A Report

HKUST Forum on the Future Development of Hong Kong

May-July 2002

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EXECUTIVE SUMMARY

1. Background

Hong Kong has experienced momentous economic changes since 1997. While its daily lifestyle and business operations have continued smoothly after the return to Chinese sovereignty, the transition to a knowledge-based economy in the globalization era has been stormy. The Asian financial crisis, bursting of the dotcom bubble, world economic downturn, and 911 terrorist attacks have all dealt heavy blows to the Hong Kong economy. By mid-2002, the unemployment rate had reached more than 7%. Are the economic ills now confronting Hong Kong transient, or, are they symptoms of larger and longer problems to come? How can the HKSAR Government and community strengthen Hong Kong’s economic future? In search of possible solutions, we felt there was a need for wide discussion among experts and leaders of the Hong Kong community. This was the motivation for the “HKUST Forum on the Future Development of Hong Kong”, conducted over three sessions from May to July 2002.

2. Program

The first Session of the HKUST Forum examined the re-positioning of Hong Kong in relation to the Pearl River Delta (PRD) and beyond. At the Session, four separate expert panels discussed the major issues facing manufacturing, services, logistics and infrastructure, and jobs and human resources. The second Session examined the impact of innovation and entrepreneurship in a knowledge-based economy, offering both global and local perspectives. The third Session explored the HKSAR Government’s role in the economy and concentrated on the policy and action that the Government can and should take.

3. Report

The three Sessions drew insightful presentations from leading members of the business sector, public organizations and academia. The events attracted wide-ranging participation from different sectors of the community and sparked enthusiastic exchanges between speakers and the audience. A summary of the important issues and major recommendations is given in Part I of this Report. Details of each Session are given in Part II.

4. Myths and Misconceptions

The majority view among Forum participants was that the SAR’s economic problems have certain internal causes that are not economic per se. They relate to some myths, misconceptions, and the mind-set of society and the HKSAR Government. Such economic myths or misconceptions developed during colonial days and continue to hold widespread currency in the community and overseas. The idea that Hong Kong is a “laissez-faire” society is a myth because the Hong Kong Government always controlled many crucial parts of the economy, including land supply, housing policy and exchange rates. The “open market” is a myth because many sectors, such as banking and telecommunications, are dominated by cartels. The perception that “Hong Kong can no longer engage in manufacturing” is a myth since many existing service industries are directly linked to the manufacturing value chain. Such myths have been and still can be used as justifications for inaction and, therefore, need to be dispelled.

These hidden causes have weakened Hong Kong’s ability to cope with external challenges, both now and in the future. Before effective action can be taken, Hong Kong must clearly understand these causes, which are integral parts of the reality of Hong
Kong. The Government and the community must face reality if they are to tackle issues essential to Hong Kong’s future development.

5. **New Reality**

The competitiveness of Hong Kong has been plainly threatened due to the following factors:

- Hong Kong’s traditional “gateway” advantage in relation to the Chinese Mainland is rapidly eroding, with the aggressive growth of coastal cities in the Chinese Mainland creating keen competition;

- High business costs have made Hong Kong less competitive in many sectors;

- The effects of both technological advances and globalization have further squeezed “middle-man” trade, the mainstay of Hong Kong business;

- A knowledge economy requires high-quality education and technological capabilities, but both are weak in Hong Kong due to decades of neglect;

- Inadequate understanding of the role of technology has led to rejection and defeatism in Hong Kong in the midst of rapid technological progress among other competing cities;

- The myths surrounding Hong Kong’s economy have become excuses for bureaucratic ineptitude;

- Misconceptions about “one country, two systems” have isolated Hong Kong from meaningful cooperation with the Chinese Mainland;

- A mismatch of human resources has aggravated the unemployment problem in Hong Kong;

- The SAR appears to be losing ground in the new era judging by its competitive strategy and lack of concerted action plans.

6. **Unemployment**

The rising unemployment rate has highlighted Hong Kong’s human resources dilemma. The SAR faces a dual predicament in unemployment. Lower-educated workers are losing jobs due to the “hollowing out” of manufacturing production in Hong Kong. Meanwhile, technology businesses are losing competitiveness due to a shortage of higher-educated workers and the inhospitable business environment. This problem is not likely to be alleviated in the near term. While the HKSAR Government is trying to help the unemployed to find jobs, it must also help business to gain sustainability. The economic base of Hong Kong, currently over 85% in the service sector, is narrow and thus options available are limited. Concerted and proactive efforts to create a conducive business environment, renovate programs in human resources development, enhance R&D, encourage entrepreneurship and others need to be implemented quickly.

7. **Pearl River Delta**

It has become increasingly clear that the PRD is an important asset for Hong Kong’s economic future. The people in this region share the same culture, history, language, lifestyle, family and social networks. By collaborating in manufacturing and business over the past 20 years, Hong Kong and the PRD have achieved remarkable prosperity together. However, many social and economic changes have occurred on both sides in
the past decade. Guangzhou, Shenzhen, Dongguan, Zhuhai and Nansha all want to assume an assertive role. Thus, it is essential to re-examine the position, re-formulate strategy, and enhance synergy for a mutually beneficial future. A common vision for this region to become the “Dragon Head” of South China should be actively pursued and implemented. However, despite Hong Kong’s return to Chinese sovereignty under the premise of “one country”, government collaboration between the two sides after 1997 has not progressed sufficiently to resolve many problems related to vital interests. Delays in improving border controls and the immigration of talented people have hampered the flow of people, goods, capital and technology, and are becoming detrimental to the business and economic development of the region. The “two systems” framework has often been cited as a barrier in these matters. This should not be the case since the European Community, which operates under a “many countries, many systems” framework, is virtually border-less. These are urgent issues and the Government should take decisive and prompt action.

8. R&D and Innovation

R&D and an innovation system have proven to be instrumental to the development of knowledge-based economies in many parts of the world. Yet there have been lingering misconceptions in Hong Kong about the usefulness of technology and whether, and how, it can assist economic development here. The summary on Session 2 illustrates how Israel, India and Taiwan have achieved remarkable economic progress within a decade through pursuing R&D and nurturing high-tech businesses in specific segments. These economies have learnt from the experiences of advanced countries while building their own human resources and technology capacity. The summary also examines the success of Silicon Valley as a role model for innovation and entrepreneurship over half a century. Attention is given to Boston, which has emerged as a center of cutting-edge biotechnology despite having little pharmaceutical history. The success factors of these techno-poles and the roots of high-tech industry and their relevance to Hong Kong are outlined. In the past three years, some programs to improve Hong Kong’s R&D and innovation have been initiated by the Government. Support for university-industry collaborations has increased but still remains at a low level. The venture capital market, strongly affected by the world economic downturn, has diminished and severely damaged local technology entrepreneurs. Thus government programs to boost R&D and innovation should be further strengthened. Equally, if not more importantly, the Government must focus on improving implementation to achieve policy objectives. It should empower and motivate universities and technology entrepreneurs to pursue scientific research, technology development and innovation commercialization instead of stifling their interest and creativity with bureaucracy and micro-management. At the same time, the innovation system in Hong Kong needs to be thoroughly examined and the mission and accountability of various institutional players established.

9. Education

The current education system is out of step with the trends of technological advance and globalization. Hong Kong students are not even properly equipped to seek job opportunities in the PRD, as they lack both proficiency in Putonghua and cultural understanding of the Chinese Mainland. While quality education is described as a top government policy, education reform is at risk due to the budget deficit. Important initiatives such as the conversion from three- to four-year undergraduate education, support for universities seeking excellence in research and development, reforms on primary and secondary education, and the like, have often been discussed but soon discarded. The scheme to immigrate talent from China has plainly been ineffective. While Hong Kong takes pride in its wealth as indicated by a per capita GDP similar to OECD countries, its investment in education and R&D ranks in the lowest quartile of developed and developing economies. Yet, HKSAR’s fortune is not limited to its present resources; nor is it burdened with a national defense budget. Thus the Government must work diligently to examine its cost structure, reduce waste and simplify and streamline all its
operating units. It is understood that the accountability principle applies to all government sectors including budgeting, financing, education and technology development. But accountability does not come automatically. It builds on commitment, clear goals and verifiable action.

10. Public Support

Public participation in the formation of policy is one of the foundations of democracy. The Hong Kong community has increasingly demonstrated a willingness to participate in meaningful and substantial discussion with the Government on issues that influence its life and future. Through a process of genuine exchanges of views and deliberations, the community can recognize its role, accept its responsibilities and rally behind the Administration. The past practice of reliance on reports prepared by overseas consultants and superficial local concurrence will not be easily accepted as local expertise grows and community interest in public policy increases. The Chief Executive has advocated innovation and entrepreneurship for Hong Kong’s future. This must also encompass the Government and governance processes.

11. New Vision

Hong Kong cannot compete in the new economic era using its traditional strategy. Hong Kong’s future competitiveness should be based on a new vision and business model. The key elements are:

- Positioning HK/PRD as a world-class techno-economic region and “Dragon Head” of South China;
- Developing Hong Kong into a world-class city offering quality living, not just a center for finance and trade;
- Leveraging on the strengths of Hong Kong and the PRD;
- Creating value as a competitive advantage by exploiting the overlapping service and manufacturing sectors;
- Advancing Hong Kong at the high end of the manufacturing value chain: product and process design, market analysis and services, and creation of intellectual property;
- Building an efficient infrastructure and logistics system in air, land and sea transportation to make Hong Kong/PRD the premier gateway for South China;
- Developing a talented and entrepreneurial workforce with a global perspective;
- Providing an environment for the development of technology and innovation.

The Government needs to portray itself as a government with a vision, not one simply fighting fires. The public wants to be inspired by a proactive government that supports its vision with concerted action.

