

# 12th Asia Construct Conference

## SUMMARY

EXTRACTS FROM THE 4 COUNTRY REPORTS published in “FINANCING  
CONSTRUCTION” – The Proceedings of AsiaConstruct 12. ISBN No.

978-962-367-560-4

The Executive Summary and the Conclusions sections only, are reproduced below for each paper.  
The four country papers were provided by Hong Kong, Indonesia, Japan, and Korea.

### 1. HONG KONG COUNTRY REPORT

ON

FINANCING CONSTRUCTION

Prepared by:

The AsiaConstruct 12 Team

Research Centre for Construction and Real Estate Economics (RCCREE)

The Hong Kong Polytechnic University

Michael Anson<sup>1</sup>, Edwin HW Chan<sup>2</sup>, YH Chiang<sup>2</sup>, Lennon HT Choy<sup>2</sup>, Eddie CM Hui<sup>2</sup>, and Stephen WK 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.*

## 1. EXECUTIVE SUMMARY

There was a GDP growth of 7.3% in Hong Kong in 2005. However, the construction industry did not benefit very much from the general economic recovery. The public housing programme was scaled back and there were few large-scale infrastructure projects and private building developments. Statistics show that for a five-year period between 2001 and 2005 in Hong Kong, the year 2005 saw the least amount of buildings completed, and the second least amount of buildings to build. Of all the \$90.9 billion (all dollars in HK\$ unless otherwise stated hereinafter) of works completed, the proportions of residential buildings, non-residential buildings, civil engineering and repair & maintenance were 19%, 19%, 16% and 46% respectively. For a 12-year period between 1993 and 2005, the total construction activities peaked 1998 with a total contract value of \$170.8 billion. It started falling ever since. In 2005, the total contract value shrank to \$90.9 billion, which was only 53% of the total at its peak. There has been such a drastic reduction in new construction activities that in 2005, repair and maintenance represented 46% of the total value of construction contracts. Only seven years earlier in 1998, repair and maintenance took up 21% of the total. Consequently, in 2005, only 8% of the total employment of 3,373,200 was employed in the construction industry, down from the 9.4% in 2000. However, there were signs of recovery starting in 2006 as land sales improved. A total of \$9.1 billion of building works, and another \$127.7 billion of civil engineering works are on the drawing board.

The major sources of funds for construction and property firms in Hong Kong are the banks and the stock exchange. Hong Kong has had the highest proportion of its total loans in property lending

in the region. Ever since 1998Q3 more than 40% of all bank loans have consistently gone to property development and construction, and to residential mortgages. In 2005, about 42% of all the \$9,039 billion of bank loans were for property lending. There is mutual effect on the performance of the banking and property sectors. When property prices dropped, banks' profits also declined. The stock market in Hong Kong, like the banking sector, is also dominated by property firms. The market capitalization of all properties stocks ranged between 11% and 15% of the total for the period 2001–2005. In addition, all “consolidated enterprises” made up another 27% – 37%. Many “consolidated enterprises” are also heavily involved in property development and investment.

Hong Kong developers are among the largest, if not the largest, in the world in terms of market capitalization. They are also very profitable. They are far larger and more profitable than their construction counterparts. The largest developer (*Cheung Kong*) had an average market capitalization of \$142.2 billion, compared to the \$9.3 billion of the largest contractor (*China Overseas Land and Investment*). The five largest developers altogether had a total market capitalization of \$456.3 billion in 2005, or about 6% of the total capitalization of the stock market. The capital intensity has also led to a high barrier of entry to the property industry. The average return on capital employed (ROCE) among the developers is 8.4%, vis-à-vis the 5.3% of the contractors'. It appears that developers have made better use of their capital employed than contractors.

Though it has been said that the private sector incurs higher cost of capital than the public sector, the Hong Kong Government considers that it would be more than offset by the efficiencies and innovativeness of the private sector. Public private partnership is a long-term strategy that the Government has adopted. A full set of procedures is described in detailed in “*Serving the Community by Using the Private Sector: An Introductory Guide to Public Private Partnerships (PPPs)*”. Basically, it describes the many features usually found in PPP projects. In particular, it specifically states that: (1) The pre-qualification exercise should reduce the number of bidders to three or four, which should be enough to maintain competitive bidding. (2) The contract period should be somewhere between “a half and the whole of the useful life of the main assets”. One consideration of the contract duration is debt service. (3) Bids for PPP projects will incorporate inflation/deflation adjustments, and the prices are expressed on a net present value (NPV) basis. (4) The Government does not usually compensate shortlisted bidders for their costs incurred in their losing bids, nor offer assistance or guarantees. (5) The Government has had no tariff policy, apart from a tariffs adjustments mechanism that has been implemented following the Western

