

# **The International Conference 2010**

---

## **Housing and Real Estate Market Development – Worldwide Experience and Options for Vietnam**

**Sustainable Urbanization from the View of the Asia Real Estate Market**

26 – 28 November 2010

Hanoi

Vietnam

## **The International Conference 2010**

---

### **Housing and Real Estate Market Development – Worldwide Experience and Options for Vietnam**

26 – 28 November 2010

Hanoi, Vietnam

**U21Global**

**Habibullah Khan, PhD  
Professor of Economics**

**THEME PAPER**

## CURRICULUM VITAE OF HABIBULAH KHAN

### Personal



Name: KHAN, HABIBULLAH

Date of Birth: 26 December 1949

Nationality: Singapore Citizen

Office Address: Universitas 21 Global Pte Ltd  
5 Shenton Way # 01-01 UIC Building,  
Singapore 068808  
Tel: 65-64101385(Direct), 65-64101300, 65-97548150 (H/P)  
Fax: 65-64101358  
E-mail: [hkhan@u21global.edu.sg](mailto:hkhan@u21global.edu.sg)

Home Address: 134 Petir Road, #01-386, Singapore 670134,  
Tel: (65) 64793976

### Education

BA(Honors) in Economics, Dhaka University (Bangladesh), 1969  
MA in Economics, Dhaka University (Bangladesh), 1970  
PhD in Economics, University of New South Wales (Australia), 1980

### Honors and Awards

Colombo Plan Fellowship, University of New South Wales, 1975- 1980  
Commonwealth Academic Fellowship, Cambridge University, Sept 1990-April 1991  
Japan Foundation Fellowship, Hitotsubashi University, June 1997- April 1998  
Selected for inclusion in Marquis **Who's Who in the World**, 28<sup>th</sup> edition 2011

### Employment

Assistant Professor, Jahangirnagar University, 1980-81  
Associate Professor, Jahangirnagar University, 1981-82  
Lecturer, National University of Singapore, 1982-1985  
Senior Lecturer, National University of Singapore, 1985-1997

Associate Professor, National University of Singapore,  
1997-July, 2004

Associate Professor, Universitas 21 Global, August, 2004 – 31 December 2008

Professor of Economics, 1 January 2009- present

### Consulting

Consultant, UNCRD, 1990-1991: Worked on two projects “Industrial Estates and Regional Development in Selected Asian Countries” and “Transnational Corporations and Industrialization Process in Asia” and prepared the ‘Singapore Chapter’ for both studies.

Consultant, ESCAP, 1991: Resource person for the Project “Investment and Economic Cooperation in the Tourism Sector in Developing Asian Countries”, and prepared a technical paper on “Foreign Investment in the Tourism Sector in Selected Asian Countries”.

Consultant, World Bank, 1996-1997: Worked on the DPD Project “Social Policy in East Asian Economic Development” and prepared the ‘Singapore Chapter’, published by the World Bank Institute (“Social Policy in Singapore: A Confucian Model?”, WBI Working Paper, Stock No.37165, January 2001).

Consultant, The ASEAN Secretariat, 2003/04: Worked on the REPSF Project “Options for Managing Revenue Losses and Other Adjustment Costs of CLMV Participation in AFTA” and the final report (with Jose Tongzon and Le Dang) published by the ASEAN Secretariat in March 2005 (<http://www.aadcp-repsf.org/publications.html>).

Consultant, Economics Executive Program (EEP), National University of Singapore, 2003: Coordinated the 10-day workshop on “Contemporary Issues on Finance and Banking”, jointly funded by the Ministry of Foreign Affairs and Japan Cooperation Program.

Consultant, NTUC Enterprise and OTC Labor Institute, Singapore, 2004: Worked on the project “Short Term Contracts in Outsourcing of Work in Singapore”.

Consultant, World Bank Institute, 2004: Offered a training course for the senior Bangladesh Bank staff on “Interactions between Fiscal and Monetary Policies”.

Consultant, The ASEAN Secretariat, 2005: “Capacity Building in the Trade in Goods for the New Members of ASEAN (TRA/02/001)” ongoing project with Jose Tongzon and others.

Adjunct Professor, School of Economics, Singapore Management University (SMU), July 2007-present

Adjunct Professor (DBA supervision), International graduate school of business, University of South Australia, February 2008-present

### Teaching Areas

Development Economics  
Managerial Economics  
Macroeconomics  
International Economics  
Industrial Organization

### Current Assignments at U21Global

Associate Dean- Academic Programs

Professor- MBA620: Managerial Economics, MBA720: Global and Regional Economic Development

Subject Area Coordinator- MBA620, MBA720, and MBA602: Data Analysis for Managers,



## ***Global Financial Crisis and its Implications for Vietnam's Real Estate Sector: What are the Policy Options?***

**"Sustainable Urbanization in Real Estate Sector",  
Vietnam National Convention Center, Hanoi,  
Vietnam, 26-28 November, 2010**

Habibullah Khan, PhD  
Associate Dean, Academic  
Programs  
Professor of Economics  
U21 Global Singapore



### **An overview of the presentation**

- What caused the GFC?
- Post-crisis Vietnam Economy
- Sustainable urbanization
- The case of Vietnam
- The various Funding sources-Domestic and Foreign
- The Singapore Experience
- Lessons for Vietnam
- Real Estate Investment Trusts (REITs)
- Conclusion

## Quotes on the crisis

- *“What we know about the global financial crisis is that we don't know very much.”* (Paul A Samuelson)
- *“Financial crisis is the fruit of a pattern of dishonesty on the part of financial institutions, and incompetence on the part of policymakers”* (Joseph Stiglitz)
- *“Blaming speculators as a response to financial crisis goes back at least to the Greeks. It's almost always the wrong response”* (Larry Summers)
- *“Cash for trash”* (Paul Krugman on financial bailout)

## Traditional model of mortgage lending

- Home appraisal and the borrower's credit worthiness ('The Fair Isaac Company' or FICO score above 620)  
   ▶ **mortgage amount**
- Deposits (net of minimum reserve requirements) held by the bank ▶ **mortgage lending capacity**
- Inherent risk ▶ bank failure in case of mortgage defaults  
   ▶ diversification needed
- Other risks: Banks can be fully “loaned up” and cannot cope with increasing housing demand (particularly in a ‘liquid’ environment)
- Financial innovation ▶ to broaden the mortgage base (funds against which new loans can be granted)



## New model: securitization of mortgages

- Pooled a bunch of loans and sold them in secondary market  
► **mortgage bond market**
- Loans (such as ARMs or Adjustable Rate Mortgages) extended to low quality borrowers ► **subprime market** with FICO score below 620
- “Jumbo” mortgages above Freddie Mac’s loan limit (\$417,000)
- Levels (traunches) of subprime mortgages in accordance with quality of borrowers ► **higher and lower**
- Credit rating agencies ► higher levels rated above “prime” mortgage lending ► massive expansion of the number of buyers
- Mortgage bond market in 2007 stood at \$6 trillion ► largest single component of \$27 trillion US bond market ► bigger than treasury bonds



## Other Debt instruments

- Other Debt Instruments ► Collateralized Debt Obligations (CDOs) and Asset Based Securities (ABS)
- CDOs were packaged as complex combinations of good and bad loans ► higher risk ones yielded attractive 12% return to investors  
► sold and resold to global financial market
- Companies like AIG insured CDOs (mainly through ‘credit default swaps’ or CDS) and buyers included large banks, hedge funds, pension funds etc
- “Pool of pools” (raising ‘aggregation’ bias) as Special Investment Vehicle (SIV) or Special Purpose Vehicle or Conduits ► Off balance-sheet entities ► greater flexibility from accounting and regulatory points of view



## Pre-crisis macro environment

- Economic boom in the decade (from mid-1990s) before the crisis ► American banks flushed with liquidity
- Technology boom, war spending, growth of EU ► fuelled further increase in money supply
- Rise of China, India, Brazil, Russia ► Savings fuelled money supply (e.g. Chinese banks lent money to overseas banks) ► supply exceeded demand ► downward pressure on interest rate ► property boom (“housing bubble”) in USA
- Clinton administration encouraged banks to lend to the poorer segment ► subprime lending
- Fed’s low interest policy (no inflation worries!) and historic lows after ‘dotcom bubble’ burst in 2000 and 911 terrorist attacks
- Housing investment was assumed safe by both borrowers and lenders

## The party is over

- Crisis started (around 2005) in ‘subprime capital’ Cleveland that was hard hit by manufacturing decline ► wave of repossessions (one in 10 homes gone by end 2007) ► ARM set higher interest rate fueling the crisis
- Crisis spread quickly across all other states (20% of mortgages were subprime by 2005) of USA ► banks and the chain of investors (including insurers through CDS) suffer heavy losses beyond recovery ► mortgage bond market collapse ► onset of GFC
- *“Global capital markets pose the same kinds of problems that jet planes do. They are faster, more comfortable, and they get you where you are going better. But the crashes are much more spectacular” (Larry Summers)*

- Failure to check growth of housing bubble (the price of a typical American house rose by 124% in 1997-2006; average house prices increased almost five times in 1980-2006)
- Increased debt burden (overleveraged) during the years preceding the crisis (household debt as % of annual disposable income was 127% at the end of 2007 compared to 77% in 1990)
- Easy credit conditions (Fed lowered the federal funds rate from 6.5% to 1.0% during 2000-03)
- Fraudulent underwriting practice (thanks to rating agencies!) in issuing loans by banks including the bigger ones
- Predatory lending (brilliant mortgage brokers!) by using 'bait-and switch' method (particularly in loan refinancing)
- Complexity (thanks to talented financial experts!) in financial innovation (too deceiving!)

- Vietnam economy was overheated in 2007 and early 2008 due to large capital inflows following its accession to WTO since 11 January 2007
- The effects of GFC were somewhat moderated by the stimulus package and the economy grew by 5.3% in 2009
- The economy is predicted to rise by 6.5% in 2010 and 7.0% in 2011
- In World Bank classification, Vietnam is a "lower- middle-income country" or LMC (per capita income ranging from US\$996 to \$3,945); it was one of the poorest countries in 1990 (per capita income was less than US\$100)

## Growth Rates for Developing East Asia

**Table 1. Prospects for East Asia and the Pacific continue to be bright, although forecasts for 2011 have been reduced**

growth, percent year-on-year

	2008	2009	Forecast 2010	Forecast 2011
<b>Developing East Asia</b>	<b>8.4</b>	<b>7.3</b>	<b>8.9</b>	<b>7.8</b>
China	9.6	9.1	9.5	8.5
Indonesia	6.0	4.6	6.0	6.2
Malaysia	4.7	-1.7	7.4	4.8
Philippines	3.8	1.1	6.2	5.0
Thailand	2.5	-2.2	7.5	3.2
Vietnam	6.2	5.3	6.5	7.0
Cambodia	6.7	-2.0	4.9	6.0
Fiji	0.2	-3.0	1.0	1.4
Lao PDR	7.5	7.6	8.5	8.4
Mongolia	8.9	-1.6	8.5	7.0
Papua New Guinea	6.7	4.5	7.5	5.5
Solomon Islands	7.3	-2.2	3.4	5.2
<b>Developing East Asia excl. China</b>	<b>4.6</b>	<b>1.2</b>	<b>6.7</b>	<b>5.1</b>
East Asia	6.3	4.7	8.4	6.8
East Asia excl. China	2.7	-0.2	7.1	4.6

Source: World Bank staff estimates.

## World Bank's Assessment of Vietnam

- Though growth is set to return to pre-crisis level, current account deficit remains high
- Weakening of bank balance sheets due to rapid expansion of domestic credit for stimulating the economy
- Capital inflows are returning and FDI rose from US\$6.9 billion in 2009 to \$7.6 billion in 2010
- 'Economic Groups' (EGs) investing heavily in financial sector and real estates exacerbating asset price bubbles
- Structural reforms ongoing and committed to achieve "quality- based sustainable growth" by emphasizing on efficiency rather than capital accumulation



## Vietnam has improved its Competitiveness

- Vietnam ranks 59 (out of 131 countries) in the latest WEF Global Competitiveness Index 2010-11, showing a 16 notch up from its position in 2009-10
- It has improved in 10 out of 12 GCI pillars and the most notable ones are its efficient labor market (30<sup>th</sup>), impressive innovation potential (49<sup>th</sup>), and large market size (35<sup>th</sup>)
- However, trade is hindered by high import tariffs (90<sup>th</sup>), other trade barriers (112<sup>th</sup>) and burdensome customs procedure (106<sup>th</sup>)
- Due to highly regulatory (non-transparent) environment Vietnam ranks quite low (144<sup>th</sup> out of 179 countries) in terms of '2010 Index of Economic Freedom'




## Vietnam is a peaceful country

- The Institute for Economics and Peace (IEP) has ranked Vietnam 38<sup>th</sup> (among 149 countries) in the 'Global Peace Index (GPI)' for 2010
- The ranking is based on 23 indicators measuring conflicts security and militarization. It also takes into account a range of related criteria (potential determinants of peace) which includes education, democracy, and material well-being
- New Zealand tops the list and Iraq stands at the bottom; Singapore ranks 30 and US occupies 85<sup>th</sup> position

## Importance of urbanization

“There is a robust relationship between urbanization and per capita income: nearly all countries become at least 50 percent urbanized before reaching middle-income status, and all high income countries are 70–80 percent urbanized. In all known cases of high and sustained growth, urban manufacturing and services led the process, while increases in agricultural productivity freed up the labor force that moved to the cities and manned the factories. In the high-growth cases that we examined in the Growth Commission, the average productivity of a worker in manufacturing or services is on the order of three to five times that of a worker in traditional sectors, and sometimes much more” (Michael Spence, Nobel laureate in Economics in “Urbanization and Growth”, Commission on Growth and Development, The World Bank, 2009, preface)

## Sustainable urban development

 *"Improving the quality of life in a city, including ecological, cultural, political, institutional, social and economic components without leaving a burden on the future generations. A burden which is the result of a reduced natural capital and an excessive local debt. Our aim is that the flow principle, that is based on an equilibrium of material and energy and also financial input/output, plays a crucial role in all future decisions upon the development of urban areas" (URBAN21 Conference, Berlin, July 2000)*

For analyzing “good practice” in urban development, Asian Development Bank (ADB) selected the following sustainability criteria (‘Urbanization and Sustainability in Asia: Case Studies of Good Practice’ edited by Brian Roberts and Trevor Kanaley, ADB, 2006):

- Good governance
- Urban management
- Infrastructure and service provision
- Financing and cost recovery
- Social and environmental sustainability
- Innovation and change
- Leveraging ODA

- Less than 30% of total population live in urban areas (47% in slums) but the share is likely to double by next 25 years
- Sustainable development is not widely understood but the government has proposed measures to improve urban environments and reduce poverty
- The strategies recommended for sustainability of urban development includes: reform of land administration and management system, improvements in land registration and tenure, financial market development by means of land as collateral for capital raising, improvements in the recognition and protection of property rights and mortgage market for residential development, improvements of urban infrastructure and utility services, strengthening urban and solid waste management, and so on

## The Scope for ODA

- In 1993 - 2007, total ODA conclusion (60% loan and 40% grant) reached some US\$32,109 million, accounting for 76% of total ODA commitment; total ODA disbursement is US\$19,865 million or 62% of total ODA conclusion.
- According to MPI, there has been major problems in translating commitments into disbursements and while the former has risen sharply from 2002, actual disbursements have risen much more slowly (MPI, Overview of 15 years of ODI of Vietnam 1993-2008)
- Untied aid represents 65% and used mainly for general budget support, disaster and debt management, banking and financial sector, energy, fishing and forestry, water supply and sanitation
- Vietnam may be “graduated” soon (as it has already become a “middle-income” country) from concessional ODA entitlements

## Does foreign aid really work?

- One predominant view is that aid (roughly US\$100billion business; 30% through NGOs and 10% emergency assistance) is not necessary for development to happen-- though, if used properly, it can provide an important catalyst to accelerate the development process (Roger C Riddell, ‘Does Foreign Aid Really Work?’ OUP, 2008)
- ‘Dependency’ School highlights the negative aspects of foreign aid but the views are not substantiated with conclusive evidence
- Jeffrey D Sachs (The End Of Poverty, penguin 2005) believes that global poverty can be eliminated if Western countries contribute a modest 0.7% of their respective GDPs to foreign aid program

## Other forms of capital inflows

- Foreign investment- Direct foreign investment or FDI; portfolio investment; management contract; franchise agreements
- Foreign capital (debt)-commercial loans
- FDI (through MNCs or TNCs) is generally viewed as the best form as it comes as a “package” (capital, technology, and skilled manpower)
- Singapore preferred FDI over other forms (in fact, rejected ODA) despite inherent limitations (like ‘transfer pricing’ and inappropriate ‘technology transfer’); the benefits of FDI depend on host-investor country relationships
- While most countries afflicted by earlier debt crises have now recovered, the problem is still “sleeping” and debt servicing remains a major issue for Third world countries

## Singapore success story

- Singapore (710 sq. km. with a population of nearly 5 million) understood the need for housing the residents and created Housing and Development Board (HDB) in February 1960 (immediately after it attained self-rule in 1959) to “build affordable homes of quality and value” particularly for low - income groups
- 82% of resident population live in public flats and 80% residents enjoy home ownership; home ownership is above 90% if private housing is included
- Urban Redevelopment Authority or URA is Singapore’s land use planning authority- prepares long-term strategic plans and detailed local area plans for physical development ; “Garden city” concept to preserve greenery that could otherwise be turned into a ‘concrete jungle’; ‘golf courses’ added aesthetic qualities to city’s landscape and helped attract Japanese investors



## Singapore's innovative approach

- Singapore could successfully overcome land constraints through efficient 'spatial planning' (land reclamation, vertical expansion in a eco-friendly manner, zoning of industrial sites, nature conservation by charting a comprehensive "Green Plan") and costs of urbanization have been successfully contained (utility and transport prices are 'competitive'; pollution standards are within acceptable limits) through integrated land use and transport policies
- Mortgage finance greatly assisted by CPF savings; "asset enhancement programs" helped preserve value of investment
- The level of public subsidy was tuned to economic growth rates for the sake of sustainability and not to create a showcase state (Bankrupt Dubai!)
- Other innovations in transport/water management (car quota system, Electronic road pricing, water recycling)

## Interventionist approach

- The Singapore government had no ideological commitment to any particular economic system. The only concern was the betterment of living for the citizens and in order to achieve this objective, it implemented (with the help of experts/technocrats) a host of 'pragmatic' policies which involved extensive government intervention in all areas of life.
- *"I am accused often enough of interfering in the private lives of citizens. If I did not, had I not done that, we wouldn't be here today". (Lee Kuan Yew, cited in Lim Chong Yah & Others, Policy Options for the Singapore Economy, McGraw-Hill, 1988, p66*



## Can Vietnam emulate Singapore policies?

- Development is not a process of imitation but lessons can be learned from successful experience
- The interventionist policies worked in Singapore as the leaders are dedicated and exceptionally clean (Singapore ranks 3<sup>rd</sup> in terms of 'Corruption Perception Index 2010' following Denmark and New Zealand)
- While politicians took the major decisions the implementations were made by the relevant experts (Singapore relies heavily on foreign talents) drawn from various parts of the world
- The policies were 'flexible' for the sake of 'stability' (e.g. 'asset enhancement' policies supplemented by 'property cooling' measures as and when needed to avoid 'asset bubbles' and ensure a gradual appreciation of property value)



## Real Estate Investment Trusts or REITs

- REITs are investment vehicles that invest in, develop, and manage income-inducing real estates (offices, hotels, apartments or malls).
- The number of REITs globally stood at 451 at end-June 2008, down from 484 at end-2006 (Vinod Kothari, "Introduction to Real Estate Investment Trust", 2009). Singapore's first REIT, CapitaMall Trust (by CapitaLand) was launched on 17 July 2002 and currently there are 20 REITs (market capitalization now about US\$ 20 billion)
- All Singapore REITs are listed and are bought and sold like other securities on SGX at market prices. The revenue generated from rental payments under the properties is distributed to unit holders either annually or semi-annually.

## REITs by country (Vinod Kothari 2009)

### REITs by country



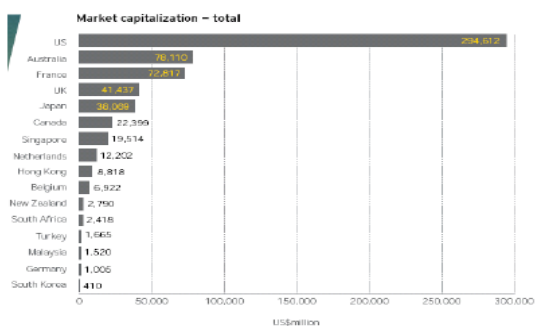
Total number of REITs by country			
Global Region	Country	2008	2006
North America	United States	148	253
	Canada	33	33
	Netherlands	8	9
EMEIA (EMEIA is a global region made up of Europe, Middle East, India and Africa. Note Indian REITs have not been analyzed in this report.)	Belgium	14	13
	Germany	2	NA
	France	48	30
	Turkey	13	NA
	United Kingdom	19	NA
	South Africa	6	7
	Australia	64	58
Pacific	New Zealand	8	6
	Japan	42	38
	Hong Kong	7	4
Asia	South Korea	6	11
	Malaysia	13	11
	Singapore	20	11
Total		451	484

## Market Capitalization of Global REITs (Vinod Kothari 2009)

### Market cap by country



Market size and depth



Source: E&Y 2008 REITs annual

- Three types of REITs- **Equity REITs, Mortgage REITs, and Hybrid REITs.**
- Equity REITs invest in and own properties and most of their income is derived from the rent of properties.
- Mortgage REITs are mortgage backed securities (MBS). They also loan money to real estate owners thereby receiving income from interests earned on the mortgage loans.
- Hybrid REITs is a combination of both the investment strategies
- Currently, all REITs in Singapore are Equity REITs

- Professionally managed and opportunity for small investors (compared to investment property)
- REITs are required to distribute at least 90% of their income to unit holders (higher returns than bank deposits)
- Performance monitored by independent directors, analysts, auditors and media
- Investors enjoy tax exemption on distributed income
- Allowed to use CPF funds in Singapore
- Investors may however lose money if they need to sell their units at a time when market price is low or at the time of economic downturn
- REITs are becoming more competitive in Singapore and some measures (acquisition of overseas property, enhancing current property assets, quality management) need to be adopted to remain competitive

- The state must play an 'active' role to create sustainable urban communities and measures be taken to enhance the efficiency of the public sector
- An integrated approach must be adopted for efficient use of land and infrastructure development
- Given the large size of informal sector, efforts should be made to improve the living standards of those who are employed in this sector
- All projects should be financially viable; foreign funds (if any) must be utilized properly so as to avoid any possible chances of bankruptcy
- Housing should be seen mainly as an act of consumption rather than investment and profit-seeking; public subsidy (if any) should be confined to low-income groups
- Investment in REITs can be carefully considered

# **The International Conference 2010**

---

## **Housing and Real Estate Market Development – Worldwide Experience and Options for Vietnam**

26 – 28 November 2010  
Hanoi, Vietnam

**HONG KONG**  
member country of



**THEME PAPER**

## **CURRICULUM VITAE**

**Professor Stephen W. MAK, PhD**

### **Academic Qualifications:**

Doctor of Philosophy, University College London, University of London

Master of Science, University College London, University of London

Bachelor of Social Science, The Chinese University of Hong Kong

### **Professional Qualifications:**

Project Management Professional, Project Management Institute, USA

Certified Manager in IT Service Management, EXIN, The Netherlands

Registered PRINCE2 Practitioner

### **Employment History:**

2005- Professor

2001-2005 Associate Professor

1993-2001 Assistant Professor

Department of Building and Real Estate

The Hong Kong Polytechnic University

1992-1993 Lecturer, Department of Building and Surveying, Hong Kong Polytechnic

1991-1992 Senior Research Assistant, University of Hong Kong

1989-1991 Research Assistant, Greenwich University, UK

1984-1988 Assistant Engineer, Mitsui Construction Limited

## Prizes and Awards

### Internal

- **President Awards for Outstanding Performance / Achievement 2001**  
Professional Service to the University
- **President's Awards for Excellent Performance / Achievement 2002/3**  
**Certificate of Appreciation** in appreciation of contribution to the Hong Kong Community during the SARS outbreak in 2003
- **Faculty Awards for Outstanding Performance/Achievement, Team Award (Teaching) 2004/5**
- **Faculty Awards for Outstanding Performance/Achievement (Services) 2004/5**
- Young Professors Award 2007/8

### External

- 32nd International Exhibition of Inventions, New Techniques and Products, Geneva, Switzerland April 2004
  - o **Silver Award:** System Architecture of the Basic Competency Assessment System
- 33rd International Exhibition of Inventions, New Techniques and Products, Geneva, Switzerland April 2005
  - o **Silver Award:** Assessment for Learning – Deployment of a city-wide Basic Competency Assessments
  - o **Gold Award:** Intelligent Systems for Construction and Real Estate Asset Management
- 35th International Exhibition of Inventions, New Techniques and Products, Geneva, Switzerland April 2007
  - o **Silver Award:** On Screen Marking System



**Funded Research, High Level Consultancy and Contract Research (major projects):**  
[Over \$150M over 10 years]

***Completed projects:***

Design, develop and maintenance of IT Services for the College of Professional and Continuing Education (CPCE) of the Hong Kong Polytechnic University comprising 2 new campuses in Hung Hom Bay and West Kowloon (2006-2009)

**HK\$80M**

Smiling Hong Kong: Life-long Learning and Crisis Management for Teaching and Learning for the Community (2004-2007)

Chief Executive's Communication Project List 2004

Funded by the Hong Kong Jockey Club Charities Trust **HK\$24,610,000**

Development of a Central Property Database, Automatic Valuation System, Custom Relationship Management system and e-Commerce services

Chesterton Petty International Real Estate Consultant 2001 **HK\$3,200,000**

The supply, delivery, installation, implementation and maintenance of the hardware and software for the School Based Assessment System (SBAS)

Hong Kong Examinations and Assessment Authority Consultancy 2006 circa **HK\$1,500,000**

The supply, delivery, installation, commissioning, maintenance and the provision of related services for system analysis and design and implementation of the Basic Competency Assessment (BCA) System

Hong Kong Examinations Authority Consultancy 2001 circa **HK\$45,000,000**, including additional services such as hosting, production of contents, leased line and facilities management.

