US\$21.5bn.

^{6.} The most striking FDI event was witnessed in 21 January 2011 when the Chairman of the Ho Chi Minh City People's Committee Mr. Le Thanh Hai presented the investment license to the US-based First Solar Group to build a US\$1bn-solar cell plant in the South-East Industrial Zone of Cu Chi District.

more than US\$872mn.

In 2010, overseas remittances increased dramatically by 25% to US\$8bn. This was a historically high level of remittances sent back home by Vietnamese guest-workers and overseas people of Vietnamese origin. The recovery of the US and European economies played an important role in creating jobs for many people including the overseas Vietnamese, which resulted in their better income and savings. Overseas remittances are a crucial source of capital for Vietnam to maintain the balance of payments.

Balance of payments

2010 was the second successive year that saw a large current-account deficit of 7% of GDP. This figure represented a big rise from the 4.1% in 2008. Vietnam continues to be able to finance this deficit with inward flows of FDI, ODA and remittances. However, foreign exchange reserves are under pressure. In December 2010, according to the International Monetary Fund (IMF), Vietnam's foreign exchange reserves fell to US\$15.4bn (equivalent to around two months of imports) from the US\$17.6bn (= 2.5 months of imports) in June 2009.

Foreign Trade

2010 marked a significant recovery of Vietnam's exports which increased by 25.5% against 2009 to US\$71.6bn. Of the figure, foreign invested enterprises contributed US\$38.8bn (+27.8% y-o-y), while domestic companies, including SOEs, added US\$32.8bn (+22.7% (y-o-y).

The increase in global prices of key Vietnamese commoditive boosted the performance of Vietnam's exports. This helped increase by one third the number of Vietnamese commodities that join the group of billion-dollar export revenues, increasing from 12 commodity groups in 2009 to 18 groups in 2010, namely: Garments & textiles (export revenues: US\$11.2bn; year-on-year increase: +23.2%), footwear (US\$5.1bn; +24.9%), crude oil (US\$4.9bn), fisheries (US\$4.9bn; +16.5%), electronics & computer (US\$3.6bn; +28.8%), wooden furniture (US\$3.4bn; +31.2%), rice (US\$3.2bn; +20.6%), machineries & equipment (US\$3bn; +48%), rubber (US\$2.4bn; +93.7%), gold & gems (US\$2.8bn), coffee (US\$1.8bn), coal (US\$1.5bn), means of transport & accessories (US\$1.5bn), electrical wires & cables (US\$1.3bn), refined petroleum (US\$1.3bn), cashew nuts (US\$1.1bn), plastic products (US\$1.1bn), and steel (US\$1bn).

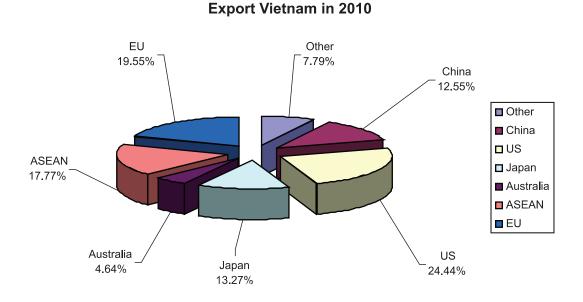
Data from the General Department of Customs indicates that the EU maintained its position as the second largest destination for Vietnamese exports, buying goods worth around US\$11.38bn or 19.55% of Vietnam's total export revenues in 2010. This figure represents a year-on-year increase of 22.36%. The largest export market of Vietnam was the USA (US\$14.24bn; +27.1%). Other important export markets include ASEAN (US\$10.35bn; +21.76%), Japan (US\$7.72bn; +24.5%) and China

^{7.} According to the General Statistic Office of Vietnam (GSO), the world prices of cassavas increased by 90.7%, rubber by 81%, pepper by 39.7%, cashew nuts by 22.4%, coal by 52.9% and crude oil by 33.7%.

(US\$7.3bn; +52.2%).

2010 saw a 20.1% increase in imports by Vietnam, which were estimated at US\$84bn by the GSO. Domestic companies imported goods and materials worth US\$47.5bn (+8.3% year-on-year) while foreign invested enterprises spent US\$36.5bn on imports, a rise of 39.9%. The rise in world commodities prices, on one hand, helped improve export revenues. On the other hand, the same rise led to the increased import costs on the economy which still relies heavily on imported materials for onward export. The structure of imported materials accounting for 90.2%, consumer goods 8.6% and gold 1.2%.

In 2010, China continued to be the largest seller of goods and materials to



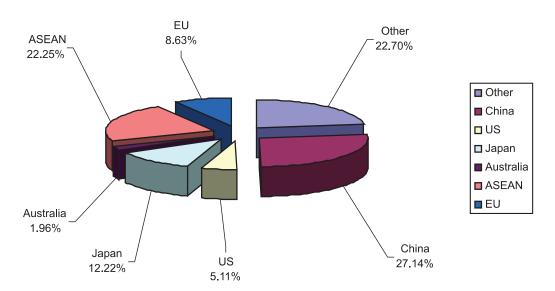
Vietnam. According to data provided by the Vietnam General Department of Customs, the economy imported goods and materials worth more than US\$20bn from China, accounting for 27.14% of total import spending and representing a 24.33% rise over 2009. Imports from the EU into Vietnam (US\$6.36bn in value) ranked fifth after China (US\$20.018bn), ASEAN (US\$16.4bn), South Korea (US\$9.76bn) and Japan (US\$9.016bn). Spending by Vietnamese importers on EU goods and materials in 2010 accounted for 7.57% of the total import spending and represented a 15.6% year-on-year increase.

According to the General Statistics Office, the trade deficit increased slightly to US\$12.4bn in 2010 from 2009's US\$12.2bn, representing 17.3% of Vietnam's total export revenues. Excluding the export of gold and gems (imported into Vietnam at a

 $^{8. \,}$ According to the GSO, the world prices of cotton increased by 45.2%, metal by 32.2%, steel by 27.6%, liquidified gas by 32.3% and processed rubber by 64.2%.

^{9.} Spending on refined gasoline in 2010 reportedly increased by 225.2%, wheat by 70.4%, metal by 57.7%, materials for footwear and textile & garments by 36%, plastic by 33.9%, cloth by 27.2%, computer accessories by 30.7%, animal feed by 22.4%, and steel by 15%.

Import Vietnam in 2010

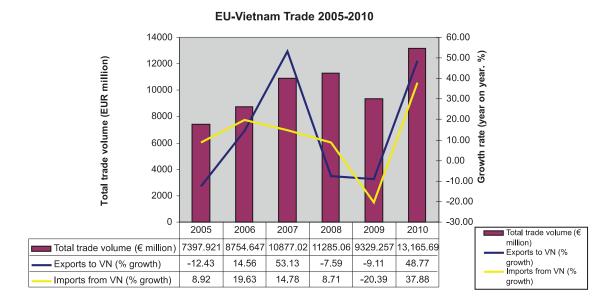


lower price and then re-exported as raw material for profits when the world gold prices were volatile), the actual trade deficit was estimated at US\$14.2bn, or 20.7% of total export revenues. It is worth noting is that the lion's share of such deficit continued to be incurred from Vietnam's commercial links with China, which was as much as US\$12.71bn, or about 90% of Vietnam's total trade deficit of US\$14.2bn.

It seems that the government has decided to tackle the persistent trade deficit with the introduction of several protectionist measures, including "automatic" import licensing, an offal import ban, price controls, and lists of non-essential goods "not encouraged" for imports. These measures affect exports from Vietnam's trading partners, including the EU with whom Vietnam has had an annual trade surplus averaging €4.5bn. Furthermore, the EU also grants the unilateral Generalised Scheme of Preferences (GSP) to Vietnam. Most importantly, these measures - which cannot address such a bilateral problem (as 90% of the total trade deficit incurs in trading with one single partner) - give the wrong signal both domestically and internationally. Obviously, a country like Vietnam that exports 69% of its GDP cannot afford to play the protectionist anthem.

Eurostat data re-confirms the trade surplus that Vietnam enjoyed with the EU, estimated at nearly €4.9bn in 201 On balance, the Eurostat figures indicate that the EU managed to increase its exports to Vietnam by 48.77% while its imports from Vietnam rose by 37.88% year-on-year. While labour intensive products continued to dominate Vietnamese exports to the EU, the top five commodities exported from the EU to Vietnam in 2010 remained high-tech products. The main exports from Vietnam to the EU comprise **footwear** (€1.75b); **textiles & garments** (€1.43bn); **fishery**

^{10.} Divergences in data provided by Vietnam General Statistic Office and Eurostat are due to the differences in methods of calculation. The Vietnam General Statistic Office (GSO) calculates the value of exports and imports based on ports of next arrival and the Eurostat's calculation is based on the final destinations of goods.



products (€739.2mn); **coffee** (€794.5mn) and **wooden** furniture (€720.5mn). Meanwhile, the main goods imported by Vietnam from the EU in 2010 were **boilers-machinery & mechanical products** (€911.2mn), **aircraft** (€400mn), **electrical machinery & equipment** (€371.5mn), **vehicles** (nearly €243.5mn), and **pharmaceutical** products (€307.8mn). This demonstrates the most important feature in the bilateral commercial ties, i.e the two economies are on complementary basis rather than competing against each other. In other words, a future comprehensive Free Trade Agreement if launched soon and concluded within a few years could bring considerable benefits and trading opportunities to companies in both the EU and Vietnam while potential losses would be at a minimum level.

Interestingly, Vietnam has already concluded FTAs with many partners whose products directly compete with Vietnamese products in both domestic and overseas markets. Nevertheless, Vietnam has so far not been able to secure access to its main export markets where it enjoys surpluses. It still relies mainly on unilaterally granted trade preferences, which by nature are precarious, particularly for a country that has just reached middle income status.

Conclusion

The government deserves praise for taking decisive action to mitigate the negative impacts of the global economic crisis during 2009 and early 2010. However, pursuing a pro-growth agenda into late 2010 despite signs of overheating has had a significant negative impact on inflation, FOREX reserves, the exchange rate, and above all, investor confidence. Importantly, Vietnam's economic growth has arrived at a critical stage where the government should decide clearly to implement pro-business policies in order to boost investor confidence and pursue its trade liberalisation efforts in order to help sustain the momentum of development.

2. ANALYSIS BY INDUSTRY

2.1. GARMENTS AND TEXTILES

Overview

Vietnam's textile and garment industry showed a strong development in 2010. As Vietnam's largest foreign currency earner, the textile and garment sector significantly improved its role in the domestic and foreign markets. The Free Trade Agreements (FTA) that Vietnam and other ASEAN members have signed have benefited the country, leading to a rise in export earnings. Vietnam is negotiating on signing agreements with several important markets in the near future, including an FTA with the European Union. Vietnam has also decided to join the negotiations for a Trans-Pacific Economic Partnership (TPP) Agreement as a full negotiating partner.

According to the Vietnam Garment and Textile Group (Vinatex), several garment and textile enterprises, primarily located in Vietnams north, have recently expanded their production capacities. Furthermore, Vietnamese textile companies began to pay more attention to Corporate Social Responsibility (CSR) guidelines. Whereas CSR was initially only practiced by foreign investors, WTO accession in 2007 and the resulting stronger integration into the world market increased the interest in certifications to prove the application of social standards. However, political enforcement and a well-defined legal basis are still absent.

Domestic / Import market

Vietnamese manufacturers faced difficulties in 2010 as prices for imported materials rose by 30-40% over 2009. Vietnam currently imports up to 80% of the materials needed by the garment sector. According to the General Statistics Office (GSO), imports of textile fabrics rose from US\$4.3bn in 2009 to US\$5.4bn in 2010. According to VITAS (Vietnam Textile and Apparel Association, a non-governmental and non-profit organization representing the interests of textile and apparel firms in Vietnam), there are about 2,400 garment and textile manufacturers in Vietnam. The sector employs almost 2 million people. In April 2010, labour unions and textile associations signed a contract establishing different levels of minimum wages, depending on the factories' geographic location. The agreement is obligatory to all textile and garment firms and the level of wages shall be controlled every 6 months. However, not all firms currently respect the guidelines, provoking strikes by workers in 2010.

In line with the campaign "Vietnamese people use Vietnamese goods", textile and garment firms also tackled the domestic market. Vinatex and other companies expanded their domestic sales networks. Vietnamese brands primarily concentrate on middle-priced segments, while high-price segments are served by western brands. Chinese mass goods target the low-price segments.

According to the Thai Nguyen Investment and Trade Company (TNG), global garment and textile suppliers are shifting their attention from China to Vietnam; within Vietnam the sector is moving from the south to the north due to lower labour-costs.

Overseas/ Export Market

Vietnam's garment and textile sector rose to US\$11.7bn in total export turnover in 2010. The US remains the biggest market for Vietnamese textile and garment products. In total, textiles and garments worth US\$6bn were exported from Vietnam to the US market in 2010, an increase of 22% over 2009. Although the EU's textile demand was negatively affected by the sovereign debt crisis in some countries, Vietnam was still able to maintain its market share in the EU textile market and the country's garment and textile exports to the EU grew by 14 %. Vietnam's total export to the EU market amounted to US\$1.8bn in 2010. Vietnam is the seventh largest textile supplier to the EU textile market.

Vietnam's garment and textile exports to Japan amounted to US\$1.2 in 2010, an increase of 20% compared to 2009. Currently, Vietnam accounts for 2.5 % of the total global garment market share and is the fifth largest garment and textile supplier in the world.

According to Vinatex, Vietnam's textile and garment industry targets export earnings of US\$13bn in 2011. Experts expect investors to focus on garments rather than on textile and dyeing this year. By 2015 the textile and garment sector aims to achieve US\$18bn in export turnover.

Announced Targets of the Vietnamese Textile & Garment Sector

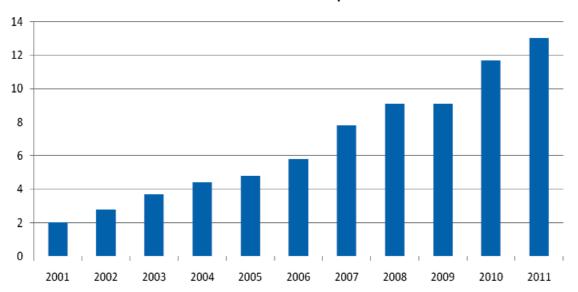
	2015	2020
Turnover	US\$18-21bn	US\$27-30bn
Export Revenue	US\$14-16bn	US\$20-22bn
Labour	3.5mn people	4.5mn people
Fabric Production	1.5mn tonnes	2.0mn tonnes
Fiber Production	0.5mn tonnes	0.65mn tonnes

Source: VITAS

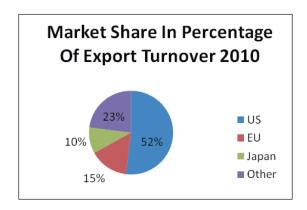
Challenges and Opportunities

According to Vinatex, the Vietnamese textile and garment sector needs restructuring to keep up with its competitors' developments. Many countries that import Vietnamese textiles and garments have strict environmental and health standards for imports. Therefore investment in quality, environmental friendliness and production technology modernisation will be necessary. In this context, Vinatex aims for a more efficient use of energy, improvement of the general working environment

Annual Export Turnover of Vietnamese Textiles and Garments in US\$ bn



Source: VITAS (2011 turnover is estimated)





Source: Vitas and Handbook 2009

and a restructuring towards e-commerce promotion.

According to VITAS, the soaring demand for garments and textiles in the global market will provide an excellent opportunity for Vietnamese exports to improve. Vietnam is a member of the ASEAN-China Free Trade Area (ACFTA), reducing tariffs on 90 % of the imported goods in this area to zero. The agreement has already taken effect in China and some ASEAN members, while Vietnam will follow suit in 2015. This is likely to significantly boost the country's exports and trade. To achieve the set export goals, the sector also plans to find new export markets. Furthermore, local farmers are encouraged to grow more cotton to reduce reliance on imported raw materials. Vinatex has built four weaving and dyeing industrial zones to attract domestic and foreign investors. The Ministry of Industry and Trade plans to develop a material and a dyeing zone in southern Dong Nai Province by 2015.

2.2 FOOTWEAR

Overview

Vietnams' footwear industry has been growing since the mid-nineties and has become one of biggest foreign currency earners for the country; currently it is ranked in third place in terms of export turnover. As shown in chart 1, the figure of export value has been increasing continuously in the last 10 years, except in 2009 when, due to the effects of the world economic slowdown, there was a decline of around 15% followed by a relevant rebound in 2010.

5,122 4,000 3,000 2,000 1,468 1,575 1,846 2,266 2,266 1,000 2,

Chart 1: Vietnamese Footwear Export Turnover 2000-2010 (million US\$)

Source: General Department of Vietnam Customs/LEFASO

According to Vietnam Leather and Footwear Association (LEFASO) figures, around 800 companies, employing over 670,000 workers (plus 500,000 in supporting industries) are active in footwear, shoe materials, leather goods and tanning. Production of three-quarters of the exported footwear is concentrated in the three southern provinces of Ho Chi Minh City, Dong Nai and Binh Duong, which are the key supply hubs where the largest share of manufacturing companies in the sector is located. The industry is strongly export-oriented and export volume accounts for most of the total output (domestic consumption was 9% of the total national production in 2010), while most of the production is concentrated in the sport shoes category, with 67% of the total quantity of footwear produced.

Most Vietnamese enterprises operate on processing contracts, while foreign partners provide materials and designs and market the finished products. About 80% of materials and other inputs need to be imported. Foreign-owned enterprises, mainly from Taiwan and Korea, account for more than half of the total export turnover. The

high value added stages of the supply chain are managed mainly by foreign partners, while Vietnam hosts the processing stages where cheap labour represents the main advantage.