12. Competitiveness

With a new vision in place, the HKSAR Government needs to collaborate with the local business and academic communities on a strategic review and planning process for Hong Kong. The review should cover all key sectors including: advanced manufacturing, services (financial, professional retailing, trading, tourism), infrastructure and logistics. To promote related business development, support structures (database, market information,
trade associations, testing, qualification and certification centers, etc) should be established. Since resources are limited and competition keen, it is important to select certain areas as the focus for development. Strategic action to enhance creativity, technology, management and globalization culture should be nurtured. Programs that the community has long said are necessary, such as streamlining border controls between HK/PRD for passengers and commerce; improving transport links between the airport, city and many points in the PRD; establishing HK/PRD regional tourist attractions; enhancing training for all service personnel and others should be quickly implemented. Major programs such as building a Macau/Guangdong/Hong Kong bridge, planning a regional logistics hub, the mergers of the KCRC and MTR and the two utility companies, should receive higher priority for review given their impact on the overall competitiveness of Hong Kong and the region. Government policy and programs in education and manpower, business development, commerce, industry and technology, housing and land, economic development and labor, environment and transport, health and welfare, financial services and treasury must be orchestrated. This exercise will enhance the role of the Government as a planner, facilitator, integrator, enabler and, above all, leader of the society. Thus, it will strengthen the overall competitiveness of Hong Kong.

13. Commitment

The Forum has highlighted the difficulties the Hong Kong community faces. It has also recognized that hard times are often accompanied by opportunities. Entrepreneurial and innovative individuals and institutions can uncover and seize these opportunities. By taking prompt and responsible action, they will be handsomely rewarded. Thus Hong Kong must abandon the colonial mind-set that looks to developed countries for new concepts and as the source of innovation. It should continue to strengthen its commitment to nurturing innovation and technology, and foster the ability to chart its own destiny.

14. Way Forward

The Forum covered many facets of Hong Kong’s future development. The issues and recommendations contained in this report need to be examined. There are 14 recommendations on Economic Integration with the Pearl River Delta, 12 on R&D and Innovation, nine on Education, 13 on Competitiveness and five on Vision. We recommend a thorough reading of the session summaries below for their context. At this stage, all recommendations made are mainly conceptual and serve only, as a reference for the Government and the business community. Implementation will require detailed study and analysis. HKUST would be pleased to collaborate on follow-up studies and further planning.

All subject matter and conclusions in this report are derived from the panelists, speakers and the audience. The Session Chairs, as authors of the report, take responsibility for the accuracy of the presentation.
ISSUES AND RECOMMENDATIONS

MAJOR ISSUES

1. Economic Background

The current economic crisis is not a unique phenomenon in Hong Kong. However, the circumstances in which the community faces this downturn have altered dramatically both locally and globally from previous crises in the 1970s and 1980s.

Hong Kong must now take into account:

- Its changed relationship with the Chinese Mainland since the change of sovereignty in 1997;
- The effect of globalization on the world economy and Hong Kong’s own competitiveness;
- The growth of Shanghai and other regions in the Chinese Mainland that offers direct competition to Hong Kong at lower cost;
- The impact of the Chinese Mainland’s accession to WTO;
- The community’s lack of preparation for developing a knowledge economy;
- A mismatch of the human resources available and those required, and an unemployment rate approaching 8%;
- The impact of Hong Kong’s isolationist mentality on future economic integration with the South China region, particularly the Pearl River Delta.

1.1 Hong Kong economic myths

To position Hong Kong correctly for its future development, various myths about the economy must be dispelled.

1.1.1 Myth 1: Hong Kong operates on a laissez-faire economic basis

Hong Kong is not a laissez-faire society because the former Hong Kong Government and current HKSAR Government dictate a crucial part of the economy: land. There has never been free allocation of resources in Hong Kong because the Government has always monopolized land.

1.1.2 Myth 2: There is a competitive market in Hong Kong

Despite the popular view that Hong Kong is alive with competition, industries have been dominated by particular firms, for example, the banking cartel.

1.1.3 Myth 3: The HKSAR Government does not interfere in the economy

The Government now and in the past has intervened considerably. Examples include control of land supply and public housing policy.

1.1.4 Myth 4: Hong Kong no longer has any manufacturing

Although Hong Kong’s relationship with manufacturing has changed, a recent survey found about 40% of Hong Kong’s GDP dependent on manufacturing and manufacturing services. The misconception about manufacturing prevails because companies within the sector tend to be relatively small, unlisted and not included in statistical studies or analyses.
1.2 Structural problems

Over the years these prevalent myths about the Hong Kong economy have obscured the economic reality in which Hong Kong operates and which decision makers must take into account when setting policy. They have played their part in creating the current structural difficulties facing the community.

1.2.1 Over-dependence on land sales and the property sector for revenue. Once the property sector declined, decrease in revenues was inevitable.

1.2.2 When Hong Kong manufacturers decided to move their production base to the Chinese hinterland, rather than upgrade their capabilities in Hong Kong, they created an economy over-reliant on the service sector, which now accounts for 86% of Hong Kong’s GDP.

1.2.3 Industrial policy-making has traditionally been limited in Hong Kong. The lack of coordinated preparation for the high-tech economy, in terms of education, training and manpower, R&D investment, and identification of core industries, has left Hong Kong far behind other economies.

1.2.4 The Government has abrogated responsibility for nurturing competitiveness because of local politics before and after the handover. The lack of interest in innovation and technology may have led to an over-indulgence of older businesses and not enough encouragement of new and emerging businesses.

2. Economic Integration with the Pearl River Delta (PRD)

Hong Kong manufacturers have engaged in economic activities in the Pearl River Delta (PRD) for more than 20 years. But greater economic integration of Hong Kong with the PRD is urgently needed. The urgency relates to the challenge from other fast-rising regions in the Chinese Mainland, particularly Shanghai and the Yangtze River Delta. Shanghai has established itself as the leader of Central China and is drawing new business investment away from the PRD. Hong Kong needs to abandon its isolationist mentality, see its location as an economic strength and take up a leadership role for the PRD and South China. If Hong Kong does not take up this role very soon, cities such as Zhuhai and Shenzhen will push forward on their own.

2.1 The border

One of the most serious problems is the border, where flows of people, goods, capital and technology are being held up by lack of coordination. Decision making is slow in this regard, yet this is a very serious problem that needs to be resolved quickly. It is now five years since the handover and the border is still not open 24 hours a day. The whole situation has increased the cost of doing business and is detrimental to Hong Kong’s future competitive advantage.

2.2 Infrastructure

Better physical links to the PRD are a key element in economic integration. One proposal is to build a bridge to link Zhuhai/Macau with the Hong Kong International Airport at Chek Lap Kok. The idea was first proposed by local industrialists about five years ago and shelved by the Government until 2020. Changing economic conditions demand timely reconsideration of this proposal. The bridge, together with deep water berths in Western Lantau, is considered by its proponents to have the potential to make Hong Kong the logistics center of the PRD for decades. It is also believed that the bridge could serve as a gateway encouraging goods from Western
China to be trucked to Hong Kong and the PRD rather than relying on the Yangtze River Delta and Shanghai.

3. **R&D and the Role of High-Tech Industry in the Economy**

There is a general lack of understanding as to what the knowledge-based economy means in the Hong Kong context and how Hong Kong people can best equip themselves to successfully participate in it. The community and the Government need to be able to recognize and cultivate the roots of high-tech enterprise: knowledge, capital, leadership and human, infrastructure and networking resources. One common perception is that Hong Kong can buy in the technology it requires rather than spend money on developing its own. This overlooks the important role R&D plays in giving industries competitive advantage through new breakthroughs and fostering a creative culture that prepares people mentally for the challenges of the modern economy.

3.1 **Misconceptions about the high-tech economy**

It is often thought that scientific research will automatically lead to high-tech industries. But there are many additional steps to take to move from research to commercialization. These are basic research, applied research, product development, process development, pilot production, marketing, distribution and sales, and post-sales services. The process generally requires the cooperation of four institutional players: universities, technology-developing institutes, government to provide the supportive environment, and business and industry to implement the transition.

3.2 **Innovation and technology challenges facing Hong Kong**

Hong Kong is a long way behind in developing the necessary environment for a flourishing knowledge-based economy. Human resources are seriously inadequate at present for rapid development of the high-tech economy. The Government has been reluctant to take the lead and pinpoint specific high-tech industries for development.

3.2.1 **Low public investment**

Currently, public investment in R&D is low—less than 1% of GDP—compared to other developed economies.

3.2.2 **Poor innovation/venture capital system**

Venture capital (VC) participation and efforts to channel private capital to high-tech businesses lag behind most competitive economies. Many high-tech start-ups are being jeopardized by the lack of second-round funding. Venture capital funds for technology start-ups and funds in support of technological upgrades for small and medium-sized enterprises should be expanded. The Innovation and Technology Fund (ITF) VC programs should be run by professionals who are experienced in mentoring start-ups.

3.2.3 **The Hong Kong mind-set**

Hong Kong is known for its entrepreneurial spirit but it needs to realize that to fully support innovation and technology this concept must be de-linked from the opportunistic, low-risk and quick-profit mentality of the past and re-attached to commitment.
There is also a reluctance to recognize local high-tech talent and too much dependence on overseas "brand names", making it even harder for high-tech companies to flourish.

3.2.4 Implementation of R&D programs

In the last three years, the Innovation and Technology Commission (ITC) has provided research funding to worthy programs to promote university research and university-industry collaborations. This is a good policy. However, ITC has refused to provide universities with overheads funding for effective program execution. Funding for overheads and indirect costs is included in research budgets in all advanced countries, such as the UK, US, Canada and EU member states. Universities in Hong Kong were in a quandary as they found it increasingly difficult to support the implementation of a well-intentioned policy. This is an incredible illustration of the HKSAR's bureaucracy. The March 2002 University Grants Committee (UGC) Report on Higher Education also specifically recommended: "That institutions should not use the UGC block grant to subsidize externally funded research, whether from private or public sources; and, as a corollary, that bodies funding research should accept their responsibility for funding research at full cost." Yet, this has fallen on deaf ears.

4. Human Resources

Rising unemployment is a serious problem in the HKSAR and there is little prospect of alleviating the situation in the short term. For the past 20 years Hong Kong has been experiencing the "hollowing out" effect brought about by the opening up of China and Hong Kong manufacturers moving production to the Chinese Mainland. At the same time, Hong Kong has seen great expansion of the highly skilled service sector. As a result, the community is facing the contradictory situation of growing unemployment among lower-educated workers who have lost jobs in manufacturing, and a shortage of highly educated workers.