A Study on the Demand and Supply of Construction Personnel

Works Bureau Consultancy Jul 2001-Jan 2002 **HK\$1,299,386**

*Member of the IT Team*

System for Multimedia Integrated Learning (SMILE)-An On-line Teaching & Learning Platform"

PolyU IGARD Fund 2001 **HK\$1,605,200**

*Principal Investigator*

Multimedia Communication Centre

PolyU Large Equipment Grant 2000 **HK\$600,000**

*Director*

Advanced applications of IT to professional level teaching and learning

RGC Teaching Development Grant 1999 **HK\$2,390,000**

*Co-Investigator: Information Technology Manager*

Development of Computer-Aided Learning Units using a LAN-based Video-on-Demand (VoD) System via the World Wide Web

UGC Teaching Development Grant 1997 **HK\$2,688,000**

*Co-Investigator: Information Technology Manager*

Area of Strategic Development: Construction Information Industry Database  
PolyU Faculty of CLU, Area of Strategic Development 1996 **HK\$1,400,000**  
*Chief Investigator*

Interactive Multimedia Learning Packages for Real Estate Development and Marketing through Internet Technology  
PolyU Learning & Teaching Development Grant 1996 **HK\$230,000**  
*Chief Investigator*

Development of Computer-aided Instruction Modules for Construction and Real Estate  
PolyU Central Research Grant 1996 **HK\$239,900**  
*Co-Investigator*

Human aspects of project risk management  
RGC Grant # HKP38/95E **HK\$331,000**  
*Chief Investigator*

An information system for international construction work  
RGC Grant # HKP35/95E **HK\$359,000**  
*Chief Investigator*

Establishment of an Electronic Retrieval System for Construction Research  
PolyU Research Grant # 350/324 **HK\$298,440**  
*Chief Investigator*

Construction Industry Information System: A pilot study  
Poly Research Grant 93/94 # 350/209 **HK\$298,440**  
*Chief Investigator*

Risk analysis in construction: Applications of fuzzy membership functions  
UPGC Direct Allocation 92/93 # 340/820 **HK\$228,845**  
*Chief Investigator*

## Recent Publications

- Choy, L.H.T., Mak, S.W.K. and Ho, W.K.O. (2010, in press) Region-specific estimates of the determinants of residential investment. *Journal of Urban Planning and Development, ASCE*.
- Mak, S.W.K., Choy, L.H.T. and Ho, W.K.O. (2010) Quantile regression estimates of Hong Kong real estate prices. *Urban Studies*. **47**(10), 1-12.
- Leung, S.W., Mak, S.W.K. and Lee, B.L.P. (2008) Using a real-time integrated communication system to monitor the progress and quality of construction works. *Automation in Construction*. **17**, 749-757.
- Mak, S.W.K., Choy, L.H.T. and Ho, W.K.O. (2008) Hedonic Models, Internet-based Technologies, and the Provision of Online Property Appraisal. *Construction Innovation: Information, Process, Management*. **8**(2), 92-105.
- Choy, L.H.T., Mak, S.W.K. and Ho, W.K.O. (2007) Modeling Hong Kong Real Estate Prices. *Journal of Housing and the Built Environment*. **22**, 359-368.
- Mak, S.W.K., Choy, L.H.T. and Ho, W.K.O. (2007) Privatization, Housing Conditions and Affordability in the People's Republic of China. *Habitat International*. **31**(2), 177-192.
- Mak, S.W.K. and Liu, Y.T.Y. (2007) Real property valuation decision support system. *International Journal of Management and Decision Making*. **8**(2/3/4). 176-189.
- Chan, A.P.C., Chiang, Y.H., Mak, S.W.K., Choy, L.H.T. and Wong, J.M.W. (2006) Forecasting the demand for construction skills in Hong Kong. *Construction Innovation: Information, Process, Management*. **6**(1), 3-19.

# Sustainable Urbanization in Real Estate Sector – Hong Kong

## Theme Paper

---

prepared by

AsiaConstruct Team  
Research Centre for Construction and Real Estate Economics  
Hong Kong Polytechnic University  
([www.bre.polyu.edu.hk](http://www.bre.polyu.edu.hk))

for

The International Conference  
26<sup>th</sup> – 28<sup>st</sup> November 2010  
Hanoi, Vietnam.

---

*Team:*

**Michael Anson<sup>1</sup>, Eddie Cheng<sup>3</sup>, YH Chiang<sup>2</sup>, and Stephen Mak<sup>2</sup>**

<sup>1</sup> Professor Emeritus, Faculty of Construction and Land Use, The Hong Kong Polytechnic University.

<sup>2</sup> Department of Building and Real Estate, The Hong Kong Polytechnic University.

<sup>3</sup> School of Commerce and Management, Southern Cross University, Australia.

---

*About the Research Centre for Construction and Real Estate Economics (RCCREE):*

The RCCREE is the Hong Kong Polytechnic University Centre for solution oriented research and consultancy in construction and real estate economics. It undertakes internationally relevant multi-disciplinary research that supports the advancement of the construction and real estate industries in the following areas: Economic Policy and Institutional Analysis, Real Estate Economics, Construction Economics, Housing, Human Behaviour in Economic Decision making, and Value Management and Facilities Performance. For further information, please contact Professor Francis K.W. Wong, Director of RCCREE ([bskwong@polyu.edu.hk](mailto:bskwong@polyu.edu.hk)) or Professor Eddie C.M. Hui, Deputy Director ([bscmhui@polyu.edu.hk](mailto:bscmhui@polyu.edu.hk)).

---

November 2010

# **COUNTRY REPORT ON SUSTAINABLE URBANIZATION IN THE REAL ESTATE SECTOR**

[As at 26 October 2010, 1.00 VND = HK\$ 0.0004; US\$ 1 = HK\$ 7.77]

## **1. EXECUTIVE SUMMARY**

According to the Council for Sustainable Development (CSD, 2010), “a sustainable built environment is a built environment that is well balanced for the needs of the present and the future from the economic, social and environmental perspectives”. This country report explores the current situation of sustainable urbanisation in the real estate sector of Hong Kong with respect to the three perspectives stated above. Firstly, it summarises the current economic situation of Hong Kong in general and of the real estate market in particular. This includes the initiatives and measures that have been taken to improve the real estate market as well as the whole economy. Secondly, it summarises social policies that are developed for urban planning and land using. Important policies include multiple intensive land use, sustainable building design features, assistance to low-income families, rail-led transport planning, public housing, etc. Thirdly, it summarises key environmental policies, such as urban renewal and heritage preservation, site coverage of greenery, etc., which are developed for environmental protection.

## **2. MACRO ECONOMIC REVIEW AND OUTLOOK**

### **2.1 Overview of Hong Kong's economy**

Following the “global financial tsunami” (which was highlighted by the bankruptcy of the US financial house Lehman Brothers and the takeover of Merrill Lynch) in September 2008, Hong Kong's economy suffered a heavy blow in the latter half of 2008 and the trough continued until the end of the first quarter of 2009. After the announcement of a series of stimulus measures by the Hong Kong government, Hong Kong had staged a strong rebound since the second quarter. According to the Financial Secretary, Mr. John C Tsang (2010), GDP expanded by 2.6% in the fourth quarter of 2009 after four straight quarters of negative growth. In 2009, the GDP shrank by less than expected (-2.7%) and the GDP per capita was HK\$233,060 (US\$30,100). The inflation rate was 0.5%, while the unemployment rate was 5.2%. Total trade in goods and services reached HK\$5,198 billion and HK\$1,014 billion respectively.

Among all measures that are used to consolidate the recovery and enhance economic development, some are related to sustainable urbanization. For example, the Hong Kong government offers a HK\$300 million Pilot Green Transport Fund to encourage the transport sector to test out green and low-carbon transport technology, and provides another HK\$540 million to subsidise the replacement of Euro II diesel commercial vehicles. In addition, the government optimises land resources by revitalising old industrial buildings and reserving sites for our industries, and increases capital works expenditure to HK\$49.6 billion in 2010-2011.

## **2.2 Main economic indicator (Refer to Table 2.1)**

For 2009 as a whole, the economy contracted by 2.7% in real terms, the first annual recession since 1998. Opposite to the original estimate by the Hong Kong government, the city turned out to achieve a budgetary surplus of about HK\$25.9 billion in the fiscal year of 2009/2010 (ended on 31 March 2010), which was attributed to high land premiums and huge revenues from stamp duties in both the stock and property markets.

As the Financial Secretary of Hong Kong, Mr. Tsang (2010), in his speech for “Budget 2010-2011”, expressed that he remained cautiously optimistic about Hong Kong’s economic prospects for 2010. He expected that Hong Kong might have a surplus of HK\$13.8 billion for the year of 2010 as a result of revenue from stamp duties and land sales, and forecasted GDP to grow by 4-5% with an underlying inflation forecast at 1.5% in 2010.

Hong Kong’s economy in the last year was stronger than expected. It expanded by 8.2% in the first quarter of 2010, the fastest pace in four years, as exports and retail spending rebounded from the global financial tsunami. China’s economic comeback provides the favourable condition for driving the city’s growth.

The unemployment rate slid to a 15-month low of 4.4% in the first quarter of 2010. Although that was still higher than the 3.3% level before the financial tsunami deepened in late 2008, the continual improvement in the labour market boosts spending, one of the sources for economic recovery. This may partly prove that the government’s measures adopted to stimulate the labour market work effectively.

	2005	2006	2007	2008	2009
GDP and Components					
GDP in chained (2008) dollars (HK\$ million)	1,440,343	1,541,450	1,639,826	1,675,315	1,629,057
GDP at current market price (HK\$ million)	1,382,590	1,475,357	1,615,455	1,675,315	1,632,284
GDP growth (%)	7.1	7.0	6.4	2.5	-2.7
Primary sector (HK\$ million)	947	942	1,009	920	n.a.
% growth	-1.1	-0.5	7.11	-8.9	n.a.
Manufacturing sector (HK\$ million)	45,547	45,761	39,319	38,710	n.a.
% growth	2.5	0.4	-14.1	-1.5	n.a.
Services sector (HK\$ million)	1,207,873	1,297,545	1,431,815	1,441,908	n.a.
% growth	7.9	7.4	10.4	0.8	n.a.
Construction sector (HK\$ million)	38,538	38,688	40,153	47,922	n.a.
% growth	-4.6	0.04	3.79	19.3	n.a.
Demographic Indicators					
Population	6,837,800	6,909,500	6,963,100	7,008,900	7,026,400
% growth	0.6	1.0	0.8	0.7	0.5
Total labour force	3,534,200	3,571,800	3,629,600	3,648,900	3,676,600
% growth	0.6	1.2	1.6	0.5	1.3
Unemployment rate (not seasonally adjusted)	5.6	4.8	4.0	3.6	5.2
Financial Indicators					
Changes in consumer price index (%)	1.0	2.0	2.0	4.3	0.5
Changes in GDP deflator (%)	-0.1	- 0.3	3	1.5	0.2
Short term interest rate* (%)	3.65	3.29	1.96	0.05	0.07
Long term interest rate** (%)	4.18	3.73	3.44	1.19	2.58
Annual average exchange rate with \$US (HK\$)	7.777	7.768	7.803	7.783	7.756

#### Notes

n.a.: data not available

\* yield of 91-day Exchange Fund Bills

\*\*yield of 10-year Exchange Fund Notes

#### Sources:

GDP, Demographic and Financial Indicators:

Government of the HKSAR web-page at [http://www.censtatd.gov.hk/hong\\_kong\\_statistics](http://www.censtatd.gov.hk/hong_kong_statistics)

Short and long term interest rates:

*Monthly Statistical Bulletin*, Hong Kong Monetary Authority.

**Table 2.1 – Macro-Economic Indicators**

### **3. OVERVIEW OF REAL ESTATE MARKET**

#### **3.1 Overview of real estate market (Refer to Table 3.1)**

##### **3.1.1 Development process of real estate market during the past years**

With a land area of only 1,104 sq. km., land supply in Hong Kong is extremely limited. Thus, Hong Kong has long been argued of having expensive residential property prices.

In the early to mid-1990s, a property boom occurred in most of the Asia-Pacific property markets, including Hong Kong. There was high growth in investment returns in property markets, attracting much local and foreign capital. After the Asian financial turmoil in 1997, property and stock prices have dropped by a large amount until 2003. An over-supply emerged, which led ultimately to a “negative-equity” situation in the property sector. In time, lending rates increased, leading to further falls in property prices, while vacancy rates climbed. In July 2003, residential property prices began to pick up again and rose by 63% (62% in real terms) until May 2005. The housing market stalled in the first half of 2006, and then increased by 32.4% (23.5% in real terms) from August 2006 to August 2008. In the second half of 2008, the “global financial tsunami” stopped the growth of the housing market. Given a set of measures raised by the local government, the housing market recouped much of the ground lost during the crisis. As regards residential, commercial and industrial property, both market activity and transaction volume rose substantially in the second quarter of 2009. When compared to the previous quarter, the number of registrations increased substantially by 121% in the residential market, 144% in the office market, 158% in the retail market and 112% in the industrial market.

On the other hand, in order to provide a shelter to those who could not afford to live in private housing, Hong Kong has established one of the largest public housing sectors in the world. Public housing in Hong Kong began as early as the 1950s as a way to provide those who suffered from wars and calamities with temporary housing. In the 1970s, the government changed its policy to provide permanent public housing. Figures indicate that as of 2009, 47.1% of the total population (around 3.3 million people) live in public housing. Of this population, 29.1% live in rental flats while 18.1% live in private flats subsidized by the government.



PRIVATE SECTOR							
	2005	2006	2007	2008	2009	2010	2011
Private Domestic (No. of units)	17320	16580	10470	8780	7160	14260	10960
<i>Small/medium units (No. of units)</i>	16250	15130	9730	7600	4740	12830	9320
<i>Large units (No. of units)</i>	1070	1450	740	1180	2420	1430	1640
Private Office ('000 m <sup>2</sup> )	34	108	320	341	151	122	130
<i>Grade A ('000 m<sup>2</sup>)</i>	30	92	286	331	129	113	103
<i>Grade B ('000 m<sup>2</sup>)</i>	2	9	31	9	19	7	27
<i>Grade C ('000 m<sup>2</sup>)</i>	2	8	3	1	3	2	0
Private Commercial ('000 m <sup>2</sup> )	111	183	48	49	84	82	56
Private Flatted Factories ('000 m <sup>2</sup> )	0	0	16	70	3	69	39
Private Industrial/Office ('000 m <sup>2</sup> )	4	0	0	4	0	0	0
PUBLIC SECTOR							
	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11
Public Housing (No. of units)	24682	17153	7192	13726	19050	15389	n.a.

#### Notes

n.a.: data not available.

Data for the Years 2010 and 2011 are provisional.

As defined in the *2010 Hong Kong Property Review*:

Private Domestic units are "independent dwellings with separate cooking facilities and bathroom (and/or lavatory)".

Small/medium units comprise "units with a saleable area of less than 100m<sup>2</sup>, and large units comprise "units with a saleable area of 100m<sup>2</sup> or above."

Private Office "premises comprise premises situated in buildings designed for commercial/business purposes. Excluded are non-domestic floors in composite buildings. Offices are graded as follows: Grade A - modern with high quality finishes; flexible layout; large floor plates; spacious, well decorated lobbies and circulation areas; effective central air-conditioning; good lift services zoned for passengers and goods deliveries; professional management; parking facilities normally available. Grade B - ordinary design with good quality finishes; flexible layout; average-sized floor plates; adequate lobbies; central or free-standing air-conditioning; adequate lift services, good management; parking facilities not essential. Grade C - plain with basic finishes; less flexible layout; small floor plates; basic lobbies; generally without central air-conditioning; barely adequate or inadequate lift services; minimal to average management; no parking facilities."

Private Commercial "premises include retail premises and other premises designed or adapted for commercial use, with the exception of purpose-built offices. Carparking space is excluded."

Private Flatted Factories "comprise premises designed for general manufacturing processes and uses, including offices, directly related to such processes, and normally intended for sale or letting by the developers."

Private Industrial / Office "premises are floor space designed or certified for industrial/office use."

Public housing has been provided by the Hong Kong Housing Authority (HA), which is a statutory body established in April 1973 under the Housing Ordinance. There is also the Hong Kong Housing Society, which is a non-government organization established mainly to provide subsidized rental housing to qualified people. However, the annual production of rental flats has been zero since 1998 until 2008 when there were 872 units completed (<http://www.hkhs.com/eng/info/annual.asp>). Their annual production is hence not reported in this Table.

#### Sources:

Private Sector: *2010 Hong Kong Property Review*. Rating and Valuation Department.

Public Sector: Hong Kong Housing Authority, <http://www.housingauthority.gov.hk/en>.

**Table 3.1 – Breakdown of Real Estate Market**

### 3.1.2 Key lessons of success and failure

Policies coming into effect may not be effective due to different reasons. Some policies may work initially but become ineffective when the situation changes. Some Hong Kong experiences are given below.

In order to assist low-income families to purchase their first homes, Hong Kong Housing Authority (HKHA, 2010) offers three schemes:

1. Home Ownership Scheme (HOS) – HOS flats are subsidized by the government. The scheme was run successfully during the boom period. However, when residential property prices continually fell from 1997 to 2003, the scheme had been temporarily stopped since 2003. The scheme was resumed in 2007 so that the last remaining batch of HOS flats could be sold. These flats were sold out recently.
2. Tenants Purchase Scheme (TPS) – The scheme offered those tenants in public rental flats to buy the flats at a price lower than the market price. However, due to the sharp drop of residential property prices over the years since 1997, selling under the TPS was stopped in 2005 in order to stabilise the housing market.
3. Home Assistance Loan Scheme (HALS) – Since 2003, the government offered low-income families interest-free loans that could be payable up to 20 years to buy their first homes. After evaluation, the HALS was halted in 2004. The main reason was that most loan borrowers were not able to pay their loan instalments when their properties became “negative-equity”.

Another experience came with the then chief executive Tung Chee-Hwa who pledged in 1997 to construct 85,000 units of residential properties in the next three years. The purpose of it was to cool down the rapidly growing residential property prices that peaked towards the end of 1997. However, in the wake of the Asian financial turmoil, the plan contributed to a dramatic plunge in house price. From its peak in 1997, residential property prices fell by 66.1% (61.8% in real terms) in mid-2003.

## 3.2 Planning and land using in Hong Kong

Traditionally, the Hong Kong government has raised revenue from the sale and taxation of land but not engaged in industry and commerce for profit. From its revenues, the government has built roads, schools, hospitals, and other public infrastructure facilities and services.

### 3.2.1 Urban planning

Hong Kong needs an urban infrastructure in support of economic development. With the principle of sustainable development, urban planning seeks to bring about an organised, efficient and desirable place for the community to live and work in. However, usable lands in Hong Kong are very limited. According to Ye (1998), Hong Kong consists of peninsula and islands dominated by hilly terrain in south subtropical zone. About 84% of the total area is slope, which is unfavourable for urban and agricultural development.

Only 16% is small plains, which has almost been used as urban areas. As land suitable for development is scarce, urban land use is of primary concern and there is a need to strike a balance in utilising for housing, commerce, industry, transport, recreation, nature conservation, heritage preservation and other community needs. For more information about urban planning in Hong Kong, refer to the website of Planning Department (2010).

For urban planning that involves sustainability, the Buildings Department of the Hong Kong government has recently commissioned a consultant to study the ventilation performance under different degree of building permeability and separation (Buildings Department, 2009). The consultant has provided three key guidelines about sustainable building design features that are described below:

(1) *Building separation* – Intervening spaces are used to separate buildings in large development sites so that “air ventilation and environmental quality of pedestrian level” can be enhanced while “urban heat island effect” can be mitigated. This guideline should be applied to “site area not less than 2 hectares or buildings with a continuous projected façade length greater than 60 metres”.

(2) *Building setback* – This guideline is applied to “pedestrian zone for developments abutting narrow streets less than 15 metre wide” for the purpose of enhancing “air ventilation and environmental quality of pedestrian level” as well as mitigating “deep street canyon effect”.

(3) *Site coverage of greenery* – This is the provision of greenery to various site areas such that “the environmental quality of living space” can be improved while “urban heat island effect” can be reduced. This guideline is applied to “sites larger than 1,000 square metres”. It is necessary to use up about 20 to 30% of the site areas for fixed planting areas. Although it is preferable to plant near pedestrian for wider public interests, other locations at ground floor, podium, roof and other levels are not ruled out.

Apart from the above sustainable urban planning guidelines, Hong Kong has also established a highly developed and sophisticated transport network, encompassing both public and private transport, which is part of the infrastructure that supports sustainable urbanisation. Over 90% of the daily journeys in Hong Kong are on public transport, making it the highest rate in the world (Lam, 2003). In addition to taxis, buses and ferries that have also been widely used in other countries, the public transport that runs within the city includes public light buses, peak trams, light rails and mass transit railway (MTR). Of all these transport types, the MTR system is known to be the most widely used transport in Hong Kong. It first began service in 1979 as the government would like to establish a mass transport system that can solve traffic jam in the city. After merging with the Kowloon-Canton Railway (KCR) network, the MTR represents the biggest network in Hong Kong. Under the government’s rail-led transport policy, the MTR system offers efficient and affordable public transport with over 4 million trips made in an average weekday (Civic Exchange, 2004). As of first-half 2009, the MTR has a 42% market share of the franchised public transport market, making it the most popular transport option in Hong Kong (MTRC, 2009). Since its launch in

September 1997 for use on the MTR, the Octopus card, which is a rechargeable contactless smart card used in an electronic payment device in all MTR stations, has provided a payment alternative to the traditional banknotes and coins. Most MTR travellers are using the Octopus card nowadays.

### 3.2.2 Land use resource

Hong Kong has a high demand for urban land utilization because of its limited land resources and the vast expansion of the scale of urban development (Ye, 1998). Of its total urban land, a large proportion has been developed for residential use. Of the total land, only 1.3% is used for commerce, 6.0% for manufacture industries and 14.6% for roads and railways. However, due to its need for urbanization with limited land resources, the Hong Kong government has made the concept of multiple intensive land use (MILU), which can achieve intensification of land use through mixing residential, commercial, recreational, community facilities and transport facilities at higher densities at selected urban locations (Lau et al., 2005). In this multiple land uses concept, the residential component is regarded as the core, which occupies 30 to 65% of the total gross floor area of a high-density, high-rise development. The development is typically surrounded by other components to form the platform, with access to five or more modes of public transport and an accessible network of multilevel pedestrian links that create the necessary variety, vitality and viability.

In order to address public demands for a more spacious and “greener” living environment and for preserving built heritage as well as the natural environment, the Town Planning Board (TPB), a statutory body established under the Town Planning Ordinance, Cap.131, has made several key policies (TPB, 2006):

1. *Urban renewal and heritage preservation* – While acknowledging the need for urban renewal, the TPB will inform the Urban Renewal Authority (URA) to initiate development schemes and to make amendments to the schemes to address the concerns of the local residents, particularly “in terms of preserving the cultural heritage and historic features of the area”. Examples can be found from the website of the Town Planning Board (TPB, 2006).
2. *Harbour-front planning* – In order to protect our harbour front, the Protection of the Harbour Ordinance has established regulations for minimising reclamation. The underlying principles are to promote “public enjoyment of the harbour-front”, improve “connectivity between the harbour-front and the inland areas”, enhance “the landscape proposals and urban design” and re-provision “affected existing uses”. Each urban design project will take into account major viewpoints (such as the Harbour-Front Enhancement Committee), the Urban Design Guidelines and other relevant considerations (such as extensive public engagement exercises).
3. *Incorporation of building height and/or plot ratio restrictions on outline zoning plans (OZPs)* – While the Board recognises that public demands

for the preservation of ridgeline and views of Victoria Harbour has been increased, it has incorporated building height control for a number of OZPs. As the Board wrote, “this has enabled appropriate controls to be put in place to help safeguard unobstructed views towards Victoria Harbour and to preserve the existing character of some residential neighbourhoods.”

4. *Rural planning* – A new Development Permission Area (DPA) Plan was prepared to “protect the natural habitat from disturbance, conserve the rural character and accord planning control and guidance for future development”. Also, the Plan stated that “the majority of the Area is designated as “Conservation Area” buffered by “Green Belt” to protect the continuous woodland, the ecologically significant stream and the mangroves in the “Coastal Protection Area” zone along the sensitive coastlines”. The substantial flat land in the heart of the Area is intended for agricultural use and for village expansion.

### 3.2.3 Issues of social housing policy and public housing provision for the less well off

The Hong Kong government has implemented policies for the needy and the elderly through Hong Kong Housing Authority and Hong Kong Housing Society (THB, 2010). The Housing Authority is a department under the Transport and Housing Bureau (THB) of the Hong Kong government, while the Housing Society is a public organisation for subsidised public housing.

Public Rental Housing (PRH) for the Needy is the government’s housing policy to provide subsidised public housing for citizens who cannot afford private rental housing (THB, 2010). It sets the eligibility criteria for selecting the eligible citizens for PRH. A waiting list has also been produced for those who are eligible but have not yet been offered a PRH unit. The government aims at maintaining the average waiting time for PRH for general family applicants at around three years. Under the policy, there is Harmonious Families Priority Scheme, which aims to shorten the waiting time by six months for those who choose to live with or in close proximity to their elderly parents/relatives. PRH estates in Hong Kong are grouped in four districts, namely Urban, Extended Urban, the New Territories, and the Islands. Since there are insufficient PRH units provided in the urban areas, applicants can only choose one district among the three non-urban areas for their future housing selection. However, applicants who qualify to join the Single Elderly Persons Priority Scheme, the Elderly Persons Priority Scheme and the Harmonious Families Priority Scheme (described in later paragraph) and opt to live with the elderly person(s) in one flat may choose PRH units from any one of the four districts.

Hong Kong Housing Authority and Hong Kong Housing Society offer different types of public housing subsidies to the elderly to address their housing needs. The major schemes are described below (THB, 2010):

1. *Priority Public Rental Housing Schemes* – Hong Kong Housing Authority offers three main types of priority schemes for the elderly in need of PRH:
  - (i) “Single Elderly Persons Priority Scheme for those who wish to live

- alone”, (ii) “Elderly Persons Priority Scheme for two or more elderly persons who are willing to live together”, and (iii) “Harmonious Families Priority Scheme for those families who opt to live with or close to their elderly parents or relatives”.
2. *Special Housing for the Elderly Scheme* – Both Hong Kong Housing Authority and Hong Kong Housing Society provide special flats that are fit for the elderly. The Housing Authority provides the elderly with two main types of housing in public rental estates: (i) “Housing for Senior Citizens units which come with communal and recreational facilities under the care of a warden”, and (ii) “Self-Contained Small Flats which are equipped with facilities such as non-slippery floor tiles and single lever taps to cater for the needs of the elderly”. The Housing Society also offers approximately 900 rent-discounted flats for eligible elderly people.
  3. *Housing Society Elderly Resources Centre* – The Housing Society Elderly Resources Centre provides elderly comprehensive services, which are aimed to cope with changing home facilities needs of the elderly. By the provision of education and assessment of current physical conditions and home safety, the Centre can help elderly people understand their physical needs and the potential risks at home to reduce home accidents. The Centre also provides “one-stop referral services” to facilitate the services for the elderly.
  4. *Building Maintenance Grant Scheme for Elderly Owners* – The scheme is intended to offer financial assistance to elderly owner-occupiers to upkeep their building safety by repairing and maintaining their self-occupied buildings. The maximum grant available for each eligible elderly owner-occupier within a period of 5 years is HK\$40,000.