In 2010 the EU retained its position as the main market for Vietnam footwear; however the proportion of exports to the EU of total footwear export value has been declining continuously from almost three-quarters of the total in 2001 to 47% in 2010, as a result of increased diversification of markets. Among EU Member States, the United Kingdom, Germany, the Netherlands, Belgium, Spain, Italy and France are the main importers of Vietnamese shoes. The U.S. is the single largest importer of footwear from Vietnam, accounting for more than 27% of export value (from 22.5% in 2008) and around US\$1.4 billion in turnover.

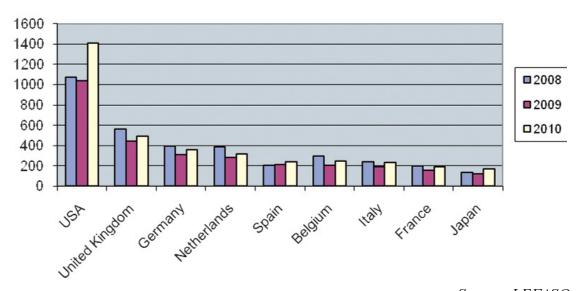


Chart 2: Top ten export markets 2010 (million US\$)

Source: LEFASO

In October 2006, following European Commission proceedings that found evidence of unfair competitive practices and injury to European industry, the EU imposed antidumping duties, initially for a two-year period, on certain footwear with uppers of leather produced in Vietnam and China. These measures were then extended until 31st March 2011, when they expired. However, the Commission decided to establish a monitoring mechanism and supervise the import volume from Vietnam and China for one year in order to facilitate swift appropriate action, should the situation so require. According to Eurostat figures, about 20% of all Vietnamese footwear exports to the EU were affected by the duties in the last years.

It should also be noted that, since 1st January 2009, Vietnam's footwear exports to the EU have lost the benefit of preferential treatment under the Generalized System of Preferences (GSP). Figures had demonstrated the reduced dependence of Vietnamese exports to the EU on one single item and Vietnam's success in diversifying exports (footwear export has fallen below the threshold of 50% of total GSP-covered export to the EU).

Opportunities and challenges

Mainly due to its low labour costs, Vietnam has proven to be one of the most attractive locations for the production of low-value added shoes for export through assembling imported components. Vietnam positions itself as a main source of moderately and competitively priced products even while cooperation with foreign partners has brought about an improvement in the quality level of production and manufacturing skills.

A notable obstacle faced by the Vietnamese footwear industry is the limited supply of locally produced high-quality leather, canvas, PVC and other materials used in the industrial process, which must be imported from foreign markets. This reliance on imported materials leads to higher production costs and has made Vietnam's footwear industry an important market for the producers of these materials, mainly from China, South Korea, Japan and also the EU. Rising labour costs faced by local companies is another challenge, with increases potentially causing a decrease in the competitiveness of Vietnamese made footwear.

The European machine industry, despite strong Asian competition, has seized opportunities over the past years, as efforts have been made by local and foreign-invested footwear companies in order to expand and upgrade production lines, adapting to technological change, growing competition, demand from foreign partners to improve quality. In response to the challenges of the market, it is expected that the footwear industry will increasingly try to penetrate new export markets and, in order to reach that goal, will continue the process of upgrading of production lines by procuring modern imported equipment.

Recommendations

In order to increase the competitiveness of Vietnam's footwear industry vis-à-vis other low labour cost countries, trying to move up the local footwear product in the value chain, there is an urgent need to promote exchanges of experiences, know how and technologies in order to address the traditional weaknesses of the Vietnamese footwear industry such as:

- Poor technical skills of the local management and workers
- Poor capacities in the fields of design and marketing
- Need to import most of materials and inputs

A stronger trade promotion activity in different markets and increased presence of Vietnamese companies in specialised international fairs is necessary. Moreover, favourable conditions should be created to attract investment in the production of needed materials and tanneries (supporting industries) while development of domestic market should be enhanced and diversification of export markets should continue. As a final consideration, which generally applies to all industrial sectors of the country, Vietnam's authorities should keep a strong focus on the development of infrastructures,

such roads and seaports, in order to meet the requirements of its export-oriented industries.

2.3 FISHERIES

Overview

2010 saw Vietnam consolidate its position as a leading fisheries producer and exporter. Key points include:

- Fish and shellfish production in 2010 reached 5.2mn tonnes (2.8mn tonnes from aquaculture and 2.4mn tonnes from capture fisheries marine and inland combined), an 11% increase over the 2009 figure.
- Total fisheries exports amounted to US\$4.94bn, up 16% on 2009 export turnover figures.
- Vietnam was ranked as the worlds 6th largest seafood exporting country.
- In February 2010, Vietnam filed its first trade dispute since it became a WTO member in 2007. The dispute concerns US anti-dumping measures and taxes placed on imported Vietnamese shrimp. Vietnam claims that the zeroing procedure used by the US to calculate whether a product has been dumped is contradictory to WTO rules.
- In late 2010 the WWE classified Vietnams *Pangasius* fish as a "Do Not Buy" product due to environmental and sustainability concerns. Rapid negotiations headed by the Ministry of Agriculture and Rural Development (MARD), the Vietnam National Association of Fisheries (VINAFIS), the International Centre for Aquaculture and Fisheries Sustainability (ICAFIS) along with the Vietnam Association of Exporters and Producers (VASEP) saw the decision revised and Pangasius placed in a new category of fish "awaiting certification". The aim is that up to 50% of production units attain the (as yet not finalised) Aquaculture Certification Council (ASC) certification by 2015.
- The Prime Minister approved MARDs Fisheries Strategy 2020 document (with a planned VND57.4trn/US\$2.9bn investment). (The Strategy was referred to in the Danish government funded Fisheries Strategic Economic Analysis, which was finalised and submitted to MARD and the Ministry of Planning and Investment -MPI- in December 2010.) This strategic plan calls for a doubling of aquaculture output by 2015 whilst capture fisheries

^{1.} Zeroing is a term used when a country in an anti-dumping investigation uses values of exports below the normal value, but ignores exports where prices are above the normal value. The WTO Dispute Settlement Body (DSB) has repeatedly struck down zeroing as being WTO-incompatible.

^{2.} World Wide Fund for Nature, formerly World Wildlife Fund, is a private organisation, registered in Switzerland.

landings are to be maintained at 2010 levels (approx 2mn tonnes). The analysis raised caveats about both targets; in order to double aquaculture production, the industry would have to both intensify and expand land use, with implications for disease and climate change induced risks. Similarly, maintaining a 2mn tonne capture fishery industry based on fully exploited or over-exploited fish stocks will give raise to sustainability problems.

- EU rules to combat Illegal Unreported and Unregulated (IUU) fishing came into force in January 2010. Exporters are now required to show catch certificates which record where fish were caught. Marine caught fish prices subsequently dropped in some provinces were such certificates were not available.
- In December 2010 export prices for *Pangasius* reached US\$3.00/kg with farmers being paid US\$1.20/kg. However many farmers had stopped producing when the purchasing price fell to US\$1.0/kg due to high production costs (US\$0.97/kg). This resulted in approximately half the year-end demand for *Pangasius* being unmet. *Pangasius* exports were very similar to those of 2009 with just over 600,000 tonnes exported worth about US\$1.4bn. In January 2011, farm-gate prices increased to VND24,000/kg. However the February 2011 devaluation of the dong means that the price is around \$1.15/kg leaving an operating profit of \$0.15/kg. The implications for 2011 are that the production total could drop to a more sustainable level close to or below 1mn tonnes.
- Shrimp exports in 2010 amounted to 240,000 tonnes, up 20% over previous record high levels with revenues of US\$2bn. This was due mainly to an increase of 30% in the production of the exotic *Penaus vannamai* (white legged shrimp). Market demand was high for several reasons: i) the Gulf of Mexico oil spill closing the shrimp fishery in the area; ii) a global decline in shrimp production; iii) partial economic recovery in the 92 markets Vietnam exports to (mainly Japan 27.8%, USA 26.9% and the EU16.2%); and iv) a change in eating customs whereby in Europe and the USA more people buy quality seafood to eat at home rather than eating out more expensively. VASEP also reported that China and South Korea have demonstrated an increasing demand for Vietnamese produced shrimp.
- The aquaculture production increase confirms the trend for aquatic products to come mainly from culture systems rather than from capture fisheries.
- In May 2011, a cooperation deal was signed between Vietnam and GlobalGA n a voluntary program for responsible *tra* fish also known as

^{3.} GlobalGAP (GAP stands for Good Agricultural Pratices) is a private sector body, with secretariat in Cologne, Germany. It sets voluntary standards for the certification of production processes of agricultural (including aquaculture) products.

Pangasius farming through certified standards. The aim is to improve the application and certification capability of GlobalGAP in Vietnam aquaculture, and to find common ground between GlobalGAP and the local Vietgap, a program of Vietnam's General Directorate of Fisheries.

Markets

Processing overcapacity continues. VASEP has again requested the government of Vietnam to reduce taxes imposed on unprocessed finfish and shellfish imports to zero (currently rates are 10-20%).

Subsidies

At the end of 2010 the government of Vietnam announced it would provide twoyear interest-free subsidised loans for aquaculture businesses wanting to improve farming practices and processing technology. Over a third year it would cover 50% of interest payments.

Quality

As noted last year, scaling back production and focusing on quality would help both pangasius and shrimp aquaculture to achieve cleaner production, reduced mortalities and better market acceptability/price.

Focus on Fish

The Directorate of Fisheries (D-Fish) of MARD, established in March 2010, is responsible for all aspects of fisheries management in Vietnam. D-Fish has six Departments (Administration, Planning & Finance, International Cooperation Science & Technology, Aquaculture, Fisheries Resource Protection and Inspection), one Institute (Vietnam Institute of Economics and Planning), one Informatics Centre and a proposal for three Aquaculture Inputs Testing Centres (one each in the North, Centre and South). D-Fish maintains close links with four other MARD entities with Fisheries functions: Quality Assurance, Processing & Trade, Animal Health and Cooperatives.

The Global Climate Risk Index (CRI) for 2011 places Vietnam as the 5th most vulnerable country in the world in terms of countries most affected by extreme weather events. Increased storm frequency and intensity will have a negative impact on fisheries, both capture and aquaculture. Mitigation of damage to the sector from such events will come from improved vessel design and construction together with diversified aquaculture and concomitant mangrove forest reforestation.

The Vietnam Institute for Fisheries Economics and Planning (VIFEP) is drafting the Fisheries Master Plan for the next five years 2011-2015 with a vision to 2020; this should be ready towards the end of 2011.

January 2011 saw US\$320mn worth of seafood exported from Vietnam (up 2% over 2010).

It is likely that the Mekong Delta will produce 1.2mn tonnes of Pangasius worth

US\$1.5bn from 6,300ha of ponds. At around 40% fillet production this will yield 480,000 tonnes which would be less than the 600,000t produced in 2010.

Danish International Development Assistance (Danida) has extended its second phase of the Fisheries Sector Programme Support (FSPS II) until the end of 2012 and will assist with the promotion of business links between Europe and Vietnam in 2011.

In 2011 preparatory work will take place for a World Bank US\$100 million loan to be implemented by MARD D-Fish via a project entitled *Coastal Resources for Sustainable Development* (CRSD). It is expected that this project will start mid 2012 and that it will have 3 main outputs: 1. Institutional Capacity Strengthening for sustainable resources management in support of fisheries; 2. Good practices for sustainable aquaculture; and 3. Good practices for sustainable near-shore capture fisheries) plus a Technical Assistance element.

2.4 AGRO-INDUSTRY

Overview

Agriculture remains an important sector for Vietnam, accounting for the largest proportion of the work force, approximately 56%. This sector has made a significant contribution to the economic growth of Vietnam, bringing the country from the famine situation in the 1980s to one of the world's leading exporters in various agricultural products. Vietnam is the biggest exporter of pepper and cashew nuts, the second in rice (after Thailand) and robusta coffee (after Brazil), the fourth in rubber and the sixth in fisheries. Agriculture made up 20.6% of the country's total GDP in 2010. Key agricultural products are concentrated in the following areas:

- Aquaculture in the Mekong River Delta
- Rice in the Mekong River Delta and Red River Delta
- Coffee in the Central Highlands and Southern Northeast

Table 1: Exports of major agricultural products from Vietnam in 2010

Products	2009		20	10	2010/2009 (%)		
	1000 T	M \$	1000 T	M \$	Vol.	Val.	
Coffee	1139	1678	1113	1666	-2.3	-0.7	
Rubber	720	1230	773	2321	7.4	90.0	
Rice	5817	2595	6878	3229	18.2	24.4	
Tea	133	178	132	194	-0.8	9.0	
Cashew nuts	175	840	196	1141	12	35.8	
Pepper	135	347	116	419	-14.1	20.7	
Fishery	-	4207	-	4943	-	17.5	
products							
Raw wood and	-	2535	-	3408	-	34.4	
wooden							
products							

Source: Ministry of Agriculture and Rural Development

- Tea in the Northeast and Northwest
- Rubber in the South Northeast
- Fruits in the South Northeast and Mekong River Delta.

The total export value of Vietnam's agro-industry for 2010 hit a record US\$19.15bn, a 22.6% increase over 2009, due mainly to a recovery of global economy and to high prices. Fisheries continued to affirm itself as a key economic sector (see Chapter on Fisheries for more detail). The largest increase occurred for rubber latex, with an increase in export value of 90% to US\$2.32bn while volume was up 7.4%. According to Vietnam's Ministry of Industry and Trade, the export value of the agro sector should reach US\$19.38bn in 2011 (a small increase of 1.2% over 2010). Quarter 1 figures for 2011 show, however, that thanks to global market price hikes, Vietnam's agricultural export turnover increased 56% y-to-y to reach US\$3.4bn.

Table 2: Export of major agricultural products from Vietnam Jan-March 2011

Products	2010 (Jan-March)		2011 (Ja	n-March)	11/10 (Jan-March) (%)		
	1000 T	M \$	1000 T	M \$	Vol.	Val.	
Coffee	330	461	509	1047	54.2	127.1	
Rubber	126	332	173	774	37.3	133.1	
Rice	1233	677	1686	849	36.7	25.4	
Tea	25	35	25	35	0.0	0.0	
Cashew nuts	30	158	29	204	-3.3	29.1	
Pepper	26	79	25	121	-3.8	53.2	
Fishery	-	961	<u>-</u>	1142	-	32.6	
products							
Raw wood	-	761	-	816	-	14.0	
and wooden							
products							

Source: General Statistics Office

Challenges

While productivity of agricultural products has somewhat increased over the years, due in large part to international donors technical assistance, Vietnam's agricultural sector still lags behind in terms of quality and competitiveness. For example, while Vietnam is the second biggest coffee exporting country in the world in terms of quantity, it is only the fourth biggest in terms of quality.

Weak infrastructure in terms of transport and cooled storage is slowing down the development of the sector. A good cold chain distribution network and better logistics are required in order to preserve the quality of food and faster delivery to the market.

Under-developed marketing channels hinder the development of Vietnam's agricultural sector. The importance of and need for branding of Vietnamese agricultural products has been recognised. However, branding of these products in the

international market is weak. Vietnam would also benefit from further implementing its Geographical Indications. In this sense, more effort should be given to the marketing aspect of products in order to raise their prices which in turn will improve the lives of farmers and the agricultural sector of Vietnam overall.

Opportunities

Inherent opportunities are present at various levels of the value chain in the agricultural sector, as evidenced by the rising imports of animal feed, fertilizer and farm inputs. The total value of imports of animal feed and raw materials in 2010 increased to US\$2.1bn, 23% higher y-o-y. Domestic supply of animal feed inputs remains indeed largely insufficient and unstable, forcing the animal feed industry to import most of its input needs.

The same situation is experienced in the food processing industry where a large portion of inputs are imported. Greater development in the food processing industry will push for more investment in mechanised equipment.

Vietnam is set to phase out small scale farming through the introduction of new technologies that are expected to result in higher yields and more competitive farm produce. The value of the high tech sub-sector is aimed to reach 10-15% of total agricultural production over the next five years and 30-35% by 2020. This is part of the scheme approved by the Vietnam government to industrialise the agricultural sector. High tech agriculture is expected to grow, particularly given that many arable farming areas are being cleared and used for industrial zones.

Rising concern on food safety in both domestic and international markets will create and further strengthen the demand for traceability technologies and certified chemicals. Vietnam will put greater effort into food safety programs for domestic consumption and export to push for higher quality and safer products for consumers (the 2010 Law on Food Safety should enter into force in July 2011). Concrete activities shall include but not be limited to reviewing the legal framework, regulations and standards on food safety, hygiene and promoting the application and certification of GAP, GMP, GAHP, etc. These in turn will open opportunities for technical assistance, know-how transfer and certification related services.

However, regarding market access, foreign companies are facing cumbersome import procedures and SPS-related regulations which Vietnam frequently modifies.

Successful negotiation of an FTA between Vietnam and the EU should lead to an ever increasing trade of agricultural equipments and food products in both directions, allowing productivity and quality to develop so as to fulfil the increasing demands of consumers.