The SAR faces an aging population due to high life expectancy and a shrinking workforce due to low fertility. The workforce has also been inadequately prepared for the new economic conditions because the education system is out of step with the needs of a knowledge economy. Although the Chinese Mainland economy is strong, many in the community lack the necessary language skills to look for employment across the border.

4.1 Education policy

For the past 30 years, the Hong Kong general education system has been geared to turning out technical professionals, not enterprising, innovative all-rounders, fuelling a shortage of people equipped to succeed in the new economic climate.

4.1.1 In the 1980s and 1990s when other locations were starting to move towards the concept of universal higher education to raise the overall education level of their workforce, Hong Kong higher education remained for an elite. By 2001, just 13.4 % of the population aged 15 and above had received a tertiary (degree and non-degree) education.

4.1.2 Overall investment in education remains too low. Hong Kong ranks 10 in global GDP per capita but 42 in total overall public expenditure on education.

4.1.3 The Government's funding cuts for higher education are out of step with the development of a knowledge-based economy that depends on the human resources and research that higher education institutions produce. Many
Hong Kong universities have set out to provide the right human resources for a high-tech economy, but funding reductions are hampering their efforts.

4.1.4 Low-skilled workers need to undergo retraining and all-round education to prepare them for the ever-changing job market.

4.2 Importing talent

The fast pace of change and the economic difficulties Hong Kong now faces mean there is no time to wait for home-grown talent to fill the knowledge gaps in the economy.

4.2.1 Hong Kong should take after Singapore, Israel and the United States and welcome international talents, those from the Chinese Mainland in particular.

4.2.2 The present program for bringing talented people from the Chinese Mainland to Hong Kong is ineffective and needs to be reviewed.

4.2.3 A proactive immigration policy is the key to accelerating Hong Kong's drive towards a knowledge-based economy.

5. Hong Kong's Competitiveness

Business costs are high in Hong Kong given the land policy and the high wages that resulted from the boom in the 1980s and 1990s. Most service industries in Hong Kong now have to compete on the basis of value added to justify the additional expense in relation to other service providers in the PRD and elsewhere. Moreover, there is a lack of innovation in technology business to sharpen Hong Kong's competitive edge.

5.1 The HK/PRD business model

The previous business model for manufacturing ventures between Hong Kong and the PRD was based on Hong Kong undertaking sales, marketing and management, and the PRD doing the production. Rising capabilities in Guangdong are now putting this model to the test, placing further pressure on Hong Kong jobs.

Hong Kong firms need to rapidly position themselves higher up the value chain to offer R&D, product and process design, logistics and supply chain management, and after-sales service. To increase competitiveness in these areas, firms should utilize technological innovations and advances, and work together with universities and technology-developing institutes.

5.2 Business practices

Business practices are not always conducive to competitiveness. For example, Hong Kong electricity costs are too high, which hinders developments in manufacturing, especially those with a high-tech component and high electricity demand.

5.3 Industrial policy-making

There is a lack of government leadership to encourage innovative business and technology. Although the Government has traditionally tried to avoid setting industrial policy and "picking winners", the Financial Secretary has now identified four core sectors of the economy to promote in the future:

- logistics;
- financial services;
- tourism;
- professional/producer services.
These are sound choices, as they stress Hong Kong's current and future comparative advantage. But they must be supported by concerted action. To achieve high productivity to pay Hong Kong wages and make profits, each must still be driven by technological and managerial innovation. Hong Kong needs R&D programs that reflect this awareness. Success stories in Silicon Valley show that innovation in technology is the main driving force behind major economic growth.

6. Vision and Future Direction

The public has a poor perception of the HKSAR Government's effectiveness. People blame the Government for the recession and expect it to "do something" to immediately solve the current problems. This is adding pressure to rush through policies without proper consideration. If not addressed, this demand for "instant results" will put heavy pressure on the new ministerial system.

6.1 Lack of vision and motivation

Public confidence is lacking and there needs to be more clarity over what Hong Kong can and should be achieving. The campaign to promote Hong Kong as "Asia's world city", for example, has been a lost opportunity to give people a shared vision of what they should be striving to create. Instead it has been presented as a fait accompli. To be a truly world-class city, Hong Kong needs more than its legal, government and business institutions, and international links. It requires:

- A clean environment;
- Modern housing and health-care facilities;
- A convenient transportation network;
- Excellent educational institutions;
- Rich cultural establishments;
- Excellent recreational, entertainment and sports programs.

People need to be motivated to work towards these ends, not handed yet another slogan.

6.2. Poor quality of public debate

There is a desperate need to move away from the way public policy is debated. Currently, discussions tend to be superficial and do not draw in the right variety of people. There needs to be more open discussion of the Government's role in the economy so that the community understands why action is necessary in certain areas and may not be in others; why some decisions can be made immediately and others require longer consideration.

6.3 Lack of knowledge about the Chinese Mainland

Although it is now more than five years since the political handover in 1997, there is still considerable psychological reluctance towards economic integration with the Chinese Mainland. A side effect of this reluctance is Hong Kong's lack of knowledge about the Chinese Mainland. Hong Kong needs to understand the Chinese Mainland's past and to be able to gauge its future in order to create the best strategy for Hong Kong's economic development. The drive to study "native" language should focus on "Chinese" literature and "Putonghua".

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MAIN RECOMMENDATIONS

1. Economic Integration with the Pearl River Delta

1.1 Pursue economic and technological cooperation between Hong Kong and the PRD as a high priority, set clear goals and assign accountability.

1.2 Set up a full-time think tank with deep understanding of Hong Kong and PRD industries to provide recommendations on technology and industrial policy for the future development of Hong Kong and the PRD.

1.3 The HKSAR Government should actively study ways to strengthen cooperation with PRD local governments. Major proposals:

1.3.1 Participate in building up Chinese Mainland ports and distribution centers;
1.3.2 Exchange ideas on the application of information technology to logistics;
1.3.3 Share Hong Kong’s best practices and management of international business;
1.3.4 Standardize both sides’ categorization and product coding systems.

1.4 Improve or remove border controls. The ease with which European Community members travel under a “multi-country, multi-system” framework is a good model for reference.

1.5 Improve flow of information and goods across the region. Hong Kong’s part in this process of standardization and centralization is best led by the HKSAR Government given the approval bodies and regulatory procedures involved:

1.5.1 Centralize and place online all information flows and customs procedures, including export license approvals;
1.5.2 Set up a direct Electronic Data Interchange (EDI) link with mainland customs authorities in the PRD;
1.5.3 Develop and use common software for both imports and exports;
1.5.4 Establish a joint SAR/mainland customs group at Chek Lap Kok Airport to expedite flow of goods between Hong Kong and PRD.

1.6 Set up a central government unit to pursue and oversee all PRD infrastructure and logistics projects to increase efficiency.

1.7 The recently approved Shenzhen-Hong Kong corridor link via Shekou to the proposed Route 10, together with proposals for a western link via Lantau, will enhance Hong Kong’s position in the PRD. These projects should be implemented quickly.

1.8 Re-examine the proposal for a bridge linking Zhuhai and Macau at one end and Chek Lap Kok Airport at the other.

2. Research and Development (R&D)

2.1 Several areas around the world offer examples of how innovation and entrepreneurship in technology can positively impact the economy:

2.1.1 Silicon Valley: leader in technology innovation and entrepreneurship for over 50 years. Success factors: high knowledge intensity, open business environment, high quality and mobile workforce, results-oriented meritocracy, climate that rewards risk-taking, proactive government policy.
2.1.2 **Taiwan:** transformation from low-level industrialization in 1970s through creation of high-tech industries and application of new technology to upgrade traditional industries. 
*Success factors:* good support for education and training, continuous technological development to remain at the cutting edge, government industrial policies focusing on strategic areas, effective technology transfer, support for SMEs.

2.1.3 **Israel:** Despite a difficult external environment, innovation and entrepreneurship have transformed the economy in the past decade. Total high-tech revenues accounted for more than 15% of the country’s GDP by 2000. 
*Success factors:* strong entrepreneurship, highly educated and creative workforce; multilingual population with good overseas links.

2.1.4 **India:** In just over a decade, the country has become the world capital in merchant software. In 2000-01, the software industry was worth over US$10 billion. 
*Success factors:* good human resources; reduction in taxes for IT; high quality products and visionary policy-making.

2.1.5 **Boston:** a leading biotech center in the United States with 250 biology-based companies (about 18% of US total), employing 28,000 people. 
*Success factors:* major overheads and research funding from the National Institutes of Health, strong university support, strategic alliances with pharmaceutical companies for product development, and a research infrastructure provided by medical clusters.

2.2 The HKSAR Government should provide universities with overheads funding to cover the full cost of implementing ITC and other related research programs, the same as private sponsors do.

2.3 Revise current regulations for IT research support and collaboration programs to simplify their implementation and also amend its stipulations on intellectual property rights and others.

2.4 Increase public investment in R&D activities and minimize red tape.

2.5 Encourage more private investment in technology firms and start-ups.

2.6 Clarify the roles, accountability and mechanisms of collaboration between various institutional players in Hong Kong’s innovation system.

2.7 Set a high-tech strategy for Hong Kong. Bring in local expertise from the business sector and universities to assist with strategy. The public should be made aware that time is running short to develop this side of the economy vis-à-vis competition.

2.8 Review and renovate existing policies, regulations and practices to foster a proactive environment conducive to innovation and entrepreneurship.

3. **Education and Human Resources**

3.1 Clarify direction and integrate goals of the Hong Kong education system at all levels compatible with the needs of the knowledge economy.

3.1.1 Upgrade primary and secondary education;
3.1.2 Re-think policy and allocation of resources to higher education;
3.1.3 Enhance continuing education.
3.2 The HKSAR Government, business and tertiary institutions should make concerted efforts to increase Hong Kong people’s knowledge of the Chinese Mainland and proficiency in Putonghua so they can take advantage of China's accession to WTO and expand Hong Kong’s role as a supplier of services to the mainland market.

3.3 Ease immigration policies to enable importation of talented professionals from the Chinese Mainland to help solve the current mismatch of skills in Hong Kong while homegrown talent is being developed.