### **3.3 Finance sources for sustainable urbanization in real estate sector**

#### **3.3.1 Financial crisis and issues related to real estate**

Hong Kong housing market was seriously affected by the global financial crisis (also known as the financial tsunami), but after falling 17% (18% in real terms) from June to December 2008, Hong Kong’s residential price index rebounded and rose by 20% (21% in real terms) from last year’s bottom to August 2009. It is believed that this situation is attributed to three main causes (from anonymous writers):

1. The government immediately implemented measures to stabilise the Hong Kong’s financial sector. Measures were mainly used to enhance the liquidity that can be accessed by banks so that mortgage loan could be issued. For the whole year of 2009, the number of sales and purchase agreements for residential property received by the Land Registry jumped by 20%. Total consideration for the agreements rose by approximately 24% to HK\$425.8 billion (EAD, 2010).
2. Borrowers enjoy low interest rates in Hong Kong. The Hong Kong best lending rate, the basis for mortgage interest rates, is computed based on the US Federal Funds rate and the average of the interbank interest rate. The changes in interest rate policy caused the Hong Kong best lending rate to drop. While the US Federal Funds rate dropped to 0.13% in May

2009 from 1.5% in October 2008, the Hong Kong best lending rate fell by 0.25% from 5.25% in October 2008 to 5% in September 2009. Due to the drop in the Hong Kong best interest rate, the interest rates of major banks are as low as 3.25% below the best lending rate. This benefits most borrowers because more than 90% of housing loans in Hong Kong are based on variable interest rates.

3. A massive influx of buyers from mainland China has been another cause. The Chinese government implemented a stimulus package amounting to RMB4 trillion (USD585 billion) in November 2008, resulting in a surge of mainland buying in Hong Kong. As much as 40% of new-home sales buyers are cash-rich mainland Chinese according to the *Wall Street Journal*.

### 3.3.2 Sources of funds

In order to respond to the global financial crisis, the Hong Kong government implemented liquid-enhancing measures to protect Hong Kong's financial sector (HKMA, 2010). These measures are listed below:

1. From September 2008 to March 2009, the Hong Kong Monetary Authority (HKMA) enhanced the access to liquidity available to banks, including longer borrowings from the discount windows and foreign exchange swaps.
2. In October 2008, the Financial Secretary established the Contingent Bank Capital Facility (CBCF), which can offer additional capital available to banks. The CBCF is in effect until the end of 2010.
3. In November 2008, the HKMA refined the September 2008 measures, furthering the maturity time of the debts in the discount window from one to three months.

The government's rapid response successfully maintained confidence. Bank lending continued, and loans for house purchase increased by 5.1% to HKD593 billion in 2008.

To stimulate growth in borrowing in the mortgage market, the Hong Kong Mortgage Corporation Limited (HKMC, 2010) issued a Fixed Adjustable Rate Mortgage program in October 2009. By the application period lasting until December 2009, borrowers can lock-in a predetermined interest rate for an agreed lock-in period.

### 3.3.3 Domestic banking sector and capital markets

The HKMA sets the guideline for mortgage lending in Hong Kong. Since the housing market recouped too fast and a housing bubble seems to emerge, the HKMA has now changed the loan to value (LTV) ratio of housing loans to 60% for loans valued at HK\$12 million and above. For loans less than HK\$12 million, the 70% ratio remains unchanged.

In March 1999, the HKMC (2010) launched the Mortgage Insurance Programme (MIP) with a view to promoting home ownership in Hong Kong. Specifically, with the MIP providing mortgage insurance to banks, banks can

lend out mortgage loans more than the maximum LTV ratio without incurring additional credit risk. The programme criteria are subject to change according to the policy of the government. Currently, as long as an application meets the relevant eligibility criteria (e.g., capping the maximum debt-to-income ratio at 50% for all income groups), the bank can lend a mortgage loan of up to 90% LTV ratio under the MIP, provided that the maximum loan amount is below HK\$7.2 million. For loans with mortgage insurance cover starting from 60% LTV threshold, the maximum loan at HK\$6 million is applicable.

### **3.4 Operation of the market**

#### **3.4.1 Real estate assessment/valuation (property valuation)**

In Hong Kong, property market statistics are mainly compiled by the Rating and Valuation Department (RVD, 2010). The RVD publishes a comprehensive set of price, rental and transaction statistics for various types of private residential and non-residential premises in its *Property Market Statistics* on a monthly basis. There are two main types of price statistics: average prices and prices indices.

As shown in their website, “average prices for various types of private properties (for residential, retail, office and factory uses) are expressed in terms of price per square metre of floor area. They are computed based on the actual transaction prices reviewed by the RVD for stamp duty purposes. They are the most straightforward and simplest indicators of the central tendency of property prices of the entire population”. However, this method suffers from sampling problems in that the sample of properties differs over time. Thus, changes in average prices between two periods may be due to changes in other characteristics of the sample premises, such as quality and location.

On the other hand, “the price indices are designed to measure changes in prices with quality kept constant. They are derived based on the same set of transaction data for computing the average prices, but using a more sophisticated statistical procedure”. It should be noted that like average price statistics, the residential price indices do not include transactions of primary sales (Fan and Peng, 2005). However, transaction prices in the secondary market should be able to reflect the market trend owing to “a relatively high liquidity” in that segment.

#### **3.4.2 Broker system**

Under the Estate Agents Ordinance (EAO), “any individual or company practising estate agency work in the course of business or in the course of employment in Hong Kong must hold a valid estate agent’s licence (individual or company) or salesperson’s licence” (EAA, 2010). Failure to do so is an offence. The holder of an estate agent’s licence (individual) is allowed to “carry on the business of estate agency work in the capacity of a sole proprietor, a partner of a partnership, a director of a company or an employee of another licensed estate agent”. An estate agent’s licence (company) must



have at least one director holding a valid estate agent's licence. A licensed salesperson may be restricted to "only perform estate agency work as an employee of a licensed estate agent".

The Estate Agents Authority (EAA, 2010) was established in November 1997 to be a statutory body under the EAO. As described in its website, "its principal functions are to regulate the practice of estate agency in Hong Kong, promote integrity and competence within the industry, and facilitate training for estate agency practitioners to enhance their standards and status. The EAA organises qualifying examinations, issues licences to individuals and companies, handles complaints against licensees, conducts compliance inspections and metes out disciplinary sanctions to practitioners who have breached the EAO. The EAA also organises activities for the professional development of the trade and promotion of consumer education".

### 3.4.3 Real estate management

Real estate management practices in Hong Kong are different for private and public properties. For private properties, the owners of a building may appoint a management committee (MC) and establish an owners' corporation (OC) under the Building Management Ordinance (BMO, Cap.344) to manage, control and administer the common areas of the building (HAD, 2010). The OC may employ a manager, a building management agent or a property management company to carry out day-to-day operations on behalf of the owners. All common facilities and amenities including recreational sports facilities shall be maintained in good and serviceable condition and in compliance with the Public Health and Municipal Services Ordinance (Cap.132).

For public properties, the Government Property Agency (GPA, 2010) is responsible for the management of mainly general-use joint-user government offices, governmental quarters, ex-departmental/specialist premises under temporary care-taking by the Agency and some miscellaneous premises. The GPA consolidates its property portfolio into four property management contracts signed with four different property management companies, where two are signed for the Hong Kong Island, one for Kowloon and one for New Territories. The GPA will monitor the performance of the four companies by means of half-yearly Customer Satisfaction Survey, site inspection reports and feedback of end users.

In addition to the Government ordinances that govern the management of properties and facilities, the Property and Facility Management Division of the Hong Kong Institute of Surveyors has developed a guide for day-to-day property and facilities management operations (PFMD, 2008).

#### **4. REAL ESTATE MARKET OUTLOOK FOR SUSTAINABLE URBANIZATION**

There are some real estate benchmark indices. Hedonic based property price index is commonly known, but is argued of not being appropriate to be used in Hong Kong since much of the price influencing information is lacking (Chau, 2006). To fit the situation of Hong Kong, local indices have been developed.

##### **4.1 Forecast of real estate market/real estate benchmark index**

Department of Real Estate of the University of Hong Kong established the University of Hong Kong's Residential Real Estate Index Series (HKU-REIS, 2010). It is a set of monthly real estate price indices estimated based on repeated sales. The indices reflect the changes in the price levels of real estate in Hong Kong. It is claimed to be the first set of transaction base tradable indices, which can be used for development of real estate derivatives, outside of the UK and US. For details, refer to Chau (2006).

##### **4.2 Methods and tools that use to forecast the real estate market prospect/opportunity**

The Centa-City Index and Centa-City Leading Index were developed by the Centaline Property Agency Limited (CPAL, 2010) and the City University of Hong Kong. They are claimed to be the indicators for studying the current movement of property prices in Hong Kong. The Centa-City Index is a monthly index estimated based on all transactions recorded in the Land Registry, while the Centa-City Leading Index is a weekly index estimated based on the current preliminary contract prices obtained from the transactions managed by Centaline Property Agency Limited. The Centa-City Index reflects actual property price movements in preceding months, while the Centa-City Leading Index helps to monitor the up-to-date property price variations. For details of the indices, refer to Centaline's website (CPAL, 2010).

##### **4.3 Methods and tools that use to forecast the real estate market issues and challenges**

It is suggested that movements in real estate prices have important implications for macroeconomic and financial stability. When comparing statistics about property prices and banks' exposures to property lending (the ratios of residential real estate loans and commercial real estate loans to total loans), it is able to detect emerging asset quality problems. For details, refer to Fan and Peng (2005).

## **5. THE SOLUTION OF THE STATE MANAGEMENT TO CONTROL AND REGULATE THE PRICE OF THE PROPERTY MARKET**

### **5.1 Policy sectors related to real estate market**

The Hong Kong Monetary Authority (HKMA) was established on 1 April 1993 by merging the Office of the Exchange Fund with the Office of the Commissioner of Banking. Its main functions and responsibilities are governed by the Exchange Fund Ordinance and the Banking Ordinance and it reports to the Financial Secretary of the government. It is the government authority in Hong Kong responsible for maintaining monetary and banking stability. For details of their functions, refer to their website.

In addition to the HKMA, there are other bodies that help the government implement policies related to the real estate market. These bodies include Hong Kong Housing Authority, Town Planning Board, Hong Kong Housing Society, the Hong Kong Mortgage Corporation Limited (HKMC), and the Estate Agents Authority (EAA). For their respective functions, refer to previous sections or their individual websites.

### **5.2 Governmental solution/policy to control and regulate the property market**

Since the private property market is a commercial market, the Hong Kong government has maintained a free market economy (or a Laissez-Faire Economy) and does not control the property market (or minimise its intervention in the private property market). However, at times, it would implement policies and measures to stabilise the market when prices surge or collapse. Some major policies and measures have been discussed in previous sections.

## **6 CONCLUSION**

Since the down and up of the real estate market after the global financial crisis, the Hong Kong government has implemented policies and measures to stabilise the market during the past two years. This report has summarised these policies and measures, especially those related to sustainable urbanisation.

## 7. REFERENCES

- Buildings Department. (2009). *Consultancy Study on Building Design that Supports Sustainable Urban Living Space in HK*. Consultancy Agreement No. BA/01/2006 (Ronald Lui & Partners), Buildings Department, the Government of the Hong Kong Special Administrative Region (SAR), Hong Kong.
- Centaline Property Agency Limited (CPAL). (2010). *Centa-City Index: Hong Kong's Definitive Price Indices*. Centaline Property Agency Limited, Hong Kong, [http://www.centadata.com/cci/notes\\_e.htm](http://www.centadata.com/cci/notes_e.htm).
- Chau, K. W. (2006) *Index Construction Method for The University of Hong Kong All Residential Price Index (HKAPI) and its sub-indices (HKU-HRPI, HKU-KRPI, HKU-NRPI)*, Versitech Limited, The University of Hong Kong, Hong Kong.
- Civic Exchange. (2004). *Merging Hong Kong's Railways: The Public Interest Perspective*. Civic Exchange, Hong Kong.
- Council for Sustainable Development (CSD). (2010). *Building Design and a Quality and Sustainable Built Environment*. Council for Sustainable Development, Hong Kong, <http://www.susdev.org.hk/en/intro.html>.
- Economic Analysis Division (EAD). (2010). *2009 Economic Background and 2010 Prospects*. Economic Analysis Division, Economic Analysis and Business Facilitation Unit, Financial Secretary's Office, the Government of the Hong Kong SAR, Hong Kong.
- Estate Agents Authority (EAA). (2010). *Types of Licensing*. Estate Agents Authority, Hong Kong, <http://www.eaa.org.hk/licensing/types.htm>.
- Fan, K. and Peng, W. (2005). Real estate indicators in Hong Kong SAR. Proceedings of a joint conference organised by the BIS and the IMF in Washington DC, 27-28 October 2003, *BIS Paper No.21: Real Estate Indicators and Financial Stability*, (pp. 124-138), Monetary and Economic Department, International Monetary Fund, Basel, Switzerland.
- Government Property Agency (GPA). (2010). *Property Management*. Government Property Agency, the Government of the Hong Kong SAR, Hong Kong, <http://www.gpa.gov.hk/english/manage/manage.html>.
- Home Affairs Department (HAD). (2010). *Code of Practice on Building Management & Maintenance*. Home Affairs Department – Building Management, the Government of the Hong Kong SAR, Hong Kong.
- Hong Kong Housing Authority (HKHA). (2010). *Policies on Public Housing*. Hong Kong Housing Authority, the Government of the Hong Kong SAR, Hong Kong, <http://www.housingauthority.gov.hk/en/aboutus/policy/publichousing/0,,00.html>.
- Hong Kong Monetary Authority (HKMA). (2010). *The HKMA*. The Hong Kong Monetary Authority, the Government of the Hong Kong SAR, Hong Kong, <http://www.info.gov.hk/hkma/eng/hkma/index.htm>.
- Hong Kong Mortgage Corporation (HKMC). (2010). *Our Business: Mortgage Insurance Programme*. The Hong Kong Mortgage Corporation Limited, Hong Kong, <http://www.hkmc.com.hk/eng/pcrm/ourbusiness/mip.html>.
- HKU-REIS. (2010). *The University of Hong Kong Real Estate Index Series*. The University of Hong Kong, <http://hkureis.versitech.hku.hk/>.
- Lam, W.H.K. (2003). *Advanced modelling for transit operations and service planning*. Elsevier publishing.
- Lau, S.S.Y., Giridharan, R. and Ganesan, S. (2005). Multiple and intensive land use: case studies in Hong Kong. *Habitat International*, 29(3), 527-546.

- Mass Transit Railway Corporation (MTRC). (2009). *MTR Corporation: 2009 Interim Results*. MTR Corporation, Hong Kong.
- Planning Department (2010). *Hong Kong: The Facts*, Town Planning, Planning Department, the Government of the Hong Kong SAR, Hong Kong, <http://www.pland.gov.hk>.
- Property and Facility Management Division (PFMD). (2008). *HKIS Guide to Good Property Management Practices*. The Property and Facility Management Division of the Hong Kong Institute of Surveyors, Hong Kong.
- Rating and Valuation Department (RVD). (2010). *Publications and Press Releases*. Rating and Valuation Department, The Government of the Hong Kong SAR, Hong Kong, <http://www.rvd.gov.hk/en/publications/publications.htm>
- Town Planning Board (TPB). (2006). *Town Planning Board Biennial Report 2006-7*, the Town Planning Board, Hong Kong.
- Transport and Housing Bureau (THB). (2010). *Policy / Issues in Focus*. Transport and Housing Bureau, the Government of the Hong Kong SAR, Hong Kong, <http://www.thb.gov.hk/eng/policy/index.htm>.
- Tsang, J.C. (2010). *The Budget 2010-2011*. The Government of the Hong Kong SAR, Hong Kong, <http://www.budget.gov.hk/>.
- Ye, S. (1998). The land resource and landuse of Hong Kong. *Chinese Geographical Science*, 8(1), 12-24.

# **The International Conference 2010**

---

## **Housing and Real Estate Market Development – Worldwide Experience and Options for Vietnam**

26 – 28 November 2010  
Hanoi, Vietnam



## *Curriculum Vitae of Mr Deepak Mazumdar*

*Mr Deepak Mazumdar is presently the Head of Independent Quality Assurance Consultancy & Event Cell, of Construction Industry Development Council. Born in June, 1961 he holds an educational qualification in C Engi Civil.*

*He is a Member of Construction Industry Vocational Training Association (CIVTA), Construction Industry Professional Development Training Association (CIPDTA), Construction Industry Arbitration Council (CIAC).*

*With Over 27 years of experience in Construction Industry, he has handled a number of responsibilities in various positions. Besides Quality Assurance & Training Mr Mazumdar has spent a lot of his time on development projects.*

*Mr Deepak Mazumdar has worked on international assignments & also provided training to construction personnel in other countries such as Indonesia. Mr Mazumdar is actively associated with HRD programmes of CIDC since 2001.*

*Starting his career in the private sector Mr Mazumdar joined CIDC in 2000 post which he has specialized in development planning, IQAC, organizing events and training.*

*Mr Mazumdar is a widely traveled persons & has attended Conferences in Huston, USA, Singapore & Beijing, China.*

*He has traveled on assignments abroad including United States of America , United .Kingdam., Canada , Kuwait , China, Sudan, Afghanistan, Nepal, Germany , Amsterdam, Singapore, France, Swizerland, Indonesia.*

---

**INDIAN CONSTRUCTION INDUSTRY**

---

**2010-2011**



**“Sustainable Urbanization in Real Estate Sector”**

**PREPARED BY**

**MR. Deepak Mazumdar**

**CONSTRUCTION INDUSTRY DEVELOPMENT COUNCIL**

**INDIA**



## CONTENTS

1.		Preamble
2.		Executive Summary
3.		Economic Overview
	3.1	Economic indicators
	3.2	Demographic Scenario
4.		Overview Of The Real Estate Market
	4.1	Market Scenario
	4.2	Market Segments
	4.3	Growth Drivers
5.		Policy & Regulatory Framework
	5.1	Government Initiatives
	5.2	Union Budget 2010-11 & the Real Estate Sector
	5.3	FDI in Indian Real Estate
6.		Road Ahead

## 1. PREAMBLE

Construction Industry Development Council (CIDC) has been jointly established by the Planning Commission, Government of India and the Indian Construction Industry. Since its inception in 1996, CIDC has initiated several activities for the benefit of construction industry. A notable few are:

- *Advice the Government on policy formulation related to construction industry.*
- *Standardization of construction contracts and procedures.*
- *Training manpower at skilled worker level and construction management level.*
- *Grading of construction entities*
- *Devise mechanisms for workers' welfare.*
- *Help evolve policies for financing.*
- *Dispute Resolution in Construction Contracts.*
- *Establishing construction equipment bank.*
- *Computation & publishing Construction Cost Indices*
- *Interaction and networking with international organizations to promote emerging technologies and best practices.*

## **2. EXECUTIVE SUMMARY**

This report presents the overview of the Real Estate Market & the Indian Construction Industry. Macroeconomic parameters pertaining to the Indian Economy & the patterns of demographic patterns affecting the real estate sector is presented.

The entire overview of the real estate sector pertaining to the market scenario, market segments of the real estate and the growth drivers in context of the Indian scenario is also presented.

Moreover, policy and regulatory framework and road ahead in the real estate sector is also highlighted.

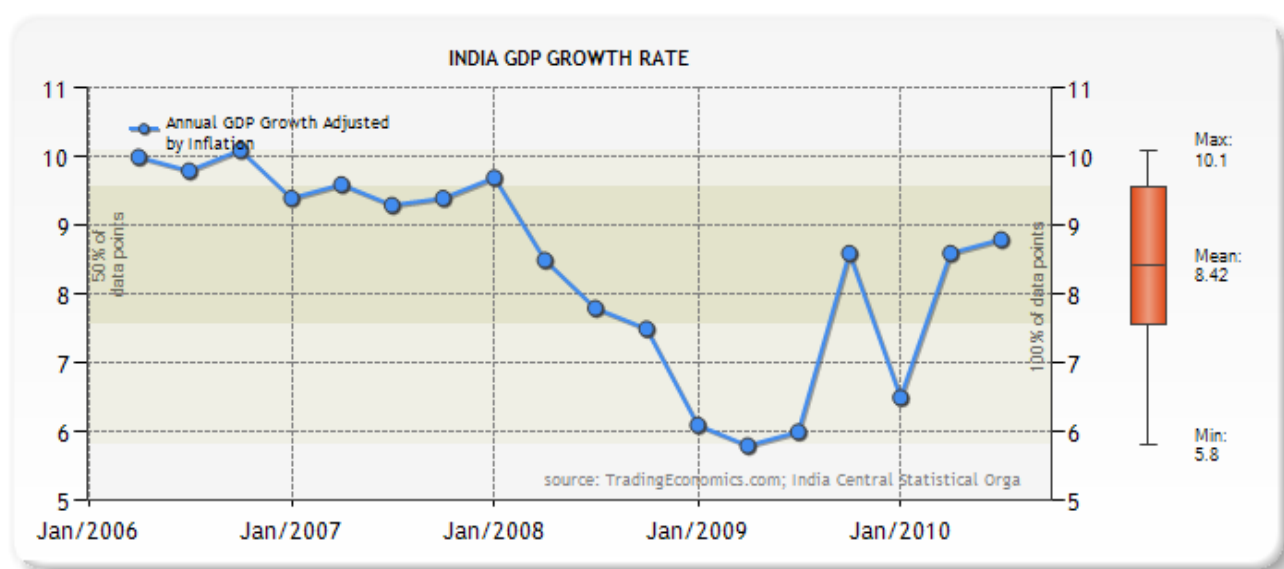
### 3. ECONOMIC OVERVIEW

- ✓ India is the fourth largest economy in the terms of purchasing power parity,
- ✓ GDP Growth accelerated from 8.6% in 2009 to 8.8% in 2010.
- ✓ Real Estate sector is registering an annual growth rate of 30%.
- ✓ 1.1% of GDP constitutes FDI in Real Estate sector.
- ✓ Returns in India range between 12-15% compared to 3-4% in advanced countries.
- ✓ The strong fundamentals of the Indian economy are having a favorable impact on all asset classes of Indian real estate viz. housing, commercial - office space and retail and hospitality.
- ✓ In recent years, the growth has spread out to tier-II and III cities as well.
- ✓ Improving living standards are driving the demand for better.
- ✓ Quality housing and urban infrastructure.

#### 3.1 Economic indicators:

INDICATORS	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
GDP (at current prices, US\$ bn)	837.2	947.0	1231.0	1222.0	1317.0	1529.0#
GDP Growth (at constant prices, %)	9.5	9.7	9.2	6.7	7.4e	8.5#

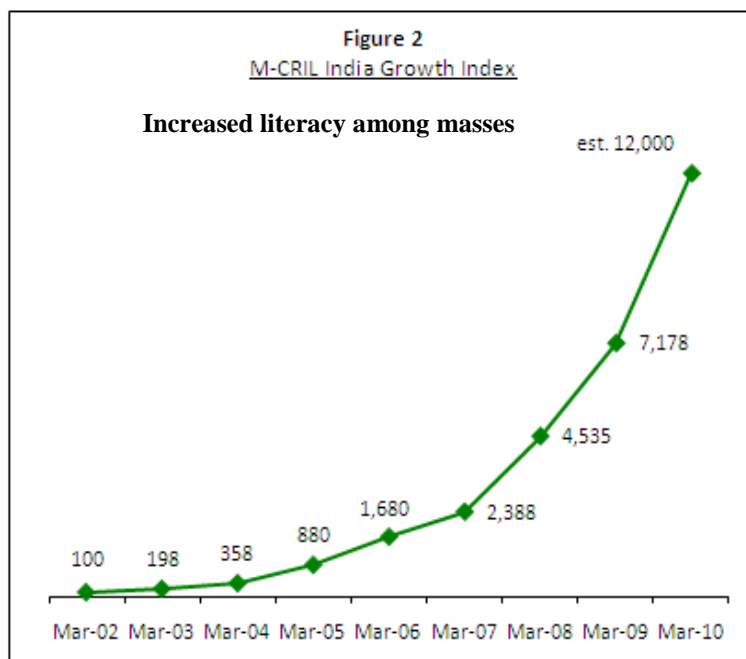
Source: Economic Survey, 2010  
 # PM Economic Advisory Council's projections  
 e: estimate



Source: CSO

#### 3.2 Demographic scenario:

- 6 metropolitan cities contribute 6% of Indian population, 14 % of Indian GDP & 60 % of shopping malls.
- Urban population spends 2.5 times more than rural population.
- Greater per capita income.
- Increase in disposable income of middle class household.
- Increased literacy among masses.



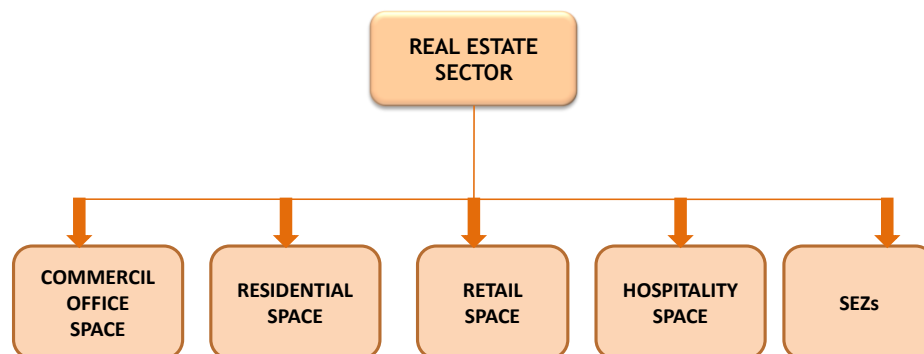
## 4. OVERVIEW OF THE REAL ESTATE MARKET

### 4.1 Market Scenario

- The real state sector in the country is one of the greatest importance. The current contribution to the real estate to India's GDP is about 5%. It is one of the highest FDI attracting sectors in India, having recorded FDI inflows worth more than 2.8 billion between 2000-2009.
- India leads the pack of top real estate investment markets in Asia for 2010, according to a study by PricewaterhouseCoopers (PwC) and Urban Land Institute, a global non-profit education and research institute, released in December 2009.