2.5 PHARMACEUTICALS

Healthcare Sector

The government is committed to developing the healthcare sector rapidly and to provide basic healthcare coverage for a population that could reach 100 million

inhabitants by 2018. To do so, Vietnam adopted an ambitious Law on Health Insurance in July 2009 to provide a broader coverage of compulsory health insurance for Vietnamese and foreign employees. The law governs eligibility and the scope of health insurance coverage, health insurance funding, rights and obligations of insurers and insured and a roadmap for universal health insurance. The monthly Health Insurance Contribution (HIC) is 4.5% of the contractual salary (capped at 20 times the minimum wage) of which 2/3 is contributed by the employer. While voluntary membership was encouraged from the start for dependents, students and farmers, uptake was low due to the cost involved. According to the Vietnam Social Insurance Agency (VSI), new health insurance cards containing the holder's personal details and information about their levels of benefit were to have been distributed in spring 2010. While very ambitious, implementation of the law has encountered many hurdles, not least the very poor, inadequate, and insufficient current health sector facilities.

Vietnam currently provides 27.1 beds per 10,000 inhabitants, still a very low figure compared to main ASEAN countries. The health sector is managed mainly by the Ministry of Health (MoH) and provincial Departments of Health (DoH). In 2009, they accounted for 95% of the 13,450 healthcare entities in Vietnam. These entities include hospitals (1,002), regional polyclinics (682), sanatorium and rehabilitation hospitals, medical service units in communes and precincts (10,979 in 2010, all under MoH), medical service units in offices and enterprises. The number of patient beds, excluding private establishments, totalled 232,900 in 2010, of which 70% were in hospitals. Average medical expenditure per capita rose from US\$19.8/pax in 2009 to US\$22.5/pax in2010.

Public healthcare spending has increased on average by 50% on a yearly base since 2005; however, it still accounts for less than 6% of the total government budget. UNDP and UNICEF experts suggest that the spending should reach 10% to have a viable health system but MoH estimates that such a target cannot be reached before 2015. It is hoped that, by then, the Law on Health Insurance will have started to show encouraging results.

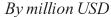
In recent years Vietnam has been developing foreign partnerships to bolster the development of the health sector. Cooperation agreements have been signed with Indonesia (technology transfer, new vaccines production), United States (emphasis on infectious disease such as HIV/AIDS and avian flu), Bulgaria (outpatient care, medical education), Singapore (enhanced medical network, medical insurance, hi-tech training), and last year with Argentina (exchange research, training).

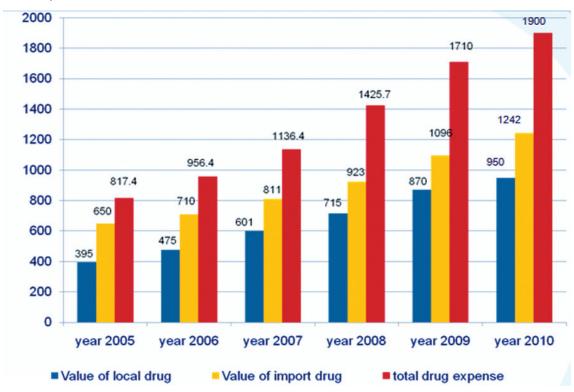
Pharmaceutical Sector

There are around 1,676 pharmaceutical entities (state-owned enterprises, joint stock companies and private pharmaceutical firms), 11,629 private drug stores and more than 41,849 retailers in Vietnam. Most retailers do not comply with the minimum health requirements and have improper storage facilities [just 51 GSP (Good Storing Practice) warehouses in July 2010].

In 2005 the Government launched an ambitious program aiming to have 60% of pharmaceutical needs supplied by local manufacturers by 2015. 5 years on, it is clear that this target is still facing two main obstacles: lack of capacity of local industry in supplying key raw materials and the lack of adequate human resources. All R&D programs of the SOEs are far from reaching their targets.

Improvements can be seen through the GMP (Good Manufacturing Practices) certification plan which aims to help local manufacturers to survive and compete locally and globally. All Vietnamese manufacturers were to have GMP certification by the end of 2010. By the end of 2011 all drug stores should have GPP (Good Pharmacy to Practices) certificate, and from January 2013, all drug outlets require GPP certificates. Drug stores and outlets not in possession of CPP (Certificate of Pharmaceutical Product) will only be allowed to sell non-prescription drugs based on Decision 08/2009/TT-BYT of June 2009. WHO recently gave international GMP certifications for products and materials as well as Good Laboratory Practice (GLP) and Good Safety Practice (GSP) certificates to some Vietnamese companies. Most new production facilities are now GMP certified.

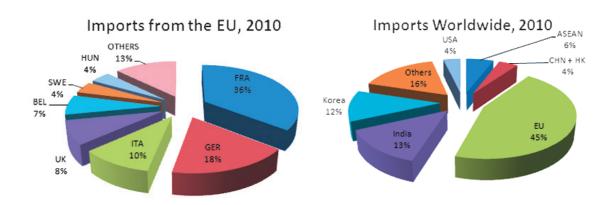




Import of Pharmaceutical Products

According to figures from Vietnamese customs, the total import of pharmaceutical products (HS code 3002, 3003 and 3004) reached US\$1.24bn in 2010. The EU is still by far the main partner with 45% (US\$557mn) of the market, followed by India (13%), South Korea (12%) and ASEAN bloc (10%). New players are emerging to tap into this lucrative market, mainly from South America and Cuba already totalling 2% of the market.

From an EU perspective, France is by far the biggest exporter with up to 36% of the export volume followed by Germany (18%), the United Kingdom (8%), and Belgium (7%). The presence of French and German production facilities in Vietnam certainly has an impact in these figures (Sanofi Vietnam, joint venture between Sanofi-Synthélabo and Central Pharmaceutical Manufacturing Enterprise, and Stada Vietnam, joint venture between Stada and Khuong Duy Pharmaceutical Company). European countries should, in general, maintain a strong market position in the coming years, particularly due to rising demand for quality pharmaceutical products. However, competition particularly from India and South Korea should not be underestimated. The United States might also emerge strongly in the coming years.



Import and Distribution

Under WTO commitments, foreign-invested companies and branches of foreign firms are allowed to import drugs directly into Vietnam since January 2009. However, guidelines which specify the operational requirements for such imports are still to be issued. Furthermore, foreign-invested companies and branches of foreign firms are not allowed to distribute drugs to the end-user. They have to work with intermediary local companies. Only these companies have the right to supply the market and have direct access to hospitals and pharmacies. Nevertheless, some foreign-owned companies active in the wholesale sector have managed to control a vast segment of the market, particularly regarding the imported drugs. Through their large brand portfolios they have become key players in the supply-chain (Diethelm Vietnam, Zuellig Pharma Vietnam, Mega Lifesciences).

Distributors, meanwhile, have slowly been applying ISO 9001: 2000 quality management standards. The Ministry of Health is developing the distribution network to help improve access to medicines throughout the country. According to the VDA, official distributors numbered 1,676 companies (including state-owned, private, joint-stock and limited companies) in mid-2010. Official statistics indicate that Vietnam currently has 165 drug manufacturers, of which 48 have been certified as GMP-compliant.

Regulatory Regime

Regulations governing the pharmaceutical industry traditionally have been unclear and often implemented on a case-by-case basis, representing a market entry barrier to foreign companies.

Advertising

Pharmaceutical advertising remains restricted in Vietnam. Prescription drugs cannot be advertised directly to consumers, restricting the potential marketplace. However, these products can be promoted to health officers via qualified representatives of pharmaceutical companies and through product conferences and health seminars. Foreign firms are required to obtain permission from a provincial health department before holding a conference and the department must be made aware of any pharmaceutical displays. Meanwhile, all advertising materials must be registered with the Drug Administration of Vietnam (DAV).

Advertising laws are more liberal for OTCs (Over-the-counter) than prescription products. Consumer marketing is permitted via magazines and newspapers as well as leaflets and brochures. The Ministry of Health issues a list of drugs that can be advertised to consumers through TV, radio and other mass media outlets.

Intellectual property, trade barriers and WTO commitments

Since Vietnam joined the WTO it has made serious efforts to implement guidelines that follow the TRIPS pact (Trade-Related Aspects of Intellectual Property Rights) but a lot of work remains to be done. The government has taken a number of steps to increase IP protection and the country's patent structure is already broadly in line with those demanded by the WTO:

Drug registration: Unfortunately Vietnam does still not automatically recognise foreign Certificates of Pharmaceutical Products (CPPs) and does not require state-owned importers to obtain registration for their products. Accordingly, time-consuming, costly and rather unclear procedures often have to be followed for drugs already registered and accepted worldwide. Vaccines still have to go through local clinical trials.

Patent protection and enforcement: Patents last 20 years with market exclusivity of undisclosed data for 5 years. Practically, the enforcement of the law is complicated as too many agencies are involved (MOF, MPI, NOIP) with no real coordination. IP enforcement remains disorganised as a result. In addition, the legal system has very little experience, with guidelines on these issues lacking.

Counterfeits: The number of counterfeits and "trade dress" drugs has a strong impact on the general public health in addition to the severe market distortions it creates. Control is rather difficult because most of the drugs are handled through private dealers and not through recognised pharmacies. Counterfeit products are also pouring into Vietnam via Laos, Cambodia and China. Even though the MoH is taking measures to tackle the issue, few results can be seen.

Prescription, OTC and generic drugs

There is no proper distinction between prescription and non-prescription drugs. Additionally, it is very easy to buy prescription drugs without a prescription making it difficult to obtain accurate market figures. Nonetheless, the growth of prescription drugs should remain solid boosted by the increase of the number of hospitals and modernisation of the existing ones. Prescription drugs should continue to account for over 70% of the total market in the coming years mainly due to a tighter control from the MoH and the import of newer and more expensive patented products. Demographic and environmental trends will heavily impact the prescription drugs market. A strong increase of respiratory problems (worsening air quality in urban centers and high smoking rates), alimentary tract and metabolism, cardiovascular diseases will be the main illnesses to be treated. The future market is estimated to be worth US\$2bn at consumer prices in 2013.

The OTC market consists mainly of alimentary tract and metabolism (36.7%, in which vitamin and minerals 15.5%) analgesics (5.6%), cough and cold remedies (9.0%), cardiovascular (5.5%), skin treatments (9.3%) sensory organ (3.4%) and others. The liberalisation of the market will put extra pressure on local manufacturers as they will remain heavily dependent on the import of APIs (Active Pharmaceutical Ingredients) needed for their industry. Due to the lack of family doctors in Vietnam, and the habit of self-diagnosis, most Vietnamese families rely heavily on OTC drugs for self-medication. On the other hand, MoH management systems are insufficient to control drug sales by chemists. MoH aims to have 100% of drug stores meet GPP standards by 2013 to tighten drug safety management systems.

Medical Device Market

The medical device market in Vietnam can reasonably be estimated at US\$220mn and is expected to grow on a y-o-y basis by 10% for the coming three years, fuelled by the continuous increase demand for healthcare services and by the increasing of a significant number of private hospitals and joint-ventures buying of state of the art equipment. Government funded hospitals are purchasing more and more expensive foreign systems to install in very large hospitals. This is usually funded by ODA or other cooperation funds from the main donors.

The market could easily double to US\$400mn in the next 5 years. The MoH is pushing hard to improve overall standards and therefore pushing regulations for better medical equipments.

Local production of medical devices is extremely limited and accounts for only 5% of the market. Local manufacturers are producing low-end products of decent quality. 48 agencies are manufacturing more than 620 basic pieces of hospital equipment. This is very far from the 2002-2010 strategy targets of manufacturing 60% of the markets need by 2010. The broad economic reform package called đổi mới"(Renovation) has been in effect for over 20 years, but local enterprises lack the critical mass for significant market share. A couple of strong joint ventures with Japanese, German and South-Korean partners are active in the sector as well. The remaining 95% are imported mainly from Japan, EU, USA, South Korea and Taiwan. Unfortunately most of the hospital staff is insufficiently trained to handle these hi-tech equipments.

EU exports of equipments under custom code HS 9018 increased to roughly €37mn (around US\$51mn) in 2010 from around €34mn (US\$47mn) in 2009, reaching the same level as in 2008. Germany accounts for over 50% of EU exports, posting very healthy growth figures for the last 4 years, followed by France, Austria, Italy and Spain.

Conditions for importing second-hand equipment are still unworkable. Second-hand equipment must retain at least 80% of its life expectancy and have a maximum 110% energy consumption compared to new equipment.

Import and Distribution of Medical Equipment

Within the MoH, the Department of Medical Equipment and Health Works (DMEHW) is in charge of medical devices, whereas the Ministry of Science and Technology (MoST) performs some regulatory functions for domestically made medical devices.

Imported devices are not subjected to registration but to an import license. Only certain categories of medical devices have to go through that procedure (see MoHs circular No. 08). Traders wishing to import such appliances must satisfy some particular conditions, including having technical staff capable of guiding through installation and maintenance. In some cases clinical trials will be requested. Foreign clinical trials can be accepted but ultimately still require approval from the MoH.

2.6 MACHINERY

Overview

Mechanical engineering industry

The Government Decision 186/2002/QD-TTg, dated 26/12/2002, is often referred to by experts when talking about development policies in the mechanical

engineering industry sector. This Decision acted as a master plan providing guidelines for the development of the mechanical industry with certain goals to be reached up to 2010 with a vision to 2020. Up to 2010, 45-50% of the country's mechanical engineering demand was to be met and 30% of the total production output exported. Priority for development was to be given to the following 8 sectors:

- Complete equipment/production lines
- Engines
- Machinery for processing of agricultural products
- Machine tools
- Construction machines
- Shipbuilding industry
- Electronics and electrical equipment
- Auto industry and transport engineering

To reach this ambitious goal, Vietnam was to apply new development policies such as (i) restructuring of state-owned companies in order to increase their production capability, (ii) attracting foreign direct investment, and (iii) encouraging private enterprises to grow.

According to statistical information by VAMI (Vietnam Association of Mechanical Enterprises) there are 7,803 mechanical enterprises throughout the country, including 6 corporations with more than 5,000 workers each. In total, there are approximately 538,700 people working in the mechanical engineering sector.

State industrial out-put value (at constant 1994 prices) by industrial activities

Activities / Year	2001	2005	2006	2007	2008	2009
Fabricated metal						
products, except	7062.7	17595.2	22836.1	27972.3	33437.6	37046.6
machinery and equipment						
[billion VND]						
Fabricated machinery and						
equipment	3421.1	5494.9	5561.2	7228.3	8235.5	8771.4
[billion VND]						

Source: General Statistics Office

With the growing number of enterprises the manufacturing capability of mechanical products has been increased continuously. Vietnam's mechanical industry in the period 2001–2009 has had annual average growth rates of 23% in value from

VND22,225bn in 2000 to an estimated VND143,715bn in 2009 and a projected VND175,185bn in 2010 (based on 1994 fixed prices).

The table below shows the change in production output of some products in the recent years.

Product / Year	Quantity	2000	2005	2008	2009	2010
	in	20220	201702	277226	202770	2.10000
Combustion	pieces	30329	201593	275236	302750	348000
engines	1	1000	0671	2225	27.50	20.10
Tractors &	unit	1932	8654	3325	3560	3842
transport vehicles						
Irrigation water	pcs	3496	8298	2196	2250	2400
pumps						
Household water	1,000 pcs	208	591	310	330	350
pump						
Rice harvesting	unit	11877	19529	18230	18500	19800
machines with						
engines						
Rice harvesting no	unit	7061	6993	3161	3200	3500
engines						
Pesticide pumps	1,000 pcs	70.4	54	59.3	65	68
Rice threshing and	unit	12484	2734	5685	5500	5000
husking machines						
Agricultural hand	1,000 pcs	15918	25998	21197	22000	22500
tools						
Machine tools	pcs	4121	3839	3700	1500	1800
Electric motor	Pcs	45855	194374	165302	181830	209100
Transformer	Pcs	13535	45540	46915	47100	48200
Electric wire	Mio m	146.5	936	1024	900	1100
Electric fans	pcs	328.4	1751.7	3069	3200	3300
Fridges	1,000 pcs	174.5	692.6	1000.8	1296	1350
Air conditioner	1,000 pcs	52.5	147.9	313.1	444	540
Wash machines	1,000 pcs	159	336.6	530.6	520.9	600
Cars assembled	unit	13547	59152	100076	99600	115000
Motorbikes	1,000	463.4	1982.1	2880.2	3054.2	3100
assembled	unit					
Gas cooker	1,000 pcs	548	1046.7	2140.1	-	_
Railway carriage	unit	79	461	95	100	110
Bike cycles	1,000	659	2525	1689	1700	1800
	unit					•

Source: VAMI

Thanks to the open-door-policy begun more than 20 years ago mechanical engineering companies have the opportunity to co-operate with foreign contractors, moving from basic tasks assigned by contractors to, after more than two decades, undertaking the role of EPC (engineering / procurement / construction) in building of industry projects. These include for example the Uong Bi Thermal Power Plant, the Ca Mau Combined Cycle Power Plant, Nhon Trach Thermal Power Plant, Son La Hydro Power Plant, A Vuong Hydropower Plant, the Song Thao Cement Plant, and the Do Luong Cement Plant.

Manufacturing capabilities however are still limited to simple works like welding, making frames and non-standard steel structures or assembling such as in the automotive and shipbuilding industries. Attention at all authority is focused on tackling weaknesses so as to contribute to further developments in sectors such as casting, forging, creation of big semi products, heat treatment, surface treatment, manufacturing of high quality standard products. Factors hampering the international competitiveness of Vietnamese engineering companies are:

- Lack of investment capital
- Lack of R&D personnel
- Lack of skilled work force
- Lack of international market information
- Companies not prepared to follow the policy of localisation of products
- Old/obsolete technology
- Need to restructure state-owned companies while competing world-wide

The goal set in Decision 186 to meet 45-50% of mechanical engineering demand by 2010 has not been fulfilled. No exact figure for the local production capacity in 2010 has been officially announced, but it is believed to be about 38%. The remaining demand has to be imported.