3.3.1 Relax restrictions and simplify application procedures;
3.3.2 Shorten the decision-making period;
3.3.3 Communicate to the Hong Kong public the idea that importing expertise will not take jobs away but will fill knowledge gaps, stimulate the economy and lead to more employment for Hong Kong people.

3.4 Provide government funding and institutions to upgrade skills of less well-educated workers.

3.5 Set up a one-stop government resource center providing information on job openings and qualifications required, including those in the Mainland.

4. Competitiveness

4.1 Create programs to enhance creativity, technology, management skills and a global outlook in Hong Kong business and industry. The HKSAR Government should lead the way in fostering this business culture.

4.2 Introduce advanced manufacturing to Hong Kong focused on R&D, product and process design, supply chain management, customer services and green technologies.

4.3 The Government must take immediate action to build up the four key sectors it has identified: tourism, financial services, professional/producer services, and logistics. To facilitate these areas, it should:

4.3.1 Bring in the relevant local business people and academics involved in each area to identify what needs to be improved, what type of education is necessary and what technology is required to maintain and increase competitive advantage. Local consultants should be employed.

4.3.2 Institute systematic policies, together with well-planned projects, to raise productivity in these key areas.

4.4 Build up Hong Kong’s industrial support infrastructure by establishing or strengthening the following:

- Industrial databases;
- Technical and marketing information;
- Testing and product analysis;
- Trade associations;
- Qualification and certification centers.

4.5 Create a more transparent land policy. If particular types of economic activities are important to Hong Kong, put enough land on the market so that the price of land makes those economic activities viable in Hong Kong.

4.6 Take measures to improve efficiency and reduce business costs, such as the merger of the KCRC and MTR, and the two electricity companies.
4.7 The Hong Kong service sector must pursue excellence and high standards, flexibility and cross-cultural competence to capture the mainland service market in the wake of WTO. A multi-level approach should be taken to ensure all aspects are taken into account when planning strategy.

4.8 Boost tourism with a concerted package of measures to enhance Hong Kong's appeal and use expansion of the sector to create more jobs to help solve current high unemployment. Major proposals:

4.8.1 Develop regional tours including Hong Kong, the Pearl River Delta and mainland attractions.
4.8.2 Improve service quality of tour guides through provision of better training and qualifications related to subject knowledge, language proficiency and service attitude;
4.8.3 Develop more Hong Kong attractions, such as food streets, art galleries, etc.
4.8.4 Strengthen transport links between Chek Lap Kok and other parts of the city and the PRD, and price them attractively.
4.8.5 Simplify immigration and transfer procedures, and adopt a service rather than a control attitude.

5. Vision and Future Direction

5.1 Develop a common vision that sees the HKSAR as the "Dragon Head" of South China. This should be followed by strategic actions by both Hong Kong and the PRD to turn this vision into reality.

5.2 The HKSAR Government should make building Hong Kong into a really world-class city a policy goal and encourage the community to strive towards this goal. The idea of Hong Kong as a "world-class city" should not simply be used as a slogan.

5.3 Information must be shared, not controlled, to increase the standard and amount of community debate.

5.4 Many government officials need a change of mind-set. The idea of encouraging businesses to bring back low-value jobs from across the border should be abandoned. The creation of higher value jobs, and the people to staff them, must be the priority in order for Hong Kong to continue to play an intermediary role between China and the rest of the world.

5.5 Restore confidence and rally people to work for common goals through a large-scale project that really captures people's imagination. It does not have to be an infrastructure project, but may involve using intellectual capital to drive the economy forward.
SESSION SUMMARIES

SESSION 1  POSITIONING HONG KONG: PEARL RIVER DELTA AND BEYOND

29 May 2002  Hong Kong Convention and Exhibition Centre

Welcome Address  Prof Paul C W Chu
President, Hong Kong University of Science & Technology (HKUST)

Opening Address  The Hon Antony Leung
Financial Secretary, HKSAR

Introduction  Prof Otto C C Lin (Session Chairman)
Vice-President for Research & Development, HKUST

Panel 1  Manufacturing

Moderator:  Ms Marjorie Yang
Chairman, Esquel Group of Companies; Court Member, HKUST; Director of the Board, HKUST RandD Corp Ltd

Panelists:  Mr Jeffrey Lam
Deputy Chairman, Federation of Hong Kong Industries

Mr Raymond Leung
President, SAE Magnetics (HK) Ltd

Mr C D Tarn
CEO, Hong Kong Science & Technology Parks Corporation; Former Council Member, HKUST

Prof Mitchell Tseng
Director, Advanced Manufacturing Institute and Professor of Industrial Engineering and Engineering Management, HKUST

Panel 2  Services

Moderator:  Mr Philip Chen
Director & COO, Cathay Pacific Airways; Court Member & Council Vice-Chairman, HKUST

Panelists:  Mrs Selina Chow
Chairman, Hong Kong Tourism Board

Mr S C Liu
Managing Director, Pearl River-Hang Cheong Real Estate Consultants; Honorary Fellow, HKUST; MBA, HKUST; Director of the Board, HKUST RandD Corp Ltd

Mr Roger Luk
Managing Director & Deputy Chief Executive, Hang Seng Bank

Mr Michael Tien
Chairman, KCRC & The G2000 Group
Panel 3

Infrastructure and Logistics

Moderator: Sir Gordon Wu
Chairman, Hong Kong Port & Maritime Board; Former
Court Member, HKUST

Panelists: Prof Raymond Cheung
Associate Professor of Industrial Engineering and
Engineering Management, HKUST

Mr John Mullen
COO-Asia Pacific, DHL Worldwide Express

Mr Sin-Por Shiu
Executive Director,
One Country Two Systems Research Institute

Mr Cliff Sui
Chairman, Hong Kong Exporters' Association

Mr C C Tung
Chairman and CEO, Orient Overseas (International) Ltd

Panel 4

Jobs and Human Resources

Moderator: Dr Vincent Lo
Chairman, Shui On Holdings Ltd;
Court Member & Immediate Past Council Chairman,
HKUST

Panelists: Mr Philip Chok
Deputy Secretary for Education and Manpower,
HKSAR

Prof Francis Lui
Director, Center for Economic Development and
Professor of Economics, HKUST

Mr P O Mak
Senior Vice President–Human Resources, Asia Pacific,
GE Capital Asia Pacific

Mr Andrew Tsui
Managing Director,
Korn/Ferry International (Hong Kong) Ltd

Concluding Remarks
PANEL 1. MANUFACTURING

Moderator: Marjorie Yang, Chairman, Esquel Group of Companies
Panelists: Jeffrey Lam, Deputy Chairman, Federation of Hong Kong Industries
Raymond Leung, President, SAE Magnetics (HK) Ltd
C D Tam, CEO, Hong Kong Science & Technology Parks Corporation
Mitchell Tseng, Director, Advanced Manufacturing Institute and Professor of Industrial Engineering & Engineering Management, HKUST

Key Issues

1. In the past, Hong Kong's relationship with the Pearl River Delta (PRD) has worked on the basis of Hong Kong providing marketing, sales and management services and the PRD undertaking production. This successful business model is now being tested by the rising capabilities of Guangdong and the growing domestic market in the Chinese Mainland. How can the relationship between Hong Kong and the PRD be maintained and strengthened to mutual benefit in the future?

2. After the 1997 handover, the HKSAR has been very aware of upholding the "one country, two systems" political framework. Government collaboration between the PRD and Hong Kong has not progressed adequately to resolve many problems of vital interest to the growth of the Hong Kong economy. Delays over issues related to the border and the immigration of talented people have hampered the flow of people, goods, capital and technology. This is proving costly to Hong Kong and detrimental to the SAR's future competitive advantage.

3. Presently, manufacturers cannot focus on traditional manufacturing operations alone. They need to consider the entire value chain, including R&D, product and process design, logistics and supply chain management, and after-sales services. The Esquel Group, for instance, has extended its garment manufacturing activities to include merchandising and design, product and process development and research, and supply chain management. Higher values are generally associated with the two ends of the value chain. To upgrade from a "sunset" industry position, manufacturers need to utilize technological advances, position themselves in the value chain and interact productively with government, universities and institutes.

4. The PRD now accounts for over 32% of export values in China and leads all regions in the production of electronic products. Many manufacturing companies have world-class facilities. One example is SAE Magnetics, which manufactures magnetic recording heads for hard disk drives. It employs more than 20,000 people, and is actively seeking expansion into emerging technology markets. The major issues facing such companies are upgrading their technical capabilities and sourcing quality human resources.

5. Hong Kong has become a world city by serving as the hub of a global network related to manufacturing in the PRD and China. As the Chinese Mainland economy surges forward, some manufacturing companies in Hong Kong and the PRD are moving from being suppliers and original equipment manufacturers (OEMs) to original design manufacturers (ODMs) and original brand manufacturers (OBMS) in order to maintain their "value-added" position. To what extent can Hong Kong transform itself to a "City of Ideas" and provide even higher value links to major markets?

Major Recommendations

1. Actively pursue economic and technological cooperation between Hong Kong and Guangdong, Guangzhou and Shenzhen. Develop a common vision that sees Hong Kong and the PRD as the "Dragon Head" of South China. This should be followed by concerted, speedy and strategic action on both sides towards realization of this vision. Shanghai has already established itself as the leader of the Yangtze River Delta and is attracting new business investment away from South China.
2. Border controls should be rapidly improved, if not removed, to facilitate the flows of people, goods, capitals and technology and to give credence to the "one country, two systems" spirit. The HKSAR Government should recognize the seriousness of the problem, which has raised costs and created doubts in the business community. The ease of travel for European Union members under a "multi-country, multi-system" political framework should be taken as a point of reference.

3. Introduce advanced manufacturing to the Hong Kong community, focusing on R&D, product and process design, supply chain management, customer services and green technologies. Manufacturing creates tangible products and values and is an important source of jobs. In the knowledge-based economy, Hong Kong should position itself as a manufacturing center of technology products and intellectual properties.

4. Institute programs to foster creativity, technology, management skills and a global outlook for Hong Kong business and industry. The Government can play a leading role in fostering this business culture.