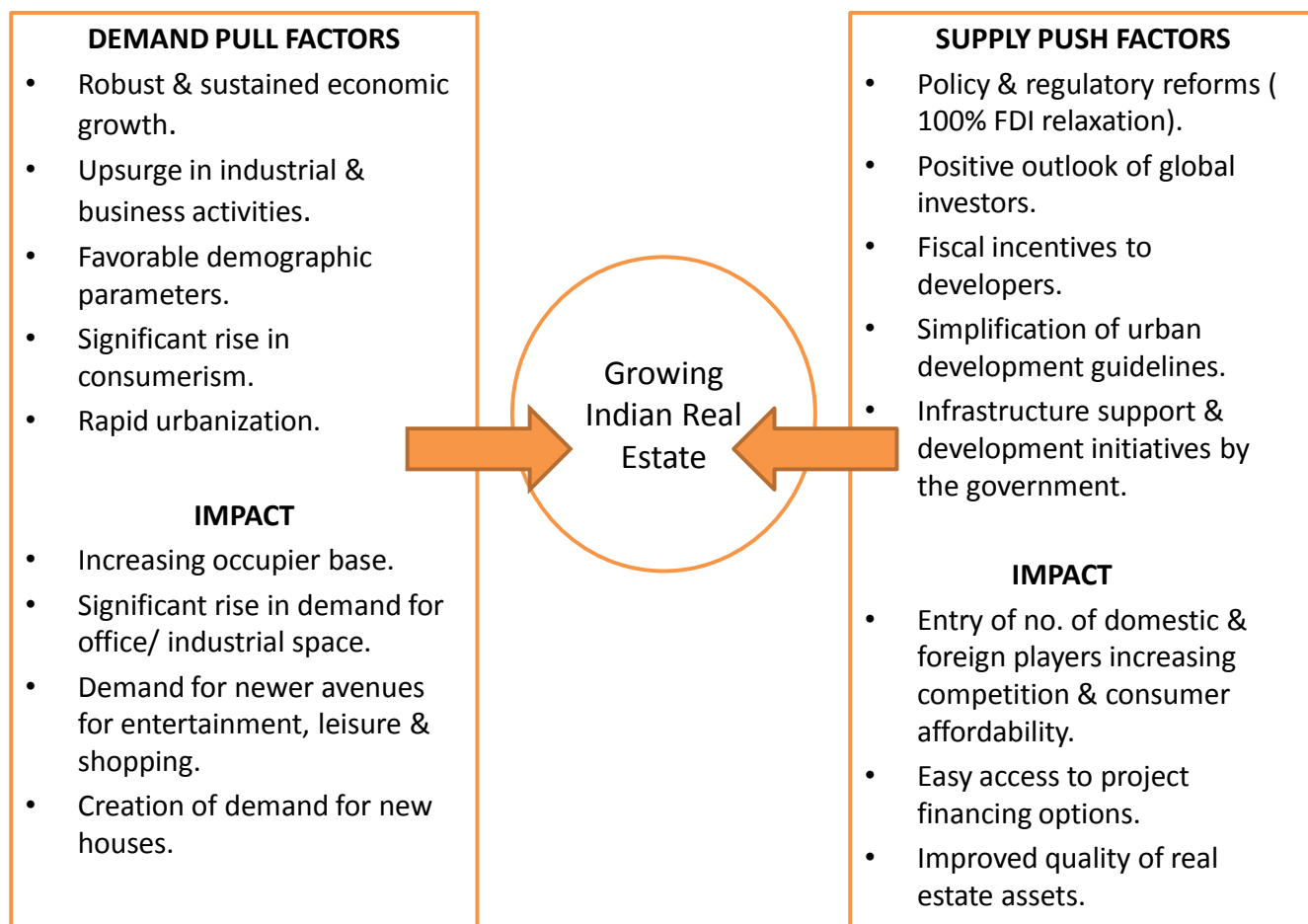
### 4.2 Market Segments

- In recent years the industry has evolved from highly fragmented & highly organized market into semi-organized market.
- The sector can be divided into commercial, residential, retail & hospitality assets classes.



### 4.3 Growth Drivers

- ✓ The robust growth in IT sector; with increase in the demand of office space, growing presence of foreign businesses in India, global strides of Indian corporate & rapidly increase consumer class.
- ✓ Introduction of REMFs (Real Estate Mutual Funds) and REITs (Real Estate Investment Trusts).
- ✓ Global economic recovery.
- ✓ The demand supply mismatch will remain over 50% beyond 2010, generating substantial business for Real Estate.



## **5. POLICY & REGULATORY FRAMEWORK**

### **5.1 Government Initiatives**

The government has introduced many progressive measures to unlock the potential of the sector and also to meet the increasing demand levels.

- ✓ 100 per cent FDI allowed in townships, housing, built-up infrastructure and construction development projects through the automatic route, subject to guidelines as prescribed by Department of Industrial Policy and Promotion (DIPP).
- ✓ 100 per cent FDI is allowed under the automatic route in development of Special Economic Zones (SEZ), subject to the provisions of Special Economic Zones Act 2005 and the SEZ Policy of the Department of Commerce.
- ✓ FDI is not allowed in Real Estate Business.

### **5.2 Union Budget 2010-11 & the Real Estate Sector**

- Allocation for urban development was increased by more than 75 per cent from US\$ 660.3 million to US\$ 1.17 billion in 2010-11.
- Allocation for housing and urban poverty alleviation was raised from US\$ 183.4 million to US\$ 215.8 million in 2010-11.
- Scheme of 1 per cent interest subvention on housing loan up to US\$ 21,576 where the cost of the house does not exceed US\$ 43,153 announced in the last budget has been extended up to March 31, 2011 and US\$ 151 million has been earmarked for this scheme for 2010-11.
- US\$ 274 million has been allocated for Rajiv Awas Yojna, as compared to US\$ 32.4 million last year.
- Meanwhile, the Reserve Bank of India (RBI) has revised the norms for urban cooperative banks for giving loans to the housing and real estate (RE) segment. Now, urban banks can use up to 15 per cent of deposits to provide housing, real estate and CRE loans. Earlier, the RBI norm permitted them to use up to 15 per cent of deposits for giving advances to housing loans and other block capital loans.

### **5.3 FDI in Indian Real Estate**

- ✓ FDI inflows recorded as US\$ 2.8 billion in 2008-2009 as per Department of Industrial Policy and Promotion (DIPP).



- ✓ Over the years, FDI in real estate has increased due to growing interest of foreign players in Indian market.
- ✓ Majority of FDIs are from West Asia & investors from US & Europe, who have shown keen interest in launch of several real estate funds.
- ✓ FDI in real estate is expected to witness an increase of US\$21 billion from the current values over the next 10 years.

### GUIDELINES FOR FDI IN REAL ESTATE IN INDIA

#### Conditions for development

Minimum 10 hectares to be developed for serviced housing plots.

For construction-development projects, minimum built-up area of 50,000 sqmt prescribed.

In case of a combination project, any one of the above two conditions should be met.

At least 50 per cent of the project to be developed within five years from the date of statutory clearances.

#### Conditions for investment

Minimum capitalisation of US\$ 10 million for wholly-owned subsidiaries and US\$ 5 million for joint ventures with Indian partners.

Infusion of funds within six months of commencement of business.

Original investment cannot be repatriated before a period of three years from completion of minimum capitalisation.

Investor may be permitted to exit earlier with prior government approval.

#### Other conditions

Investor is not permitted to sell undeveloped plots.

Project to conform to norms and standards laid down by respective state authorities.

Investor responsible for obtaining all necessary approvals as prescribed under applicable rules/bye-laws/regulations of the state.

Designated authority to monitor compliance of above conditions by developer.

h of services sector and organised retail, increasing urbanisation, rising income levels, contracting household sizes and easy availability of home loans are key growth drivers of the industry.

- ✓ According to the Eleventh Five Year Plan (2007-2012), the housing shortage in urban areas was estimated to be 24.7 million units in 2007, of which over 88 per cent was in the economically weaker section (EWS). Further, the housing shortage in rural areas was estimated to be at 47.4 million units in 2007.
- ✓ In recent months, the residential real estate segment has witnessed a revival in demand, primarily due to improved affordability. Several players have launched new projects in the affordable housing sub-segment, which have received an encouraging response.
- ✓ Long-term view on the Indian real estate industry is positive as the fundamental demand drivers such as increasing urbanisation, favourable demographics, growth of services sector and rising incomes are still intact.
- ✓ Demand in coming years is expected to be driven primarily by the unmet need in the housing segment, stable economic reforms and large infrastructure investments from the government, besides the strong demographic profile of the Indian consumers.
- ✓ The Government of India plans to spend about US\$ 350 billion on infrastructure development under the Eleventh Plan, which is expected to drive demand in the real estate sector.
- ✓ Further, upcoming industrial clusters, improved infrastructure and growing availability of land for development in emerging tier II and tier III cities are also expected to fuel growth in the real estate sector.

# **The International Conference 2010**

---

## **Housing and Real Estate Market Development – Worldwide Experience and Options for Vietnam**

26 – 28 November 2010  
Hanoi, Vietnam

**INDONESIA**  
member country of



**COUNTRY REPORT**

## CURRICULUM VITAE

- 1 Name : Yaya Supriyatna Sumadinata, M.Eng. Sc
- 2 Birth : Bandung, March 21, 1959
- 3 Gender : Male
- 4 Religion : Islam
- 5 Nationality : Indonesia
- 6 Marriage Statue : Marriage, 1985
- 7 Education :
  - Graduate: Bandung Institute of Technology, Civil Engineer, 1985
  - Post graduate: The University of New South Wales, Australian, Highway Engineering, 1992
- 8 Job Experiences :
  - 1985 – 1998: Directorate General of Highway, MPW
  - 1999 : State Ministry of Public Works
  - 2001 : Inspectorate General of MPW
  - 2002 : Human Resources Development Agency of MPW
  - 2004 – now : Construction and Human Resources Development Agency of MPW
- 9 Job Occupation :
  - Technical staff for highway and bridge
  - Project manager for highway and bridge design and supervision
  - Head of section for highway environmental impact
  - Policy analysis for community participation on infrastructure development
  - Auditor for technical and financial infrastructure
  - Head of division for higher professional education curriculum development

#### 10 Significant Short Course

- Head of division for construction professional competency development
- Acting head for center expertise and technical construction development
- 1989: Road construction management and supervision, Denmark
- 1994: Construction project management for core official government, Bandung
- 1998: Involuntary resettlement, Philippine
- 2002: Teaching technology for professional education, Malang
- 1993, 1998, 2007: Public management for forth, third, and second level echelon of government official, Jakarta, Bandung, Semarang
- 2006: Public private partnership course, Japan
- 2008: Private initiative finance for infrastructure development, Jakarta

#### 11 Contact Address

- Office: Pusat Pembinaan Keahlian dan Teknik Konstruksi, jalan Kampus Atpu no. 1, Cicaheum, Bandung, Jawa Barat, Phone: 062 227206892
- Home: Kompleks Fadjar Raya A1-14 Cimahi, Jawa Barat, Phone: 062 226650390, HP: 0628122026889

Bandung, October 8, 2009

Yaya Supriyatna Sumadinata

# THE INDONESIAN CONSTRUCTION SECTOR

Akhmad Suraji<sup>1</sup> & Yaya Supriatna<sup>2</sup>

## 1. EXECUTIVE SUMMARY

Economy of Indonesia is growing better since the economic turmoil 10 Years ago. In 2009, GDP Per Capita At Current Market Prices is IDR 24.3 juta (USD 2,590.1) and GNP Per Capita At Current Market Prices IDR 23.4 or USD 2,499.5. The economic growth is 4.5%. The inflation rate from January to July 2010 is 4.02%. The construction sector contribution to GDP decrease from 7.31% in 2008 to 7.1%. The contribution of construction sector to GDP is 555 Trillion IDR (2009) based on current price and 140.2 Trillion IDR (2009) under constant price (2000). The next coming years, it is expected to account more than 9%. This expectation is applicable since Indonesia is known as the second largest construction market up to 2010 in Asia after China (ENR Singapore, 1997). The market covers infrastructure and property investments both under government spending and or private investment as well public private partnership. For the fiscal year 2010, the government spending for infrastructure provision accounts for almost 108 Trillion IDR and the next coming year account for 126 Trillion IDR (2011) in which public work projects covering road networks, water resources and human settlement will get the public funding almost 56 Trillion IDR (2011). It was estimated that Indonesia needs almost 1,500 Trillion IDR for infrastructure procurements (Bappenas, 2005).

## 2. MACRO ECONOMY REVIEW & OUTLOOK

### 2.1 Overview of National Economy

The Indonesian economy is growing significantly since it was hit by Asia economic crisis in 1997. Now it is considered to be in stable state and to growth at 6.06% (2008) but it slightly decreases at 4.5% (2009) due to affected by the global financial crisis. During 2006-2009, economics of Indonesia were increased by 5.5 percent (2006), 6.3 percent (2007), 6.0 percent (2008) and 4.5 percent (2009). Meanwhile, in the first semester in 2010 compare with second semester in 2009, grew by 2.1 percent and if it is compared with first semester in 2009 grew by 5.9 percent (CBS, 2010). Furthermore, the value of GDP at 2000 constant prices in 2006 was IDR 1,847.1 trillion and increased in the year 2009 to become IDR 2,177.0 trillion. In the first semester in 2010 GDP at constant prices was IDR 1,131.8 trillion.. The value of GDP at current prices in the year 2006 was IDR 3,339.2 trillion and always increased in the next year to become IDR 5,613.4 trillion in the year 2009, meanwhile, in the first semester in 2009 GDP at current prices was IDR 3,068.6 trillion (CBS, 2010). Other component of GDP which have significant contribution to GDP is Gross Fixed Capital Formation (GFCF) and export of goods and services. The growth of GFCF was 24.1 percent in 2006 and increased higher became 31.1 percent in 2009 and 31.4 percent in first semester 2010. (CBS, 2010)

The business trend index in fourth quarter of 2006 was 107.3 showing that business condition in general is better than third quarter of 2006. This business condition is growing better since increased revenue due to increasing production capacity and number of working time. Higher business revenue occurs in the finance sector, property and services. The higher increased workforce occurs in the construction sector. The highest business index is 115.35 occurring in the construction sector. It shows that this sector is the most increased sector compared to other sectors. However, the agriculture sector has decreased its index (95.12%). The business trend index during first quarter of 2007 was

---

<sup>1</sup> University of Andalas & National Construction Services Development Board

<sup>2</sup> Directorate General of Construction Development, Ministry of Public Works



expected about 108.79. During 2007, business condition is expecting higher than 2006 and in this year, construction sector will have higher index.

Consumer trend index across greater Jakarta during last quarter of 2006 was 106.96 showing economic condition of consumers are in better condition. Increased value of consumer trend index is due to increasing household income and consumption of main commodities. Higher consumption occurs in the housing expenses (energy and water), transportation, and education, while recreation expenditure decreased. It was expected that economic condition of consumers during 2007 is much better than 2006.

## 2.2 Main Economic Indicators

The Indonesian economy is in a stable shape towards increased growth. The Indonesian gross domestic product for 2004 in constant 2000 real prices was RP. 1511 Trillion which represents a 1.03% increase on the previous year. To January 2005 the gross domestic product grew at an annual rate of 5.13% in Central Bureau of Statistics data (CBS, Economic Indicators, January 2005). During the same period the consumer price index standing at 118.53 in January 2005 grew by only 1.43 points against 0.57 the previous year (2002=100). The interest on 90-day bank deposit bills was 6.65% in October and the 10-year Treasury Bonds returned 8.31%. Rising cost of materials including that for crude oil leading to an increase in inflation from 5.06% in 2003 to 6.4% in 2004 and the cyclical Rupiah devaluation of 20% against the US\$ has forced the government to instigate minimization of energy consumption, spending and subsidy provisions nationwide. The unemployment rate however, increased from 15% in 2003 to 16% in 2004. Despite current uncertainties about the international economy and the downturn in balance of payments from US\$28.6 Billion in 2003 to 23.5 Billion in 2004, the rate of economic growth is forecast to continue to the end of 2006 at 6.5%, with the domestic economy proving to be relatively resistant to adverse global economic conditions.

The Indonesian economy continued to grow slowly between 1999-2004 after the Asia Economic crisis had affected all sectors in the regions since 1997, but will obviously be affected by what occurs in the global market. Although difficult to predict, the indications for the Indonesian economy are positive for the years after 2004 judging from the information shown in Table 1 This table shows that the Indonesian economy is getting better.

**Table 1.** Main Economic Indicators

Indicators	2005	2006	2007	2008	2009	2010 (forecast)
<b>Economic Growth (%)</b>	5,7	5.50	6.28	6.06	4.5	6
<b>Construction Growth (%)</b>	9.90	9.00	10.40	10.50	7.1	7-8
<b>Inflation (%)</b>	17.11	6.60	6.59	11.06	6.5-7,5	5,67
<b>Foreign Exchange (Rp/US\$)</b>	9,830	9,167	9,300	10,895	10,150	8,950
<b>CBC-3 Months (%)</b>	12.83	9.75	8.50	8.67	7.36	7.25
<b>Oil Price (US\$/barrel)</b>	41.00	64.00	94.00	99.40	71,17	85

Source: Bank Indonesia, Finance Department of RI, [www.oilprice.net](http://www.oilprice.net) (2009) Updated

According to the latest CBS the real gross domestic product (GDP) expanded by 6,06% (2008), indicating that the economy is picking up, as the corresponding value for the previous year was 6,28% (2007). In the past the Indonesian economy was relatively resilient against minor adverse international economic conditions. The control exercised over the relatively long recovery period since the economic crisis of 1997-2000, through fundamental economic remedies, has provided a good basis for managing the present uncertainties thereby indicating opportunity for gradual expansion and continuing

sustained growth in the key sectors of the economy. These include in particular the construction, agriculture, manufacturing and services sectors. In terms of consumption and investment ( not in the table ), for the first half of 2005 compared to the first half of 2004, retail sales at current prices increased by 16%, new capital expenditures by 27% and new government expenditures were up 10%.

**Table 2.** Macro Economic Development Indicators

	(1,000,000 IDR)					
	2005	2006	2007	2008	2009	2010 (forecast)
<b>GDP at constan prices 2000 Rp. Billion</b>	1,750,815	1,847,127	1,963,092	2,082,104	2,165,388	2,286,650
<b>GDP at current market price</b>	2,774,281	3,339,217	3,949,321	4,954,029	5,152,190	5,440,713
<b>GDP growth (%)</b>	5,7	5.50	6.28	6.06	4.00	5,6
<b>GDP growth (%) for agriculture, forestry and fishery sector</b>	2.72	3.36	3.43	4.77	3.57	2,9
<b>GDP growth (%) for manufacturing sector</b>	4.60	4.59	4.67	3.66	4.38	3,6
<b>GDP growth (%) for services sector</b>	5.16	6.16	6.60	6.45	6.09	4,6
<b>GDP growth (%) for mining sector</b>	3.20	1.70	2.02	0.51	1.86	3,5
<b>GDP growth (%) for construction sector</b>	7.54	8.34	8.61	7.31	7.95	7,3
<b>GDP growth (%) Financial, Ownership and Business Services</b>	6.70	5.47	7.99	8.24	7.10	5,5
<b>GDP growth (%)Transportation and Communication</b>	12.76	14.23	14.04	16.69	14.43	11,9
<b>GDP growth (%)Trade, Hotel and Restaurant</b>	8.30	6.42	8.41	7.23	7.59	9,3
<b>GDP growth (%)Electricity, Gas and Water Supply</b>	6.30	5.76	10.33	10.92	8.33	7,2
<b>Population (number)</b>	219,852	222,747	225,642	227,779	230,633	237,556
<b>Population growth rate (%)</b>	1.79	1.32	1.30	0.95	1.25	2.9
<b>Labour force (number)</b>	106,280	106,390	109,940	111,879	113,852	116,000
<b>Labour force growth rate (%)</b>	1.59	0.10	3.34	1.76	1.76	1,9
<b>Unemployment rate</b>	10,854,254	11,104,693	10,547,917	9,427,590	9,258,964	8,595,600
<b>Unemployment growth rate (%)</b>	5.88	2.31	(5.01)	(10.62)	(1.79)	(7.16)
<b>Inflation rate</b>	10.40	13.33	6.40	10.31	6.02	5.67
<b>Short term interest rate (%)</b>	16.83	17.58	16.13	16.62	17.12	17.56
<b>Long term interest rate (%)</b>	16.23	15.07	13.00	13.90	14.87	15.18
<b>Changes in Consumer Price Index (2007=100)</b>	141.50	148.34	155.58	170.18	186.16	118.37
<b>Average change against USD\$</b>	9,830	9,020	9,300	10,895	10,150	8,950

Source: CBS (2009) & Central Bank of Indonesia (2009)



### 3. OVERVIEW OF THE CONSTRUCTION INDUSTRY

#### 4.1 Construction Investment

The construction value completed can be seen in Tabel 3. The Government of Indonesia has expressed her desire to speed up infrastructure development in order to accelerate economic growth to levels of 7.8% through increasing the ratio of Investment to GDP to 28.4% from 19.6%, opening new job opportunities to reduce unemployment and poverty alleviation to 5.1% and 8.2%. The above investment driven development plan can be seen in Table 4 which depicts infrastructure demand between 2005-2009 to be Rp.145 Trillion or US\$15.825 Billion. A more accurate picture can be obtained in Table 5 which illustrates for construction investment and maintenance demand in the Department of Public Works to total Rp.73.59 Trillion; broken into Bina Marga (Roads and Bridges) Rp.21.27 Trillion, Sumber Day Air (Water Resources) Rp.34.53 Trillion, Cipta Karya (Human Settlements) Rp.14.60 Trillion, and Other Public Works Rp.3.18 Trillion.

**Table 3.** Value of Construction Completed by Type of Construction  
2004 – 2009 Based on Contract Price

(1,000,000 IDR)

TYPE OF CONSTRUCTION		2004	2005	2006	2007	2008	2009*
1	Residential	4,795,995	7,495,904	9,305,172	9,305,172	11,263,484	13,633,931
2	Non residential	18,581,659	20,701,163	22,069,558	23,528,407	29,613,637	37,272,710
3	Electrical installation	3,825,819	3,174,567	3,363,393	3,563,451	3,775,409	3,999,974
4	Gas and Water supply installation	114,635	431,511	371,544	319,911	275,453	237,174
5	Sanitary installation	69,988	206,000	194,926	184,447	296,659	477,137
6	Foundation	353,875	1,155,892	850,095	625,198	1,127,658	2,033,936
7	Sound system, AC, lift, etc	2,038,887	1,090,505	1,268,817	1,476,285	1,261,856	1,078,573
8	Water supply network	447,877	487,919	512,374	538,055	681,455	863,073
9	Oil and Gas pipe network	759,422	650,974	648,546	646,127	1,031,995	1,648,304
10	Electricity network	1,559,105	439,088	1,027,867	2,406,148	3,653,882	5,548,641
11	Road and bridge works	15,083,795	18,844,750	19,897,065	21,008,143	25,345,791	30,579,053
12	Irrigation/drainage	4,975,447	3,845,006	4,553,470	5,392,472	6,999,582	9,085,657
13	Electric power supply and Telecommunication Network	20,973	2,823,137	1,137,230	458,105	218,031	103,770
14	Construction or improvment of airport, harbor, bus station, etc	1,440,669	1,688,968	1,598,572	1,513,014	1,112,716	818,325
15	Other construction works	1,936,391	4,282,534	5,144,678	6,180,386	7,827,060	9,912,468
	TOTAL	56,004,537	67,317,918	71,943,309	79,391,287	94,484,668	117,292,725

Source: CBS (2009)

**Table 4.** Construction investment plan (2008 – 2009)

MODEL PROJECTS	USD \$Million
Central Java Coal Fired Power Plant 2 x 600 MW	1,200
Pasuruan Combined Cycle Power Plant 1 x 500 MW	275
Medan Kuala Namu Tol Road 60 kms	142
Solo Kartosono Tol Road 165 kms	928
Margagiri Ferry Terminal 0.9Million Vehicles, 1.2 Million Passengers	97
Teluk Lamong Seaport (Tanjung Perak Port Expansion)	275
Bandung Water Supply Project	26
Dumai Water Supply Project	44
Tangerang Water Supply Project	37
Palapa Ring Telecommunications Projects 7 ring FO 30000 kms	1,500
Total	4,524

**Table 5.** Public works investment plan (2008 – 2009) (USD Million)

Public Works	Strategic Plan 2008	Indicative Investment 2008	Strategic Plan 2009	Proposed Investment 2009
Road Networks	8.80	10.02	10.30	11.25
Water Resources	13.20	15.80	15.10	18.73
Human Settlement	5.60	7.13	6.49	7.47
Others	0.88	1.42	0.95	1.77
TOTAL	28.48	34.37	32.84	39.22

#### 4.2 Construction Companies

According to Law No. 18/1999, construction company consists of consulting and contracting company. Consulting company can be designer and also supervision engineer. Under a new guideline for construction services certification and registration, the number of certified consulting companies was 4,389 firms consisting of 3,280 firms (G1-G2), 824 firms (G3) and 285 firms (G4) and registered by National Board of Construction Services Development (NBCSD) in 2008. In the same year, the number of certified contracting companies was 112,071 firms registered by NBCSD 2008. These contracting companies consist of G1 up to G7 qualification firms. The number of small contracting companies (G1-G3) was 101,293 firms (90%). The number of medium contracting companies (G4-G5) was 10,083 firms (9%) and the big contracting company (G6-G7) is only 695 firms (1%). Of the figure, 263 Contractors already hold ISO-9000.

The Number of foreign construction companies has been increasing since a couple of years ago. In this year, the number of foreign contracting companies in Indonesia is 79 firms mostly coming from Japan and it is about 67 consulting companies mostly also coming from Japan. In the period of January to July 2007, 19 foreign contractors and 9 consulting firms were endorsed by the government.

#### 4.3 Construction Employees and Workforce

Total number of registered engineers is about 106,283 professional engineers (2008). The following table 6 shows the distribution of certificate held by professional engineers according to their expertise.

**Table 6** The Number of Professional Engineer

ENGINEER	QUALIFICATION				TOTAL
	BEGINNER	LOWER MIDDLE	MIDDLE	HIGHER	
Electrical Engineer	165	5,225	3,869	433	9,692
Landscaping Designer	327	4,423	1,099	213	6,062
Civil Engineer	4,841	58,368	18,182	1,917	83,308
Mechanical Engineer	62	2,282	710	74	3,128
Other	37	253	438	71	799
Architecture	265	1,268	1,497	264	3,294
Total	5,697	71,819	25,795	2,972	106,283

Source: NCSDB (2008). Note: a professional engineer may hold more than one certificate of competence.

The number of workforce working in the construction sector is more than 5 million people in average. The following table 7 shows annual number of construction workers.

**Table 7** The number of construction workforce

Year	2004	2005	2006	2007	2008	2009
Construction Labour	4,540,102	4,417,087	4,697,354	5,252,581	5,547,324	5,858,606

Source: CBS (2009)

#### 4.4 Construction Productivity

Productivity in construction varies according to many factors. Current research findings (Wuryanti, 2005) on productivity measurement show different level of productivity in construction works under observation. The following table 8 figures out some findings from productivity analysis of 4 composite columns of reinforce concrete.

**Table 8** Some findings of productivity analysis

No	Construction Works	Unit	Man-Minute
01	Steel cutting for reinforce concrete	M <sup>3</sup>	21.90
02	Steel fixing for reinforce concrete	M <sup>3</sup>	28.50
03	Concreting for sloof foundation	M <sup>3</sup>	16.56
04	Formwork dismantling	M <sup>3</sup>	4.10
05	Soil stabilisation under floor	M <sup>2</sup>	36.10
06	Concrete work	M <sup>3</sup>	17.11

Source: Wuryanti (2005)

#### 4.5 Construction Cost

Indonesia is a large country with high diversity. It is very difficult to get a standard figure of construction cost across archipelago. In Jakarta, skill worker may have 100,000 rupiahs daily wage while in other regions such as Yogyakarta only 40,000 rupiahs. It is similar to natural material price such as sand and stone. In Central Java where sand and cobble stone are easier to get, the cost of sand is roughly 70,000 up to 90,000 rupiahs for 1 m<sup>3</sup>. It is quite common to buy a truck of sand which is about 2.5 – 3.5 m<sup>3</sup> will cost about 300,000 up to 350,000 rupiahs.