Vietnam's import of machinery, transport means and spare parts

Import volume / Year	1986	2000	2005	2006	2007	2008
US\$mn	749	4.781	9.285	11.040	17.966	22.425

Source: General Statistics Office

Electronics industry

Vietnam's electronics industry began in the 1970s when Sanyo opened a TV and radio factory that is now run by Vietronics Bien Hoa under a licensing agreement. However, it has really shown significant growth after Doi Moi in the 1990s, when several joint ventures with foreign companies have been established. In recent years more and more foreign companies have been setting up their subsidiaries in Vietnam.

- Canon Vietnam
- Ericsson Vietnam
- Fujitsu Vietnam

- IBM Vietnam
- Intel Product Vietnam
- LG Vietnam
- Microsoft Vietnam
- Motorola Vietnam
- Panasonic Vietnam
- Resenas Vietnam
- Samsung Electronics Vietnam
- Samsung Vina
- Siemens Vietnam

Like the mechanical engineering industry, the electronics industry had a development master plan until 2010 and a vision for 2020, as set out in Decision No.75/2007/QD-TTg of 28 May, 2007. The goals of this plan are:

- Turnover of 4-6 billion US\$ from electronics production by the year 2010
- Export volume of electronics products of US\$3-5bn
- Creation of 300,000 jobs
- Annual growth rate from 20-30%

Electronics production and export

Electronics output	2006	2007	2010f	2011 <i>f</i>	2012f	2013f	2014f
Electronics industry output	1,770	2,200	4,451	5,510	7,181	8,818	10,722
[US\$mn]							
Electronics export volume	1,606	1,880	2,174	2,478	2,934	3,485	4,120
[US\$mn]							

Source: Business Monitor International, f = forecast

According to reports of the Ministry of Industry and Trade, the export and import of electronics products (including computers, electronic devices and components) in 2009 were as follows:

Exports: US\$2.76bn (+4.6% over 2008). The main markets are US, Japan, Thailand and China.

Imports: US\$3.95bn (+6.5% over 2008). The main importers are the foreign direct invested enterprises with US\$2.55bn (64.5% of the total import volume).

Mobile handsets accounted for the largest part (39%) of domestic consumer electronics spending in 2009, followed by computers with 35%. Sales volume of computer hard ware in 2010 was around US\$1.5bn. An annual growth rate of about 14% is expected in the period 2010-2014.

State industrial out-put value (at constant 1994 prices) by industrial activities

Activities / Year	1995	2005	2006	2007	2008	2009
Office accounting and						
computing machinery	27.9	3206.1	5222.8	6701.5	8469.2	9119.8
[billion VND]						
Electrical machinery and						
apparatus [billion VND]	1087.6	11991.6	15840.9	20185.8	22192.8	23560.7
Radio and						
communication	2064.8	9136.7	9137.8	12461.9	14081.3	15403.6
equipment and apparatus						
[billion VND]						

Source: General Statistics Office

Consumer electronics overview

Product / Year	2006	2007	2010f	2011f	2012f	2013f	2014f
Computer	990	1,110	1,492	1,700	1,972	2,249	2,541
[US\$mn]							
Audio, Video, Gaming	650	780	1,137	1.319	1,517	1,730	1,954
[US\$mn]							
Communications	694	954	1,750	1,942	2,160	2,226	2,270
[US\$mn]							

Source: Business Monitor International, f = forecast

Experts suggest that the local electronics industry is reliant on outdated technologies and equipment. Vietnam is still in phase 1 (import of components and assembly for domestic demand) while other countries in the region (Thailand, Singapore, Malaysia, Indonesia and the Philippines) are in phase 3 (R&D, high-tech, export oriented). Industry capability is limited mainly to assembly, lacks a support sector that would provide components, and therefore local companies find it difficult to achieve cost-competitiveness with foreign brands.

For electrical machines and equipment, in the near future investment efforts will focus on increasing production capacity to manufacture machines and equipment for the power industry, especially manufacturing of big transformers up to 125 MVA, 220 kV, power distribution equipment and power transmission.

Recommendation

There is an urgent need to focus on the development of supporting industries for the sectors such as electronics and informatics, automotive and motorbikes, textile and garment, shoes and leather and mechanical engineering. As a key factor in achieving the country's goals of industrialisation and modernisation, the Government will make significant efforts to expand the engineering industry.

The electronics devices market growth rate is forecasted at 13% through 2014, with key areas including low-priced handsets, notebook computers and LCD TV sets. Low labour costs and a large emerging domestic market make Vietnam a potentially interesting location for global vendors. Foreign companies are encouraged to set up production here. The Government provides support and incentives for investment, particularly in semiconductors.

Vietnamese companies will need in the not so distant future to increase the quality of their equipment to be able to manufacture mechanical quality products which comply with international standards.

Several European companies already cooperate closely with Vietnamese partners. More and more companies regard Vietnam as a persuasive alternative to China. Therefore, the potential for a mutually fruitful partnership is promising.

Vietnamese companies frequently lack know-how, technology and capital: factors which are plentiful in internationally-active European companies. On the other hand, European labour costs are relatively high and thus uncompetitive in a global context. The cost structure of Vietnamese companies is highly attractive and even withstands comparison with China. Vietnam's advantages are manifold, since it offers a better quality of work as well as better protection for intellectual property rights than many other countries in the region.

Consequently, the teaming up of European and Vietnamese partners can be a profitable business, offering Vietnamese companies access to Western know-how and, at the same time, European companies a reliable and cost-efficient production base in Asia.

2.7 BANKING AND FINANCE

Summary

Vietnam's financial services system is regulated by the Government and strictly supervised by the State Bank of Vietnam (banking services), Ministry of Finance (insurance services), and the State Securities Commission (stock exchange and securities).

The financial services sector in Vietnam has shown unprecedented growth during the past few years with increase in penetration of foreign insurers and improvement in services offered by local banks.

The sector is developing at double rate of the country's GDP growth with booming consumer demand, and increased internationalisation of the banking system. Vietnam's financial services sector is transforming and the ongoing deregulation will ensure the sectors growth in the coming years.

In Vietnam's developing market, there are many cash management opportunities for banks. To develop these opportunities, global banks that have the expertise, the technology and the global resources may look at entering strategic partnerships with

local banks that already have the nation-wide distribution networks.

Banking Sector

In 1990, Vietnam adopted the Ordinance on the State Bank and the Ordinance on Banking, Credit Co-operatives and Financial Institutions in order to create a legal framework for the banking system. Since then, the banking system in Vietnam has made considerable progress.

The State Bank of Vietnam, the Central Bank of the country, defines its roles as formulating monetary policies; recommending economic policies to Government; managing the country's international reserves; supervising commercial banks operations in Vietnam; printing and issuing banknotes; and controlling the foreign exchange.

There are six State owned commercial banks (SOCBs) in Vietnam including: Joint Stock Commercial Bank for Foreign Trade of Vietnam (Vietcombank), Vietnam Bank for Industry and Trade (VietinBank), Bank for Investment and Development of Vietnam (BIDV), Vietnam Bank for Agriculture and Rural Development (AgriBank), Housing Bank of Mekong Delta (MHB) and Vietnam Bank for Social Policies (VBSP).

There is also the Vietnam Development Bank (VDB) which is the successor to the Development Assistance Fund and which was been established by a decision of the Prime Minister in May 2006. VDB is a non-profit, policy lending institution and has a chartered capital of VND5 trillion. Together with VBSP, VBD is expected to contribute to poverty reduction through providing financing for construction of irrigation and rural transport works, traditional village infrastructure, socio-economic infrastructure in remote areas, and export financing.

The Bank of Social Policies (VBSP) was established in 2002 with primary functions are to provide concessional and directed credit to the poor people, provide subsidised funding to create job for the poor, i.e. not for profit purposes.

The organisational and financial restructuring of SOCBs was expected to happen alongside with their equitisation by 2010. However, so far only VietcomBank and VietinBank equitised in 2007 and 2008 respectively through Initial Public Offering (IPO) with the states shareholding in both banks remained at 70%. AgriBank, BIDV and Mekong Housing Bank have postponed equitisation until 2011 - 2012 due to the poor performance of the stock market.

1 April 2007 was an important date for the banking sector of Vietnam to demonstrate its ability to comply with WTO commitments, i.e. that Vietnam should start allowing foreign banks to locally incorporate on condition that there must be an agreement between the State Bank of Vietnam and the financial services' supervision authority of the foreign banks home country. So far, British banks (Standard Chartered Bank "SCB" and Hongkong and Shanghai Banking Corporation "HSBC"), ANZ of Australia, Hong Leong of Malaysia and Shinhan Bank of South Korea are licensed to locally incorporate. Banks from other countries, including Taiwan and Russia, are also lining up similar moves. However, the world economic recession slowed the process.

Another way that foreign banks are looking to penetrate the local market is to acquire shares of local banks. Vietnam currently caps foreign ownership by a single

strategic investor of a commercial bank at 15%. However, some Vietnamese banks have sold 20% of their charter capital to foreign strategic investors under the Prime Ministerial approval. HSBC owns a 20% stake in Techcombank, MayBank of Malaysia owns 20% of An Binh Bank, and Societe Generale SA of France owns 20% of SeAbank. Other banks have reached the cap in foreign ownership. Southern Bank has sold 15% to United Overseas Bank (UOB) of Singapore pending a 20% increase, Standard Chartered Bank holds 15% of Asia Commercial Bank, ANZ holds 10% of Sacombank and Sumitomo Mitsui Financial Group of Japan holds 15% in Eximbank. Meanwhile, Deutsche Bank (Germany) has acquired 10% of Habubank, and International Finance Corporation has a 10% stake in VietinBank.

This is a win-win solution for both parties as the local banks will have access to foreign expertise, technical experience and global resources in banking while foreign banks are able to tap wider customer base in the retail segment.

Prime Minister Nguyen Tan Dung has recently instructed the State Bank of Vietnam (SBV) to consider allowing commercial banks to sell up to 20% of their charter capital to a single foreign strategic investor.

To date, Vietnam has seven state owned banks, thirty seven joint stock banks, five joint venture banks, five foreign banks that have locally incorporated, thirty nine foreign bank branches, thirteen financial leasing companies, and forty six representative offices of foreign credit institutions operating in the country.

The Governments Decree No. 141/2006/ ND-CP stipulated that the minimum legal charter capital of commercial banks must be VND3 trillion by 31 December 2010. Though the deadline to implement was extended by one year to the end of 2011, according to Decree No. 10/2011/ND-CP dated January 2011, most small banks have fixed their minimum compulsory authorised capital at VND3 trillion.

The SBV issued Decision No.750/QD-NHNN in April 2011, which will take effect in May 2011, raising the compulsory reserves ratio for foreign currencies by 2%. Accordingly, the foreign currencies reserve ratio requirement for state-owned commercial banks (excluding AgriBank), joint-stock commercial banks, joint-venture banks, foreign bank branches and wholly-owned foreign banks, for demand deposits and time deposits with term below 12 months is now 6% of the total deposit outstanding.

Meanwhile, in Circular No. 09/2011/TT-NHNN, the SBV regulated the deposit interest rates of the US dollar at 3% per year for individuals and 1% for organizations.

Also in April this year, the SBV issued Document No. 2956/NHNN-CSTT requiring credit institutions and branches of foreign banks to strictly control credit growth to below 20% in 2011 following the Governments Resolution No. 11/NQ-CP of February 2011 on fighting inflation, stabilising the macro-economy and ensuring social welfare. Consequently, much of the credit is earmarked for manufacturing, agriculture, export, supporting industries, and small and medium enterprises.

Stock Market

The Government has developed its equitisation plan since 1992. The State Securities Commission (SSC) has its headquarters in Hanoi and a representative office

in Ho Chi Minh City. The Ho Chi Minh City Securities Trading Centre, now the Ho Chi Minh City Stock Exchange (HOSE), Vietnams first ever exchange, was officially inaugurated in 2000.

The Hanoi Securities Trading Centre (HaSTC) and HOSE constitute the official mechanism through which new government bonds are issued, and they function as the secondary market for a number of existing bond issues. All securities traded on the HaSTC and HOSE are denominated in Vietnamese Dong.

The SSC is responsible for capital markets development, licensing of participants, and the issuing and enforcement of regulations. A wide range of regulations, with significant input from multilateral bodies such as the International Finance Corporation, have been promulgated, including those dealing with issues such as insider trading, take-over trigger points and margin lending. In order to be listed, a company must have been profitable for at least two years, have a minimum capitalisation of approximately US\$300,000, and have at least 50 shareholders who are not employees of the company, holding at least 20% of the stake. Foreign invested joint venture companies are technically qualified to list, but in order to do so, they must be reorganised into joint stock companies.

There have been eight banks licensed to accept custody of securities. Custody is based on a central depository, central registry book entry system.

While the economy grew at 6.78% in 2010, a 5.32% year-on-year increase, the benchmark stock index fell around 2% during the year.

The Government has set an economic growth target of 7-7.5% for 2011 and experts suggest local stocks are likely to rise this year on signs of an improved economy.

Apart from the expectations of stock market growth, another reason that will spur companies to make their stock market debut this year concerns new regulations on securities. Under the modified Securities Law taking effect in July 2011, a company must list its shares on the official market (the Ho Chi Minh City or Hanoi Stock Exchanges or the UPCoM - an exchange for informally traded stocks) for at least one year after making an initial public offering (IPO).

Analysts believe that now it is the right time to buy securities companies in Vietnam because the companies are cheap. There are many factors that have prompted foreign investors to seek to purchase Vietnamese securities companies. The stock market is gloomy, making the stocks of companies, including securities companies, cheaper. In addition, prices of companies have been going down because, from early 2012, Vietnam must allow 100% foreign invested securities companies to set up in Vietnam as per commitments made when it joined the World Trade Organisation (WTO). This means that foreign investors will be able to easily establish their own securities companies instead of purchasing Vietnamese enterprises to expand their market share.

To date, there are 105 operational securities companies, a relatively high number, given that Vietnam remains a small fledgling market, with only just over 1 million accounts.

The Ho Chi Minh City Stock Exchange has increased its total number of listed companies to 277 from 2 when it first opened in 2000, including 82 last year. The Hanoi Stock Exchange, which had 105 new listings in 2010, now has a total of 372.

In 2010, the stock markets capitalisation had reached VND726 trillion (US\$33.76bn), a year-on-year increase of 17.1% and accounting for 39% of GDP. The total amount of traded stocks on both the Ho Chi Minh Stock Exchange and the Hanoi Stock Exchange was valued at VND620 trillion. Investors have so far opened 1.1 million accounts in the market.

SSC said they will gradually restructure the stock market in 2011 by improving the listed, OTC and government bond markets. SSC also plans to raise the minimum registered capital for companies listing on the HOSE to at least VND120bn (US\$6.2mn) from VND80bn while the threshold on the HaSTC will rise to VND30bn from VND10bn.

According to SSC, Vietnam will complete the legal framework for its stock market this year in an effort to connect it with regional and world markets.

Insurance

In December 2000, the National Assembly passed the Law on Insurance Business. This law, drafted with the help of the European Commission's Eurotap programme, is the main law regulating the industry, regulating the obligations and rights of organisations and individuals. The previous Decree of December 1993 had become outdated because of the rapid development of the industry.

Although the insurance industry has developed strongly in recent years, growing at an annual rate of 28-29%, insurance premiums are still a modest 1.5-2.0% of GDP. A number of reforms announced by the Ministry of Finance (MoF) along with the rising pressure of integration are expected to spur insurance firms into seeking a greater share of the domestic market.

There are currently 27 insurance enterprises operating in Vietnam, of which 2 are state owned enterprises, 15 joint stocks, and 10 foreign invested ones. In addition, there are over 30 representative offices of foreign insurance firms.

After 10 years implementing an open-door policy, enhancing international integration, attracting foreign investment in combination with promoting internal forces, Vietnam's insurance market has made great progress both in quantity and quality. The average growth rate of insurance premiums during 1993-2004 was about 30% annually. Ratio of insurance premium to GDP has increased from 0.37% in 1993 to 1.86% in 2004.

Vietnam's insurance sector reported strong growth in 2010 with a total insurance premium of VND38.9 trillion, of which non-life insurance was 91% higher than the targeted VND17.1 trillion.

According to the Vietnam Insurance Association, local insurers had the total invested capital of over VND92 trillion, or US\$4.6 billion. The number of insurance agents was over 200,000 or 33% higher than last year's target while financial capability of insurers also improved.

Life insurance: In 2005 Vietnam's life insurance market stabilised after a period of rapid development, according to MoF. The total amount paid for life insurance premiums reached more than VND8.18 trillion (around US\$512mn) in 2005, up only 12% over 2004, much lower than the 50-60% growth rates of 1998-2003. This stability was considered as a main factor that would help the Vietnamese life insurance market to be competitive during the process of international economic integration. The stability has also made the domestic life insurance market more attractive to foreign companies. Three new life insurers that were recently licensed include Cathay Life (Taiwan), Eastern Life (Singapore) and Ping An (China).

This has, however, placed competitive pressure on local life insurance companies. As a result, many of them have changed from short to long-term investments, purchasing government bonds and investing directly in projects to develop infrastructure facilities and production.

11 life insurers are currently competing in Vietnam. The market leader is the UK based Prudential with a 41.3% market share, followed by local company Bao Viet with 33.13%. The other 9 companies share the remaining 27.57% of the market.

The life insurance market, meanwhile, raised premium revenue by 16.5% to VND13.7 trillion. Prudential took the lead in the market with VND5.3 trillion, followed Bao Viet Insurance Corp. with VND4 trillion and Manulife Co. Ltd. with VND1.4 trillion.