5. The transformation of manufacturing requires a constant supply of quality human resources. Government policies to upgrade secondary education, extend undergraduate studies from three to four years, differentiate the mission of universities, provide cost recovery to universities for supporting R&D programs, strategically plan R&D activities, enhance continuing education and the like, should be executed with vigor. The keywords for survival in the globalization era are flexibility, adaptability, enabling, agility and proactive.

6. Expand and proactively pursue venture capital (VC) funds for technology start-ups and funds to support technological upgrades for SMEs. VC participation and efforts to channel private capital into new or high-tech businesses in Hong Kong lag behind most competitive economies.

7. Establish or strengthen Hong Kong's industrial support infrastructure through industrial databases, technical marketing information, testing and product analysis, trade associations, and product qualification and certification centers.

8. Set up a full-time think tank with profound understanding of Hong Kong and PRD industry to provide recommendations on technology and industrial policy for the future development of Hong Kong and the PRD.

9. Hong Kong practices should be reviewed to ensure they are conducive to the development of industry and business. For example, electricity costs are too high in Hong Kong. This hinders the development of the manufacturing industry, especially companies with a high-tech component and high electricity demand.

Questions for Panel 1

1. Does business data support your thesis of flipping the value chain? If so, what are the implications for existing manufacturing assets and future development?

2. Could the Yangtze River Delta rival the PRD as a manufacturing center in the future? Could you compare the potential of these two Deltas?

3. Is it important to train engineers and workers to get up at 5am, walk the extra mile, and wholeheartedly serve their company and clients too?

4. What is Beijing’s stance on Hong Kong as a catalyst for the PRD? Is it considered a threat or is it welcomed?

5. People in the PRD are getting richer. Do you feel the costs of manufacturing will be competitive with other parts of the Chinese Mainland 10 years from now?
6. It seems more technology-based companies are going to Shanghai rather than Hong Kong or the PRD. What does that mean in terms of the PRD's competitiveness in technology and knowledge-intensive products vis-à-vis the Yangtze River Delta? How can Hong Kong and the PRD work together to improve the region's competitiveness in these products?

7. There is much talk about Hong Kong leveraging off the PRD and the "front office or shop/back factory" model. But China is also moving up the value-added chain. How will the PRD leverage off Hong Kong in the future and how might a new relationship between Hong Kong and the PRD be described?

8. What is the future position for traders? It seems more and more national corporations want to deal directly with foreign companies, and do not mind selling cheaper to direct overseas customers and higher to Hong Kong traders.

9. Hong Kong is transforming itself into a higher value-added and knowledge-based economy. What fate awaits the low-educated and unskilled citizens who make up the majority of the population?

10. "Made in Japan" is the brand for consumer electronics. "Made in Italy/France" is the brand for fashion. Is there any industry/service/product for which the brand "Made in HK" will be an advantage (excluding the financial market)?

11. There are not many high-tech manufacturing firms in Hong Kong and thousands of engineering students graduate every year with few job opportunities. Will this discourage talented Hong Kong students from pursuing engineering research and development?

12. How can we ensure that Hong Kong and the PRD become complementary partners and not quasi-competitors as they seem to be these days?

13. Some speakers mentioned creativity as the key to competitiveness. How do you develop creativity in terms of (i) recruitment, (ii) staff development and (iii) organizational culture-building?

14. What are the main stumbling blocks to Hong Kong becoming a city focused on the generation and execution of ideas?

15. What concrete measures can really encourage people's creativity and produce a "City of Ideas"?

16. Many Hong Kong manufacturers moved to the PRD to take advantage of lower costs (and some, lower regulatory standards). In some respects we are being repaid with regional air pollution, a main component being the emissions from power plants in cities and municipalities. Will those same Hong Kong owners participate and support a cleanup so that we can live in a decent environment?

17. We have heard stories about successful manufacturers thousands of times. We have had 64,000 opportunities to read the principles that lead to success. Yet nine out of 10 who have gone to the Mainland or PRD have failed for lack of know-how. Tell us the know-how.

18. With competition from PRD manufacturing companies increasing, do you see Hong Kong benefiting as a hub of support services for PRD companies (that is, banking, freight, legal services etc)? Is Hong Kong's competitiveness sustainable?

19. How can we get ITC to really help new technology start-up companies? The VC it provides is no better than a commercial bank loan.

20. What effect did elimination of the quota in 1995 have on your business? How has it affected your overall business plan and operation?
PANEL 2. SERVICES

Moderator: Philip Chen, Director & COO, Cathay Pacific Airways
Panelists: Selina Chow, Chairman, Hong Kong Tourism Board
S C Liu, Managing Director, Pearl River–Hang Cheong Real Estate Consultants
Roger Luk, Managing Director & Deputy Chief Executive, Hang Seng Bank
Michael Tien, Chairman, KCRC & The G2000 Group

Key Issues

1. Hong Kong has become a major service hub for Asia. Businesses and individuals expect Hong Kong to provide services with speed, efficiency, quality and high value added. In the past, geographical location and a market economy have been Hong Kong’s most significant advantages. However, these advantages are eroding. Many coastal cities in China are now positioned to compete and most are armed with proactive policy measures. On the clients’ side, there have been changes in interests, needs and priorities. How can Hong Kong adapt to the challenges and maintain its lead in the new environment?

2. Many services are export-oriented, which means they must be globally competitive. Others, such as tourism, legal or financial services, are consumed where they are produced and require a friendly, supportive and high-quality local environment. New York, for example, simultaneously serves as the nation’s financial center, the logistics center of the East Coast, and as a tourist and business center. It received 32 million visitors in 2001. The infrastructure, hardware and software, supporting New York as a premiere global service center is impressive. If Hong Kong is to adopt a similar position in China, it will have to improve its accessibility to world travelers, upgrade the cultural and entertainment environment, attract talented people to work here, provide investment opportunities, and build a service infrastructure that enables companies to make Hong Kong the center of their operations.

3. Technology has brought revolutionary changes to the way information is distributed and business conducted. It shortens the distance between producers/providers and consumers/end-users and compresses the window for the "middle-man". However, technology has also brought immense business opportunities in service products, markets, distribution and business models. How can Hong Kong take advantage of technology and develop an innovative and competitive edge for the future?

4. Business costs are high in Hong Kong. Most of the services produced in the SAR will have to compete on the basis of extra value added, setting service standards and providing consistent quality. Different service sectors will have to justify this premium in relation to other service providers in the PRD and elsewhere.

5. Hong Kong’s small and medium-sized enterprises (SMEs) have played different roles at various stages of the PRD’s development. At the outset SMEs acted as "navigators", identifying opportunities in the Chinese Mainland for Hong Kong and overseas investors. Later, SMEs became facilitators, serving the increasing service demand in the Chinese Mainland. As businesses matured, they became partners and collaborated with their PRD counterparts in projects to their mutual advantage. Examples of Hong Kong business involvement include Pearl River-Hang Cheong Real Estate Consultants, which over a period of 10 years helped develop real estate consultancy services in the PRD, and G2000, which leveraged Hong Kong management practices and training expertise to expand businesses in China. A strategic review is needed to identify the role Hong Kong can play in each business field.
Major Recommendations

1. To maintain Hong Kong's position as a service hub, a multiple approach is required: bring people in, enhance human resources, improve service values and build a world-class city. All these programs will help uphold Hong Kong's competitive advantage and create new employment opportunities.

2. Build on the excellent airport infrastructure to bring visitors to Hong Kong. Design tour packages integrating Hong Kong visits with the PRD and other Chinese Mainland attractions. Packages should be kept up to date and quality assured, and customer satisfaction increased through the use of modern communication technologies. Tour guides should be better trained and qualified in their subject knowledge, language proficiency and service attitude. Links from Chek Lap Kok Airport to various parts of the city and the PRD need to be strengthened and provided at a lower price. Immigration and transfer procedures ought to be simplified at all points, and employ a service rather than a control attitude.

3. Hong Kong's professional services sector should position itself to expand in the PRD and the rest of the Chinese Mainland, especially with China's accession to WTO. This will require understanding of China, language skills, good networking, adaptability and perseverance. The HKSAR Government, business community and tertiary education institutions must make a concerted effort to provide Hong Kong people with the necessary education and skills.

4. To capture the mainland service market, Hong Kong needs to set standards and provide consistent, high quality services. SAR service providers need to be flexible and innovative, quick to respond to markets, "think outside the box", and combine cross-cultural competence.

5. Make it a policy goal to turn Hong Kong into a world-class city. Such a city would have a fine environment, modern housing and health-care facilities, a convenient transportation network, excellent educational institutions, rich cultural establishments, and excellent recreational, entertainment and sports programs. If these are coupled with Hong Kong's traditional strengths of a sound legal system, protection of individual and business rights, transparent and responsible government services and internationalized culture, the SAR can become a world model of development.

Questions for Panel 2

1. To what extent could expanding airline fifth-freedom rights enhance Hong Kong as a service provider and service gateway to the Chinese Mainland?

2. Do you see Hong Kong service professionals, including designers and advertising people, moving to the Chinese Mainland, thereby "hollowing out" even Hong Kong's service sector?

3. Will HKUST establish itself in its own right as a tertiary educational establishment in the PRD? If not, why not?

4. A logistics development council promotes Hong Kong's logistics industry. To promote the tourist and retail industry, the quota for mainland tourists/visitors has been raised. Do you think it is equally important to set up a software development/promotion council to help Hong Kong's software industry?

5. If manufacturing relocates to cheaper areas of the Chinese Mainland, the PRD will need to move up the value chain just as Hong Kong has moved from manufacturing to services and high value-added activities. What will this mean for Hong Kong?
6. Customer service can be improved by training and education. How can innovation, "proactivity" and creativity be taught to the service sector to raise its "game"?

7. Services derive income from wealth and prosper with the growth of the economy. But Hong Kong’s economy is NOT doing well. What do you suggest to improve the economy?

8. Regarding the suggestions to create tourist products involving activities in both HK and the PRD: are there any successful examples of cross-border cooperation? What are the key impediments to cross-border cooperation?

9. I think capital is the key problem for SMEs. How can these companies, the HKSAR Government and banks help to solve this problem?