**Table 9.** Indices of Permanent Workers, Mandays, Wages & Salaries and Value of Construction Sector 2004-2008(Qrt.II)

Year and Quarter	Permanent Workers	Mandays	Wages & Salaries	Value of Construction
(1)	(2)	(3)	(4)	(5)
2004				
Qrt I	97.77	94.38	94.27	95.36
Qrt II	96.06	92.78	94.5	87.24
Qrt III	100.57	106.77	107.03	106.47
Qrt IV	99.29	104.66	102	104.08
2005				
Qrt I	104.75	107.72	108.52	110.85
Qrt II	110.21	109.19	111.53	115.23
Qrt III	102.77	108.71	109.54	114.01
Qrt IV	100.38	110.48	110.46	111.27
2006				
Qrt I	108.27	107.83	110.82	110.01
Qrt II	108.44	105.31	110.8	110.63
Qrt III	100.58	103.74	103.84	105.97
Qrt IV	100.46	112.14	115.97	113.09
2007				
Qrt I	101.59	98.28	97.54	99.92
Qrt II	100.77	100.07	101.10	101.37
Qrt III	102.13	108.57	111.75	112.51
Qrt IV	102.67	107.62	108.80	109.02
2008				
Qrt I	101.99	110.78	115.02	111.96
Qrt II	103.92	109.71	113.35	113.51

Source: CBS (2009)

**Table 10.** Construction Material Prices (Feb 2009)

<b>PASIR + Batu</b>		
<b>Sandclayey for Embankment (per m3)</b>	<b>Rp</b>	<b>175.000</b>
<b>Soil for Embankment (per m3)</b>	<b>Rp</b>	<b>130.000</b>
<b>Sand for Bricklayer(per m3)</b>	<b>Rp</b>	<b>145.000</b>
<b>Sand for Masonry (per m3)</b>	<b>Rp</b>	<b>150.000</b>
<b>Sand for Concrete (per m3)</b>	<b>Rp</b>	<b>195.000</b>
<b>White Sand Bangka (per m3)</b>	<b>Rp</b>	<b>175.000</b>
<b>White Sand Rangkas (per m3)</b>	<b>Rp</b>	<b>170.000</b>
<b>Sandy Gravel (per m3)</b>	<b>Rp</b>	<b>110.000</b>
<b>Gravel 1/2 (per m3)</b>	<b>Rp</b>	<b>150.000</b>
<b>Gravel 3/4 (per m3)</b>	<b>Rp</b>	<b>165.000</b>
<b>Fly Ash (per m3)</b>	<b>Rp</b>	<b>145.000</b>
<b>Boulder (per m3)</b>	<b>Rp</b>	<b>135.000</b>
<b>Sand with gravel (per m3)</b>	<b>Rp</b>	<b>135.000</b>
<b>Biscos (per m3)</b>	<b>Rp</b>	<b>135.000</b>
<b>Gravel (per m3)</b>	<b>Rp</b>	<b>210.000</b>
<b>Stone (per m3)</b>	<b>Rp</b>	<b>130.000</b>
<b>Pressed Brick (Unit)</b>	<b>Rp</b>	<b>413</b>
<b>Normal Brick (Unit)</b>	<b>Rp</b>	<b>303</b>
<b>CEMENT</b>		
<b>Cement by Cibinong (kujang) (50 kg)</b>	<b>Rp</b>	<b>46.000</b>
<b>Cement by Tiga Roda (50 kg)</b>	<b>Rp</b>	<b>46.000</b>
<b>White Cement by Tiga Roda (40 kg)</b>	<b>Rp</b>	<b>62.500</b>
<b>Cement Gresik (50 kg)</b>	<b>Rp</b>	<b>43.550</b>
<b>Cement by Holcim</b>	<b>Rp</b>	<b>44.850</b>
<b>CONCRETE STEEL</b>		
<b>Diameter 6mm (12m)</b>	<b>Rp</b>	<b>21.000</b>
<b>Diameter 8mm (12m)</b>	<b>Rp</b>	<b>32.000</b>
<b>Diameter 10mm (12m)</b>	<b>Rp</b>	<b>49.000</b>
<b>Diameter 12mm (12m)</b>	<b>Rp</b>	<b>64.000</b>
<b>Diameter 16mm (12m)</b>	<b>Rp</b>	<b>110.000</b>

Source: [www.duniarumah.com](http://www.duniarumah.com), accessed Sept 2009

#### 4.6 Export & Import of Construction Services

The Indonesian construction has been working overseas since 1980s, particularly led by State Owned Contracting Companies such as Waskita Karya, Adhi Karya, Hutama Karya in Asean and Middle East countries. Although, the construction export is not so progressive, it built confident level among construction companies working overseas. The number of construction companies doing export is still less than foreign companies coming in Indonesia.

Current figure shows that most foreign construction companies in Indonesia come from Japan, followed by US, China and then Europe. The companies come over through loan agreement policy and international competitive bidding particularly in the oil and gas sector, power plant projects and large infrastructure projects under loan or grant agreement.

## **REFERENCES**

1. Central Bank of Indonesia (2009), Annual Report of National Economy, Jakarta
2. Central Berau of Statistic (2007), Economic Indicators 2007, Jakarta, Indonesia, June, 2007
3. Mulyo, SS & Abidin, IS (2007), Construction Market in Indonesia, Japan - Indonesia Seminar II, Department of Public Works, Republic of Indonesia, Jakarta.
4. Public Works Department (2008), Program and Target Development, Jakarta
5. Suraji, A (2007), The Indonesian Construction 2030, National Construction Services Development Board, Jakarta
6. Wuryanti, W (2005) Cost Index Component of Reinforce Concrete & Composite for Building Construction (in Indonesian), Seminar, Institute for Research & Development, Ministry of Public Work, Jakarta.

# **The International Conference 2010**

---

## **Housing and Real Estate Market Development – Worldwide Experience and Options for Vietnam**

26 – 28 November 2010  
Hanoi, Vietnam

**INDONESIA**  
member country of



**THEME PAPER**

Name of the Presenter : DR.-Ing.Ir. Bambang Soemardiono  
Author (s) Affiliation : Sepuluh Nopember Institute  
of Technology Surabaya (ITS), Indonesia  
Mailing Address : Perum ITS, Jl. Teknik Sipil X22,  
Sukolilo, Surabaya 60111 East Java, Indonesia  
Email : bbsoem@arch.its.ac.id  
Telephone Number : 00 62 31 5963439 / 5996972,  
Fax Number : 00 62 31 5996972



#### Brief Biography

**Latest Graduation:** Doctor in **Ecological Urban Development**, Technische Hochschule Darmstadt, Germany (1995).

**Qualification:** Urban Development, -Landscape, and - Conservation

**Researchs since 1995-2007:** The Role of Landscape Factors in the planning, conservation of corridor and colonial Housing and Participatory urban Appraisal

#### Current Activities:

1. Head of Architecture Landscape Laboratory
2. Member and Head of Education Board Indonesian Architect Association East Java (IAI) Nu : 6237
3. Formerly Head of Indonesian Association of School of Architecture (IASA)
4. Member of CIB (International Council for Research in Building and Construction) W104
5. Member of Indonesian Development Board Services (LPJKN)
6. Head of Indonesian Monitoring Committee Mutual Recognition Arrangement (MRA) on Architectural Services.



# **Sustainable Urbanization in Real Estate Sector Indonesia**

**Bambang Soemardiono <sup>1</sup>**

1) Indonesian National Construction Development Board Services,  
email: bbsoem@arch.its.ac.id

## **Executive summary**

Urbanization is a consequence of the developing countries, for instance Asia. In developing countries, the tension on growth and urbanization has huge correlation in sustainable housing, infrastructure and services. The trends to be eco-polis and urbanized have been appeared before Habitat II in Istanbul (1996), in which the people in the world aware that people live in the city and the world change into urbanization. The construction is important role in realization of sustainable urbanization and the industry is expected to contribute by executing its works in a sustainable way and the Role of city's stakeholders in dealing with the implementation of sustainable urbanization is very important. According to Gary Pivo, the Chair of the Department of Urban Design and Planning at the University of Washington, cities have moved to the forefront of global socio-economic change, with half of the world's population now living in urban areas and the other half increasingly dependent upon cities for their economic, social and political progress. Factors such as globalization and democratization have increased the importance of cities for sustainable development. Congress Real Estate Indonesia 2009 is expected to produce a plan of work programs, agreements and make recommendations to policy makers. The issue of the global financial crisis, the environment and the outbreak of new viruses, disruption of ecosystems due to global warming and the reduction of environmental resources into actual issue which is currently the world is facing economic problems, ecological and social.

**Keywords** – *Indonesia, sustainable urbanization, real estate*

## **1) Introduction**

Urbanization is a consequence of the developing countries, for instance Asia. In developing countries, the tension on growth and urbanization has huge correlation in sustainable housing, infrastructure and services. The trends to be eco-polis and urbanized have been appeared before Habitat II in Istanbul (1996), in which the people in the world aware that people live in the city and the world change into urbanization. The world needs recently to achieve the goal of sustainable development and sustainable Urbanization is a major practical component of this. The construction is important role in realization of sustainable urbanization in practice and the industry is expected to contribute by executing its works in a sustainable way, and by engaging with the wider community in the planning, design and creation of buildings and infrastructure which promote the city's performance in sustainability terms. The Role of city's stakeholders in dealing with the implementation of sustainable urbanization is very important. City authorities are particularly key to sustainable urbanization progress because of the coordinating the city policies and have the power to directly implement those policies. The stakeholders consist of individuals, households and community neighborhoods contribute towards sustainability goals in ways within their limited powers, but effective progress lies squarely with city authorities working in harmony with their construction industries. To benchmark the current progress in city towards SU implementation, as evidenced by the effects on both the processes/practices of the construction industry and its outputs as well as a further aim is the identification of good practices in light of comparisons with other Asian Cities. A framework of recommendations towards further development of an sustainable urbanization culture in city will be made, structured to suit the different types of stakeholder involved in the construction process.

## 2) Sustainable Development and Urbanization

Turner, Tom (2009) wrote that the sustainable urban landscape reaches the balance between “environmental, economic and social needs”. The landscape planning becomes important in analyzing the sustainability of recent and future land use in according to environmental capacity and landscape character. The changing of landscape form will be affected by social, economy as well as environment, the landscape planning is holistic because in their planning must integrate the whole aspect such as social, culture, economy and aesthetic. Landscape architect has their tasks: to help the community, to enhance urban landscape structure, to provide activities live in harmony with nature. That is in accordance with which stated by the United Nation Organization:

*Sustainable development is a program to change the process of economic development so that it ensures a basic quality of life for all people and protects the ecosystems and community systems that make life possible and worthwhile; Sustainable development is development that delivers basic environmental, economic and social services to all without threatening the viability of the systems upon which these services depend.*

The United Nations Conference on Environment and Development having met at Rio de Janeiro from 3 to 14 June 1992, Reaffirming the Declaration of the United Nations Conference on the Human Environment, adopted at Stockholm on 16 June 1972, and seeking to build upon it, With the goal of establishing a new and equitable global partnership through the creation of new levels of cooperation among States, key sectors of societies and people, Working towards international agreements which respect the interests of all and protect the integrity of the global environmental and developmental system, Recognizing the integral and interdependent nature of the Earth as our home with the first Principle 1 that human beings are at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature. Specifically based on the Research of Triangle Institute in 1996 sustainable urbanization set the city with decision of Ecology, Economy, Equity, Engagement and Energy. Because of the mass concentration, human settlement is a consumer for natural resources (land and water). The modern cities use the “non-renewable resources” and destroy the environment.

According to Gary Pivo, who is the Chair of the Department of Urban Design and Planning at the University of Washington, cities have moved to the forefront of global socio-economic change, with half of the world’s population now living in urban areas and the other half increasingly dependent upon cities for their economic, social and political progress. Factors such as globalization and democratization have increased the importance of cities for sustainable development. This statement is generally accepted that cities not only show the potential factor to sustainable development but also hold promising chances for social, economic as well as environmental improvements at local, national, and global levels. This is supported also by the World Commission on Environment and Development (1987) that sustainable development has been defined as development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Recently the concept of sustainable development has begun to be implemented in urban planning. The principles below show us the six C developed by Gary Pivo:

- 1.Compactness: The first principle is that more compact, densely developed cities are less auto dependent, less expensive to serve with infrastructure, and put less pressure on nearby farm, forest, and environmentally sensitive area
2. Completeness. A second principle of sustainable urbanization is that communities should be made more complete. A complete community is one in which the segregation of urban activities has been reduced. The residents of a complete community have the opportunity to work and shop

in close proximity to their homes. The elimination of long commutes reduces traffic congestion, air pollution, energy use, and water pollution

3. Conservation. Regarding the use of a number of tools (in addition to development regulations) to protect environmentally sensitive areas. Such tools may include tax incentives, fee-simple and less-than-fee-simple land acquisition, cluster development, and the use of transferable development rights. In the category of development regulations, the elimination of free or abundant parking promotes alternatives to single-occupancy driving, thereby saving energy, reducing air pollution, and helping to control the build up of greenhouse gases

4-6. Comfort, coordination and collaboration. Comfort takes note of the fact that it is important to create public spaces and routes that are pleasant for pedestrians and for non-auto users, such as bicyclists. A study in Portland found that more people walk when there are continuous sidewalks, streets are easy to cross and not confusing, and the topography is conducive to walking.

According to the Asian Development Bank (ADB ) in 2009, Sustainable development is not possible without sustainable urbanization. In his speech to the Regional Workshop on sustainable Urbanization, Klaus Gerhaeuser, Director General of ADB's East Asia Department, said rapid urbanization presents significant challenges for ADB's developing member countries. He said that urbanization strategies should be "green" with a strong emphasis on energy efficiency, public transport, and sound urban planning and construction. "Only through a green approach to urbanization is it possible to ensure the quality of air and water, and effective waste treatment, which are essential to a healthy living environment, and to mitigate the impacts of climate change. He also stressed that urbanization must be inclusive in its integration with rural development, take place in partnership between the public and private sectors, and be linked to regional development initiatives, with successful experiences and lessons to be shared among cities and countries. Meanwhile from the discussion according to the Department of Economic and Social Affairs Division for Public Administration and Development Management Sustainable Urbanization in the Information Age (P. Celik, Aliye, Zyman Roxana and mahdi, Rafat) one of the principal pursuits of the United Nations is to promote economic and social advancement of all peoples, and the organ which leads this effort is the Economic and Social Council (ECOSOC). Working not just for present generations but also for the future, the Council advocates a truly sustainable kind of development – a development that reflects a careful balance of economic growth, social development and environmental protection. The key mechanism through which it does so is the Council's Commission for Sustainable Development (CSD), a high-level forum on sustainable development. This functional commission was created to ensure effective follow-up of the Earth Summit, held in 1992 in Rio de Janeiro. Its functions have since expanded so that it may respond to new needs. The Economic and Social Council itself has discussed progress made towards sustainable development during the 2008 Annual Ministerial Review (AMR), held in New York in July during the Council's Substantive Session. Selected as 2008's Review theme, sustainable development was a broad subject, but today's topic – sustainable urbanization – is a significant component. They called for better sustainable planning for urban growth based on the experiences of the twelve cities. The Forum was successful in achieving its initially defined objectives. It presented a valuable opportunity to the participants to exchange their experiences of identifying best practices in sustainable urbanization with ICT as a strategic instrument

The international Decree and National Action as seen at Chapter 7 Agenda 21 Earth Conference in Rio 1992 and Habitat Conference II 1996 held in Istanbul regarding the sustainable human settlement, paid attention on the planning of green open space and building. *Urban ecology* has supported *vulnerable urban communities*, as well as *non-human harmless species*. It means that the settlement placed not far from centre of transportation. If it is added with compact land use and nature resource as well as the appropriate technologies such as solar passive, gardens, composting, drainage or open spaces, that is what ecological city about. The green city model is not just energy agglomeration, but also efficient energy. There are 5 (five) elements namely land use dan urban form, housing and environment, transportation, urban ecology and green building (Kamil, 2007).

In 1996 the German Government has successful by greening 28.8 ha green roof (*dachgarten*) and recently 1 of 10 apartments has already greened. Since 2000 Hongkong and Japan obliged the management of building to green the roof minimal 20% from the total roof or about 250-1000 sqm. From different resources reported that roof green is able to minimize the city temperature about 4,2 degree Celcius, absorb pollutant and heat island, sun radiation until 80%, as well as noise until 50 dB, natural insulation and decreasing the indoor temperature until 3-4 degree lower than outside. In other hand Madrid has already increased the ecological urban development associate with the University of Agribusiness Project called *Environmental Protection in Berlin* through Initiative directed in the greenery of building surface under logic thinking that urban and periphery environment as one system, decreasing of noise immission, dust and other stress factors, increasing the city bioclimatic condition, planning of green open space (*urban vegetation areas*) and experience of international networking of agribusiness.

### **3) Real Estate Companies Association of Indonesia (REI) and Overview of Real Estate Market**

REI was founded 1972 in Jakarta, is an associate organization of business firms on an equal basis, activities and professions in the field of real estate and aims to enhance the dignity, quality of life of the people of Indonesia through strengthening and development of housing and settlements. At this time 1300 REI member companies throughout Indonesia. might not imagine after a quarter century later REI will be huge. REI forward together government and community boards determined to make provision for the whole society, especially *one million housing program*. The interest rate home loans (KPR), which now ranges from 14-18% led to sales of lower-middle-class homes fell 32%. The decline was predicted to continue until the first quarter - 2009. Similarly, exposure of Indonesia presented the Executive Director Property Watch (IPW) Ali Trangganda after it was researching the impact of rising mortgage rates on housing demand. It was stated by him in connection with the national banking policy that adjusts the previous mortgage rates ranging from 9-13% to 14-18% per year. The results for the lower middle class housing, each increase of 1% mortgage rates will lower demand for homes ranging from 4-5%. By calculating that mortgage rates rose 5% in the past month, according to him has lowered demand for lower-middle-class home to 20%. In addition, the IPW noted a pending request from the public house as much as 12%. Thus, the demand for housing slumped 32% in just one month. The Prediction of sales decrease meanwhile, based on data from Bank Indonesia (BI) realization of KPR / KPA banking until third-quarter 2008 totaled USD 120.89 billion or 62% of total property loans which reached Rp 196 trillion. Prior to the increase in mortgage interest rates, residential price survey of BI in the same period mention the increase in house prices, both quarterly and annually. Quarterly (qtq), the price index rose 0.97%, lower than the increase in the previous quarter (1.86%). The price increase is principally due to higher fuel prices. Price increases expected to continue in the fourth quarter of 2008. Based on the type of house, on a quarterly basis (qtq) the highest price increases experienced by house small type. For instance financing residential property in the third quarter of 2008 remained largely sourced from internal funds (56.0%), followed by funds coming from banks (28.5%) and customer funds (12.6%). Meanwhile, in the purchase of residential property transactions, mortgages remains the facilities used by most consumers (73.6%) with an interest rate of 12%, followed by a gradual cash payments (19.8%) ,and a small portion is in the form of hard cash (6.2%). Ali said the decline in housing demand lower middle class potentially continue until the first quarter of 2009. Therefore, he urged developers to be cautious because of potential home sales slump. In the first quarter of 2009. Ali predicted, sales of middle class homes by the developer will go down 29%. This trend can only be detained with a reduced interest rate (Indonesian Bank /BI Rate). Among the developers hope, if the BI rate is lowered, banks immediately responded by lowering mortgage rates. Since BI while maintaining the BI rate at 9.5% level and then fell in early December 2008 to 9.25% of the national bank was not cut interest rates credit. They fixed mortgage rates raises the rate (KPA) be 14-18%. Some developers expect the BI rate back down. According Alkudri, Chairman of the Department of Real Estate DPP HIPMI, national banks should not only raise interest rates quickly when the BI rate loans go up, but the same treatment is also done when the BI rate to fall. Because of that advice, the government should do the rescue of the high and the difficulty developers and consumers to get bank credit. When the BI rate began to fall now ,

mortgage rates should be lowered. If there was mortgage interest cost, which bought the house so much, labor continue to be needed and the industry-will continue to run. The cycle was to be maintained and should not be stopped.

**4) The mapping/ master planning of the decision-making system in planning and land using of the city, the policies designed to promote SU, the instruments in place to encourage/enforce the policies, and the methods in use for assessing city SU progress.**

The spatial planning in Indonesian cities are still following the trend of development with less out considering in ecological boundaries and environmental capacity. The sustainability of ecological function in allocation of land use and the Role and function of the city as an ecosystem and supporting of the updating of spatial data is are not yet considered. The analysis as well as prediction of ecological aspects, conservation of natural spaces (ecologically sensitive areas)- such as forest, mangrove, ricefeld, river and artificial spaces such as drainage, polder, breakwater, seawall, the spaces for conserving ecological function and optimalization of buid up area such as compact city, mix land use, vertical development, infill development, mass transportation as well as pedestrian way should be fit in the development.

It was predicted in 2030 that more than 60% of world population will be live in cities. The growth will have huge impact to the water supply and garbage. Recently one of three citizen lives marginally. Unoted Nation suggest to "*Greener planning for cities*". The first idea to 'greening' the structural architecture building just recognized recently. A lot of new property development claim that their development is "green". Green is becoming a new trend nowadays. Some Indonesian architects and engineers have been designing and applying the green principles in the design and achieve what supposed to be a green building standard. It is not merely a trend, it has to be a lifestyle change, the demand of the consumer of a "green" living environment meets the planet current conditions, climate change and degrading environmental conditions. The theoretical frame work is that it is timely and important to establish a Green Building Council. "Green" has become the shorthand term for the concept of sustainable development as applied to the building industry. Green buildings, including the appropriate site development as a sound landscape planning and design also known as high-performance "buildings" in terms of i.e. materials efficient used, wise settings in the case of socio-economy-physical environment development as a whole, are intended to be environmentally responsible, economically profitable, and healthy places to live and work. If not, then all of us will be suffer caused by the negative environmental impacts as human beings as part of the planet biological creature, we should be part and follow the natural law of the globe natural process (Purnomohadi, Ning 2010)

**5) Finance sources for in sustainable urbanization in real estate sector**

The difficulty to obtain construction loans from banks, which met several real estate developers claim began to look for alternative sources of financing. The need in looking for alternative funding for the project remains a way to fulfill a commitment to the market. Alternatively start from the optimization of internal funds through partnerships with strategic investors. But it was not easy considering the reputation of the developer to be one determinant in the success of making a financing in the market. For developers who have a good reputation in project development and track record of managing credit is not too difficult to get financing. Although developers are still trusted by the bank lenders, but money is not the only bank financing for developers as sated by President Director of PT Bakrieland Development Tbk. According to him, to accelerate sales by *pre-sales project* is the best strategy in getting cheap financing. Funds obtained from pre-sales results combined with loans to finance construction projects and other operational costs. He admits project financing the property when it was heavy. However, for developers who have a business focus in the property will fight tooth and nail to keep the road project. They will struggle to maintain a reputation for not disabled in

the market. For some developers, bridging bank funds when cash flow was just so sluggish. If it no longer funds the bank paid more. So keep the road projects with minimal risk.

Meanwhile In targeting the One Million Houses Governments's Program in developing the simple healthy housing target for the lower middle class in some areas are not achieved. Local governments are considered to be one factor inhibiting. Efforts to provide affordable housing for lower middle society is not an easy matter. Realization of simple healthy home (RSH) in some areas many do not reach the target. Apart from the low purchasing power, local government policies were sometimes made the program is blocked. This then makes the Minister for Public Housing asked local governments to maintain the investment climate of public housing development to lower middle class by removing fees and levies that may incriminate the developer in the current global economic crisis. Government should help continue the public housing program in support of a more conducive climate for development. The Minister of Public Housing acknowledge that the amount of illegal fees and levies in the licensing process of housing construction is still a constraint in many areas. For that, the government asked to distinguish the granting of licensing for luxury housing developers with middle to lower housing. Licensing for middle to lower housing should be faster, and levy a disadvantage should be eliminated. He also called for granting permission on public housing sites are selectively provided in accordance with spatial planning and regional regulations. Permit the location of housing should not be spent for productive land prone to floods. With efforts to simplify the licensing process, RSH is expected to target one million this year could be achieved. This year, there are additional targets the Ministry 170 thousand new RSH throughout Indonesia. Licensing issues it is still a wedge for developers to build RSH. Hope for local governments to facilitate the licensing process and remove the levy so that the investment climate of permanent housing construction continues to increase leveled Real Estate Indonesia (REI) of West Sumatra. "Of the 19 districts / cities in West Sumatra is not uniform in maintaining the investment climate because there is residential development charges and permit services rather convoluted. The Padang Government has wiped Building Permit (IMB) and simplify the licensing service. Furthermore investors should be entertained by local governments to facilitate the licensing process and the release fee. That way, public housing construction investment continued. With the ease of the licensing process, both the developer and the community will be helped. Developers can more freely develop the project, and the people will more easily obtain the desired occupancy. Moreover, the provision of houses by developers are assisting the government. Not only in the form of houses, but also infrastructure. The infrastructure built by the developer later handed over to local governments. Because after a community-owned, assets such as roads automatically become government property. To support all that, he hopes local governments and related institutions such as land agencies to support the sustainability and housing development conducive investment climate. With the convenience of the developer, would build houses for the people will still continue

Meanwhile vice Governor of Riau said the provincial government Riau promised to support housing development through the improvement of road infrastructure and the availability of electricity. Riau Province, with the assistance of central government, plans to add 30 megawatts of power generation in order to overcome the electricity crisis in the region. Unfortunately, the problem that is considered the licensing process is often a stumbling block for developers to build RSH. The optimistic target due to The global financial crisis to overshadow the actual construction of RSH and a modest home in some areas. As in Jambi, the target of 6500 units of houses, who realized years ago only 3500 units. These targets are not achieved because of the impact of global crisis, in which developers and consumers of capital difficulties did not have the funds to buy housing. In 2009, REI with 115 members and only 85 active members of the target to build 5,000 units and RSH is expected to be realized 100 percent. This optimism over the improving economy or the recovery of the global crisis. In the city of Jambi, today, more dominant RSH housing development that received subsidies from the government. Set a maximum sales value of 55 billion dollars per unit. RSH was built for middle to lower economic citizens or low class civil servants. While for the house type and house red RS is intended for middle to upper economic class.

In connection with the global financial crisis that began also felt by Indonesia, then, a national working meeting in 2008 recommended to the Government as follow.