Harbour Tunnel. (6) The Government will require such usual protection mechanism as performance bonds, bank or parent company guarantees or warranties with subcontractors and a liquidated damages clause in the contract. (7) A Special Purpose Vehicle (SPV) will be required set up to own and manage the PPP project. (8) The rights and obligations of the government and the private partner are enforced through the legislation of Ordinances on a project by project basis. (9) There should be single point of responsibility within both the public and private parties for the two parties to communicate with each other. PPP is still at its infancy in Hong Kong, though The Cross-Harbour tunnel is the first major infrastructure built under the Build-Operate-Transfer approach in Asia. The most important factor of success of further privatisation is perhaps more about leadership than financial viability. Strong political leadership, clear policies and robust institutions are believed to be the key factors of privatisation success.

## 2. CONCLUSIONS

In the construction and property sectors, bank loans have been the major source of finance. However, it has been the objective of the Hong Kong Government to broaden and deepen the capital market and particularly the debt market. There has been an emerging market for the Hong Kong Exchange Fund Bills and Notes, and Mortgage-Backed securities. There is also an increasing trend of securitization of the tunnels and bridges initially, and rental properties more recently in the form of real estate investment trusts. There has been an increasing participation from high quality institutional investors as well as retail investors in the debt and securitized assets markets. As regards the capital market, the Hong Kong stock exchange has benefited from the listing of enterprises from China Mainland. China accounted for nearly 90% of all privatisation proceeds in the region in the four years up to 2005. The portion increased from 50% in the nineties when Indonesia and Malaysia were other major contributions. Much of the revenues have come from share sales in large state-owned enterprises in telecoms and energy (Kikeri and Kolo, 2005). The implication for Hong Kong is that there is enormous potential for the banking and financial sectors to grow to capitalize on the privatisation trends in China. In terms of total equity funds raised in 2005, Hong Kong ranks 4<sup>th</sup> in the world, after New York, London and Toronto. Hong Kong raised a total of US\$37.7 billion, some 42% of the US\$89.0 billion raised by the leader New York Stock Exchange, according to the World Federation of Exchanges. In 2005, the LinkREIT and the China Construction Bank were the largest initial public offerings (IPO) of their kinds in the world. Eventually, the construction and property sectors will benefit from a broader and deeper financial

sector. It is anticipated that the sectors will have better accessibility to capital markets, thus complementing their more traditional access to property and construction lending from the banking sector.

## 2. INDONESIA COUNTRY REPORT

ON

## FINANCING CONSTRUCTION

Prepared by:

National Construction Services Development Board (NCSDB)

Lembega Pengembangan Jasa Konstruksi Nasional (LPJKN)

AsiaConstruct 12 Team:

Sulistiyo Sidarto Mulyo<sup>1</sup>, Kamtomo Kadarsin<sup>2</sup>, and Dr. Ismeth Samsurizal Abidin<sup>3</sup>

<sup>1</sup> *Chairman NCSDB*

<sup>2</sup> *Research & Development NCSDB*

<sup>3</sup> *Senior Researcher Civil Engineering, Faculty of Engineering, University of Indonesia*

## 1. EXECUTIVE SUMMARY

The Indonesian economy continued to grow slowly between 1999–2004 following the 1997 Asia Economic crisis which affected all sectors in the region but is now considered to be in a stable state and on the path to growth at 6.5%. Identifying the appropriate sectors for investment, including the construction sector, is important as is the provision of key information on their need for funding and financing. Such investment is necessary for full economic development.

Amongst the various sectors of the economy the crisis of 1997–2000 caused the construction sector to suffer the most. However growth in the general economy, represented by GDP, responds positively to construction investment contributions. The importance of *construction driven economic development* provided the motive for defining and identifying the needs, strategies, policies, processes, procedures for introducing key investments in construction (and other potentially benefiting sectors) and a recognition of the need for an efficient administrative and supervisory implementation framework.

Construction values by Class Group between the Years 2000–2004 based on IDR Trillion Year 2000 Constant Prices are shown in Table 1.1

	% Total Constr. Economy	% Rate of Growth	Size of Industry IDR Trillion	Ave Size p.a. IDR Trillion
Housing & Building	31.3	6.77	134.1	26.82
Transport Infrastructure	40.3	6.78	172.8	34.55
Other Construction	28.4	6.78	121.6	24.36

Table 1.1 Construction Industry Parameters

Analysis of how Housing & Other Buildings investment is related to GDP growth became the basis for deeper investigation into the role of and need for investment in Housing–Settlements and Infrastructure and other sectors and how it affects economic development including the general welfare of the medium to low income population.