10. 香港不能不發展旅遊業而幫助經濟轉型，亦不能不吸納各種的人才。而一個良好的生活環境，對這兩個目標都起著決定性的作用。香港何不順勢發展環保工業？這個新興工業在附近地區在一段時期內不會有很多競爭對手，較容易取得突出的成績，而且可以增加本地區各階層的就業機會。

11. 最近有調查顯示港人北上消費是因為內地的服務質量較香港優勝，一改我們認為只是價格因素，究竟香港的服務業怎樣回應？政府在這方面（改善服務質素）的工作是否不足？另怎樣讓前線職員在工作壓力及工作量增加下仍保持優質的服務水準？
PANEL 3. INFRASTRUCTURE AND LOGISTICS

Moderator: Gordon Wu, Chairman, Hong Kong Port & Maritime Board
Panelists: Raymond Cheung, Associate Professor of Industrial Engineering and Engineering Management, HKUST
John Mullen, COO-Asia Pacific, DHL Worldwide Express
Sin-Por Shiu, Executive Director, One Country Two Systems Research Institute
Cliff Sun, Chairman, Hong Kong Exporters’ Association
C C Tung, Chairman & CEO, Orient Overseas (International) Ltd

Key Issues

1. Logistics accounts for more than 10% of Hong Kong’s GDP and offers consistent employment opportunities. In recent years, many PRD logistics facilities have experienced growth rates higher than Hong Kong. With more logistics centers planned in the PRD, there is great concern about Hong Kong’s ability to maintain a solid lead in logistics.

2. Opportunities for synergy exist among the various facilities in the region. Hong Kong and the PRD could increase their appeal to investors if the region becomes more efficient and provides a seamless supply chain to both its manufacturing base and onshore as well as offshore customers. Instead of emphasizing competition, the focus should be on how Hong Kong can work with individual PRD ports to create an even more vibrant region.

3. The PRD is growing rapidly in terms of industrial output. Since logistics is an important part of the value chain, it would be interesting to explore how Hong Kong could participate in the future development of the PRD logistics industry. Hong Kong should also look beyond the PRD to the central and western provinces of China, a region of huge potential growth.

4. There are many logistics problems at the operational level between Hong Kong and the PRD. Many people see the border and its controls as a major stumbling block causing worker dissatisfaction and high business costs. Additionally, Hong Kong and Chinese Mainland customs operate under two separate clearance systems with no electronic linkage. The ability to effectively “hub” between Hong Kong and the PRD will be limited until this issue is resolved.

5. After the 1997 handover, the HKSAR Government has held several discussions with the Guangdong Government aimed at closer economic collaboration between Hong Kong and the PRD. The public perception is that few concrete results have emerged. Has there really been a meeting of minds between the two sides?

Major Recommendations

1. Provide better physical links between Hong Kong and the PRD. The recently approved Shenzhen-Hong Kong corridor link via Shekou to the proposed Route 10, together with proposals for a western link via Lantau, can enhance Hong Kong’s position in relation to the PRD.

2. A bridge linking Zhuhai and Macau at one end and Chek Lap Kok Airport at the other, plus deep water berths in Western Lantau, could make Hong Kong the logistics center of the Pearl River Delta for years to come. Its proponents say such a bridge would also make the PRD more attractive to the Western Development Region of the Chinese Mainland as a gateway to the outside world. Products from Western China could be trucked to Hong Kong and the PRD instead of relying on the Yangtze River and Shanghai. The bridge proposal was made by local industrialists about five years ago and the
HKSAR Government put off a decision until 2020. Changing economic conditions in the last several years suggest the proposal should be reviewed again now.

3. Address cross-border bottlenecks between Hong Kong and Shenzhen. The number of operating kiosks should be increased, especially at Lok Ma Chau on the Hong Kong side. Road, sea links and customs procedures must be simplified to avoid delays and duplication of procedures.

4. The HKSAR Administration needs to actively study the many proposals aimed at enhancing cooperation between Hong Kong and PRD local governments for long-term mutual benefit. They include: participation in building up the Chinese Mainland's ports and distribution centers; exchanging ideas on the application of information technology to logistics; sharing Hong Kong's best practices and management of international business; and harmonizing both sides' product coding, categorization systems and customs platforms.

5. Across the region, all information flows and customs procedures, including export license approvals, should be centralized and placed online. There should be a direct Electronic Data Interchange (EDI) link with mainland customs authorities in the PRD. Common software should be developed and used for both imports and exports. Given the governmental rules and regulations and the approval bodies involved, such standardization and centralization is best led by the HKSAR Government.

6. Hong Kong and Chinese Mainland customs should work on a common platform to process clearance electronically; share a common database while ensuring individual customs system requirements are met; and establish a joint SAR/mainland customs group at Chek Lap Kok to expedite the flow of goods between Hong Kong and the PRD.

7. The HKSAR Government should set up a central unit to pursue and oversee PRD infrastructure and logistic projects. The effectiveness of these projects may suffer if left to different government units to handle.

8. To improve efficiency and reduce costs, the HKSAR Government should actively pursue the merger of the KCRC and the MTR, and the two electricity companies.

9. There is a great deal of synergy between Hong Kong and the PRD in logistics and infrastructure developments. Hong Kong's proximity to the PRD and Chinese Mainland is a great asset. To the PRD, Hong Kong is a valuable conduit to world capital, markets and technology. A common vision should be quickly established for the future development of the Hong Kong and PRD region.

Questions for Panel 3

1. What is the most appropriate way to decide which infrastructure projects need to be built, especially cross-border ones?

2. Why don't we consider merging the KCRC and MTR to achieve economies of scale, a better interchange, and to make more use of Hong Kong's limited resources? The two electricity companies should also be combined to raise the overall productivity of Hong Kong.

3. Freight costs from Xiamen Port to major overseas trading partners are currently higher than Hong Kong. Is there any reason to believe it will soon match or even overtake Hong Kong's competitiveness?

4. From both Hong Kong and the PRD's point of view, is it efficient (and feasible) to develop Nansha into a deep-water container port that serves ocean-going vessels? How will the cost of dredging shipping lanes to Nansha compare with the costs of building bridges to Macau and Zhuhai?
5. What does the panel see as the role of Nansha as a logistics hub for the PRD and a partner of Hong Kong?
   (i) How big will the threat of development in Nansha be in the next 10-15 years?
   (ii) Will Hong Kong's investments in Chinese Mainland ports contribute to Hong Kong's downfall as a logistics hub?

6. How are we going to compete with the Yangtze River Delta where Shanghai has been playing a leading role? By comparison, in the Pearl River Delta, different regions compete for leadership and there is also the cross-boundary factor, which does not exist in the Yangtze River Delta.

7. It appears that the HKSAR Government is making a major effort to shave seconds off a logistics transaction with the e-logistics initiative. Yet it refuses to deal with the highly inefficient mid-stream and public cargo-working area. Why?

8. I have heard that $600 billion worth of projects are coming in the next 14-15 years, yet it seems not much is going on. What is happening?

9. 台灣及大陸大三通會帶來甚麼影響？
PANEL 4. JOBS AND HUMAN RESOURCES

Moderator: Vincent Lo, Chairman, Shui On Holdings Ltd
Panelists: Philip Chok, Deputy Secretary for Education and Manpower, HKSAR
Francis Lui, Director, Center for Economic Development and Professor of Economics, HKUST
P O Mak, Senior Vice President–Human Resources, Asia Pacific, GE Capital Asia Pacific
Andrew Tsui, Managing Director, Korn/Ferry International (Hong Kong) Ltd

Key Issues

1. The SAR’s rising unemployment is a serious problem. Causes are complex and there seems little prospect to alleviate it in the short term. The Hong Kong economy is likely to remain depressed in the foreseeable future. However, in the past five years, economic growth in the Chinese Mainland, in general, and the PRD, in particular, has been robust. Thus it appears job opportunities will increasingly be found outside rather than inside the SAR. Are Hong Kong people ready for this change? Do they have the skill sets to pursue jobs in the PRD and Chinese Mainland?

2. Human resource development in Hong Kong is a cause for concern. A combination of low fertility and high life expectancy means Hong Kong faces the problem of a shrinking workforce and aging population. Per capita GDP may decline as a result, even though GDP per worker may not. With more elderly people, greater provision of medical and welfare services is likely to be necessary.

3. In 2001, only 13.4% of Hong Kong’s population aged 15 and above had received tertiary (both degree and non-degree) education. Although Hong Kong ranks 10 in GDP per capita (US$24,010) in the world, it ranks 42 in total public expenditure on education. Since 1997, the HKSAR has placed a higher priority on education, but public investment is still inadequate.

4. The “hollowing out” process caused by China’s developing economy has seen many low-skilled jobs in Hong Kong’s manufacturing sector disappear since the 1980s. At the same time, there has been rapid expansion of the highly skilled service sector. Thus Hong Kong has faced the contradictory situation of growing unemployment among lower-educated workers and a shortage of higher-educated workers.

Major Recommendations

1. Provide more funding for higher education to create a larger pool of manpower to fulfill the SAR’s future needs.

2. University graduates must deepen their knowledge of the Chinese Mainland, become multilingual (including fluent Putonghua), possess soft skills (vision, leadership, competencies), be highly IT-literate, look North and have international visibility to be able to compete in the China job market.

3. Import people with different expertise to make Hong Kong’s economy more competitive. The application procedure for bringing in these people should be simplified, restrictions relaxed and the decision-making period shortened. The Hong Kong public should be informed that importing talented people will not take jobs away from those in Hong Kong. Instead, more expertise will stimulate the economy, leading to more jobs for Hong Kong people.
4. Develop tourism and service jobs. For example, set up more food streets to create low-skilled jobs and help solve the present high rate of unemployment (7% in mid-2002 and rising).

5. Retrain and provide whole-person education to low-skilled workers to prepare them for the ever-changing job market in the new economy. The HKSAR Government should provide funding and institutions for this purpose.

6. Set up a one-stop government resource center listing all job openings, including those on the Chinese Mainland.

7. Educational reform for secondary and tertiary institutions should include emphasis on Putonghua and practical training to prepare students for job opportunities in China.

**Questions for Panel 4**

1. There has been talk about long-term domestic solutions to move people up through skills-based education/training, and short-term measures to import talent to fill gaps at the high end. What are the short-term domestic solutions to a growing pool of low-skilled unemployed, many of whom consider themselves “too old” to retrain?