1. National: appeal that this crisis is a national problem, which needs to be addressed collectively by all actors in the Indonesian economy, society and government. Ensuring the interests of the nation rather than personal or group interest.
2. Liquidity Banks and mortgage: To maintain the availability of subsidized housing for RSH and Rusunami with interest rate based on current decree of Minister of Public Housing. Mortgage and commercial NAC should not be stopped, interest sought a maximum of 4% above the BI rate. Urge the government / government agencies to increase the placement of funds in banks executor for the benefit of mortgage and construction loans as well to ease of rescheduling banking facility and acceleration of institutional savings for housing (regional / national housing fund)
3. Taxation : Final Income Tax Regulations concerning the Government to immediately published / released and responding to the current crisis situation for the government to liberate luxury sales tax for property for at least 2 years (2009 till 2010). RSH to be released following the price set by Menpera and applied at nationally VAT Rusunami Construction Services for construction should be released and Determination SVTO increase based on inflation in the region should be concerned, and specifically for the current crisis situation there is no increase
4. Ownership of Property for Foreigners. In order to place capital inflow property sector, is expected to have a significant breakthrough in a relatively short time in the ease of property ownership for foreigners, with the proposal as follows: The term of at least 70 years of Land Rights, Price lowest standard that can be purchased USD. 1 Billion and the dwelling units to be purchased is a new dwelling units and the ownership of foreigners in an area no more than 49%.
5. Energy. Propose to the government to review trade regulations in the field of electrical energy. and the application of Transition Connection Fee (BPMT) prevailing electricity in Java and Bali are also applied throughout Indonesia.

Innovation Programm such as annual exhibition in Housing Market is expected to restimulate the market in the area. For example housing transactions in Central Java in 2009 has plummeted by 40 percent due to lower purchasing power. This exhibition is although expected to increase sales, both for the developer and the lower middle upper middle, but the housing market slowdown in such many other areas in Indonesia. Slump in housing transactions due to people's purchasing power fell and interest rate mortgage loans (mortgage) is still high. The high interest rate has increased and heavy burden on the community, even though fuel prices have not increased. The developer expects mortgage rates could fall due to lower BI rate to as low as 7.5 percent. Because without a decline in mortgage interest rates, bank credit disbursement difficult absorbed.

#### **6) Operation of the market -Products and services that related to sustainable urbanization in real estate sector**

An Example the goal and plan 2008/2009 work program is to establish a constructive communication with all levels of management and all its members, stake holders, associations, partners and all elements of civil society organizations, Enhancing the role and capacity of DPD REI across Indonesia by improving the quality and professionalism of its members based on commitment and competence in the field of real estate as well as to develop synergistic cooperation among member-based regionalization and strategic partnerships with reality and the ideal approach, To coordinate with the vice-chairman of DPP REI in terms of program implementation for each area to the DPD in accordance to their needs and conditions of each region and Monitor developments in national and local organizations in order to improve to benefit the organization to the needs of its members. Provide socialization and discussion within the framework of the implementation of pilot certificate issuance Legality Real Estate Feasibility Standards within 6 (six) months including testing for areas that are ready to implement it and there will be an evaluation of 6 (six) months. To socialize

about REI's presence in those events and / or publications that are pro-actively encouraging companies to real estate REI Member. To coordinate with the vice chairman of the organization and membership in each DPD REI.9. Coordination in improving the function and role of the Secretariat and the Secretariat membership in terms of data systems to service, administration of membership data base as well as Continuing and optimize REI Membership Management Information System.

Continuing availability of credit financing and construction of subsidized housing for RSH despite the global financial crisis is done by continuing to coordinate and lobby the Government / agencies and cooperation that has been formed between REI and Ministry of Public Housing. Socialization of REI members regarding the mechanisms Konsuil with speakers from REI and agencies of foreign policy, Department of Public Works etc Renewal of MOU between REI with National Land Agency.

## **7) Real Estate market Outlook for sustainable urbanization**

The Congress REI in 2009 has significance in the journey of REI organization in conjunction with the 9th FIABCI Asia Pacific Summit Secretariat and implemented after the establishment of the Indonesian government from 2009 to 2014. There are different the agenda of the annual fixed issues relating to the activities of the National Working Meeting of Real Estate Indonesia (REI Congress) 2009 . Congress REI 2009 is expected to produce a plan of work programs, agreements and make recommendations to policy makers. The issue of the global financial crisis, the environment and the outbreak of new viruses, disruption of ecosystems due to global warming and the reduction of environmental resources into actual issue which is currently the world is facing economic problems, ecological and social. Implications of the global financial crisis caused the value of economic growth in various countries to minus , except India, China and Indonesia are showing positive growth, as well as Indonesia's property sector in 2009 is predicted to still be able to exist. The potential market in the Asia Pacific property large enough, even Indonesia has become the country with the largest property market after the United States and China so that the property market in Indonesia has become a main attraction for investors and foreign buyers. Congress REI and 9th FIABCI Asia Pacific Regional Secretariat Summit brings two (2) themes for FIABCI theme: "Real Estate Strategy Into Global Market". While the theme of a national working meeting is: "Policy Strategies in Achieving Development Targets and the Provision of Infrastructure Facilities-Housing Settlement." Both themes were sorted aims to participate anticipate the development and growth of international property, in order to open new horizons as well as insights to provide an understanding and an opportunity for members of REI in Indonesia in the Global Era. REI also will continue to support policy measures to accelerate the realization of a balanced sustainable housing development and housing in particular the availability of basic infrastructure of electricity, clean water, while GNA strategic steps to improve purchasing power and financial support in the achievement of national Housing target. To trace the red thread flashback and reflect the policy directions and programs and residential housing,

One of the recent council named Green Building Council Indonesia (GBCI) should be in the context of sustainable urbanization. It is a not-for-profit organization that are committed to promote and implement green building concept and principles in Indonesia. This organization has to be supported by industries, professionals, media, government institutions, non-government and other organizations in collaboration to develop Indonesia's sustainable future. The vision is to encourage and develop the implementation of sustainable development with green building principles and market value considerations; improving the environmental awareness by changing our way of living, using the green building principles in designing, building and operating a property. This is aligned with the World Green Building Council (WGBC) 's vision; through leadership, collaboration, the global construction industry will transform traditional building practices and fully adopt sustainability as the means by which our environments thrive, economies prosper and societies grow to ensure the future health of our planet (Punomohadi, Ning, 2010).

Green Building Indonesia promoting Sustainable Building Concept In The Archipelago. The environmental impact of the building design, construction and operation industry is significant.



Buildings annually consume significant amount of energy, electricity, water and produce wastes. Development shifts of land usage away from the natural, biologically-diverse habitats to hard-space that is impervious and devoid of biodiversity. The far reaching influence of the built environment necessitates the action to reduce its negative impact, green building practices could significantly reduce or eliminate environmental negative impacts, improves existing unsustainable design, construction and operation practices. As an added benefit, green design measures reduce operating cost, enhance building marketability, increase worker productivity, and reduce potential liability from indoor air quality problems, i.e. 'the sickness syndrome'. In other words, green design has the environmental, economic and social elements that benefit all building stakeholders, including owners, occupant and the general public.

## 8) References

- Celik, A P, Zyman, R Zyman and Mahdim, R (2008). Sustainable Urbanization in the Information Age. Department of Economic and Social Affairs Division for Public Administration and Development Management
- Kamil, Ridwan (2008). Green Building Case Studies in Indonesia (urban & design for green). Paper in Seminar Futur Arc Forum. Jakarta
- Purnomohadi, Ning. Sustainable, Ecologic & Green Architecture, Towards Indonesia Sustainable Future, Paper presented for Intl Conf on SENVAR 2010 'Sustainable Environmental Architecture; 14-16 Nov 2010. By Lab. of Architectural Science and Technology, Dept. of Arch. ITS, Surabaya
- Report of The United Nations Conference on Environment and DEvelopment\* (Rio de Janeiro, 3-14 June 1992) Annex I Rio Declaration on Environment and Development
- Real Estate Companies Association of Indonesia (REI) <http://www.reindonesia.org>
- Soemardiono, Bambang, Nuriyati, Chaterina (2008). Model of Ecological Urban Development through Green Open Space in Surabaya, Indonesia. Paper presented at International Seminar MAPASIA 2008
- Turner, Tom. <http://www.gardenvisit.com/blog/2009/03/20/definition-of-a-sustainable-urban-landscape>
- <http://www.adb.org/media/Articles/2009/13051-sustainable-economic-developments/>. 6 Nov 2010 08:10:18 GMT.
- [http://www.cogeneration.net/sustainable\\_urbanization.htm](http://www.cogeneration.net/sustainable_urbanization.htm) / 15 nov 2010
- Alberti, Martina. <http://www.urbaneco.washington.edu/Publication/places.pdf>/ 9 Juli 2009

# **The International Conference 2010**

---

## **Housing and Real Estate Market Development – Worldwide Experience and Options for Vietnam**

26 – 28 November 2010  
Hanoi, Vietnam



## **Yoshihiro YAMAGUCHI**



Executive Fellow, Research Institute of Construction and Economy “*RICE*”  
NP-Onarimon Building, 3-25-33, Nishi-shimbashi, Minato-ku, Tokyo 105-0003, JAPAN

### Work Experience:

- 2009- Executive Fellow, Research Institute of Construction and Economy
- 2006- Director, Business Development, Tokyo Metropolitan Expressway Corporation
- 2004- Director, Regional Development 1<sup>st</sup> Division, Okinawa Region Development Bureau, the Cabinet Office, Government of JAPAN (Gov.)
- 2002- Director, Regional Development Division, City and Regional Development Bureau, Ministry of Land, Infrastructure, Transport and Tourism (MLIT), Gov.
- 2000- Director General for Policy Planning, Kyoto Prefectural Government
- 1997- Deputy Director, Disaster Prevention Bureau, Prime Minister’s Office, Gov.
- 1995- Director, Planning Bureau, Japan Regional Development Public Corporation
- 1994- Deputy Director, International Division, Ministry of Construction, Gov.  
Deputy Director, Urban Planning Division, Ministry of Construction, Gov.
- 1991- 1<sup>st</sup> Secretary, the Mission of Japan to the European Communities in Brussels (Belgium), Ministry of Foreign Affairs, Gov.
- 1986- Deputy Director, Civil Aviation Bureau, Ministry of Transport, Gov.
- 1980- Joined Ministry of Construction, Government of JAPAN

### Education

- 1985 John F. Kennedy School of Government (MPP) Harvard University
- 1980 Faculty of Economics (Department of Management) University of Tokyo
- 1979 Faculty of Economics (Department of Economics) University of Tokyo

Date of birth: Oct 23, 1955

26-28 November 2010

---

# ***Japan Theme Paper***

---

**PREPARED BY**



**RICE**

**RESEARCH INSTITUTE OF CONSTRUCTION AND ECONOMY**

Address NP-Onarimon Building,  
25-33,Nishishinbashi 3-chome,  
Minato-ku,Tokyo 105-0003,Japan

TEL +81-3-3433-5011

FAX +81-3-3433-5239

URL <http://www.rice.or.jp/english/index.html>

E-mail info@rice.or.jp

## **Sustainable Urbanization in the Real Estate Sector**

### **1. Summary**

The Japanese economy grew about 2% annually from FY2003 to FY2007, continuing on its path of moderate recovery. However, the economy was significantly impacted by the effects of the global economic recession triggered by the US sub-prime loan crisis in the summer of 2007 and the collapse of Lehman Brothers in 2008. Since October 2008, many construction and real estate projects have been cancelled or postponed, creating a significant shock for those industries. This shock is still being felt today. The economy began to recover in 2010, but there is still a considerable risk of yen appreciation and falling stock values, and risk that the economy could again start to worsen.

The Japanese building construction and urban development markets, in an effort to achieve sustainable urbanization, are pursuing activities focused on the priorities of (1) the environment and low-carbon output, (2) adaptation to the aging of society, and (3) disaster management. The real estate and construction industries are discovering markets in new construction investment derived from these three priorities, especially in maintenance, repairs, and renovation work.

In infrastructure development, developers are discovering infrastructure projects derived from the national commitment to “Forging an Open Economic Society with a Competitive Edge,” and derived from the need for maintenance and renovation work on existing infrastructure developed in the postwar period.

## **2. Macroeconomic Review**

### **2.1 Overview of the Japanese Economy**

The Japanese economy has grown by 2% annually since 2003, continuing on a path of moderate recovery. Nonetheless, the effects of the global economic chaos triggered by the American subprime loan crisis in summer 2007, combined with high resource prices, ended the longest economic recovery in the postwar period, which had been ongoing since February 2002. The Japanese economy has been faltering dramatically since fall 2008.

The decline in the export sector was particularly remarkable, with real GDP in that sector down 20% year-on-year for four consecutive quarters between the 4th quarter of 2008 to the 3rd quarter of 2009. For this reason, investments by domestic manufacturers fell significantly, and many private non-residential construction projects were cancelled or postponed.

The situation seemed to be improving in the 3rd quarter of 2009, but in 2010, the yen appreciated significantly in conjunction with the financial instability in the US and Europe triggered by the financial crisis in Greece. This has inflicted serious damage on Japan's export industry, which had just begun to see some improvement. Today, although the economy is improving, there are growing risks of further yen appreciation, falling share values, and downward pressure on the overall economy.

The economic trend forecast issued by the Research Institute of Construction and Economy (RICE) for the latter half of 2010 predicts that the Japanese economic recovery could be blunted, and that a sense of economic stagnation may end up setting in. For example, there are concerns about the impact of the end of some of the economic stimulus measures implemented by the government to fuel private consumption, and a further slowing of exports associated with slowdowns in overseas economies is expected. It also points to the possibility of further yen appreciation that would impact corporate performance.

In FY2011, the economy is expected to return to moderate recovery. If demand in newly developing countries, primarily in Asia, strengthens and the appreciation of the yen can be corrected, an increase in exports should be able to be maintained. If domestic production expands and corporate earnings improve, then the recovery in private demand can be expected to continue.

Figure 1 Macroeconomic Trends

(Unit: billion yen)

Fiscal year	1995	2000	2005	2006	2007	2008	2009	2010 (Forecast)	2011 (Forecast)
Real GDP	483,023	505,622	540,025	552,474	562,343	541,342	531,098	539,611	546,515
(YoY change)	2.3%	2.6%	2.3%	2.3%	1.8%	-3.7%	-1.9%	1.6%	1.3%
Real private final consumption expenditures	273,691	283,758	302,154	306,357	310,582	304,898	307,174	310,996	312,631
(YoY change)	2.2%	0.7%	1.8%	1.4%	1.4%	-1.8%	0.7%	1.2%	0.5%
(Contribution rate)	1.2	0.4	1.0	0.8	0.8	-1.0	0.4	0.7	0.3
Real government final consumption expenditure	75,094	85,714	94,604	95,678	97,147	97,050	98,712	100,042	100,871
(YoY change)	3.9%	4.3%	0.8%	1.1%	1.5%	-0.1%	1.7%	1.3%	0.8%
(Contribution rate)	0.6	0.7	0.1	0.2	0.3	0.0	0.3	0.3	0.2
Real private housing	23,953	20,361	18,429	18,386	15,907	15,323	12,495	12,637	13,275
(YoY change)	-5.6%	-0.1%	-1.2%	-0.2%	-13.5%	-3.7%	-18.5%	1.1%	5.1%
(Contribution rate)	-0.3	0.0	0.0	0.0	-0.5	-0.1	-0.6	0.0	0.1
Real private corporate facilities	67,881	72,963	83,200	87,097	88,240	82,246	69,645	72,091	75,643
(YoY change)	3.1%	7.2%	6.2%	4.7%	1.3%	-6.8%	-15.3%	3.5%	4.9%
(Contribution rate)	0.5	1.0	0.9	0.7	0.2	-1.0	-2.3	0.5	0.7
Real public fixed asset formation	40,603	34,445	23,157	21,111	19,752	18,456	20,172	16,475	15,030
(YoY change)	7.5%	-7.6%	-5.6%	-8.8%	-6.4%	-6.6%	9.3%	-18.3%	-8.8%
(Contribution rate)	0.6	-0.6	-0.3	-0.4	-0.3	-0.3	0.4	-0.7	-0.3
Real inventory increase	1,770	2,043	1,815	2,949	3,170	2,662	-86	-1,089	-1,215
(YoY change)	-4909.5%	-192.2%	0.7%	62.5%	7.5%	-16.0%	-103.2%	1160.4%	11.6%
(Contribution rate)	0.4	0.8	0.0	0.2	0.0	-0.1	-0.5	-0.2	-0.0
Real financial services net exports	951	6,295	17,074	21,551	28,068	21,207	20,517	27,446	29,292
(YoY change)	-80.4%	7.5%	21.3%	26.2%	30.2%	-24.4%	-3.3%	33.8%	6.7%
(Contribution rate)	-0.7	0.1	0.5	0.8	1.2	-1.2	0.4	1.3	0.3
Nominal GDP	497,740	504,119	503,187	510,938	515,644	494,182	476,363	475,691	477,492
(YoY change)	1.7%	0.9%	0.9%	1.5%	0.9%	-4.2%	-3.6%	-0.1%	0.4%

Figure 2 Main Economic Indicator

	2005	2006	2007	2008	2009	2010 (Forecast)
GDP (real, year, billion yen)	536,762	547,709	560,651	553,914	525,015	5,390,403
GDP (nominal, year, billion yen)	501,734	507,365	515,520	505,113	474,297	4,771,747
GDP growth (year, %)	1.9%	2.0%	2.4%	-1.2%	-5.2%	2.7%
Agriculture, forestry, and fishery	3.6%	-2.0%	4.2%	6.9%	-	-
Manufacturing	5.2%	3.5%	4.0%	-3.0%	-	-
Services	3.7%	3.7%	2.9%	0.8%	-	-
Mining	5.6%	-9.2%	-25.0%	11.1%	-	-
Construction	-3.2%	-0.6%	-3.0%	-3.5%	-	-
Export and Import Indicators						
Construction sector imports	-	-	-	-	-	-
Construction sector exports (FY, orders, billion yen)	1,171	1,648	1,681	1,035	697	-
Demographic Indicators						
Population (year, thousands)	127,768	127,770	127,771	127,692	127,510	127,360
Population growth rate (year, %)	-0.01%	0.00%	0.00%	-0.06%	-0.14%	-0.12%
Total labor force (year, thousands)	66,500	66,570	66,690	66,500	66,170	65,790
Labor force growth rate (year, %)	0.12%	0.11%	0.18%	-0.28%	-0.50%	-0.57%
Unemployment rate (year, %)	4.4%	4.1%	3.9%	4.0%	5.1%	5.2%
Inflation rate (year, %)	-0.3%	0.3%	0.0%	1.4%	-1.4%	-0.9%
Financial Indicators						
Interbank interest rate	0.1033	0.5418	0.86	0.7425	0.4636	0.36
Short-term interest rate (%)	0.004	0.275	0.459	0.103	0.094	0.113
Long-term interest rate (%)	1.456	1.634	1.478	1.382	1.246	1.049
Exchange rate against US\$	110.22	116.3	117.75	103.36	93.57	82.80
Financial and Real Estate Indicators						
Government finances (FY budget, billion yen)	86,705	83,458	83,804	88,911	102,558	92,299
Government budget for infrastructure (billion yen)	16,921	15,752	14,996	14,150	14,570	11,840
Government budget for social construction (billion yen)	2,053	2,045	1,951	2,060	2,330	1,980
ODA expenditures on infrastructure	-	-	-	-	-	-
FDI expenditures on infrastructure	-	-	-	-	-	-
Real estate FDI expenditures	N/A (Ref: Fig. ● Sales Status of Foreign Buyers in J-REIT)					

Source: *Construction and Economic Forecasts* (RICE, October 2010), *Cabinet Office Annual Report on National Accounts (Final Report for 2010)*, *Financial and Economic Statistics Monthly* (Bank of Japan, September 2010), Ministry of Internal Affairs and Communications website.

Notes:

1. The GDP figure for FY2010 is a forecast. Real values: 2000 prices.
2. Exports in the construction sector reflect the value of orders for the year by members of the Overseas Construction Association of Japan.
3. Population figures are as of October 1 each year. The FY2010 figures are estimates as of September 1.
4. The workforce population and unemployment rates are average values for 12 months. For 2010, the figure is an average value for five months.
5. The inflation rate is a percentage as compared with the previous year's consumer price index. For FY2010, the figure is the rate of increase between the end of FY2009 and August 2010.
6. Interest rates for 2010 are as of the end of September. Others reflect the year-end rates.
7. Short-term interest rates are unsecured overnight call rates.
8. Long-term interest rates are the rates on 10-year government bonds.
9. Exchange rate for 2009 is as of the end of September. Others are annual averages.
10. Government finance figures are budget amounts including the supplementary budget.
11. The government budget for infrastructure reflects public civil engineering investments, and includes investments by local government agencies. The figures for FY2010 are RICE estimates.
12. The government budget for infrastructure reflects public building construction investments, and includes investments by local government agencies. The figures for FY2010 are RICE estimates.



### **3. Overview of the Real Estate Market**

#### **3.1 Summary of the Real Estate Market**

In Japan, urbanization has progressed steadily in the postwar period. The flow of urban development can be briefly summarized as follows. Postwar recovery land readjustment projects were undertaken to promote recovery from World War II under the City Planning Act. In the 1950s, the Japanese economy began to experience rapid economic growth, and the population began to flock to the cities, particularly the larger urban centers. In conjunction with this trend, medium-rise and high-rise residential buildings began to go up in large urban centers, and a great deal of large-scale new town construction was performed.

In the 1960s and 1970s, urbanization was spurred on by high economic growth, and the pace of population concentration accelerated. As a result, residential district development, housing complex development, and industrial complex development was pursued all over the country. Particularly rapid progress was made on the construction of housing complexes and condominiums in large urban centers. However, there were also considerable strains related to this trend, including land problems, rural depopulation, urban overpopulation, and the lack of social capital development in people's lives. To resolve these problems, efforts were made to create healthy urban environments and improve urban functions by striving for more cooperative and advanced approaches to land use, and by promoting the comprehensive development of public facilities, such as roads and parks. The New Urban Planning Act was enacted in 1968, followed by the Urban Renewal Act in 1969, and these provided the institutional foundations for systematic urban development efforts.

In the 1980s, the period of economic growth associated with the transformation of the industrial structure, urban development projects were undertaken with increasing fervor, resulting in large-scale commercial facilities and redevelopment projects built to serve multiple functions.

In development up until the so-called bubble period, from the late 1980s into the early 1990s, development areas were typically identified as separate stand-alone areas. This was the case for most corporate self-development projects and condominium building developments, but it was also true for downtown redevelopment projects and mixed use building projects. Recent urban development that has taken place since the collapse of the bubble economy has usually consisted of complex development based on a clear development concept.

However, Japan's real estate market plunged sharply with the global recession that hit in 2008. While the Japanese economy experienced a prolonged recession throughout the 1990s, the period from 2002 to 2007 saw moderate growth, an improved economic climate, and a relatively high level of construction starts on housing complexes and office buildings. In the real estate market, construction regulations were made more stringent in 2007, resulting in a large decrease in the number of new construction starts. In 2008, Japan saw a major downturn in new starts after October due to the global recession, and in FY2009, the number of private residential starts was only 775,000. The decrease was particularly sharp in condominiums and rental homes, due to a

reduction in investment cash inflows from private funds both in Japan and abroad, and the banks' reluctance to lend to homeowners.

In early 2010, the number of new housing complex starts has been on track toward recovery. Particularly in the capital region, reports indicate that sales of affordable housing complexes targeting salaried employees are moving forward, and land purchases are also growing more active. Wealthy Chinese individuals are also able to purchase condominium units in the capital region, highlighting the high potential in the Tokyo real estate market.

Office construction starts decreased 17% in 2009 due to the global recession, but this rate of decrease was low compared to that in housing and factories. Large quantities of office buildings are expected to be available in central Tokyo in 2011 and 2012, but development projects scheduled for completion in 2013 are also in the works.<sup>1</sup>

Office building starts are largely accounted for by development projects undertaken by large developers, while few are undertaken by local-based companies and small and medium-sized companies. In the Tokyo region, large-scale development is still underway in the area around Tokyo Station, while in the Kansai region, the largest and last development project in a prime region is taking place at Osaka Station.

## 3.2 Urban Planning, Effective Land Use, and Sustainable Urbanization

### 3.2.1 Urban Planning

Japan's long-term priorities with regard to urbanization are (1) the environment and low-carbon output, (2) adaptation to the aging of society, and (3) disaster management. Sustainable urbanization in Japan cannot really be called "sustainable" without consideration of these priorities.

#### (1) The environment, low-carbon output

The New Economic Growth Strategy that was approved by the Cabinet in June 2010 includes projections regarding long-term urbanization. One growth strategy that takes advantage of Japan's unique strengths is the National Strategy Project in Green Innovation. The "Eco-Future City" concept is part of this strategy, and embodies Japan's medium- and long-term direction with regard to urbanization.

Specifically, it is based on promoting urban development in a way that allows people to feel the lush greenery and personal warmth for which Japan is famous, and calls for concentrated and strategic investments in cities and communities in such areas as the construction of urban energy management systems that incorporate a combination of smart grids, renewable energies, and next-generation automobiles, as well as the general expanded use of renewable energies. A new law has been developed to promote these efforts (the Eco-Future City Development and Promotion Act). Relevant government agencies are providing fundamental support for such measures as regulatory reforms and institutional reforms, including efforts to green-up the tax

---

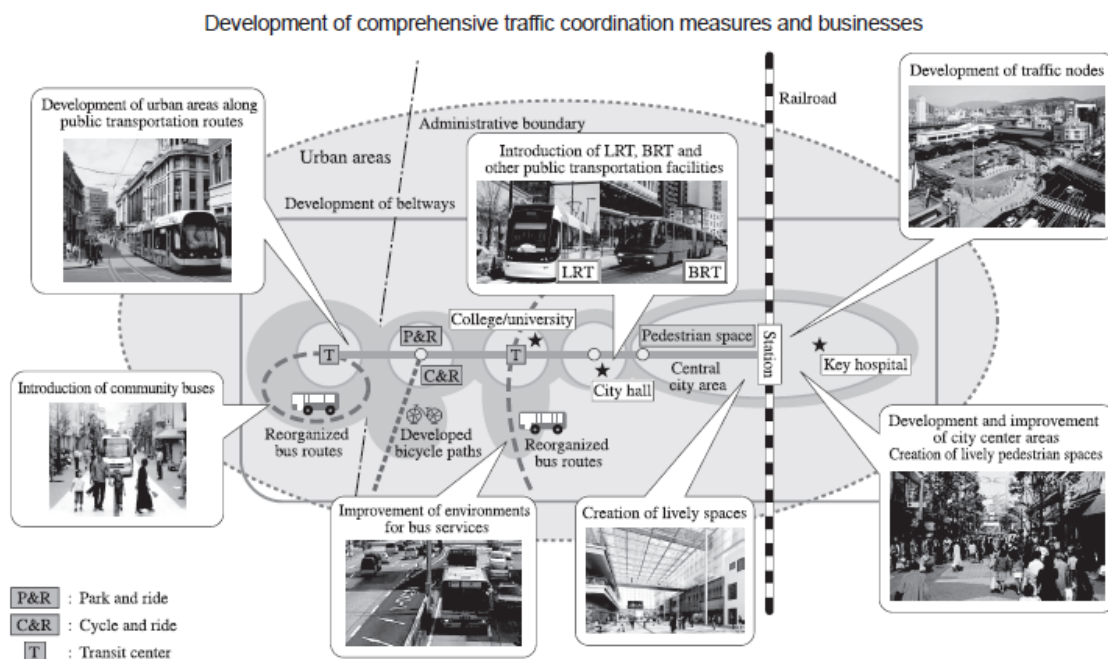
<sup>1</sup> See Mizuho Securities, Real Estate Market Report, August 12 Edition.

system, and they are also taking the first steps toward implementing changes to achieve a sustainable economic and social structure.