Last year, the sector signed almost 915,000 new contracts, a 36% year-on-year increase, including 39.2% of mixed products, 35.6% of term insurance and 24.2% investment products. The new contracts generated a premium of VND3.7 trillion, up 27%, of which Prudential took the lead with VND1.1 trillion, Bao Viet VND825 billion and Dai-ichi Life VND405 billion.

Statistics show that domestic life insurance companies have poured up to 50% of their total investment into government bonds and about 40% into credit organisations. The MoF has co-ordinated with relevant agencies to take measures, including offering investment incentives and commercial loans, in order to facilitate insurance companies investment activities.

Accountancy

The early development of the accountancy profession in Vietnam was based on the accounting practices of the countries that Vietnam had strong military, social or trade links, including China, then the Soviet Union and, more recently France and the United States.

A move towards alignment with International Accounting Standards (IAS) began in the early 1990s. The complete set of Vietnamese Accounting Standards (VAS) was issued at the end of 2003. These were based on IASs, knowledge of regional countries' standards, and Vietnam's own legal provisions and requirements. As Vietnamese companies are looking to list in international exchanges, a move towards International Financial Reporting Standards is becoming more urgent than ever and the Ministry of Finance is working hard to ensure consistency between IAS and VAS.

The UK Association of Chartered Certified Accountants (ACCA) has been

working with the Ministry of Finance to develop a Vietnamese variant of ACCA's accountancy qualifications. Since December 2006 candidates are able to sit the ACCA-recognised Vietnamese variant examinations in Corporate Law and Business Taxation. This represented the completion of the first step in the roadmap to fulfil the commitment signed between ACCA and the Ministry of Finance in 2003, concerning the localisation of the international examination in a bid to improve the relevance of the ACCA qualification in Vietnam. There is a potential training requirement for other papers within the ACCA qualification where UK financial experts can add value.

Auditing: In response to both the move towards a market-based economy in Vietnam and international economic integration, external auditing activities began to develop substantially in the late 1990s. With a view to establishing a legal framework for the establishment, development and management of external auditing activities, the Government promulgated the Regulation on Independent Auditing in the National Economy, the Regulation on the Examination and Issuance of Audit Certificate as well as the Regulation on Registration and Practising Audit Profession.

The big-six global audit firms dominate accountancy in Vietnam. With the huge work from ODA projects, foreign accountants continue to deliver strong business results in Vietnam. Their workload has increased significantly with the implementation of the Enterprise Law.

During the period from 1991 to 2005, MoF only licensed 75 auditing companies. With the boom of the stock market in 2006/2007 and the sharp increase in the number of companies listed in both stock exchanges, and in order to ensure that all listed companies have their accounts audited, SSC and MOF had to lower the requirements and licensed a large number (71) of auditing companies during the 2006/2007 period. Even then, the demand still exceeds the supply.

Conclusion

Vietnam's financial market has expanded rapidly during the past few years and has gained great strategic importance at the global level. With the rapid liberalisation, privatisation and globalisation of the market, Vietnam has become a preferred destination for an increasing number of international financial investors. The key financial sectors banking and insurance are attracting huge foreign investments as both sectors represent highly untapped potential.

With GDP growth of 6.78% or US\$104bn in 2010, Vietnam has a promising financial market for both domestic and foreign investors to consider. Financial services, including retail banking, micro-lending and consumer loans and medium business loans, can become lucrative and innovative investment portfolios in the coming years.

3. DEVELOPMENT OF INFRASTRUCTURE

3.1 TRANSPORT

3.1.1 AIR TRANSPORT

Air traffic in Vietnam is managed and regulated by the Civil Aviation Administration of Vietnam (CAAV). Since 1998 the CAAV has been internally divided into three public subsidiary companies responsible for the general administration and the construction of airports in the north, middle and south region of the country: Northern Airports Authority in Hanoi, Middle Airports Authority in Da Nang and Southern Airports Authority in Ho Chi Minh City.

In October 2010 the EU-Vietnam Horizontal Agreement on Civil Aviation was signed. Article 41 of the Vietnam-EU PCA also refers to joint actions in the field of air transport services. Both sides will encourage cooperation in, among other fields, civil aviation safety.

Passenger Numbers

According to the CAAV, in 2010, the total Vietnamese market transported over 21 million passengers and 460,000 tonnes of cargo, up 20% and 30% respectively over 2009. International traffic reached 10.7 million passengers and 340,000 tons of cargo, a rise of 20% and 37% respectively over 2009. Vietnamese companies transported 14.5 million customers and 188,000 tonnes of cargo, up 24% and 33% respectively compared to 2009. Both passenger (39%) and cargo (19.4%) transport increased in terms of international share.

The number of passengers transported by Vietnamese companies is forecasted to reach 17.5 million in 2011, an increase of 20.9% over 2010, whereas the cargo is expected to rise to 219,000 tonnes, up 16.2% compared to 2010. In addition, by 2014, Vietnam is projected to be the world's third fastest growing market for international passengers and freight, and the second fastest for domestic passengers.

Airports

There are 23 airports in Vietnam in total. Six of them are located in the north, eight in the centre and nine in the south. The number of international airports has been increased to nine due to step-by-step reconstruction and upgrade of domestic airports to international service level. The most important airports are Noi Bai International Airport in Hanoi, Tan Son Nhat International Airport in Ho Chi Minh City, Da Nang International Airport in Da Nang, Cam Ranh in Nha Trang and Cat Bi International Airport in Hai Phong. There are another four airports with international status in Can Tho, Chu Lai, Da Lat and Hue, but they are less important owing to their shorter runways.

Comprehensive development plans defined in the Masterplan 2020 include an upgrade at most airports. The upgrade includes buildings (terminal) and runways as well as modern navigation equipment and security protection required to raise

standards to acceptable levels. The airport infrastructure is underdeveloped, and is not capable of fully handling the sharp rise in passengers and cargo expected in the years to come. Passenger traffic is expected to grow by 12%-15% annually. The capacity of the airports will be increased to handle about 33 million passengers before 2020.

The most important project for the next decade will be the new Long Thanh International Airport planned to be built outside Ho Chi Minh City to replace the present Tan Son Nhat airport inside the city. The Authorities, however, have been lately considering retaining Tan Son Nhat airport so as to be able to handle the rapid growth in the number of passengers experienced recently and expected into the future. Currently, many of the main airports are under reconstruction, or are in the preparation process for reconstruction. The Ministry of Transport estimates the total investment in air transport to 2020 at around USD\$13.4bn.

Vietnam lacks the means to finance all these projects and ODA has been and will continue to be requested. The government of Vietnam is open to foreign investment in airports and airport construction (BOT and other models) as a necessary means of accelerating the modernisation of this important service industry.

Airlines

There are 47 airlines from 22 different countries and territories operating currently in Vietnam. Of those, four are Vietnamese-owned airlines. The biggest one is Vietnam Airlines Corporation operating as Vietnam Airlines. It is the national flag carrier of Vietnam and was established as a state enterprise in April 1989. Vietnam Airlines Corporation was subsequently formed in 1993, after bringing together several service companies. It has been a member of IATA since 2006. In June 2010 VA officially joined Sky Team, the second largest global airline alliance, thus becoming the first and sole Southeast Asian carrier to be a member. Vietnam Airlines Cargo is the cargo division of Vietnam Airlines, providing cargo services to hundreds of destinations in Asia, Europe, North America and Oceania, through their own network as well as partners' networks. In 2009 Vietnam Airlines transported 9.34mn passengers (an increase of 6.64% over 2008) and in 2010 the figure exceeded 12 million. Vietnam Airlines had been the major stakeholder in Vietnam's second largest carrier, Pacific Airlines, but its share was first transferred to the Ministry of Finance, and subsequently to the State Capital Investment Corporation (SCIC). Vietnam Airlines wholly owns Vietnam Air Service Company (VASCO), a regional airline in southern Vietnam. VA has become the airline with the most international presence within the Vietnamese market. It has increased its frequency of flights to France, Germany, Tokyo (Japan), Australia, South Korea, China, Hong Kong and Singapore and has also opened new routes to Myanmar and Beijing. The average age of the fleet is 5.3 years, of which, longrange and regional planes like B777, A330, A321, account for 60% (42 out of 69 aircraft) of the total.

Jetstar Pacific Airlines Joint Stock Aviation Company (operating as Jetstar Pacific) is a low-cost airline based in Ho Chi Minh City. It operates domestic and international services, as well as charter flights. Formerly known as Pacific Airlines,

the airline was renamed Jetstar Pacific in May 2008, to become part of the Jetstar LCC network operated by one of its shareholders, the Australian airline, Qantas. The airline was established in 1991, and commenced operations later that year, and has undergone a number of corporate restructurings since then. As a result of the July 2007 ownership change, Jetstart Pacific Airlines Joint Stock Aviation Company is owned by State Capital Investment Corporation (SCIC) of Vietnam, Saigontourist, Mr. Luong Hoai Nam (CEO) and Qantas of Australia.

Vietnam Air Service Company (VASCO) is a chartered and scheduled airline, operating regional flights. It is a fully-owned subsidiary of Vietnam airlines. It is based in Ho Chi Minh City and operates scheduled passenger services in the south of the country. It also conducts charter flights, medical evacuations, SAR operations, oil platform flights, and other aviation services. VASCO was established by government directive in 1987, and was originally a part of Vietnam Airlines. It began scheduled passenger flights independently of Vietnam Airlines in 2004, and approval has been given for it to be partially privatised. It has been reported that Vietnam Airlines wishes to use VASCO as a basis for a low-cost carrier, established in conjunction with foreign partners.

Mekong Aviation Joint Stock Co (Air Mekong) officially started flying from October 10, 2010 with four Bombardier CRJ900 planes on the route from Hanoi and HCM City to Da Nang, Da Lat, Buon Me Thuot, Pleiku, Phu Quoc and Con Dao. The firm plans to purchase an additional 10 aircraft in 2011, 14 in 2012, 18 in 2013 and 20 in 2014 to increase the number of operations.

VietJet Aviation Joint Stock Company, trading as VietJet Air, received approval from the Ministry of Finance in 2007 as Vietnam's second private airline after the currently non-operational Indochina Airlines. The company has been negotiating its future brands, logo and license with the CAAV while Air Asia announced in February 2010 that it had purchased a 30% stake in the airline. However, by April 2011, flight operations had yet to begin and it is believed that Air Asia might be considering divesting its stake from the company after not reaching an agreement on the Joint Venture's brand name.

Vietnam's first private cargo airline Trai Thien Air Cargo, which received its licence in 2009, had planned to officially commence operations in July 2010. However, operations have been postponed several times due to financial reasons and to date, have yet to begin.

Indochina Airlines suspended flights on October 2009 but has recently submitted a restructuring plan to the CAAV with a view to resuming services by the end of 2011.

3.1.2 LAND TRANSPORTATION AND PUBLIC TRANSPORT

Overview

The lack of transport infrastructure remains one of the key issues concerning the future steady economic and social development of Vietnam. While upgrading of the transport sector has been one of the principal policy axes of the government since the

early 1990s, significant bottlenecks in the major cities and the continuous rapid economic growth prove that transport infrastructure is going to need heavy investment in the coming years.

Financing has been one of the main problems faced by the developers of transport infrastructure. Conditions offered for private investors (BOTs, PPP schemes) still seem less favourable or attractive than those found in other countries. However, the Vietnamese government, aware of the importance of promoting private investors, especially foreign, through new and clearer BOTs, BTOs and B regulations issued Decree 108 (approved in November 2009 and effective from 15 January 2010). On 27 January 2011 the Ministry of Planning and Investment issued Circular 03 to provide guidelines on implementation of some articles of Decree No. 108. It clarifies key matters in Decree 108 such as the legal position of investors and the project enterprise, as well as tender application and selection procedures. Circular 03 came into force as of 1 April 2011.

An important feature of public works financing in Vietnam is the role played by ODA. Multilateral donors, especially ADB, World Bank (WB) as well as bilateral donors (in particular Japan but also Korea and various European countries) are very active in supporting the development of new infrastructure. New financing and cooperation schemes for infrastructure were sought in 2010, among which the ASEAN Infrastructure Fund (AIF) and the ASEAN+3 Credit Guarantee Facility signed by the ASEAN members plus China, Japan and Korea stand out. During 2010 and the beginning of 2011, lack of funding has been the major concern for project developers in Vietnam. The government's inability to provide the capital required has occasioned delays in several projects being carried out along the country. The Ministry of Transport (MoT) has recently offered various solutions to reduce burdens on contractors so temporarily halted works can resume.

Public spending priorities have focused on rehabilitation and upgrading of the main long-distance corridors. From 2006, the Ministry of Planning and Investment (MPI) and MoT have set various objectives, mainly concerning highways and international routes. The central authorities are keen on boosting the BOT and BTO schemes, approved under the MoT Decision N° 2667/QD-BGTVT of August 2007. To date, interest from private sector funding partners has been rather scarce; this is likely to change soon as several pilot PPP projects have been selected and will be implemented in the framework of the WB's assistance provided through PPP Development Office (PDO) at the MPI. The recently announced government backing for the Phu My Bridge BOT Corporation international bond issue marks a turning point in transport infrastructure financing for Vietnam.

Infrastructure

Roads

By the second half of 2009, Vietnam's road system was about 223,290 km long of

^{1.} Build Operate Transfer Contract, Build Transfer Operate, Build Transfer Contract, designations according to the Vietnamese legislation.

which only 42,167 km was paved (19%). Barely one-quarter of the network had more than one lane. According to recent surveys, approximately 40% of the network is considered to be in poor or very poor condition and requiring substantial investment. In addition, the quality of its road infrastructure was assessed by the World Economic Forum (WEF) to be poor and was ranked 102 out of 133 nations in its 2010 Global Competitiveness Report. MoT efforts are currently concentrated on the upgrade of existing roads and the construction of major national expressways (prospected total network of 6,313 km). The Vietnam Expressway Corporation (VEC) was established in 2004 as a replacement to the PMU model, for the development of express ways in Vietnam. It aims to promote the development of transnational connections and intermodal transport (both main objectives of the Road Masterplan 2020) by mobilising funds from three sources: 100% government financing, local BOT and foreign PPP arrangements.

Under the Expressway Master Plan, the short-term program (2006–2015) consists of 21 projects covering 1,968 km (estimated budget of US\$11.556bn), while the medium-term program (2016–2025) includes another 8 projects covering an additional 875 km (estimated budget of US\$5.238bn). VEC has published the main projects calling for foreign investment. The Prime Minister has also approved a plan to spend US\$1.52bn to build a north south highway along Vietnam's coastline. The project will cover 3,041 km and include the construction of the new road and the upgrading of existing roads. From 2010 - 2020, the government will spend some US\$800mn to build, upgrade and improve 892 km of road along the route.

The main projects underway in 2010-2011 are the Cau Gie-Ninh Binh expressway of 56 km and a budget around US\$400mn provided by VEC, the Ha Noi-Lao Cai highway mostly financed through ADB loans (264 km, US\$1.25bn) and the HCMC-Long Thanh-Dau Giay Expressway (55 km with a budget of US\$932.4mn) financed with a JICA ODA loan and an ADB OCR loan.

Several projects are currently under preparation, most of them, expected to be implemented from 2011 onwards. Among these projects, to name just a few, are the Ben Luc-Long Thanh expressway (45 km), the Hanoi-Lang Son expressway (130 km), the Ha Long-Mong Cai expressway (128 km), the Da Nang-Quang Ngai expressway (131.5 km) and the Noi Bai-Mai Dich expressway (20.2 km) which will require a total investment of USD\$4.642bn.

In March 2011, the Vietnamese ministries of Planning and Investment, and Transport have added a US\$305mn road management project into a list which will receive loans from the World Bank's International Development Association. The project will include upgrading four National Highways, 11 bridges with total length of 89 km, roads in Ha Tinh, Thai Binh, Hung Yen, Ninh Binh and Thanh Hoa and maintenance of 548 km of National Highway 1 and 18.

^{2.} www.expressway.com.vn

Railways

With a total railway network of 2,632 km (82% of it 1m gauge), the railway system is the least relevant of the means of transport as it accounted for just 5% of the passenger transportation in 2009 and 2% of goods transportation.

Since 2003 the Vietnam Railways Administration (VNRA) has been responsible for planning and supervising all railway projects in Vietnam while the Vietnam Railways Corporation (VRC) is in charge of business operations. Both, under responsibility of the MoT, are expected to develop the Master Plan on Railway Transport Development of Vietnam up to 2020 with a vision towards 2030.

The objectives for the period 2010-2020 include increasing passenger usage and freight transport by 13% and 14%, increasing the rail ratio (to 15-17 km per 1000 km² and 50-70km per million inhabitants) and raising the proportion of double-gauge (35-39%). The railway industry is to manufacture and assemble 50-60% of the required national supply of new wagons and locomotives.

As to the network itself, there are two main programs:

- 1) The "Two Corridors and One Economic Belt Program" linking North Vietnam and China (Lao Cai-Hanoi-Hai Phong and Hanoi-Dong Dang; see Ministerial Official Letter 6824/VPCP-CN, November 2006), whose first stage will be the rehabilitation and upgrade of the Yen Vien-Lao Cai railway, due to be initiated in July 2011 and financed by ADB and AFD (totalling US\$160mn); and
- 2) The so called Reunification Line includes an ambitious plan for the 1,570 km-long high speed line linking HCMC and Hanoi; the final report was presented on February 2009 by Vietnam-Japan Consulting Joint Venture (VJC) and was submitted for approval of the National Assembly in May 2010. With an initially estimated cost of USD\$55.8bn, the project was rejected for being considered economically unsound. During 2011, however, new feasibility studies will be launched to work out different alternatives to undertake the express line works as of 2012.