A study of the sources of funds and financing from domestic government and public and private sources including foreign loans and others, illustrated the need to understand the reasons for the decreasing investment from international and domestic fiscal and private sources of capital in the Housing–Settlement and Infrastructure sectors. This led to a search for those alternative schemes and strategies which might attract capital investment initially for the two high priority Housing–Settlement and Infrastructure sectors which have *construction driven economic development* potential.

Potential new and growing sources of high value creative investment in Housing–Settlement, Infrastructure and other related sectors are available domestically, but experience in Chile, Malaysia and other successful countries indicates the need for Indonesia to adopt many major reforms and improvements before such domestic sources could become practical and readily available so as to achieve the desired objectives and goals of investment.

To achieve financing investment led development in the public and private sectors there is a need for a funds and financing operational framework embodying functions for creating, reviewing, updating, implementing and enforcing the various policies and regulations, mobilizing funds including insurance guarantees, risk management sharing, financial indicators utilization and maintenance of the responsibilities of the parties and stakeholders.

The conclusion was that additional research and studies were required to discover how to best apply lessons learnt from the project funding and financing framework applied initially to Housing–Settlement and Infrastructure, before launching investments from new potential domestic sources into other sectors on a nationwide basis. Such efforts would then be capable of attracting back the foreign investors and attracting new domestic sources of investment currently constrained by the many risk factors prevailing in the country due to the after effects of the political and social instability of a nation in transition from an authoritarian to a democratic state. Constraints include lack of enforcement of law and order, excessive labour problems, lack of good governance and low security.

## **2. CONCLUSIONS**

The Indonesian economy at present is in its most stable state since the crisis of 1997–2000 with growth in all sectors on average rising by 5.54% except for mining. External uncertainties such as fluctuating oil prices, energy and non-competitive sectors however still affect material price rises causing increases in the unemployment rate and a downturn in the overall balance of payments. Although negative effects will continue, the rate of economic growth is forecast to continue to grow from 6.1% to 6.5% at the end of 2006 showing continuing sustained growth in the key sectors of the economy including in particular the construction, agriculture, manufacturing and services sectors.

The Construction sector will continue to pick up from an average sector growth contribution to the economy of 6.22% pa. between 2000–2004 to a higher figure of 8.17% in 2004 ending with an actual contribution to the economy of 6.29% in 2004. For the 2002 – 04 period Total Construction grew 6.77% pa. with average growth for Housing & Buildings of 6.77%, Roads Bridges Railways and Bus Terminal 6.78% and Other Construction 6.78%.

### 3. JAPAN COUNTRY REPORT

ON

### FINANCING CONSTRUCTION

Prepared by:

Research Institute of Construction & Economy



Editor: Kazushige Ishida (Executive Director)

Co-Editor: Yoshitaka Koshimura (Researcher)

Authors: Hiroki Kawata (Senior Researcher), Yoshitak

## **1. EXECUTIVE SUMMARY**

### **1.1 Macroeconomic Overview**

The Japanese economy has broken away from the deflation that gripped the country since the 1990s. The FY2005 real economic growth rate showed strong 3.2% growth on expanding exports induced by a robust economic situation outside Japan. The future of the Japanese economy can be expected to continue growing steadily, supported by solid private-sector demand. The FY2006 real economic growth rate is expected to be 2.2%, pulled up by relatively favorable private-sector demand.

### **1.2 Trends in the Construction Industry**

Construction investment in FY2005 made a year-on-year gain for the first time in nine years, increasing 1.8% to ¥53.46 trillion. This was due to a significant increase of 4.9% from the previous year in private-sector works and construction investment despite a decrease in public construction investment. Construction investment in FY2006 is expected to turn downward after the previous year's increase, falling by 1.3% from the year before to ¥52.78 trillion. This is due to a forecasted 9.3% drop in public construction investment—the eighth-consecutive year of declines—although private-sector investment is expected to increase steadily.

### **1.3 Investment Opportunities**

In July 2005, the Research Institute of Construction and Economy (RICE) made a forecast for construction investment in Japan for four scenarios, supposing an annual 1.5% increase in Japan's GDP growth rate from FY2006 to FY2010. The forecast for FY2010 put overall construction

investment between ¥46.9 trillion and ¥51.5 trillion, of which private-sector building works accounted for between ¥26.5 trillion and ¥27.4 trillion. Compared to the FY2003 performance (overall construction investment of ¥55.2 trillion, private-sector building works investment of ¥26.4 trillion, private-sector residential investment of ¥18.4 trillion, and private-sector non-residential [building] investment of ¥8.0 trillion), the forecasted figures for FY2010 will result in a decrease in overall construction investment of between 6.6 % and 15.0% but an increase in private-sector building works of between 0.6% and 4.1%.