Policies related to construction, transportation, and urban planning are being promoted by the MLIT.

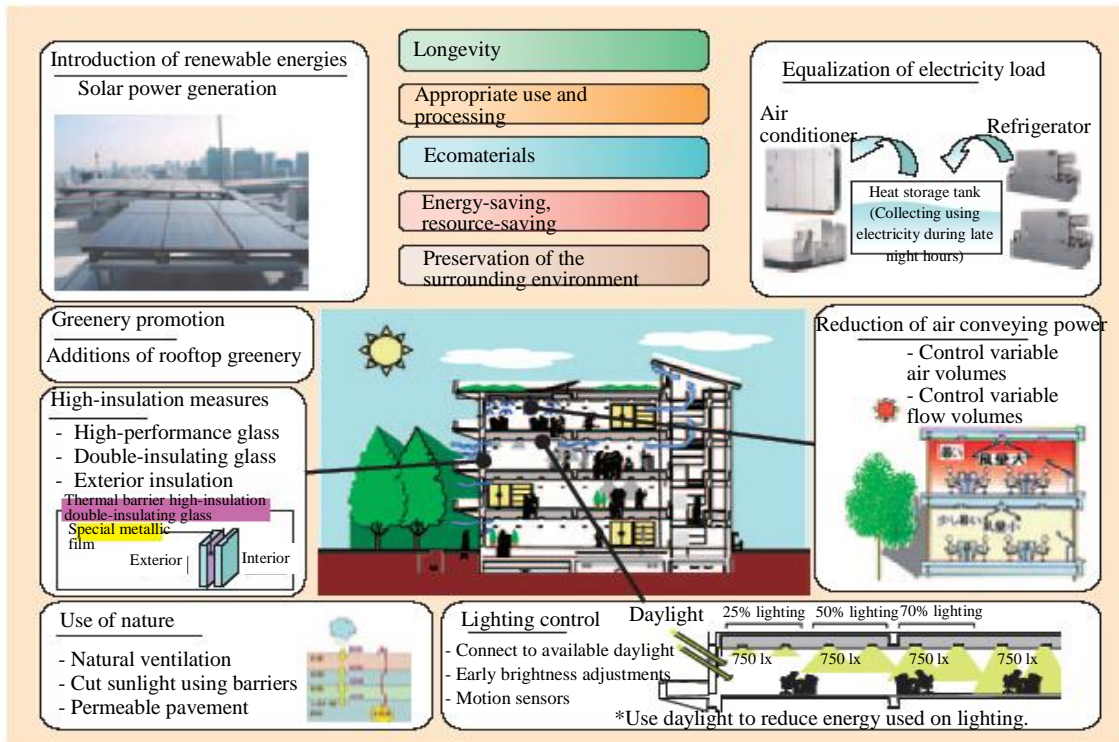
Transportation accounts for about 20% of all CO<sub>2</sub> emissions in Japan. Fig. 3 shows the types of measures that are being taken. Governments are working toward urban development in which people can get around easily using public transportation and bicycles, and urban development that promotes the use of environmentally friendly vehicles (such as electrically powered buses and cars). They are also making improvements to the existing infrastructure (tri-dimensional intersections, road crossing measures, promotion of intelligent transport systems), implementing traffic flow measures, and contributing to fuel cost improvements.

Fig 3 Global Warming Countermeasures Adopted by MLIT



To promote energy savings for residences and other buildings, the government is adopting systems that make it easy for individuals as well as companies to implement environmental measures, such as structures for offering tax breaks and other incentives. The environmental efforts being undertaken by various government agencies are shown in Fig. 4.

Fig 4 Government Buildings Adopting Various Environmental Measures



Private urban development efforts are focused on greenery. The Tokyo Mid-Town Project is the largest-scale development to be undertaken in recent years.<sup>2</sup> This development project, undertaken in conjunction with the relocation of the Ministry of Defense, included the construction of the main tower, the tallest skyscraper in Tokyo (248 m consisting of five basement floors and 54 above-ground floors). The tower features the Ritz-Carlton Tokyo on the upper floors as well as many office and retail spaces. Comprised of multiple buildings, the tower has retail, office, and residential spaces, and is bustling with businesspeople and tourists all year round. A key feature of this project is the large area of green space included in the plan. The development of a park adjacent to the project site was included in the project from the beginning, and about 4 ha, or about 40% of the area developed, has been turned into green and open space. It is appreciated by local residents as a space for urban recreation.



<sup>2</sup> More on this project's environmental efforts can be found at [http://www.mitsui-fudosan.co.jp/corporate/csr/pdf/env\\_tmt.pdf](http://www.mitsui-fudosan.co.jp/corporate/csr/pdf/env_tmt.pdf).

Another project that succeeded in its efforts to create more green space in the Kansai region is the Namba Parks project. This project was developed in conjunction with the closure of a baseball stadium. It primarily consists of a mixed-use building that includes a cinema complex and retail space. The developer used the building's rooftop and wall spaces to plant about 70,000 plants of 300 different varieties. Each building has its own unique garden plan, based on its theme. A survey conducted by the Obayashi Corporation, the large construction company in the consortium that did the design and construction work, confirmed the presence of 14 types of birds and 93 types of insects at the site. Wildlife has returned to the downtown region. As a recreational destination in the Kansai region, the complex is bustling with people all day long.



The efforts to add greenery on both projects are aimed at helping the environment and reducing carbon output, of course, but they also ultimately have a publicity effect. Recently, an increasing number of projects have been aimed not only at increasing greenery, but also, like Namba Parks, at facilitating the return of wildlife to the city. Urban development efforts that attract birds and butterflies seem to improve the productivity of office workers and increase the value of the area. The urban development trend in Japan might be referred to as one that promotes coexistence with wildlife. However, growing populations of birds and butterflies also are highly likely to attract destructive insects and other wildlife that are not particularly beneficial to human populations. Some of the large Japanese construction firms also analyze the movements of harmful insects, and select their conducting wires and landscaping appropriately. Cooperation among government agencies, private developers, and construction companies leads to better urban development.

## (2) Adaptation to the aging of society

Japan is experiencing major demographic aging and low fertility, and its population is actually decreasing. Efforts to make barrier-free housing are moving forward, as are efforts to make barrier-free accommodations in public transportation facilities and other public buildings. Senior policies need to be incorporated into urban development efforts, including road development, and these are being implemented in various locations.



Fig. 5 Percent of Transport Facilities That Are Barrier-Free

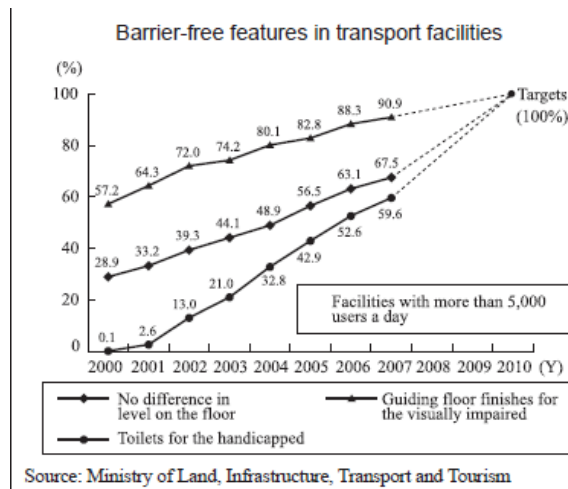
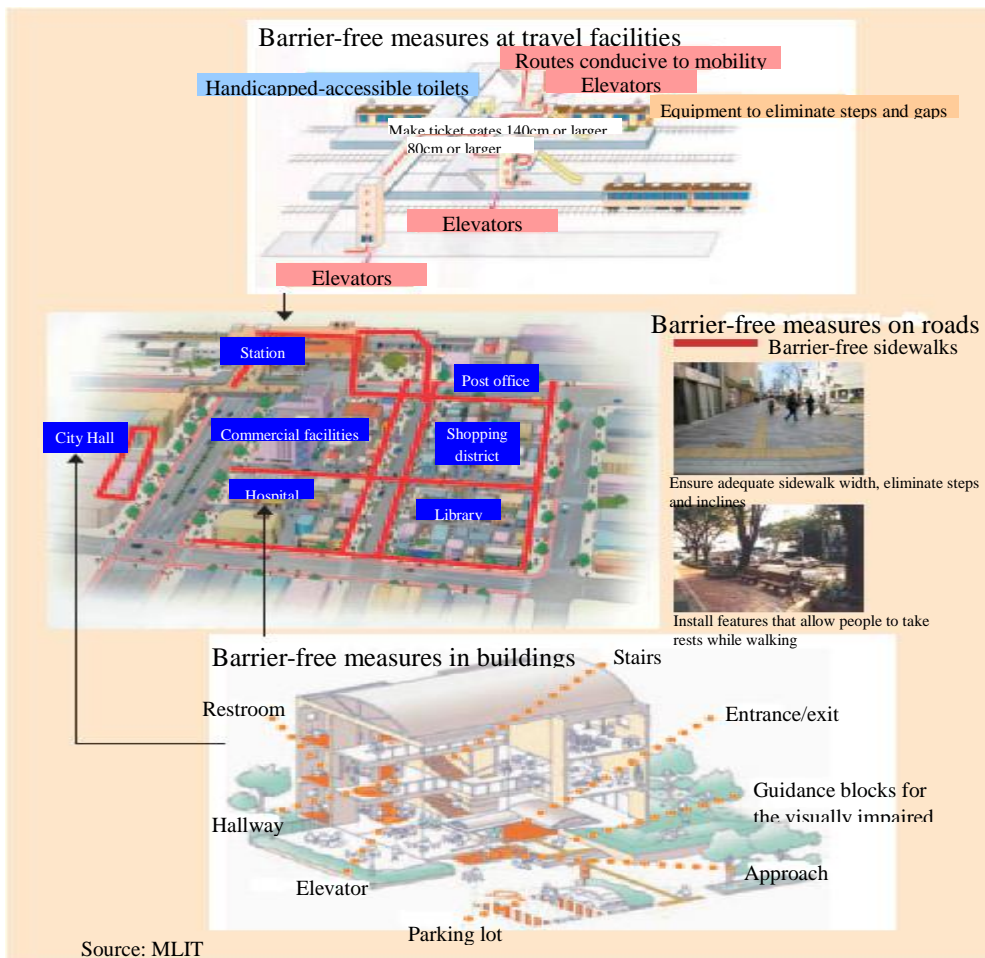


Fig. 6 Community Development for Senior Citizens

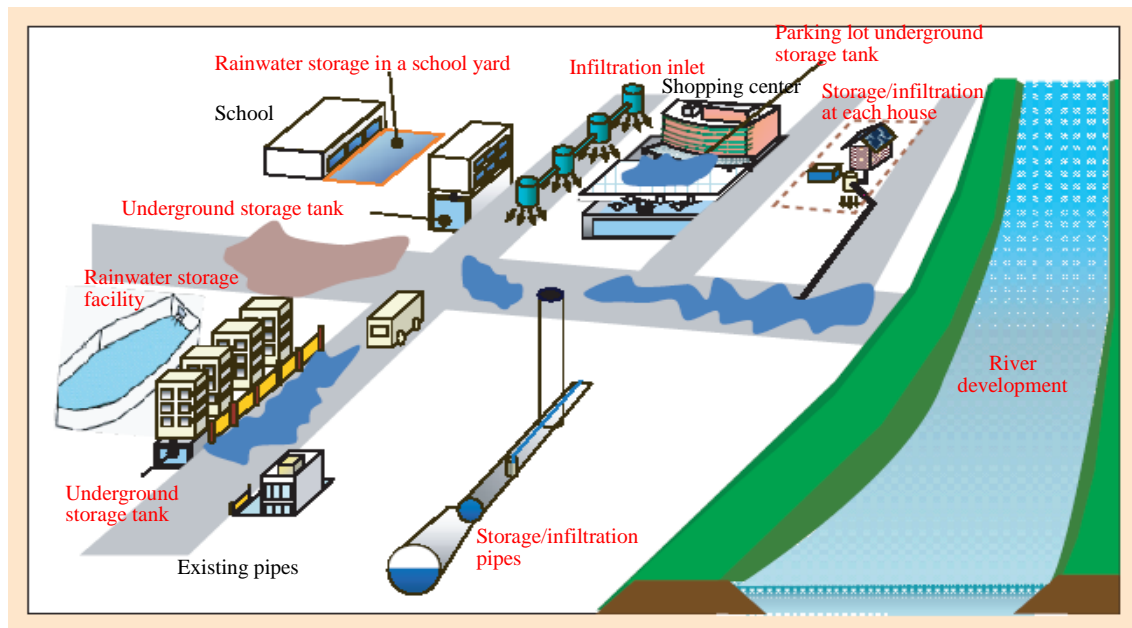


### (3) Disaster management

Japan's topography and soil quality face extremely harsh conditions, with floods and landslides occurring every year. Located in an active earthquake and volcanic eruption zone, Japan is the site of about 20% of all of the world's earthquakes (M6 and higher). Protecting people's lives and assets from natural disasters is an important priority.

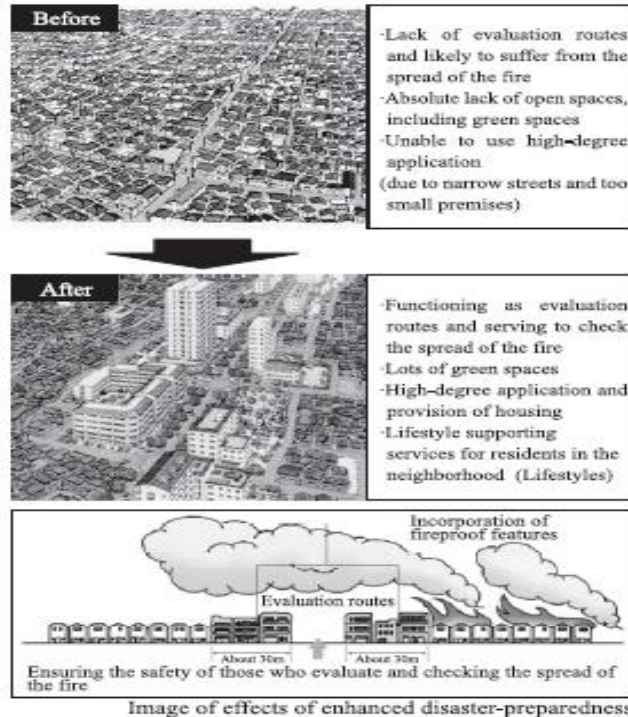
About half of the population and about 3/4 of their assets are located in the 10% of Japan that consists of flood zones. The potential hazards posed by flooding are thus extremely high. Because Japan has already promoted flood measures, such as the development of river channels (widening efforts), levees, and drainage channels to allow the safe outflow of flood waters, and the development of dams and flood control basis to temporarily collect flood water, the nation's level of flood safety has been significantly improved. Compared with other developed nations overseas, however, the level of safety and ratio of developed facilities continue to remain low. To reduce flood damage in cities, efforts are being made to implement water collection and permeation measures, like those shown in Fig.7, aimed at expelling rain water and controlling outflows of rain water regionwide.

Fig. 7 Comprehensive Flood Measures



Because Japan has experienced several earthquakes that have killed thousands of people in the past, it has no lack of earthquake management measures. Seismic standards have been established for all buildings. It is important that disaster management functions be incorporated into urban plans.

Fig. 8 Environments with enhanced preparedness against disasters



#### (4) Construction of a competitive socioeconomic system

Until now, large cities like Tokyo and Osaka have driven Japan's growth, but the governments of other nation's are using policy to improve the competitiveness of Asian cities like Seoul, Singapore, Shanghai, and Tianjin. Without municipal strategies that are informed by the international and broad perspectives of the national level, the vitality of even Tokyo will be lost as society ages; Tokyo may even become a drag on national growth. For this reason, Japan needs to strategically promote focused development for improving Japan's appeal and making priority investments in truly necessary infrastructure components that drive growth, such as airports, seaports, and roads in large metropolitan areas that have a high investment effect.

To improve the competitiveness of cities in today's international society, efforts must be made to improve the offerings of Narita and Haneda Airports, and to expand the international network of airlines.

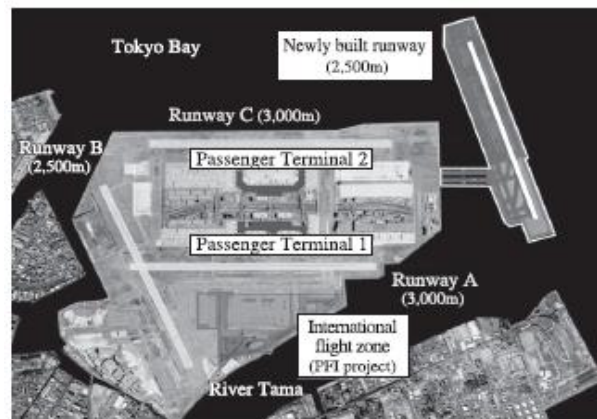
In 2010, Haneda serviced about 30,000 regularly scheduled international flights during the day, and about another 30,000 at night, for a total of 60,000 flights. Adding the 20,000 flights serviced at Narita to brings the total to 80,000 regularly scheduled international flights. Efforts are being made to vastly increase the number of international departures from airports in the capital region. At Haneda Airport in particular, the new international terminal opened on October 21, 2010, and by January 2011, it is expected to host flights serving China, South Korea, Thailand, Taiwan, Singapore, Malaysia, the US, France, and Canada. There is agreement regarding



expansion of the transportation capacity of Narita with a total of 22 countries and regions, including Hong Kong, Macao, Vietnam, Thailand, Singapore, India, Sri Lanka, Qatar, the United Arab Emirates, and Turkey in Asia; Papua New Guinea in Oceania; Egypt in Africa, Canada and Mexico in the Americas, Poland, Austria, Germany, Switzerland, Italy, the Netherlands, the three Scandinavian nations, and Finland in Europe. In the future, to maximize the international airline functions of the capital region airports, efforts will be made to make Haneda Airport a 24-hour airport for international flights, to further expand the capacity of Narita Airport, and to promote the integrated use of both airports.

A new high speed railway line to Narita Airport opened this summer, increasing the convenience of that airport by putting it only 30 minutes away from downtown Tokyo.

Fig. 9 Tokyo International Airport Re-expansion Plan(Haneda Airport)

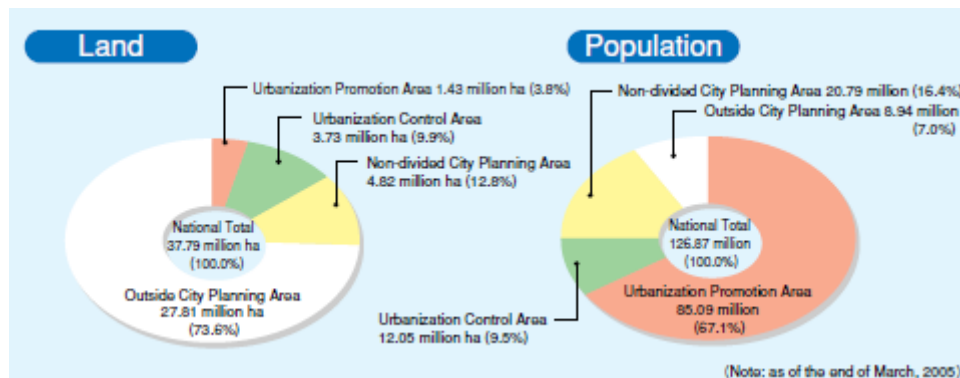
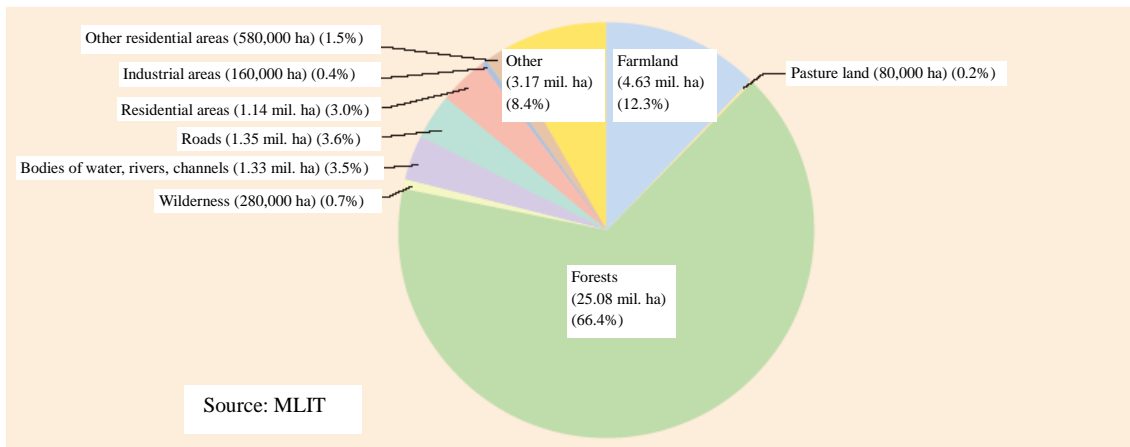


### 3.2.2 Land use resource

#### (1) Use overview

The land area of Japan at the end of 2008 was about 37.79 million ha. Of this, forests account for the majority of the area, or about 25.08 million ha, followed by farmland at 4.71 million ha (down 0.4% from the previous year). Together these make up about 80% of the land area of the whole country. Besides these, land for residential and industrial uses covers about 1.88 million ha (up 0.5% from the previous year), roads cover about 1.35 million ha (up 0.7% from the previous year), bodies of water, rivers, and channels cover about 1.33 million ha, and wilderness covers about 280,000 ha.

Fig. 10 The present situation of the Land use



## (2) Structure of the land use planning system in urban planning

The urban land use planning system is established to support efficient urban activities, achieve a pleasant urban environment, and create townscapes with significant features. The system gives a set of rules concerning different types of land use, including residential, commercial, business and industrial use. This brochure will give a basic description of the urban land use planning system in Japan.

There are various different measures for City Planning, which are applied to each area by the local government depending on local circumstances under the City Planning Law. Land use system includes a wide range of measures on different dimensions, and the rules of land use are usually decided by a combination of individual measures.

Fig. 11 Structure of City Planning System

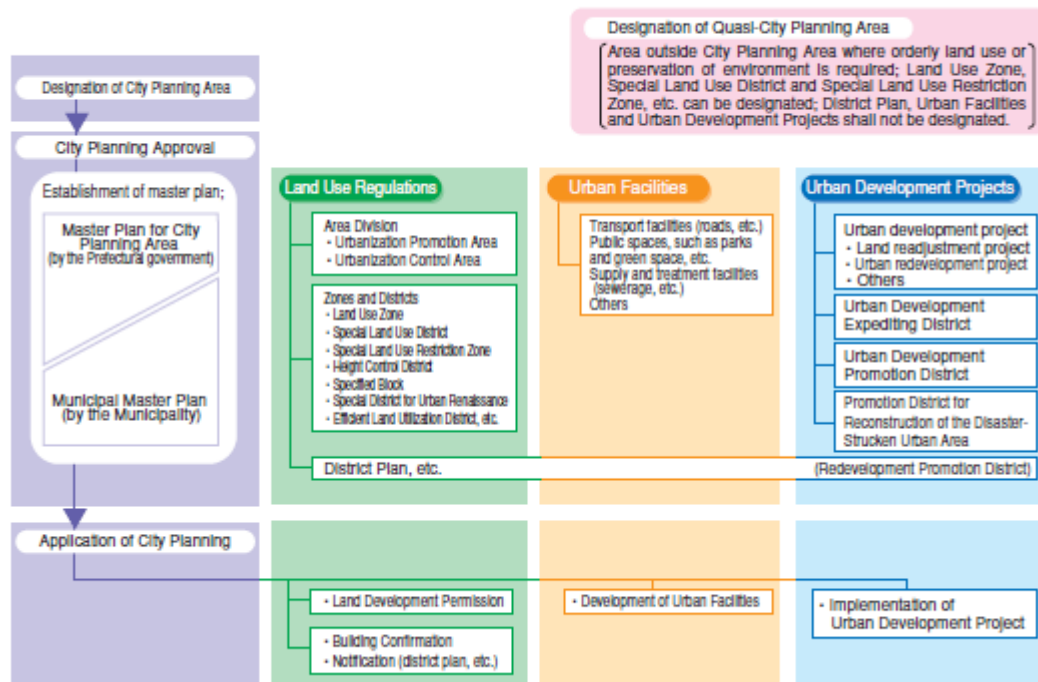
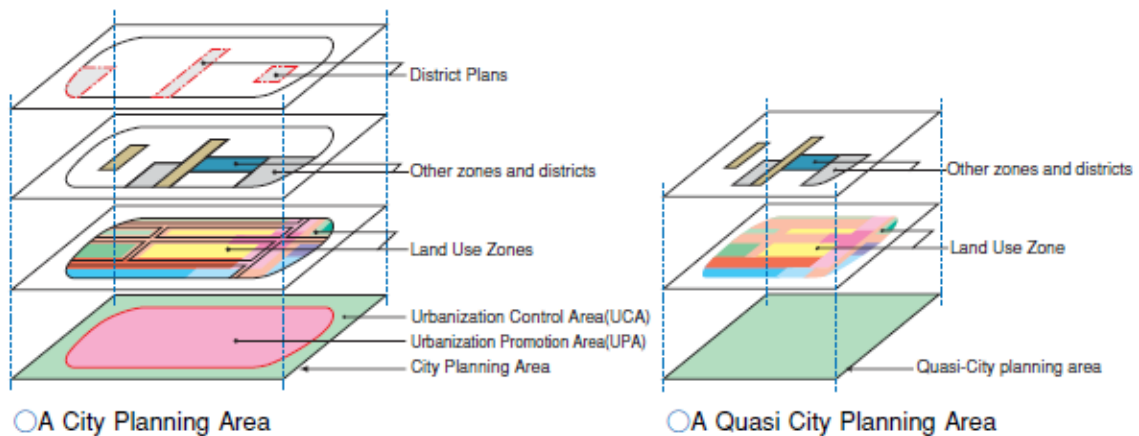


Fig. 12 Concept of Land Use Planning System



Twelve categories of Land Use Zone provide a pattern for land-use zoning in each type of urban area. These can be generally categorized into residential, commercial and industrial uses. Each Land Use Zone has specifications concerning the uses of buildings which can be constructed in the zone. As described in the City Planning map (see cover page), Land Use Zones are allocated according to a future vision of land-use pattern.