2. With most companies talking about streamlining (瘦身), many executives are working “7-11”. How would you recommend they enhance their knowledge and skills?

3. If lack of professionals is a problem, why limit the number of Mainland Chinese coming to Hong Kong since they bring networks and set up companies? Overall, can Mainland Chinese people solve the shortage of professionals?

4. 請教張教授，是否贊同政府定性中大、科大及港大為研究型大學，其他大學為教學型大學的想法？中大及科大合併的想法？上述二者對香港就業及競爭力的影響。

5. 請教張教授評論一下政府人力需求推算的準確性。

6. 為甚麼政府不投放多些資源降低現時師生比例；反而投資大量資源於老師再培訓？現在聽到很多老師的反饋：高工作量（對學生），高壓力（不斷進修→增值）。政府是否需考慮先降低師生比例，後要求老師增值？

7. 香港中學師生比例約 1:30-1:40 不等，近年來政府想要兼顧“教改”所帶來的一連串非教學工作。但“教改報告”內並沒有提及師生比例這一環，政府在這方面有沒有任何政策?

8. 你認為應否繼續增加大學學額？根據需求定律，不斷增加會令質素下降，有甚麼看法？

9. 人才輸入對現在高企的失業率會不會構成壓力？大學畢業生應怎樣去裝備自己以適應轉型中的經濟？

10. 如果 2005 年，市場對大專以上學歷人士求大於供，那時是否不會再出現大學生待業的情況？

11. 香港大專生往內地找工作的情況和優勢在那裡？
SESSION 2  
INNOVATION AND ENTREPRENEURSHIP IN HONG KONG

17 June 2002  Hong Kong Convention and Exhibition Centre

Welcome Address  
Prof Yuk-Shee Chan  
Vice-President for Academic Affairs, HKUST

Opening Remarks  
Dr John C C Chan  
Chairman, University Council, HKUST; Managing Director, KMB

Introduction  
Prof Kang L Wang (Session Chairman)  
Dean of Engineering, HKUST

Part I  
International Entrepreneurship in Practice

“Successful Commercialization of Science and Technology: World Perspectives”  
Prof Otto C C Lin  
Vice-President for Research & Development, HKUST

Part II  
Success Stories in Hong Kong and the Region

Mr Hong Hcon Ong  
Chief Executive, GP NanoTechnology Group Ltd

Mr Humphrey K W Leung  
President & Managing Director, Solomon Systech Limited

Dr Jack Lau  
Chairman & CEO, Perception Digital Ltd; Associate Professor of Electrical and Electronic Engineering, HKUST

Dr Zexiang Li  
Chairman, Googol Technology (HK) Ltd; Associate Professor of Electrical and Electronic Engineering, HKUST

Part III  
Panel Discussion: Innovation & Entrepreneurship for Economic Growth

Moderator:  
Dr Paul Y S Cheung  
Policy Advisor, Innovation and Technology Commission, HKSAR Government; formerly Dean of Engineering, HKU

Panelists:  
Mr Johnny K C Chan  
Director, Co-founder and Vice Chairman, techpacific Capital Limited

Dr Cheng-Wen Cheng  
President & CEO, AcrossAsia Multimedia Ltd; formerly founding CEO, Provisional Hong Kong Science Park Co Ltd

Prof Tony Eastham  
President & CEO, HKUST RandD Corporation Limited; Associate VP for R&D, HKUST
Affirmation Session  

High-Tech Entrepreneur Program Project Presentation

Judges and Panelists:

Prof Mitchell Tseng (Moderator)  
Director, Advanced Manufacturing Institute and  
Professor of Industrial Engineering & Engineering Management, HKUST

Prof K C Chan  
Acting Dean of Business and Management, HKUST

Prof Tony Eastham  
President & CEO, HKUST RandD Corporation Limited;  
Associate VP for R&D, HKUST

Dr Ting Ho  
Managing Director, Logistics Venture Limited

Mr Ting Kay Ho  
Vice President, JAIC International (HK) Limited

Mr David K Kao  
Managing Director, H&Q Asia Pacific (Hong Kong) Limited

Dr Jack Lau  
Chairman & CEO, Perception Digital Ltd; Associate Professor of Electrical and Electronic Engineering, HKUST

Prof Kang L Wang  
Dean of Engineering, HKUST
Project Presentations:

Educational Electronic Game – by DKK Toys Limited
Dennis Lam, Ken Mo, Kelvin Kong, S W Ng, Jacky Chan

Dehumidifier – by GreenMix Company Limited
Martin Yip, Dave Fok, Wendy Wai, Angela Hui, Mavis Ng, Alan Lee

Development of Massive Solder Ball Transfer Equipment for Wafer Bumping – by MicroMax Technology
Jeffery Lo, Michael Ng, Daniel Lei, Alan Wong, Jerry Au, Vivian Fung, Arthur Lam, Jo Lau

3D Map Generator – by VirtuREAL
Sun Chan, Daniel Lau, Alan Yeung

HTEP Project Awards Presentation
PART 1. PRESENTATION

“Successful Commercialization of Science and Technology—World Perspectives”
by Prof Otto C C Lin, Vice-President for Research and Development, HKUST

Introduction

Science, technology, innovation and entrepreneurship are considered the keys to productivity in a knowledge-based economy. Traditionally, the Hong Kong economy has relied on its geographical location, real estate and infrastructure developments, and concentrated on building an environment for trade and international commerce. But in recent years, it has become clear that these old strategies are insufficient to deal with the economic challenges Hong Kong now faces.

It is vitally important that the community recognizes and responds to this new global, and highly competitive environment. It needs to understand what changes it must make—and why they are necessary—to secure its economic future.

However, several damaging misconceptions exist about a high-tech economy: that scientific research will automatically lead to high-tech industries; that any university, institute or governmental agency can develop high-tech industry on its own and as a matter of course; and that, for Hong Kong, the expedient way for economic development is to imitate and duplicate. These need to be removed in order that Hong Kong can move forward quickly and effectively.

The presentation clarified the roots of a high-tech economy, and through a series of international examples, illustrated the remarkable effects that science and technology can have on wealth creation. It highlighted the relevance of such development to Hong Kong and provided recommendations on what the SAR needs to do to survive and excel in the new world economy.

Roots of a High-Tech Economy

According to popular thinking since World War II, the creation of a high-tech economy is rooted in science. This line of thought suggests that if science is nurtured, eventually it will produce technology, which will then blossom into profitable, high-tech industry. This is a misconception.

The reality is that science can seldom create high-tech industry by itself. A long and complicated process from scientific research to technology development to product commercialization is generally inevitable. This process involves many stages: basic research, applied research, product development, process development, pilot production, marketing, distribution and sales, and finally, post-sales services.

Completion of this process generally requires the cooperation of four groups of institutional players: universities, technology-developing institutes, a government providing a supportive environment, and business and industries. The structure, the interactions of the players and the dynamics of the research commercialization process is referred to as a national innovation system.

The growth of a high-tech economy can be shown to require six categories of resources. They are: leadership, knowledge, human resources, capital, infrastructure and networks. These can then be broken down further into many factors, or roots.

Economic Impact of Innovation and Entrepreneurship

The following five cases draw on the results of the International Symposium on Economic Development through Commercialization of Science and Technology held in March 2002 by HKUST, in cooperation with the Hong Kong Science and Technology Parks. They illustrate the
dramatic effect that science and technology can have on an economy when a supportive environment is present.

**Silicon Valley**

Silicon Valley has held a leading position in technology, innovation and entrepreneurship for more than 50 years. From the early 1960s, it focused on the defense industry; in the 1970s, microelectronics; the 1980s, personal computers; and in the 1990s, Internet technology.

In Santa Clara County, for example, employment has increased from 400,000 in the 1970s to nearly 900,000 at the present time. The value added is three times the national average. Even in high-tech sectors, such as computers, communications, software and semiconductor equipment, the value added in Silicon Valley is significantly higher than US norms. In 1999, Santa Clara County had an 8% share of all US patents—about 10 times the national average—showing the innovative nature of its two million population.

**Key success factors:**

- High-quality and mobile workforce;
- Results-oriented meritocracy;
- Knowledge intensity;
- Climate that rewards risk-taking and tolerates failure;
- Favorable government policies;
- Open business environment;
- University-institute-industry interactions;
- Collaborations among business, government, and non-profit organizations;
- High quality of life and specialized business infrastructure.

**Taiwan**

Taiwan has undergone a remarkable transformation in recent decades, moving from low industrialization in the 1970s (GDP US$389,1970) to a highly industrialized economy in the 1990s (GDP US$12,396, 1995) largely through the pursuit of science, technology and innovation.

Microelectronics has been an important part of this development. The integrated circuit (IC) industry in Taiwan started at the Industrial Technology Research Institute (ITRI). In 1974, it acquired phased-out 7-micron CMOS IC technology (on a 3-in wafer) from RCA. In six years, the Institute produced the first IC fab spin-off, UMC (3.5 micron CMOS). ITRI continued to improve on the technology. In 1987, the second spin-off, TSMC, on 2 micron CMOS with 6-in wafer, was completed. TSMC pursued a strategy as an IC foundry, performing a manufacturing service for microelectronic companies worldwide, which proved to be a successful business model. In the meantime, ITRI continued to work on advanced sub-micron technology with mainly government funding. In 1994, it completed the Vanguard spin-off, capable of producing 0.5 micron CMOS on an 8-in wafer.

These three major spin-offs triggered numerous mid-stream and downstream, hardware and software, semiconductor companies, forming an integrated cluster in microelectronics. Other joint ventures also emerged, with Ti-Acer becoming the most significant in the 1990s. Today, the IC industry has reached nearly US$10 billion. Downstream electronic products are several times higher. Together they have become the cornerstone of the Taiwan economy.