A third big project would be the Singapore-Kunming Project (SKRL), an east-west line which intends to connect Vietnam with Malaysia and Singapore through Cambodia. The governments of Australia and Japan, in collaboration with the ADB are especially active in this project which is still in a very early stage (rehabilitation of railway infrastructure in Cambodia).

Connecting socio-economic centres in the country, integrating with other transport modes and involving economic sectors in railway investment and operation has become the goal of VNRA and VRC. To that purpose, a land demand of 12,685Ha, an energy demand of 4,972mn KWh/year and US\$71bn will be needed to the year 2020. The funds will be provided by the state budget, ODA, government bonds and private investors.

^{3.} General Statistics Office of Vietnam.

Urban Transport

The People's Committees of HCMC and Hanoi and their Transport Departments face several challenges regarding their transportations. Both cities lack modern mass transport systems and are grappling with important issues of environment protection, traffic congestion and energy saving.

A public entity dependent on the Transport Department was created in both cities to manage the development of urban railway lines. The Management Authority for Urban Railways (MAUR) in Ho Chi Minh City and the Hanoi Authority for Tram and Public Transportation Development Management (HATD) are responsible for planning and implementing three mass transport systems: BR elevated railway and subways: four lines in Hanoi and six lines in Ho Chi Minh City.

Most of the necessary funds (around US\$15bn) for these projects will come from international donors, mainly ADB, Japan, China and European countries which have already been financing several feasibility studies. The projects currently under way are suffering a steady increase in costs and time delay due to complex financial arrangements and difficulties in the land clearing process.

By the end of March 2011, amongst the metro routes in progress, Line 2 in HCMC and Line 3 in Hanoi seem to be the ones in a more advanced state of development. A number of recent cooperation contracts have also been signed to build several monorail routes in HCMC.

Opportunities and Recommendations

European companies working on the transport infrastructure sector have been very active in the planning and feasibility studies, especially regarding the mass urban transport systems but also roads and railways. There have also been several landmark projects where European companies have supplied highly sophisticated equipment. Most of the projects have been funded by multilateral donors or by bilateral donors, who usually have their own bidding and procurement procedures for their soft loans or technical assistance.

Vietnam's commitment to infrastructure development makes it an important and promising market. Competition is tough, however; any interested European engineering, consulting, equipment provider or construction companies will need time, international references, local knowledge and resources to set the appropriate strategy for a successful entrance into the market. Attention should be paid to the push for PPP and the expected increase in private sector involvement in the market.

3.1.3 PORT DEVELOPMENT AND MARINE TRANSPORT

The maritime sector is playing an important role in Vietnam's economic development and has the potential for growth for the foreseeable future. Despite many

^{4.} Bus Rapid Transit or Busway.

lingering challenges, the sector presents many opportunities for foreign entrepreneurs' involvement. The following section provides an overview of Vietnam's marine transportation sector, analyses a number of challenges facing it, and points out potential opportunities for the EU maritime companies' participation.

Ports in Vietnam

Vietnam is strategically situated along important international marine transit routes and has a coastline that stretches 3260 km. There are currently 39 seaports in Vietnam, including 17 national ports, 23 local ports and 9 specialised industry ports. The network of port clusters around Ho Chi Minh City is by far the largest and most technologically advanced such facility in Vietnam, accounting for 61% of the country's container throughput and 48% of total cargo throughput. Due to increasing congestion and environmental problems since 2005, ports in the vicinity of HCMC have been undergoing gradual relocation to more convenient settings—more distant from the city itself and closer to the focal southern economic zone (Ba Ria-Vung Tau port cluster) and industrial zones (Dong Nai port cluster). However the relocation process to date has been slower than expected due to capital and site clearance difficulties. The second most important seaport in Vietnam is Haiphong, which is situated in the north and which services inter alia the capital city of Hanoi. This port accounts for 31% of the countrys container and 13% of its total cargo throughput.

Vietnamese seaports are divided into six regional groups (see the table below) and are more or less evenly spread across the country's elongated coast. They are all small by international standards; even the largest Vietnamese ports still have but a fraction of the capacity — both in terms of maximum vessel size and storage capacity — of competitive seaports in other Southeast Asian countries. With the official opening of the Cai Mep International Terminal in early 2011, the country's first deepwater port, the largest port in Vietnam can service bulk vessels of up to 130,000 DWT and container vessels of up to 11,500 TEU, while most other Vietnamese ports are geared to service bulk vessels below 30,000 DWT and generally lack the requisite facilities to service container vessels. Service charges at Vietnamese ports are also relatively high. As a result, disproportionate amount of traded goods continue to be transferred to and from Vietnam via large regional hubs such as Singapore, Kaohsiung and Hong Kong. The construction of Cai Mep deepwater terminal elicited the inauguration of direct sea routes to Europe and North America (Southampton, Le Havre, Hamburg, Rotterdam, Los Angeles).

Insufficient access to deepwater terminals and container servicing facilities is not the only challenge facing Vietnamese seaports. Other shortcomings often include: insufficient connectivity with other transportation networks; inadequate logistic and auxiliary facilities; mediocre service quality; shortage of skilled professionals; substandard harbour management and excessive administrative burdens; etc. Despite these deficiencies, however, Vietnamese ports have experienced rapid development in recent years and their official growth forecasts (measured in terms of throughput) are impressive.

Planned total cargo throughput by regional seaport groups and by cargo types (in million tonnes):

Region/Cargo Type	2015	2020	2030
1- Northern ¹	86-90	118-163	242-313
2- North Central ²	69-80	132-152	212-248
3- Middle Central ³	41-46	84-104	154-205
4- South Central ⁴	63-100	142-202	271-384
5- East Southern ⁵	185-200	265-305	495-650
6- Mekong Delta ⁶	54-74	132-156	206-300
TOTAL – all Vietnam	498-590	870-1083	1580-2100
General & container	254-280	410-488	880-1180
Container (mln TEU)	13.5-15.2	24.5-29.0	57.5-79.0
Coal & Ore	164-210	350-463	563-745
Liquid bulk	80-100	110-132	137-175
TOTAL-all cargo	498-590	870-1083	1580-2100
types			

Source: 2009 Master Plan on Development of Vietnams Seaport System Through 2020, with Orientations Toward 2030.

1: Hai Phong; Hon Gai. 2: Nghi Son; Nghe An; Son Duong-Vung Ang. 3: Da Nang; Dung Quat. 4: Van Phong; Quy Nhon; Nha Trang-Ba Ngoi. 5: Ba Ria-Vung Tau; Ho Chi Minh City; Dong Nai. 6: Can Tho.

Total cargo throughput by cargo types, 2003-2010

Cargo	Unit	2003	2004	2005	2006	2007	2008	2009	2010
Container	million TEU	2.0	2.4	2.9	3.4	4.5	5.0	5.5	6.5
Dry	million tons	49	55	61	68	79	88	126	105.1
Liquid	million tons	34	37	36	35	35	36	42	51.6
Transit	million tons	11	11	13	15	17	18	20	29.5
Passenger	pax in '000	132	120	53	233	350	511	303	359.9

Source: Vinamarine.

Total cargo throughput in 2010 reached 259 million tonnes – a slight increase of 3.16% compared to 2009, but up 82.4% compared to 2005 – and 6.5 million TEU, almost double the 2006 figure. After many years of continual growth, dry cargo throughput witnessed a significant decrease from 126 million tonnes in 2009 to 105 million tonnes in 2010. On the other hand, transit cargo and passenger turnover reached record levels in 2010. The Ministry of Transportation of Vietnam predicts that in 2011 cargo throughput will grow by about 8% and will reach 280 million tonnes.

Vietnamese seaports are subject to the supervision of the Ministry of Transportation, Vietnam Maritime Administration and provincial governments. They are also subject to a diversified system of management by provincial governments and large state-owned companies such as Vinalines, Vinashin and Petrovietnam. Some ports also operate under joint-venture agreements, with foreign companies never holding controlling stakes.

In December 2009 the prime minister approved the Master Plan on Development of Vietnam's Seaport System Through 2020, with Orientations Toward 2030 (Decision No. 2190/QD-TTg) which delineates a detailed and very ambitious schedule for the expansion and improvement of the country's seaports (see the subsection on opportunities below).

Ocean Shipping in Vietnam

By end of 2010, the Vietnamese fleet included 1,636 vessels, with several hundred ships serving on international routes, but few reaching regions outside of East and Southeast Asia.

Capacity and volume handled by Vietnamese maritime fleet 2006-2010

	2006	2007	2008	2009	2010
Fleet tonnage (million					
DWT)	3,447,474	4,384,880	5,579,524	6,218,397	7,182,775
Volume handled (million	49,840,000	61,350,000	69,284,522	81,056,074	88,919,900
tonnes)					

Source: Vinamarine.

The total tonnage of Vietnamese fleet increased from 3.4 million DWT in 2005 to 7.2 million DWT by the end of 2010. The average age of Vietnamese ships was about 12 years by end 2010. The overwhelming majority of these ships are dry bulk, small (under 10,000 DWT each) and relatively shy of modern technology (while scarcity of skilled professionals also constitutes a problem). However, in October 2009 the prime minister adopted an ambitious master plan with the view to stimulate their development. The Master Plan on Development of Vietnam's Ocean Shipping Up to 2020 and Orientations Towards 2030 (Decision No. 1601/QD-TTg) stipulates that by 2020 the Vietnamese fleets total tonnage will reach 11.8-13.2 million DWT and the volume of goods transported by the Vietnamese fleet will increase from 88.9 million tonnes in 2010 to 215-260 million tonnes in 2020.

Dynamic development of the Vietnamese shipbuilding sector is to facilitate this growth. However, in 2010 Vietnams state-owned shipbuilding company Vinashin ran into serious financial difficulties and failed to meet payments to some international creditors. This situation constituted a serious setback to the Vietnamese government's ambitious development plans for the shipbuilding.

Vietnamese shipping companies have a monopoly over all domestic routes. However, due to the abovementioned deficiencies they control only a fifth of Vietnam's market share for international shipments. A number of international shipping companies are active on the Vietnamese market, such as Maersk, APL, Evergreen, K-Lines, NYK, OOCL, etc. State-owned shipping company Vinalines accounts for close to half of the Vietnamese fleets total tonnage capacity.

Vietnamese ocean shipping operators have proven less resistant to the negative impacts of the global economic crisis than did the Vietnamese seaport industry.

Although global demand for shipping services is likely to rise in the future, Vietnamese shipping companies are hard pressed to ensure sufficient capital to undertake requisite investments in order to compete globally.

Opportunities

A number of factors bode well for long-term development prospects of Vietnamese seaports and for strong growth potential of the country's shipping demand: solid growth of the Vietnamese economy, its noteworthy openness (high external trade-to-GDP ratio), the country's gradual implementation of WTO obligations, its adoption of numerous new free trade agreements, and the relative resilience of Vietnam's maritime sector through the economic crisis. However, serious insufficiencies in terms of maritime infrastructure, know-how and capital availability still constitute a critical bottleneck hindering the country's economic development. With this in mind, the Vietnamese government treats the development of the maritime sector as a strategic priority and has adopted the aforementioned master plans on seaports and ocean shipping. These plans stipulate a need to mobilise foreign involvement and delineate top priority projects.

In particular, Vietnam's priority investment projects for the period 2010-2015 include: (1) commencing investment in the country's first international trans-shipment port, in Van Phong in south Central Vietnam, with planned capacity to receive container ships of 9,000-15,000 TEU and oil tankers of 300,000-400,000 DWT; (2) development and modernization of Vietnam's international gateway ports of Ba Ria-Vung Tau and Haiphong, which are scheduled to receive vessels of 80,000-100,000 DWT and container ships of 4000-8000 TEU; (3) development of specialized wharf areas to serve the Nghi Son petrochemical oil refinery complex in north Central Vietnam, the Long Son petrochemical complex in east Southern Vietnam, the Ke Ga metallurgical complex in south Central Vietnam and the coal-fuelled thermal electricity plants in Nghi Son, Vung Ang, Vinh Tan and the Mekong River delta (to receive vessels of 100,000-300,000 DWT); (5) development of wharf areas in the ports of Ho Chi Minh City and Can Tho; (6) ensuring adequate access fairways to the ports of Haiphong and ports on the Hau river, as well as between key terminals in the vicinity of Ho Chi Minh City.

Other than the aforementioned immediate priority projects, Vietnam is seeking to develop until 2020 and 2030 a complete and modern system of seaports and access channels, a more capable and modern fleet, an advanced shipbuilding industry, and quality ocean-shipping support services such as multimodal transportation services. The cost of the planned development and modernisation of Vietnamese ocean shipping – i.e. fleet, cargo distribution and logistics service centres – is estimated to reach VND270-290 trillion (US\$19-20bn) by 2020. The corresponding cost for seaport development is estimated to reach VND360-440 trillion (US\$20-24bn), including VND290-340 trillion for wharf infrastructure facilities and VND70-100 trillion for public infrastructure of seaports.

To ensure adequate financing and to attract requisite technology and know-how,

Vietnam will have to rely to a large extent on foreign partners (the Vietnamese government may undertake public-private partnerships to develop new large ports and terminals, for instance in Haiphong and Danang). This constitutes a unique opportunity for European companies to get involved in a number of ways. However, European entrepreneurs should be wary that Vietnam's business environment is complex and bureaucratic, especially in big infrastructure projects. Companies seeking opportunities in this area have to develop strong relationships with ministries and provincial authorities. Furthermore, European companies should be mindful of increasing international competition in Vietnam's maritime sector, especially from Japan and China.

3.2 IT AND TELECOMMUNICATIONS

Telecommunications

Vietnam's telecom sector has made remarkable achievements in recent years. The rolling out of the 3G network and services will open up potential business for added-value services such as internet banking, e-commerce, e-health, e-education, entertainment and media.

Some figures and facts

Fixed line penetration in Vietnam has improved considerably from 4.8 fixed line subscribers per 100 inhabitants in 2000 to 20.1 in 2009. Almost every municipality in Vietnam has access to the fixed-line telephone network. There are approximately 17.5 million fixed lines in the country, a number that is not expected to grow significantly as other solutions are taking over. Fixed wireless-networks have become increasingly popular, especially in urban areas.

The rapid development in mobile phone subscriptions in recent years has been impressive. At present, there are about 170mn Vietnamese telephone subscriptions, of which 154 million are from the mobile phone segment (almost double the population of 87mn). It should be noted that about 50% of mobile subscribers are "virtual" and are mostly prepaid, in large part arising from rapid growth in the last couple of years taking advantage of promotions offered by mobile phone operators. The Law on Telecommunications and Radio Frequency which entered into force in July 2010 is expected to control the aggressive promotional campaigns made by mobile operators.

Two state owned enterprises, Vietnam Post and Telecommunications Group (VNPT) and Ministry of Defence (Viettel) dominates the market with 85% of the fixed and 88% of the mobile telephone market.

Vietnam has seven telecom operators. Five of them, Vinaphone and VMS Mobifone (belonging to VNPT), Viettel, GTel (under Ministry of Public Security) and Ha Noi Telecom (HT Mobile), provide GSM-based network while two operators, S-Telecom (S-Fone) and EVN Telecom, use CDMA-based network.

The first two mobile virtual network operators (MVNO) - i.e. not having their

own infrastructure, Dong Duong Telecom and VTC obtained their licenses in late 2009 and early 2010 respectively but delayed their plans on providing services. They were confronted with difficulties in developing their customer base due to tough competition with the three largest mobile service providers such as Viettel, Mobifone and Vinaphone, which in total, account for nearly 90% of mobile subscribers. A further big challenge for these MVNOs is to reach agreements on sharing the existing wireless network infrastructure.

One of the foundations for e-government, e-commerce and e-transaction concerns digital signature certificates and Vietnam has five such providers, namely VNPT, NacencommSCT under Hanel, Bkav Network Security, Viettel and Vietnam Data Communication Company (VDC). Currently, digital signature services are provided mainly for electronic tax declarations and custom related transactions from businesses. In the near future, it will be compulsory for individuals and businesses to use online public services while security matters including authenticity of digital signatures, dispute settlement etc. must be internationally standardized.

By the end of February 2011, the number of internet users reached 28 million or about one third of the population. There are internet cafés all over the country, even in the most remote areas. Vietnam ranked 15th on the Connectivity Scorecard, surpassing China and India, in the 2010 ranking report comprising 50 countries, released by Nokia Siemens networks.

However, legislation places restrictions on the freedom of internet, with access to several web services restricted, including, for example, social networking sites services such as Facebook, while internet cafés must register and track their customers' online activities.

3G in Vietnam

In 2009, four licences for 3G mobile phone services were granted to VNPT (Vinaphone and VMS Mobifone), Viettel and to a consortium of EVN Telecom and Ha Noi Telecom. 3G services including mobile internet, video call and mobile TV, are available.

According to a survey conducted by the Ministry of Information and Communication during the first half of 2010, the real numbers of 3G subscribers were much lower than those claimed by the mobile operators. Vinaphone and MobiFone under VNPT reported having 13 million 3G subscribers registering for the pay-as-you-go services. However, the survey showed that Vinaphone only had 1.5mn while MobiFone had 4mn subscribers. With a further 1.5mn from Viettel, the figure of 7mn 3G service subscribers in Vietnam remains modest. However, with projected geographic 3G coverage of 98% by the end of 2012, a gradual decrease in 3G services charges, an increasing number of middle-income class, frequent handset upgrades (about 60% of population under the age of 30 upgrade high-tech regularly), together with the availability of 3G phones from Nokia, Samsung, Sony Ericsson, Apple and BlackBerry and 3G related devices, 3G subscribers are

expected to increase rapidly in the coming years.