#### **1.4 Frameworks for PPP/PFI**

Private finance initiative (PFI) projects in Japan are typically conducted using the build-transfer-operate (BTO) scheme, which presents no risks to the private-sector operator, while the BOT scheme is employed relatively less often. The concession system, in which the private-sector operator carries a considerable operational risk, is rare.

#### **1.5 Future Development of Construction Financing and Conclusion**

The huge amount of bad debt in the financial sector that appeared with the bursting of the bubble economy in the early 1990s has been decreasing steadily. Moreover, the considerable amount of interest-bearing indebtedness held by major and second-tier construction companies has also been decreasing steadily through debt forgiveness measures implemented by financial institutions as well as increases in private-sector demand sparked by economic recovery. Corporate reorganization has also moved forward, especially at second-tier construction companies. Construction finance in the future is expected to gradually pull out of the disposal of debt stage and enter a new phase. Reforms taking place in financial institutions and trends in the public construction market are continuing to become entwined, and will likely move in the direction of a more influential private sector.

Sources of funds for construction works completed divided between the central budget (APBN) 32.22%, local government (APBD) 23.11%, foreign loans 22.95%, State companies 6.54%, and from other sources 15.18%.

New accounting standards in Local Government and new Fiscal Decentralization policies will need wise monitoring and control in order to contribute to achieving the valuable National Housing–Settlements & Infrastructure Construction Driven Economic Development Objectives.

Experience of the reduction of funds from foreign sources to developing countries between 1986–1995 indicates the need for new sourcing of funds for country development. Experience in Chile and Malaysia of the seeking of funds from domestic sources with strong

## **2 . CONCLUSIONS**

The privatization of public construction projects has made striking progress in recent years through the privatization of project implementing bodies (including the transformation of public corporations into joint–stock corporations and independent administrative institutions) as well as the privatization of project methods (including the adoption of the PFI scheme). In the future, the challenge will be to smoothly operate these systems and make them firmly established.

Construction companies in Japan typically rely on financing from banks for project funds. This framework is not expected to change drastically in the future. However, the diversification of financing of related businesses, such as development projects, will likely make headway, including in the form of securitization.

In the long–term, it is possible that Japan’s major construction companies may change their business portfolios. Also, it is conceivable that the financial environment surrounding construction companies could change in the future. Accordingly, attention must continue to be paid to the relationship between construction and finance, both from a domestic and international perspective.

# 4. KOREA COUNTRY REPORT

## ON

### FINANCING CONSTRUCTION

Prepared by:

Korea Research Institute for Human Settlements

Author: Jae-Yoon Yoo, Research Fellow

#### 1. EXECUTIVE SUMMARY

The Korean economy in 2006 is projected to post a growth rate of around 5 percent with enhanced domestic economic activities despite rising uncertainties such as high oil prices and volatility in foreign exchange rates. **Assuming GDP growth rate of 4%~6%, gov't budget for SOC development is an average of 2.4% of GDP. Total estimated government investment amount for SOC development between 2001~2010 is 159.2~180.4 trillion won which is 16~18 trillion annually.**

The Cheonan-Nonsan Highway project was chosen as a case study. The Cheonan-Nonsan Highway was constructed during 1997~2002. The total length of the highway is 80.96 km. The total expenditure of the highway project was about 1,158.9 billion won (about 1.45billion dollars). Internal Rate of Return (IRR) of the project is estimated to be 9.24%.

Introduction of PPI complements the reduction in the SOC investment by the fiscal budget. Minimum Revenue Guarantee System contributes to the vitalization of PPI, however, the system brings about in the fiscal outflows. In the sense that the main purpose of PPI is to reduce the fiscal burden, the excessive fiscal support by MRG is not desirable. To mitigate the problems, the system has been much improved to rationalize the MRG system, strengthen the competition, etc.

While the budget for SOC has been decreasing, still there is a need to invest in SOC to improve the nation's competitive advantage. Under this situation, PPI has become a very important tool to finance SOC investments. However, more selective and efficient investments should be required because the objectives of PPI are introducing efficiency and saving fiscal resources.

## **6. CONCLUSIONS**

While the budget for SOC has been decreasing, still there is a need to invest in SOC to improve the nation's competitive advantage. Under this situation, PPI has become a very important tool to finance SOC investments. However, more selective and efficient investments should be required because the objectives of PPI are introducing efficiency and saving fiscal resources.

In the near future, the market for PPI will change into the more rational and competitive market by improving transparency in the process and introducing qualification test through Value for Money (VFM). As a result, the project implementation terms such as minimum revenue guarantee, IRR, construction costs will be rationalized. The role of the private part in PPI will be increased, that is, under the new circumstances the private investors will improve their creativity through the selection and the development of the best methods and the terms of the project implementation. The medium sized enterprises, financial institutes, and the specialized operation companies will participate to the PPI market, as the various project types and BTL project methods are introduced to the market.