Fig. 13 Control of Building Use by Land Use Zones

Examples of buildings	<div> <span>can be built</span> <span>usually cannot be built</span> </div>											
	Category I exclusive residential zone	Category II exclusive residential zone	Category III exclusive residential zone	Category IV exclusive residential zone	Category V exclusive residential zone	Category VI exclusive residential zone	Category VII exclusive residential zone	Category VIII exclusive residential zone	Category IX exclusive residential zone	Category X exclusive residential zone	Category XI exclusive residential zone	Category XII exclusive residential zone
Houses, Houses with other small scale function (store, office, etc.)												
Kindergartens, Schools (Elementary, Junior High, Senior High)												
Shrines, Temples, Churches, Clinics												
Hospitals, Universities												
Stores (mainly selling dairy commodities) (Restaurants with floor space of 150m <sup>2</sup> max. on the first or second floor (excluding ②))												D
Stores/Restaurants with floor space of 500m <sup>2</sup> max. on the first or second floor (excluding ②)												D
Stores/Restaurants not specified above (excluding ②)					A	B						
Offices, etc. not specified above					A	B						
Hotels, Inns						B						
Karaoke boxes (excluding ②)												
Theaters, Movie theaters (excluding ②)												
② Theaters, Movie theaters, Stores, Restaurants, Amusement facilities and so on, with more than 10,000m <sup>2</sup> of floor area												
Bathhouses with private rooms												
Independent garage with floor space of 300m <sup>2</sup> max. on the first or second floor												
Workshops of workshop company, independent garage of other type than specified above												
Auto repair shop												
Factory with some possibility of danger or environmental degradation												
Factory with strong possibility of danger or environmental degradation												

Note A : Must not be built on the third floor or higher. Must not exceed a floor area of 1,500m<sup>2</sup>.  
 B : Must not exceed a floor area of 3,000m<sup>2</sup>.  
 C : Audience seating floor area must not exceed 200m<sup>2</sup>.  
 D : Stores and restaurants must not be built.  
 E : Floor area must not exceed 50m<sup>2</sup>.  
 F : Floor area must not exceed 150m<sup>2</sup>.  
 G : Floor area must not exceed 300m<sup>2</sup>.

### 3.3 Financial Resources Related to Urbanization

#### 3.3.1 Problems Involving the Global Financial Crisis and Real Estate

While the global recession has had an impact on all industries, the real estate and construction industries have been particularly hard hit. Since October 2008, many factory and office building construction plans have been cancelled, and private non-residential housing investments fell sharply in FY2009. Many condominium and apartment building construction projects have also been cancelled. With financial institution loans and other funds drying up, many developers have been faced with black-ink bankruptcy, leaving the construction companies that would have performed the work on their projects facing major challenges.

Investments in real estate investment trusts and privately placed funds, which were first made in 2001, began to rise sharply in value in 2004. This triggered a spike in the construction of apartment buildings and office space primarily in the capital region. As it became more difficult to build in the capital region, development spread to the outlying areas. In the latter half of 2007, capital inflows began to dry up as excess supply and the sub-prime loan problem came to a head, and in 2008, amidst many instances of business feasibility problems, Lehman Brothers collapsed and further exacerbated existing problems.

Japanese general contractors had been receiving large orders from overseas developers, but they ended up facing significant challenges. First, they started to see the cancellation of projects by Japanese firms, and later they saw the cancellation of government projects in the Middle East due to the Dubai shock and other factors.

In 2010, the effects of the global recession are still being felt. With the recent appreciation of the yen, private construction investment has been trending at low levels.

### 3.3.2 Financial Resources Related to Urbanization

In the area of financing (capital procurement), it seems that capital conventionally used for urban development in Japan has been procured on the basis of a specific company's own credibility, profitability, and ability to provide collateral. This is called corporate financing. Funding comes from bank borrowing, stock issuance, corporate bond issuance, and loans from various types of financial institutions.

Institutional support is also provided by the national government. For example, the Organization for Promoting Urban Development (OPUD) was established in 1987 to promote private urban development through low-interest loans for that purpose. OPUD is governed by MLIT, and provides support for urban development projects conducted by private developers by supplying interest-free loans as well as low-interest capital to firms in the form of participation in their projects as a co-developer, and by advancing long-term, low-interest capital through deposits to the Development Bank of Japan.

However, with the collapse of the bubble economy in the early 1990s, it became difficult to secure project capital even for well conceived urban development projects because of the low level of capital that could be procured through the markets due to low stock market values, and the difficulty of borrowing from financial institutions due to regulations regarding self-capital ratios<sup>3</sup> and total volume control.<sup>4</sup>

Also, urban development projects are highly individualized, and their content and strategies have become increasingly complex. Some cannot be accommodated solely through conventional business loans. With a mismatch between projects and finances, there is growing demand for the creation of new modes of financing. There has been a breakthrough in the form of a method that is called project financing. This is a method of financing based on the profitability of a given project, and differs from corporate financing which is dependent on the creditworthiness of a company.

Due to the enactment of Japan's Real Estate Specified Joint Enterprise Act in April 1995 and the Act on the Liquidation of Specified Assets by Special Purpose Companies (the old SPC Act) in September 1998, a new financing method known as "real estate securitization" came into being. The enactment of the Act on Investment Trust and Investment Corporations in November 2000 paved the way for Japanese real estate investment trusts (J-REITs), and the transition from the old SPC Act to the new SPC Act, or the Act on the Securitization of Assets, simplified the procedures involved in real estate securitization aimed at liquidating assets. As a result, the use of this approach increased dramatically. With the widespread adoption of this method of securitization, the real estate and financial markets became intertwined, and there was an increase both in urban development project schemes premised on the possibility of securitization, and in no-recourse loans issued by financial institutions. Both markets have been significantly impacted by the global economic recession since 2008.

---

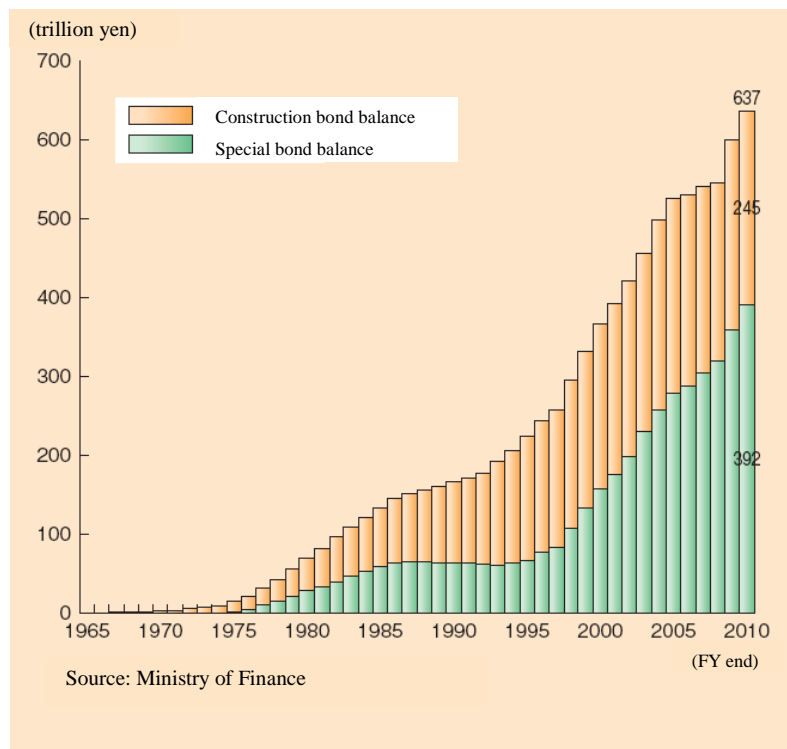
<sup>3</sup> To ensure the sound management of banking operations in Japan, banks with overseas locations are being required to maintain self-capital ratios that are consistent with international standards (8% and above). As a result, the banks subject to regulation are controlling increases in lending to raise their self-capital ratios, are trying to hold down debts used as bank assets, and are liquidating their debt for off-balance sheet financing.

<sup>4</sup> The regulation states that growth in loan balances to real estate companies must be lower than growth in total loan balances. Those subject to the regulation must therefore limit their loans to real estate companies. This has made it difficult to procure capital for real estate projects from banks.

### (1) Public works projects

The financial resources for public works projects, including infrastructure projects, generally come from the budgets of the national and local governments. The Japanese government began issuing construction bonds in 1966, when there was a need to rapidly develop infrastructure during Japan's high growth period, because it felt that the public facilities constructed would be able to be used by future generations of citizens. Such bonds are still being issued today. Construction bonds cannot be used to pay for administrative costs or personnel expenses that will not be left for future generations.

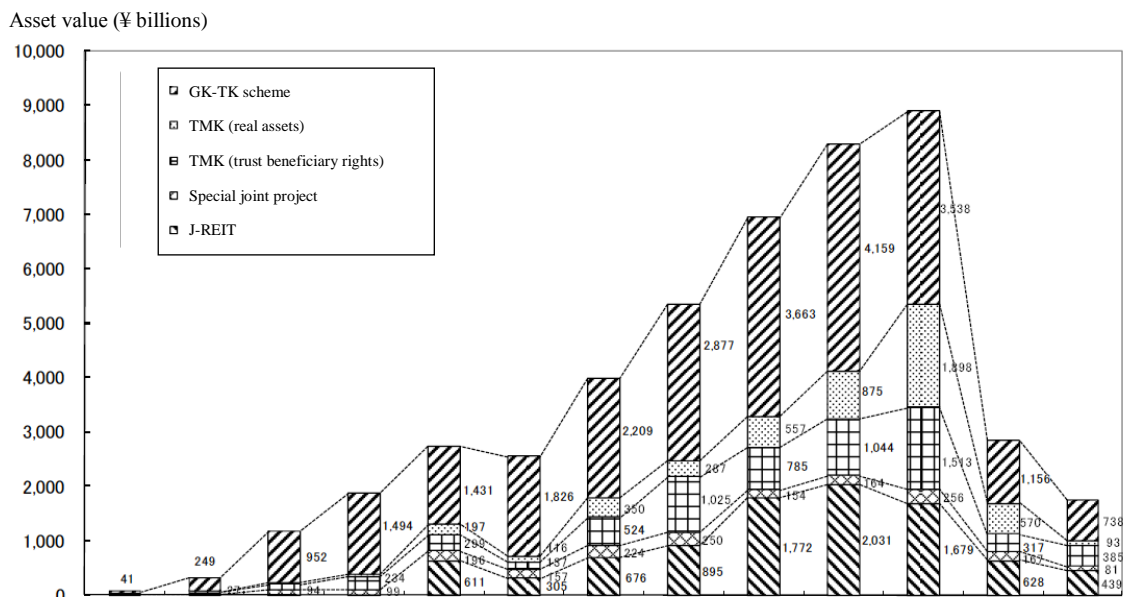
Fig. 14 The change of the Japanese public bond balance



### (2) Private markets

Real estate securitization is an extremely effective method of efficiently linking demand for capital with supply, and is essential to the development of both real estate and financial markets. The market expanded rapidly starting around 2003, and rose as high as ¥8.9 trillion in the peak year of 2007. However, capital inflows have slowed due to the global recession. In 2008, the market fell considerably, and remains at low levels today.

Fig. 15 Actual Trends in Real Estate Securitization by Scheme

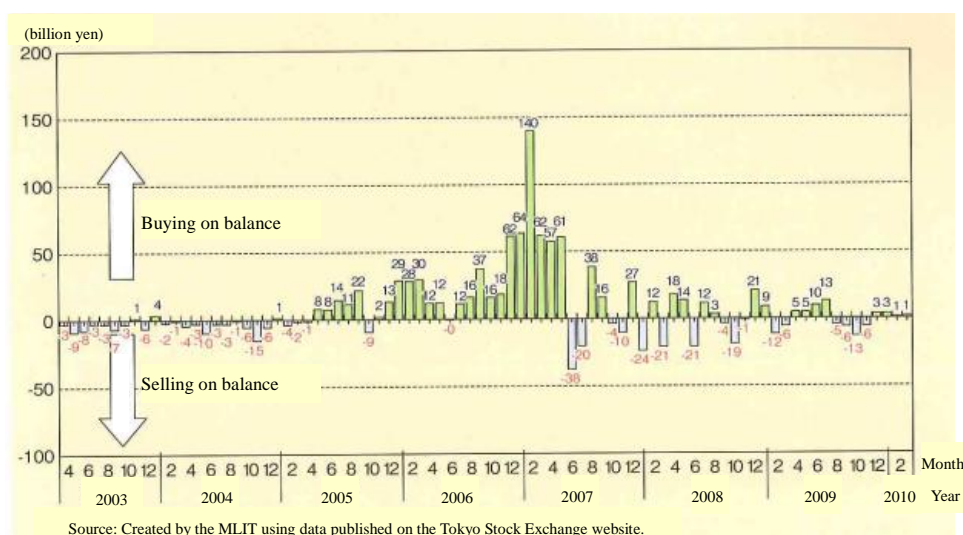


Notes:

1. The breakdown for FY2009 reflects quick estimates. TMK based on actual results reported.
2. Figures for FY2008 were recounted based on actual TMK issuance.

Fig. 16 shows the sales of J-REITs to foreign buyers. There were many cases of overselling from 2005 to mid-2007, but after that period, sales fell considerably.

Fig. 16 Sales Status of J-REITs to foreign buyers



Private developers and construction companies largely procure capital from the stock market, as well as from loans from private banks. New loans have fallen sharply since the onset of the global recession.



Fig. 17 Lending Situation

(Unit: billion yen)

Quarter	Loan balance to real estate, construction companies						New loans to real estate companies (funds for equipment)	
		YOY		YOY		YOY		YOY
Mar. 2005	68,484	-4.7	17,567	-8.6	50,917	-3.2	3,269	15.6
Jun.	66,657	-4.3	16,241	-7.7	50,416	-3.1	1,541	-10.1
Sep.	68,924	-0.3	16,234	-8.6	52,690	2.6	2,863	40.9
Dec.	69,921	0.6	16,730	-7.8	53,191	3.5	2,177	27.7
Mar. 2006	69,139	1.0	16,218	-7.7	52,921	3.9	2,945	-9.9
Jun.	68,039	2.1	15,185	-6.5	52,854	4.8	1,733	12.4
Sep.	73,069	6.0	15,498	-4.5	57,571	9.3	2,480	-13.4
Dec.	74,148	6.0	15,991	-4.4	58,157	9.3	2,056	-5.5
Mar. 2007	74,359	7.6	15,589	-3.9	58,771	11.1	2,995	1.7
Jun.	73,413	7.9	14,567	-4.1	58,846	11.3	2,246	29.6
Sep.	74,048	1.3	14,979	-3.3	59,068	2.6	2,512	1.3
Dec.	75,064	1.2	15,514	-3.0	59,550	2.4	2,408	17.1
Mar. 2008	74,665	0.4	15,006	-3.7	59,659	1.5	3,061	2.2
Jun.	73,653	0.3	14,023	-3.7	59,629	1.3	1,799	-19.9
Sep.	73,269	-1.1	14,191	-5.3	59,078	0.0	2,041	-18.7
Dec.	74,600	-0.6	15,380	-0.9	59,220	-0.6	1,528	-36.5
Mar. 2009	73,340	-1.8	14,846	-1.1	58,494	-2.0	2,326	-24.0
Jun.	75,304	2.2	13,531	-3.5	61,773	3.6	1,394	-22.5
Sep.	74,940	2.3	13,713	-3.4	61,226	3.6	1,799	-11.8
Dec.	74,435	-0.2	13,856	-9.9	60,579	2.3	1,444	-5.5
Mar. 2010	73,801	0.6	13,406	-9.7	60,395	3.3	2,504	7.6
Jun.	72,668	-3.5	12,388	-8.4	60,280	-2.4	1,486	6.6

Source: Bank of Japan, "Loans by Loan Recipient"

### 3.4 Real Estate Market System Operations

#### 3.4.1 Introduction of Real Estate Appraisal

Land prices are the normal prices of standard land as of January 1 every year, publicly announced by the Land Appraisal Committee in late March, under the Public Notice of Land Prices Law (Law No. 49, 1969). The purpose of the public notice is to provide a guideline for general transaction prices of lands, to help in evaluating acquisition prices of public use lands, and to serve as a standard for land appraisal by real estate appraisers and others, thus contributing to formation of appropriate land prices.

In addition to these functions, land prices in the public notice are utilized as a guideline for appraisal of inheritance tax and fixed assets tax, for the purpose of balancing and adjusting the evaluated values of public lands. At the same time, those prices are also utilized as standard for evaluating current prices for the purpose of laws concerning reappraisal of lands, for national properties, and for real estate for sale in corporate accounting. In this way, the importance of the land price public notice system has been increasing.

To determine the price in the public notice, the Land Appraisal Committee requires appraisals from two or more real estate appraisers, reviews the results, adjusts them, if necessary, and judges normal prices per square meter in the land in question, under Article 2 of Public Notice of Land Prices Law.



### 3.4.2 Introduction of Brokerage Companies and Brokerage Fees

When a person engages in the following transactions with a third party, a real-estate transaction specialist or a real estate transaction agent licensed by the MLIT or the prefectural governor provides support for the parties engaged in the transaction pursuant to the Building Lots and Buildings Transaction Business Act.

- Purchase of a home or building.
- Exchange of a home or building.
- Proxy to purchase, exchange or rent a home or building.
- Intermediate to purchase, exchange or rent a home or building.

The amount of the brokerage commission that can be charged by a home builder to a client is limited to the amounts shown in the table below, as per the notice by the Minister of Land, Infrastructure, and Transport pursuant to the Building Lots and Buildings Transaction Business Act.

Trading Value	Brokerage Commission
For the portion of ¥2 million and less	Up to 5.25%
For portions over ¥2 million up to ¥4 million	Up to 4.2%
For portions over ¥4 million	Up to 3.15%

When the transaction amount exceeds ¥4 million, the commission can be simply calculated as follows:  $(\text{Trading value without consumption tax} \times 3\% + ¥60,000) \times 1.05$ . This simple calculation method can be used in actual transactions. The amount obtained from this method is an upper limit. The brokerage fee actually paid will be determined based on negotiations with the broker, within the established limits (and will be included in the brokerage contract).

### 3.4.3 Recent Real Estate Management Practices

Building management is often contracted out to a building management company rather than by the owner. If properly maintained, repaired, and renovated, the frame, interior, and facilities of a building can be used for a very long time. However, appropriate measures require appropriate funding. The costs incurred from the the initial construction costs to the demolition costs many decades later should be viewed as the life cycle costs, and owners should be concerned not only with initial costs or renovation costs, but with maximizing total cost effectiveness. The proportion of initial construction costs to the total life cycle cost is typically about 15-30%. If maintenance, repairs, and renovations are not performed, the real estate value will fall, as will the building's ability to attract clients, thus hastening the building's demise. The owner, building management company, and consulting designer or construction company work

as partners in striving to extend the longevity of a building.

#### **4. Future Outlook for the Real Estate Market**

##### **4.1 Outlook for the Real Estate Market**

Due to the global recession, few companies issued new building plans in 2009, and in the residential sector, condominium and apartment building starts were down significantly in 2010. In the non-residential sector, factory and warehouse starts also fell significantly. New projects have been at low levels in FY2010, and starts in both the residential and non-residential sectors in FY2011 seem likely to improve slightly over the previous year. However, they are still forecast to be low compared to pre-2008 figures.

In the non-residential sector, declining construction since 2008, the financial crisis in Greece, and the rapid appreciation of the yen have all put pressure on export profits, causing delays or cancellations of domestic production facility projects. The area of construction starts on schools, hospitals, and welfare facilities is increasing in size, and further development is predicted given the ongoing aging of the population.

Fig. 18 Area of New Construction Starts(Table 2)

Area of private non-residential starts (1000m <sup>2</sup> )							
FY	2005	2006	2007	2008	2009	2010 (Est.)	2011 (Est.)
Offices	6,893	7,064	6,696	7,688	6,366	6,126	6,826
Stores	12,466	11,280	12,955	8,249	5,504	6,092	7,099
Plants and operation sites	14,135	15,375	12,009	12,579	5,446	5,930	6,929
Warehouses	8,991	9,789	7,915	7,554	3,990	4,340	5,152
School buildings	2,095	1,989	1,654	1,688	1,567	1,617	1,624
Hospitals, clinics	2,699	2,686	2,557	1,911	1,916	2,551	2,126
Lodging facilities	1,433	1,673	1,634	1,660	535	10,681	11,826
Other	16,782	16,065	12,444	12,126	9,535		
Total	65,495	65,920	57,865	53,454	34,859	37,337	41,582

Area of public non-residential starts (1000m <sup>2</sup> )							
FY	2005	2006	2007	2008	2009	2010 (Est.)	2011 (Est.)
Offices	866	862	695	893	695	-	-
Stores	35	41	22	30	23	-	-
Plants and operation sites	91	172	129	87	86	-	-
Warehouses	146	168	85	130	142	-	-
School buildings	2,563	2,140	2,181	2,286	820	-	-
Hospitals, clinics	335	300	479	401	375	-	-
Lodging facilities	10	22	6	14	9	-	-
Other	2,676	2,487	2,311	2,268	2,480	-	-
Total	6,721	6,193	5,908	6,109	4,630	-	-

Area of housing starts (including private and public) (1000m <sup>2</sup> )							
FY	2005	2006	2007	2008	2009	2010	2011
Owned single-family housing	47,161	47,409	41,037	40,435	36,499	37,883	40,730
Rental housing (apartment house, single house)	24,175	24,742	19,605	20,235	14,954	15,371	16,305
For sale in lots (apartment house, single house)	34,741	35,889	27,061	24,943	15,590	19,266	21,116
Housing provided as compensation for	574	607	655	732	711	694	682
Total	106,651	108,647	88,358	86,345	67,754	73,214	78,833

Fig. 19 Investment amount

(Unit: billion yen, real values reflect 2000 prices)

Fiscal year	1995	2000	2005	2006	2007	2008	2009	2010 (Forecast)	2011 (Forecast)
Nominal construction investment (YoY change)	79,017 0.3%	66,195 -3.4%	51,568 -2.4%	51,328 -0.5%	47,696 -7.1%	47,650 -0.1%	42,170 -11.5%	39,250 -6.9%	39,660 1.0%
Nominal government construction investment (YoY change)	35,199 5.8%	29,960 -6.2%	18,974 -8.9%	17,797 -6.2%	16,946 -4.8%	16,210 -4.3%	16,900 4.3%	13,820 -18.2%	12,610 -8.8%
Nominal government building construction investments (YoY change)	5,667 -12.5%	4,000 -12.0%	2,053 -13.9%	2,045 -0.4%	1,951 -4.6%	2,060 5.6%	2,330 13.1%	1,980 -15.0%	1,580 -20.2%
Nominal government civil engineering investments (YoY change)	29,531 10.3%	25,960 -5.2%	16,921 -8.3%	15,752 -6.9%	14,996 -4.8%	14,150 -5.6%	14,570 3.0%	11,840 -18.7%	11,030 -6.8%
Nominal private residential construction (YoY change)	24,313 -5.2%	20,276 -2.2%	18,426 0.3%	18,750 1.8%	16,602 -11.5%	16,390 -1.3%	13,700 -16.4%	13,710 0.1%	14,410 5.1%
Nominal private non-residential construction (YoY change)	19,505 -1.8%	15,959 0.7%	14,168 4.0%	14,782 4.3%	14,148 -4.3%	15,050 6.4%	11,570 -23.1%	11,720 1.3%	12,640 7.8%
Nominal private non-residential building construction (YoY change)	11,010 -6.8%	9,343 -0.5%	9,236 3.4%	9,789 6.0%	9,167 -6.4%	9,990 9.0%	7,760 -22.3%	7,750 -0.1%	8,470 9.3%
Nominal private non-residential construction (YoY change)	8,496 5.6%	6,616 2.5%	4,932 5.3%	4,993 1.2%	4,981 -0.2%	5,060 1.6%	3,810 -24.7%	3,970 4.2%	4,170 5.0%
Real construction investment (YoY change)	77,727 0.2%	66,195 -3.6%	51,520 -3.4%	50,600 -1.8%	45,776 -9.5%	44,599 -2.6%	40,742 -8.6%	38,060 -6.6%	38,450 1.0%

Note: Figures up to FY 2009 are from the FY 2010 Construction Investment Forecast issued by the MLIT. Figures for 2010 and 2011 are RICE estimates.

## 4.2 Forecasting Methods for the Real Estate Market

RICE calculates its real estate forecasts using its own construction economy model. In the residential sector, the emphasis is on the latest indicators, including interest, purchasing attitudes, lending attitudes, the condominium vacancy rate, and contract rates. In the non-residential sector, the emphasis is on such indicators as private company profits, machine orders, interest rates, and the industrial output index. Investment amounts in infrastructure are calculated based on national and local government budgets, the execution rate, and the carry-over factor.

## 4.3 Trends in the Real Estate Market

Japan's population is declining due to aging and fertility decline. In such situations, there are concerns that homes and offices will not continue to be built at current levels. It has been 65 years since the end of World War II (1945), and the infrastructure built during the high growth period is now at the point of needing renovations. Since Japan experiences many earthquakes and floods, improper renovations can result in significant human casualties. In infrastructure as well as buildings, maintenance and renovations could become an important construction market going forward.

The new towns (housing complexes) built during the 1960s and 1970s are aging, such that problems like building dilapidation, vacancies, and community issues are becoming social problems.

In the short-term market, the Bank of Japan indicated in October 2010 that it would revive its zero interest-rate policy through additional monetary easing. Stocks related to real estate projects, such as condominium developments, rose in value across the board as a result. The continuation of low interest rates reduces the burden of borrowing associated with condominium development. It will be interesting to see how the real estate market develops in the future.

## 5. Government Contributions to Real Estate

The MLIT oversees real estate issues and works with local government agencies on implementing relevant measures. When land prices skyrocketed from 1985 to 1991, the government implemented measures aimed at calming the price increase. Later, when prices fell, the government replaced land price controls with measures to promote the liquidation of land.

As a medium-term plan for the next 10 years, the government has drafted policies related to solving the aging and low fertility problem in postwar new town communities, comprehensively developing real estate information, and pursuing environmental efforts, all in an effort to ensure that real estate is benefiting people's lives. Under government leadership, efforts are underway to stimulate demand, such as a residential version of the Eco-Point system, tax reductions, and to promote environmentally friendly housing.

Under conditions of population decline due to aging and low fertility, it is highly likely that people and businesses will become more concentrated in urban areas. It is

therefore essential that the public and private sectors collaborate on efforts to determine how the limited real estate available should be used.