Revenue from the telecom sector is increasing tremendously, almost doubled from US\$3.5bn in 2007 to US\$6.8bn in 2009, of which revenue from mobile services accounts for 60% at US\$4bn. The revenue from telecom sector in 2010 was US\$6bn and most telecom companies reported achieving 20% growth or above but the market reached saturation point. Average revenue per user is decreasing and it is expected that in 2011, telecom companies will focus on improving quality and broadband services.

Future and potentials

According to the newly-passed Decree No 25, there will be a limit on the ownership of an institution/individual in the telecom market. As a result, the Vietnam Post and Telecommunication Group (VNPT), the owner of VinaPhone and MobiFone, will have to equitize one of the two networks, or merge the two networks into one. MobiFone has already been on the plan for equitization for quite a long time. But equitizing MobiFone and holding a 20% stake in the network would not be VNPT's first choice as MobiFone has contributed a much larger share to the groups growth than VinaPhone. It is likely that VNPT would choose to merge its two mobile networks.

According to US-based Pyramid Research, the provision of mobile internet services is the quickest way for the operators to gain future competitive advantage in the telecom sector. Even though the market in Vietnam for value added internet services is still small, the areas of internet banking, e-commerce, e-health, e-education, entertainment, media etc. will create future business potential. Recently, eBay, a well established American e-commerce company has bought 20% of PeaceSoft, a Vietnamese e-commerce company.

Between 2004 and 2009, the entertainment and media market in the country increased three-fold, driven by the availability of multichannel television, broadband internet and mobile phones. In the tenth "Global Entertainment and Media Outlook" report released by PriceWaterhouseCoopers, Vietnam is expected to achieve an estimated market value of over US\$2.3bn by 2013 at a maximum 16.7% growth rate.

Research and Markets forecasts in the "Online Games Market in Vietnam" report that the users of game online in Vietnam will surpass 11 million by 2013 driven by higher incomes, increasing internet penetration and the young population.

Information Technology

IT industry in Vietnam is still at an early stage of development with about 220,000 employees working with hardware, software and digital content business. About 15,000 employees are high skilled IT specialists.

Vietnam has 500 active software companies of which 19 of these companies are joint ventures, with a total over 57,000 employees. About 300 companies are involved in outsourcing. Most of the companies are small sized with 10-50 employees providing web-based applications, specific customer solutions and IT consultations. Top 20

companies have 100-500 employees.

About 40 companies have obtained international quality certificates such as ISO 9001, ISO 27001 and about 20 companies have Capability Maturity Model (CMM) - level 3, 4 or 5 certificates. FPT Software, CSC, TMA, Lac Viet, CMC, Tinh Van are leading in software outsourcing. The main clients are from Japan, USA, Australia and the EU. Vietnam became Japan's third biggest outsourcing partner in late 2010. In 2000, the total revenue for software was just US\$50mn. It reached US\$1bn in 2010, up from US\$880mn in 2009 with a steady growth rate of about 20-25% each year.

Total revenue of the IT industry in 2010 was US\$7.4bn, up from US\$6.26bn in 2009, an 18% increase in line with increases over the last few years, contributing to 7% of GDP. The hardware industry contributed most to this increase with 75% (US\$5.6bn) with digital content contributing US\$800mn. The hardware industry employed around 110,000, working mainly in electronics and computer assembling.

Famous global ICT companies such as Intel, IBM, Cisco Nortel, Compaq, Hewlett-Packard, Sony, Fujitsu, Hitachi, Canon, Daiwa, Fuji, NTT, Panasonic, NEC, Fox Conn, Compac, Hon Hai have factories in Vietnam. Nokia has recently signed a contract to start production in Vietnam. There are more than 30 computer assembling factories in Vietnam.

Vietnam aims to become a strong IT nation by 2020 targeting total revenue of 17-20% of GDP with a total investment of US\$8.5bn. About US\$53mn will be spent on IT human resource development. Vietnam aims to have one million IT engineers and 23 high-tech parks by 2020. About 10 high-tech parks are already in operation.

After 20 years of implementing the ICT strategy, the sector has made remarkable progress with an annual growth rate of over 20%. The total revenue of the ICT sector in 2010 reached US\$14bn, achieving an annual growth rate of 25%.

3.3 ENERGY

Overview

The energy sector remains dominated by public ownership; however, market forces have been brought to bear in recent years and private sector participation is expanding. Since 1995, energy sector operations have been organised into three of the largest companies in Vietnam; PetroVietnam, Vinacomin (former Vinacoal) and Electricity of Vietnam (EVN).

Vietnam is endowed with various energy resources, notably petroleum, coal, and hydropower. It has been a net energy exporter since 1990. Output in the three sectors has been growing strongly, as has Vietnam's energy consumption, in line with the country's industrialisation and integration into the global economy. Primary energy consumption, excluding biomass, grew at an annual rate of 10.6% in the 2000-2005 period. Despite this rapid growth, a large part of the rural population still relies heavily on non-commercial biomass energy sources, which

still accounts for almost half of total energy consumption.

Strong economic growth, urbanisation and demographic growth are increasing energy needs considerably. Up to 2020, EVN expects a 17% to 20% annual increase in electricity demand. The Ministry of Industry and Trade, the line ministry responsible for the energy sector, has the task of supervising the State-owned companies and of developing policies. To ensure that the supply of energy meets the rise in consumption, Vietnamese policy emphasizes the need to diversify the country's energy mix whilst maximizing the use of local energy reserves.

Coal

Coal is Vietnam's largest primary energy reserve, with exploitable resources estimated at 150m tonnes. The bulk of this is anthracite concentrated in the northern part of the country (especially Quang Ninh province). The coal industry is controlled by the State-run Vinacomin; private companies and foreign investment enterprises may obtain leases for up to two years to mine coal reserves, renewable if they meet agreed performance targets.

Production has increased significantly in recent years, from 15.9mn tonnes in 1995 to 47mn tonnes in 2010 (according to the General Statistics Office). This strong growth trend is expected to continue, as a result of modernised mining methods and significant investment by Vinacomin. Production could, however, fall to 44mn tonnes by 2011, according to Vinacomin targets.

Coal exports, destined mainly for Japan (steel sector) and China (power production; paper and cement industry) have soared from 5.9mn tonnes in 2002 to 20mn tonnes in 2008. In 2010, coal exports amounted to US\$1.6bn (+22% over 2009). According to Vinacomin, local demand, which reached more than 20mn tonnes in 2009, could grow to 196mn tonnes by 2020. It is expected that Vietnam will import 8.2 and 12.8mn tonnes of coal by 2012 and 2015 and up to 100mn tonnes by 2020. Vietnam plans to gradually cut coal exports to meet rising domestic demands. Power plant consumption is expected to strongly increase in the upcoming years with the construction of new large scale coal-fired power plants. Most of these future power plants will use imported coal with high calorific efficiency. For example, the coal imports for thermal power plants in the south only are expected to rise to 28mn and 66mn tonnes by 2015 and 2020.

Oil

Oil and gas exploration in Vietnam has been ongoing since 1959, but large-scale exploitation took off only in the late 1990s, when Vietsovpetro, a joint-venture between PetroVietnam and the Russian firm Zarubezhneft began production, i.a. at the country's largest oil field Bach Ho. Today, Vietnam is Southeast Asia's third-largest petroleum producer.

Estimations of Vietnam's proven recoverable oil reserves vary, but according to Petrovietnam, they stood at 75mn tonnes at the start of 2009, excluding reserves

at foreign oil fields.

Production peaked at 20mn tonnes in 2004, shrank to 14.8mn tonnes in 2008 and rose again in 2009 by 10% up to 16.3mn tonnes. Petrovietnam plans to produce 15mn tonnes of crude oil in 2011. The company anticipates producing 90mn tonnes over the next five years. PVP is also looking abroad: among the 15 contracts signed in 2009, two relate to oil production in foreign countries. The company is also said to have signed seven oil cooperation agreements in 2009 with state oil firms from Nicaragua, Bolivia, Argentina, Kazakhstan, Mozambique, Angola and Sudan.

Crude oil is Vietnam's second cash earner export item, representing over a fifth of all export earnings in recent years. Until 2009, almost all crude oil was exported (14,6mn tons in 2008, and 12,67mn tons in the 1st eleven months of 2009) since Vietnam lacked refining capacity. With the opening Vietnam's refinery in Dung Quat, on February 2009, the exports have fallen by 20% to USD 4.96bn in 2010.

In 2010, Vietnam imported petroleum products worth US\$6.1 billion. The drop in imports of petroleum production (-3% in 2010 and -43% in 2009) is attributed to the beginning of operations in Vietnamese first oil refinery Dung Quat. When operating at full capacity, the refinery will be able to process 6.5mn tons of crude oil per year and will meet 30% to 40% of the domestic fuel demand.

Petroleum consumption could reach 34-35mn tons by 2020. The Government hopes to have at least three major refineries in operation by 2020, to satisfy the country's demand. Given the rapidly growing demand and the maturity of some of its best-producing oil fields and despite efforts to bring new fields on-stream, Vietnam is likely to become a net oil importer in the next 10-15 years, a situation of some concern to the Government. This has prompted the country to invest increasingly in oil exploration and exploitation abroad. Vietnam pumped its first barrels of crude oil from an overseas well in 2006 (Malaysia's Cendor field, in which PetroVietnam holds a 30% stake), and has also invested further afield, in projects in Indonesia, Algeria, Iraq, Cameroon, Mongolia, Venezuela, Cuba, Peru, Nicaragua and Kazakhstan.

Gas

Vietnam has significant offshore natural gas resources, recently estimated at 2,000-2800bn m3 by Petrovietnam. Natural gas production and consumption have been rising rapidly – from a low level – since the late 1990s and are expected to increase further in the coming years.

Vietnam's first gas pipeline went into operation only in 1995, bringing associated gas ashore from the Bach Ho oil field. Since then, production has soared from 700mm m3 to 6.86bn m3 in 2007, 7.5bn m3 in 2008 and 8bm m3 in 2009. So far, only two fields have been developed principally for their natural gas potential, but other fields

^{1.} Source: Ministry of Industry and Trade, Energy and Petroleum Department.

are likely to develop in the foreseeable future, and natural gas production and consumption is targeted to increase to 542 and 616bn m3 by 2014 (Vietnam Oil and Gas Report Quarter 2, 2010). The O Mon gas pipeline will transport natural gas to fuel the O Mon and Tra Noc power plants, and for local distribution. This new pipeline, with a total investment of US\$1bn, will be 400 km long.

New and renewable energies

80% of the rural population still relies on non-commercial biomass, such as wood and rice husks, as an important fuel source for cooking and other purposes. However, there is no significant commercial production from other renewable energy sources – geothermal, solar, wind, tidal, wood and waste – so

The Main Gas Basins in Vietnam



Source: GCA

far, but some potential for future development. Low temperatures beneath Vietnam mean geothermal energy may generate only 200-400 MW by 2020. Wind power is largely underdeveloped, mainly because of lack of appropriate policies for wind energy. Production costs are too high to be attractive for the single buyer: EVN. However, Decision 130 issued by the Prime Minister in 2007 develops some economic incentives for CDM (Clean Development Mechanism) projects (more than 30 projects have been registered and more than 100 projects received a Letter of Approval from the Designate National Authority for the CDM), including wind power plants. Solar energy remains costly in Vietnam, and is best-suited for use in rural and remote areas. Renewable energy sources are still largely untapped in Vietnam, but will play an increasingly important role in the Government's energy policies within the next few years. The Ministry of Industry and Trade plans to increase the production of renewable sources by 5% from 2015 to 2025, in which wind and solar power collectively account for half of the production target. However, the country still needs a coherent policy. The MoIT is currently drawing up a decree on renewable energy.

In the last years, the Vietnamese government has become more and more aware and involved in renewable energy development. The Ministry of Industry and Trade has submitted to the Government projections to increase the percentage of renewable energy in the total amount of primary commercial energy in Vietnam to 3% in 2010, 5% in 2020 and 11% in 2050. In March 2011, Deputy Prime Minister Hai urged MoIT to complete policies to support wind projects and set up favourable conditions for investors.

Nuclear

Exploration for uranium has been undertaken, and uranium ore is found in the

northern and central regions of Vietnam. These uranium deposits could hold up to 210,000 tons of U3O8, with a low average uranium oxide content of 0.06%. Proven recoverable reserves are only 1,337 tons. No production of uranium has so far been achieved. Vietnam has operated a nuclear research reactor in Dalat since the 1960s, but there is no commercial nuclear power production in Vietnam.

In June 2008, the National Assembly approved the Law on Atomic Energy which came into effect in January 2009. In October 2009, the Vietnamese National Assembly adopted the investment report submitted by the government and prepared by EVN. This report plans the construction of the two nuclear power plants Ninh Thuan 1 and 2, each with an installed capacity of 2,000 MW.

This nuclear project offers large opportunities of cooperation for foreign countries, from legal, training and technical assistance to plant construction. Some countries, including Japan, France, USA, China, South–Korea, Russia, India, Canada and their affiliated companies, have already expressed interest in cooperation with Vietnam in this area. Some of them have signed memorandums of understanding for bilateral cooperation.

Russia's Rosatom was chosen by the government in 2010 to build Vietnam's first nuclear power plant (Ninh Thuan 1). Japan was chosen to help to build the second plant (Ninh Thuan 2). The government plans to put Ninh Thuan 1 into operation by 2020 and Ninh Thuan 2 a year later. Vietnam plans to have 8 operational nuclear reactors in the next twenty years with Japanese and Russian assistance.

Electricity

Vietnam's total installed generating capacity is 20.9GW (as of 2010). It generated an estimated 97TWh in 2010. The expected demand in 2011 should be 112 TWh (+15.8% over 2010). To ease power shortages in the north, Vietnam started purchasing electricity in 2004 from China (3TWh in 2009 and 3.2TWh in 2008), transported through 110kV lines linking Vietnam to China's Yunnan and Guangxi provinces. Vietnam also plans to start buying power from Laos, where it has already hydropower plant projects, and is conducting feasibility studies for other hydro projects. To boost its own capacity, Vietnam is constructing a series of new plants, ranging from the 2400MW Son La hydro project and a number of other medium hydro plants in the Central Highlands, some large-scale coal-fired plants in the North and the Centre, and additional gas-fired plants in the South. In total, over 55GW in additional capacity are planned to come on-stream by 2015. Issued in 2007, EVN's Master Plan 6 aims at developing about 135 power plants by 2015. In November 2008, the Vietnamese Government allowed foreign partners to work with local companies to undertake 13 power projects that had been given back by EVN earlier in August. The plans for the development of the 13 power projects that were rejected by EVN have been finalised and will now be submitted to the government for consideration. Under the latest plans, EVN will instead invest in two projects with an overall capacity of 2,000MW, and the remainder of the projects will be financed by investors.

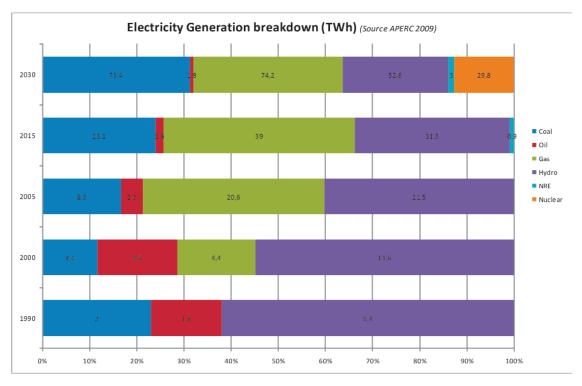
EVN announced in 2010 that it was, once more, unable to implement necessary

power projects due to a shortage of capital. Between January and November 2010, electricity demand for industry and construction rose by 18.7% y-o-y, while EVN was only able to increase its electricity production by 14.5% y-o-y. Vietnam had to rely on the costly option of purchasing electricity from abroad to meet this shortfall. For example, severe weather forced EVN to increase its electricity purchases from China by 32% y-o-y in November 2010.

Dao Van Hung, EVN's group chairman, stated that the firm requires US\$33bn to establish 47 power projects between 2006 and 2015, but has only managed to raise US\$20bn. Meanwhile, independent power plant investors are expected to invest an estimated total of US\$45bn during the same period, but these investors have only so far raised about US\$25bn.

The draft Master Plan VII (due to be formally approved in 2011) forecasts that demand for electricity will grow annually by between 12.1% (low-case scenario), 13.4% (base-case) and 16.1% (high-case) during the period 2011-2015. It is estimated that an additional capacity of 4,100 MW will be required per year on average during this time. Power shortages can be expected if adequate measures are not taken to increase the power supply accordingly.

The necessary legal regulations are being finalised for the operation of a pilot competitive power market on 1 July, 2011. The Electricity Sector Restructure Plan and a project to establish a National Electricity Regulatory commission will be submitted to the Government for approval this year. Vietnam's electricity market shall be formed and developed in three phases: (1) Competitive electricity production market (2005-2014); (2) Competitive electricity whole sale (2015-2020); and (3) Competitive electricity retail sale (after 2020).



Power generation by source

In view of the immense investment needs in the sector, the mobilisation of the necessary finance is not a trivial matter. To develop its planned new power generation projects, as well as some 4,000km of 500kV transmission lines along with 100,000kms of lower voltage distribution lines, an investment of at least US\$2-4bn will be needed each year. The role of the private sector is seen as increasingly central in achieving this aim, and the Government has decided to open the electric power generation to investment from other domestic investors other than the erstwhile monopoly EVN, as well as to foreign players, under various forms, including independent power producers (IPP), Build-Operate-Transfer (BOT) projects, and joint ventures. In 2010, Vietnam imported 5 TWh.

Moreover, the Government plans to partially liberalise the electricity transmission and distribution sectors between 2015 and 2020, and totally after 2021. A competitive electricity market is supposed to be established on a pilot basis in July 2011. According to a MoIT circular of May 2010, the market will comprise companies that buy and sell electricity, generate electricity, operate the supply network and manage the market itself. The circular requires all licensed power plants with a capacity of 30MW and above, except for current facilities built under BOT and hydroelectric facilities, to join the market. In the transmission sector, EVN has concluded the merging of four transmission companies and three power network project management boards into the National Power Transmission Company.

Investment

It is estimated that a total of US\$3.2bn in ODA support was allocated to the power sector between 2000 and 2007. During this period, the energy sector received 15% of total ODA (US\$20.9b According to the Master Plan VI, between 2006 and 2025, the electricity sector will need total investment of around US\$79.9bn up to 2025. Around US\$52bn of this amount will be invested in power generation, the remainder in the electricity transmission and distribution network.

Energy conservation and efficiency

Between 1990 and 2004, total energy consumption in Vietnam rose by 11.2% each year, 1.5 times higher than GDP growth during the same period. According to forecasts, energy demand will continue to grow at a rate of 8.1% annually until 2020, which could jeopardize Vietnam's economic growth. For this reason, energy efficiency has become a priority for the Vietnamese Government, which issued a Master Plan for Energy Conservation and efficiency for the period 2006-2015. The creation of the Energy Efficiency and Conservation Office (EECOV) aims to implement this Master Plan, along with the Energy Efficiency Decree of Vietnam (Decree of the Government No.102, 2004). A new Law on Energy Saving and Efficiency was passed in June 2010. According to the Law, intensive energy consumers will have to follow strict requirements on energy efficiency. Incentives are planned for others consumers.

^{2.} Source: Website DAD Vietnam (MPI).

Opportunities – market access opportunities for foreign players

In view of the very substantial investment needs, which Vietnam cannot easily meet on its own, and the requirement for state-of-the-art technologies, the modernisation of Vietnam's energy sector will necessitate increased involvement of foreign players. Foreign commercial actors, including EU firms, are already active in various parts of the energy sector.

Enhanced market access under Vietnam's WTO accession terms will facilitate foreign participation in the sector in the medium term. EU operators are well-placed to benefit from increased market access, not least due to the foothold they already have in the sector. However, problems remain including the performance of their (primarily State-owned) Vietnamese counterparts, legal stability, foreign exchange convertibility and assistance in removing administrative hurdles.

3.4 ENVIRONMENT

Environmental issues

Vietnam's environment is under considerable stress from rapid economic growth, urbanisation and rising human pressure on relatively scarce natural resources. Surface, ground and coastal waters are threatened by pollution, and water supply systems are often old and inefficient. Water treatment capacity is extremely weak and most polluted water goes directly to rivers and to the sea. Waste treatment capacity is also weak; only about 10% of medical waste is collected. Air pollution in cities and industrial areas is causing increasing respiratory problems. Greenhouse gas emissions are rising as a consequence of the industrialisation of the country. Competition is increasing for scarce resources such as land, water, and forests.

Water sector

The major issues in the water sector may be summarised as follows:

- Slow implementation of an integrated approach to water resources management as defined in Agenda 21.
- Limited assessment of water resources and a lack of water resources data and information management.
- Worsening water quality, threat to biodiversity from pollution; concentration of pollution from long-term drought.
- Notwithstanding the expansion and renewal of the water supply and sanitation network, a significant number of people in rural areas still has little option but to use polluted water, and the rate of non-revenue water (NRW) in urban areas is high.

Current projects being implemented from 2006-2013 mainly concentrate on improving the management of water resources; strengthening institutional capacity is nonetheless also required.

Increased coverage of rural water supply and sanitation is a major priority for the government and is a crucial part of the fight against poverty. 21mn people do not have access to a hygienic water supply, and 41mn people do not have a supply that meets MoH clean water standards. Around 8.5mn urban people do not have access to clean water and for those that do, the current standard of service is poor.

Waste treatment

Vietnam produces over 15mn tonnes of waste each year from various sources. More than 80% is from municipal sources, industry generates over 17%. About 1% (160,000 tonnes/yr) of Vietnam's waste is considered hazardous, including hazardous waste from hospitals; toxic or flammable waste from industrial processes, and pesticide containers from agriculture. Dramatic increases in waste generation are expected, due to the urbanisation process and a higher level standard. Most hazardous waste is not treated or is treated in a very primary way and then dumped together with municipal waste at landfill sites. Most municipal waste in Vietnam is not safely disposed of. However, there have been significant improvements by the public urban environmental companies that are responsible for municipal waste collection and disposal.

Air and land pollution

Air quality is worsening, particularly in urban areas and in industrial zones. In urban areas, the continued rapid rise in the number of motorbikes and cars is increasing lead and carbon monoxide levels while the construction sector is producing high levels of dust. Reducing urban pollution through the development of public mass transit systems such as buses and subways is regarded as a priority by the Vietnamese authorities. Ho Chi Minh City and Hanoi plan to start construction of subway and sky-train networks respectively towards the end of 2012 (see Chapter on Land Transport and Public Transport for more detail).

Land pollution is also an issue, due to intensive agriculture (about 85 kgs of fertiliser per ha), heavy industry, and urban areas.

Dioxin contamination in Central Vietnam from the American War remains a sensitive issue. Decontamination work is undertaken by the Committee 33 with the help of Czech ODA and American NGO's projects.

Institutional and policy framework

Vietnam's implementation capacity is limited, although the government, supported by international donors, has been developing an institutional and policy framework for about ten years. There is a lack of environmental integration at planning and programmatic levels, especially in the public investment planning process and in regional plans for land and resource use. In addition, existing environmental laws had insufficient power to levy protection because of very low fines. It was easier for companies to pay fines than spend money on environment protection even though they had already built environment protection facilities. At the same time, it seems that the number and magnitude of environment pollution fines on companies and/or on industrial

parks did see an increase last year.

Institutional framework

The Ministry of Natural Resources and Environment (MoNRE) performs the function of State Management for land-use planning, water resources, mineral resources, sea and islands, environment, hydro-meteorology, and mapping. In each province of Vietnam, a Department of Natural Resources and Environment (DoNRE) attached to the People's Committee supports locally the work of MoNRE.

The Ministry of Agriculture and Rural Development (MARD) manages forestry and fishing resources. Until the amendment (expected in August 2011) of the Law on Water Resources 1998/QH, MARD still has responsibility for clean water and sanitation in rural areas. According to the legislation development programme, this competence will be transferred to MoNRE.

The Ministry of Planning and Investment (MPI) manages the provincial People's Committees' demand for investment projects.

The Strategy for Sustainable Development (Agenda 21 Vietnam)

The notion of "sustainable development", of which one pillar is the environment, has been developed in Vietnam's Strategic Orientation for Sustainable Development (Agenda 21), issued in 2004. This document sets out the challenges facing Vietnam, and the orientations, policies, legal instruments, and priority activities that need to be implemented. The Ministry of Planning and Investment (MPI), helped by a National Council on Environment, is in charge of monitoring its implementation.

The main laws on environment protection and resources management

The Amended Law on Environment Protection became effective in July 2006. This law provides a general framework for the use of natural resources, environmental impact assessment (EIA), waste treatment, and international environmental cooperation. In particular, the revised law requires polluters to clean up pollution and compensate those affected, introduces a license system for waste producers and regulates generators of "hazardous waste". The law on Environmental Protection Tax came into force on 15 November 2010.

Other environment-related laws complete this framework, such as the Maritime Law (1990) or the Law on the Development and Protection of Forests (1991).

The Law on Biodiversity was approved by the National Assembly in November 2008 and came into effect in July 2009. In December 2008, a Decree was promulgated on river basin management (9 basins have been identified: Red River-Thai Binh, Bang Giang-Ky Cung, Ma, Ca, Vu Gia, Thu Bon, Ba, Dong Nai and Mekong).

The Law on Land (1987/QH) had the latest amendment issued on 18 June 2009. The new Mining Law was approved on 17 November 2010 and will come into effect

The institutional and policy framework related to climate change

UNDP and World Bank reports indicate that Vietnam is one of five countries world-wide most vulnerable to sea-level rise as a result of climate change. A 1m rise would flood more than 11,000 km2 of the Cửu Long (Mekong) Basin, some 38% of the land area of the basin. Some provinces would lose nearly half of their land area.

Vietnam signed the Kyoto Protocol in 1998 and ratified it in 2002. Vietnam has no obligation to reduce its greenhouse gases (GHG) emissions. However an "Implementation Plan of the Kyoto Protocol" in the period of 2007 - 2010 was approved by the Prime Minister in 2007.

In December 2008, the "National Target Program on Climate Change Adaptation" was approved by the Decision No: 158/2008/QD-TTg. This long-term strategy describes the potential impacts of climate change in Vietnam and proposes some objectives and measures to adapt to the negative consequences of climate change.

More and more "Clean Development Mechanisms" (CDM) projects are proposed by the Vietnamese authorities. The Clean Development Mechanism Designated National Authority (DNA) and the National Office for Climate Change and Ozone Protection (NOCCOP) aim at selecting and approving CDM projects in Vietnam.

Vietnam took advantage of its 2010 ASEAN Presidency at the Hanoi ASEAN Summit (September 2010) to push forward this issue in the region by means of ASEAN Climate Change Initiative (ACCI) and effective implementation of Reduced Emission from Deforestation and Forest Degradation (REDD).

3.5 CONSTRUCTION AND REAL ESTATE

General market overview

Strong economic growth contributed to the development of the property market in 2010 and Vietnam's real estate market attracted a large number of foreign investors. Foreign direct investment in real estate hit US\$6.8 billion, equivalent to 36.8% of the total in the country Domestic investors, however, are a growing segment.

Recent developments having an impact on the real estate and construction in Vietnam include (i) the launch of Decree 71/2010/ND-CP and Circular 16/2010/TT-BXD guiding the implementation of the Law on Residential Housing - which are intended to increase transparency in the real estate market by preventing the purchase of houses via authorisation contracts for properties which do not yet have certification, and providing that 20% of units within a project can be sold via Capital Contribution Agreements (CCA) prior to foundations being completed, but after infrastructure works have begun. As such, these provisions have tightened investors capital mobilisation,

^{1.} MPI-Foreign Investment Dept.

thus limiting the speculation in real estate market; (ii) stock market developments, devaluation of the VND and high inflation that might encourage the domestic capital to flow into other investment channels, including property; (iii) the improvement of the transport infrastructure system with a series of transport projects completed in 2010, especially in Ho Chi Minh City with the first phase of East West Avenue, a tunnel in Nguyen Huu Canh street, Phu My Bridge, New Dong Nai Bridge, Khanh Hoi street, Tan Thuan 2 Bridge and Cong Ly Bridge, and a number of other on-going projects that are due to be completed in 2011.

However, there is some concern for the status of health in the property market. Although many high-visibility sales promotion programs have been launched, there is clear caution on the market. The office-space leasing is dealing with the most challenges. Supply is increasing whereas demand is decreasing, especially for the top A-level offices. According to a real estate market overview the total supply of Hanoi's market is over 740,000m2, an increase of approximately 4% quarter on quarter and 26% annually over the same period of 2009. The annual average growth rate of total supply has been approximately 20% in the ten-year period between 2000-2010 while in the fourth quarter of 2010, nine new office buildings with approximately 67,500m2 came onto the market in Ho Chi Minh City, a 7% increase over the third quarter. Ho Chi Minh City's office market has approximately 1.055bn m2. Despite the fact that existing floor space has not been leased, new office buildings are still expected to be launched during 2011.

With the significant increase in the supply of office space and the global financial crisis affecting the operation and expansion of multinational companies and causing many large companies to scale down their operations worldwide, Vietnam's office rental price has been on a sharp fall.

In addition, the high-end apartment segment has come under pressure recently. Prices remain high despite abundant if not over-supply. Current demand for luxury property is very low and many developers have had to cut their prices and begin offering perks to attract buyers. Despite these efforts, sales have sagged.

The so-called "affordable housing" segment is an emerging trend in the market, with a series of on-going projects. These projects launched a supply of apartments of around 50m2, which are sold at an average price of around US\$700 per square meter, valuing an affordable apartment at US\$20,000-\$40,000. Nonetheless, the dream of owning one's own home is an increasingly difficult goal to reach for an average citizen, particularly in the urban centres, and reflects the widening gap of living standards in Vietnam.

Alongside the rise of the affordable housing segment, the tourism property segment is also luring many investors with a series of projects in Nha Trang, Vung Tau, Phan Thiet and even the north of Vietnam, in addition to Da Nang. The prices of the tourism property are also diversified, from \$200,000 to multi-million dollar projects. The diversified types, locations and prices of the projects are providing buyers with more options.

^{2.} Savills, 4Q Report 2010-http://www.savills.com.vn/Research.aspx

In the five years to the end of 2010, Vietnam has developed 55 second home projects throughout the country, supplying more than 5,300 villas and 6,600 condominium. More than half of these properties are located in the central provinces. The reason for the boom of tourism property segment originates from the improved living standards of the Vietnamese. Tightened credit policies and inflation have calmed the market down significantly, causing both buyers and developers to scale back their plans.

The lease of retail space in shopping malls or trading centres is emerging as a new investment channel and is now a fast growing segment in the real estate market. Retail turnover enjoyed 30% year-on-year gains. Nationwide average occupancy is also high - more than 95% - and rents have accordingly been rising. In anticipation of increasing demand for luxury shopping options, trading centres have been mushrooming up in Hanoi, Ho Chi Minh City and other large cities.

By the end of 2010, Hanoi had a total of 431,000m2 of retail space, provided by 130 projects, including 13 shopping centres/ department stores/ hypermarkets, 67 supermarkets, 34 electronic marts, 2 wholesale centres and 14 retail podium Lack of available land in the city centres means that larger shopping centres are located outside of traditional retail areas. Meanwhile, Ho Chi Minh City has 6 department stores, 20 shopping centres, 6 retail podiums, 58 supermarkets, and 3 wholesale markets with a total area of approximately 625,450m2, an increase of 27% year on year. How sustainable this rapid growth is, remains to be seen. Some new retail centres appear to draw quite modest foot traffic, especially if their location is not central.

Future Trends and Opportunities

While the current situation in the Vietnam's real estate market gives reasons for concern of the sustainability of rapid growth, the long term strong points remain unchanged: Vietnam has a growing and modernising economy with a young, increasingly urbanised citizenry who will need space for living, working and consuming.

At the same time, short term weaknesses and challenges remain including macroeconomic instability, tightened real estate credit, spiralling and unregulated property prices, lack of transparent or cumbersome procedures and the unbalanced supply of different segments in the market.

According to State Bank of Vietnam, at the end of 2010 outstanding debt loans for real estate investments reached about VND228,000bn, an increase of 23.5% as compared with the same period last year.

Additionally, as provided in the Decree 71/ND-CP project owners are allowed to sell a maximum number of 20% of units via Capital Contribution Agreements (CCA) prior to the foundations being completed, but after infrastructure works have started with the aim of mobilising sources of capital from the buyer for the next steps of their projects. The remaining 80% units can be sold only after foundation has been completed, under S&P contracts through a Real Estate Trading Floor (and trading floor

^{3.} CBRE Richard Ellis.

^{4.} The Report Quarter IV released by Savills Vietnam.

conditions). This, together with tightened credit policies is also challenging the investors in mobilising capital from the buyers.

Furthermore, the prices of house and land are generally seen as too high against the average income of the Vietnamese. In developed countries, the house price/income index is only at the rate of 5-6 times, in Vietnam this index is 26 times. This trend is seen very clearly in the prices of house and land in Hanoi. Hanoi has a master-plan for the capital's future development, with different roles envisioned for different areas of the city. While a lot of developments are taking place and are being planned in the outer areas of the city, like My Dinh, the core centre of Hanoi is still expected to retain its attractiveness.

Regulations on construction are expected to become stricter and licences more difficult to obtain. Safety standards merit more attention. News of construction site accidents, but also construction and building collapses with human and material losses are unfortunately not unheard of in Vietnam.

Energy efficiency and conservation issues are becoming increasingly important, with the Energy Efficiency and Conservation Bill which includes measures to ensure energy security and balance and provides for developing models for efficiency energy use in buildings.

Resolution 11/NQ-CP issued February 24th 2011 on major solutions on inflation control, macro-economic stabilization and social security enhancement also contains elements that will impact on real estate and construction development in the country. An overall savings target of 10% has been set. The State Bank of Vietnam will coordinate the imposition of tighter and more prudent monetary policies; and e.g. to reduce the speed and ratio of credit in non-production sectors, especially real estate and securities. Under this resolution, the Ministry of Construction is instructing against commencing new buildings and works using the national budget in 2011. Investment projects are to be reviewed. Building materials with increasing prices, such as cement, iron, steel etc. production costs will need to be reviewed, energy saved and corporate efficiency improved.

These measures are part of the overall plan to stabilise the macroeconomic situation in Vietnam, but can be expected to have an impact also on the real estate and construction sector in the country.

Notably, in order to increase capital mobilization channels for the real estate market, especially in the context of currently tightened credits, the Real Estate Investment Trusts ("REIT") have been mentioned and considered as a new feasible channel of capital mobilization. It is being implemented on a pilot basis in Ho Chi Minh City. However, a clear legal framework will need to be developed.