The formation of high-tech industries was only part of Taiwan's technological drive. It also successfully applied technology to upgrade traditional industries, such as bicycles. In the 1970s, Taiwan established itself as a major world producer of bicycles, mostly at the low-price end. By applying technological advancements in design, materials, testing and quality assurance, it has now captured nearly 60% of the high-end, specialty bicycle market with a unit price of US$1,000 and above.
Key success factors:

- Visionary government industrial policies, focusing on strategic areas;
- Effective execution of R&D programs through ITRI;
- Funding support through government venture capital arms;
- Successful commercialization through the creation of a science park, tax shelters and R&D incentives;
- Continuation of technological development to keep at the forefront of industrial change and business model innovation;
- Support of good local education, and advanced training and experience overseas.

Israel

Israel shows how technology and entrepreneurship can transform an economy despite a difficult external political environment. 10 years ago, its software exports were at a similar level to exports of oranges. A decade on, orange exports have changed little, while software exports have experienced exponential growth. Total high-tech revenues accounted for more than 15% of the country's GDP by 2000.

Key success factors:

- Outstanding human resources, with people keen to start their own businesses;
- Strong academic infrastructure—one of the world's most highly educated workforces;
- A multilingual population with worldwide business links;
- Third in the industrialized world for number of patents per capita, after the United States and Japan.

India

The country is now recognized as the world capital of merchant software. The drive started around 1990 in Bangalore, supported by strong education and R&D institutions, and proactive government policies. By 2000-01, the country's software industry was worth more than US$10 billion. Statistics show 203 of the Fortune 500 companies outsource IT services from India. Indians comprise 32% of professional employees at NASA, 34% at Microsoft, 28% at IBM and 17% at Intel. Indian entrepreneurs are behind 40% of Silicon Valley start-ups.

Key success factors:

- Quality consciousness and adoption of international quality standards;
- Low-cost manpower; 150,000 English-speaking graduates a year;
- Overseas Indian community;
- Reduction of taxes for IT;
- Visionary policy-making.

Boston

Boston is not traditionally known for its pharmaceutical industry. However, it is now becoming one of the leading centers for the emerging biotech industry in the United States, demonstrating a different supply chain and business model for the biotech industry. There are 250 biology-based companies in the area (about 18% of the US total), employing 28,000 people. Market capitalization has grown from US$5 billion to US$47 billion since 1991. MIT alone has spun off 30 biotech companies since 1998.
Key success factors:

- Research funding from the National Institutes of Health (NIH);
- Research infrastructure provided by leading universities;
- Strong life science and health care clusters;
- Strategic alliances with major pharmaceutical companies have provided opportunities for product development, clinical trials, marketing and distribution.

Lessons Learned

The following are suggested as common factors to successful economic development from science and technology:

1. Recognizing and cultivating the “real roots” of high-tech-industry: knowledge, capital, leadership and human, infrastructure and networking resources.

2. Establishing a national innovation system.

3. Developing competitive advantage in strategic areas to effectively achieve policy objectives.

4. Nurturing human creativity, the foundation of wealth in a knowledge-based economy.

Recommendations for Hong Kong

The following are recommendations arising from the presentation:

1. Review and renovate existing HKSAR policies, regulations and practices to nurture a proactive environment conducive to innovation and entrepreneurship.

2. Clarify the roles, accountability and mechanisms of collaboration between various institutional players in the innovation system of Hong Kong.

3. Conduct strategic planning with business/university partners to identify core strengths and sectors of strategic importance as foci for the development of Hong Kong.

4. Set goals and provide public investment in R&D and human resource development using competitive newly developed economies in the Asia Pacific region as benchmarks.
PART 2. PANEL DISCUSSION

"Innovation and Entrepreneurship for Economic Growth"

The Hong Kong High-Tech Story So Far

In the past five years, Hong Kong has started to take steps towards the promotion of innovation and high-tech entrepreneurship. It has set up an Innovation and Technology Fund (ITF) to support university R&D and promote university-industry collaboration. It has established the Hong Kong Science and Technology Parks (HKSTP) and the Hong Kong Applied Science and Technology Research Institute Co Ltd (ASTRI) to assist technology transfers from research to industry. A small fund has been set up to provide assistance to small entrepreneurs (SERAP). While there are shortcomings, these programs represent efforts in the right direction.

At the same time, human resources are being strengthened through Hong Kong's universities. The eight UGC-funded institutions, to a varying degree, are encouraging entrepreneurial training and education. HKUST is playing an active role. It has established an entrepreneurship program for the incubation of technology start-ups. About 20 such companies are now in operation, despite the present economic recession. The University has also set up a professional leave program to facilitate university-industry collaborations. Perception Digital Ltd and Googol Technology (HK) Ltd are among the more lively HKUST start-ups, and are gaining regional recognition.

Today, students should be prepared not only for full-time employment with big companies, but also to become independent and innovative professionals who can take advantage of any opportunity that may arise in the business world. The advent of HKUST’s High-Tech Entrepreneur Program (HTEP) in 2001 enables engineering undergraduates to practice entrepreneurship in a simulated high-tech start-up environment and acquire business know-how.

Issues on the Development of Innovation and Entrepreneurship in Hong Kong

However, there are still many problems for Hong Kong to address if it is to succeed in the new economy. These relate to its social and cultural heritage as well as its political and economic environment.

1. The critical need to strengthen human resources

People play a key role in high-tech economic development and multiple levels of expertise and experience are required. Under globalization, people with international knowledge and connections can increase accessibility to international markets, capital and technology.

Hong Kong's human resources are seriously inadequate. At the technical, engineering and professional levels, local capability for quality supply is below future demand. The need is critical at managerial and executive levels. The HKSAR Government has been unable to provide more funds to boost human resources. While many Hong Kong universities are striving to provide the right kind of human resources for a high-tech economy, they are hampered by funding reductions.

The present program to allow talented people from the Chinese Mainland to work in Hong Kong is ineffective. This is a major disadvantage. Hong Kong should learn from Singapore, Israel and the US and open itself up to highly skilled professionals from around the world, the Chinese Mainland specifically. A proactive immigration policy for talented people is a key factor in accelerating Hong Kong's successful transition to a knowledge-based economy.
2. Inadequate public investment in R&D and education

Despite a policy objective to encourage innovation and technology, HKSAR public investment in R&D and education is shockingly low compared to other leading economies. While Hong Kong prided itself in coming 10th in terms of global GDP per capita in 2000, the same survey showed the SAR’s total public expenditure on education and on R&D as a percentage of GDP ranked in the bottom quartile. More government effort in these areas is vital. Hong Kong should benchmark itself against competitive economies in the region, such as Korea, Singapore and Taiwan in the next decade. Furthermore, the SAR should abandon its refusal to provide universities with overheads funding required to support research programs. To continue this refusal could jeopardize government-university-industry cooperation.

3. Setting a development strategy

The Government is normally reluctant to target particular sectors for development, citing the principles of market economy and non-intervention. But with overall resources limited and time short, Hong Kong must move forward by focusing on strategic areas to restore economic vitality. Korea, Singapore, Taiwan and the various provincial and city governments in China all try to drive the economy by taking a leadership role and not to heed this world trend may appear to border on arrogance, or ignorance. Hong Kong’s strategic areas should be based on its core competencies and culture.

4. Reluctance to move ahead on economic integration with China

Five years after the Handover, Hong Kong has yet to come to terms with the idea of economic integration with China. While it has started along the road to innovation and entrepreneurship, there is something fundamentally wrong with its attitude at the macro level. Hong Kong seems to want to become an isolated innovation and entrepreneurship center. This will not work. The community must realize its future lies with the Pearl River Delta (PRD) region. There are two main industrial regions in China: South China and Shanghai. Hong Kong could take the leading role in the PRD, but it has not done so. By not being actively involved in the development of South China, Hong Kong is not only damaging itself but the whole region. It has to merge with South China to compete for the industrial leadership of the whole country. The Yangtze River Delta is progressing much faster than the PRD and without action the battle will be lost.

The community should focus not only on what China can do for Hong Kong, but what Hong Kong can provide for China. One key area is financial services. China needs to come to Hong Kong to access capital markets. Hong Kong must ensure these are well oiled and healthy, and the free flow of capita remains.

5. Lack of knowledge of China

A major side effect of reluctance to integrate with China is Hong Kong’s lack of knowledge about the Chinese Mainland, despite its proximity. Hong Kong needs to understand China’s past and gauge its future, to create the best strategy for Hong Kong’s economic development.

There are many opportunities in China for Hong Kong people, especially in design, advanced materials and the development of intellectual property, which can again be developed into products through manufacturing facilities on the Chinese Mainland. But people must recognize that the China market is evolving very quickly. Keeping up to date with these changes is essential. Hong Kong people must be prepared to go in on the ground to fathom the market.
6. Understanding innovation and entrepreneurship

The community and the Government together must recognize and cultivate the roots of successful high-tech. They need to understand that in a knowledge-based economy, strong working relationships among industry, universities and institutes are essential for the development and transfer of technology to products. This applies not only to high-tech fields, but also to traditional industries that need to move up the value chain to remain competitive. Some Government funding agencies, such as ITC, consider funding university program as a favor to the universities, not understanding that the Government relies on the universities to implement its policies. Universities and Government should be partners in nurturing innovation and entrepreneurship in Hong Kong.

People must be fully aware of the process required to commercialize technology. Universities create new technology, but the major challenge is to take it to the market place. Profit model innovation is vital for commercial success. Technology and product innovation account for about 13% of the process, while 90% stems from market positioning and how well tangible assets are turned into tangible income.

7. The Hong Kong mind-set

Hong Kong is known for its entrepreneurial spirit, but this has traditionally been tied to opportunism, low risk, quick profit and real estate development. To fully support the development of innovation and technology, there is a need to de-link the concept from opportunism and re-attach it to commitment.

Hong Kong’s attitude towards high-tech entrepreneurship is also very poor. While the Government has set up programs to support start-ups and innovation, it is a struggle for entrepreneurs to gain the next set of funding due to the "commercial loan" mind-set of VC administrators. Many projects are being jeopardized. Rewards for risk-taking are non-existent. There is a reluctance to recognize local high-tech talents and too much dependence on overseas "brand names", making it even harder for Hong Kong high-tech entrepreneurs to flourish.

8. Urgency of Hong Kong’s situation

Hong Kong’s present economic ills are serious. Innovation and high-tech entrepreneurship are required to develop a knowledge-based economy that can sustain the income levels that Hong Kong is accustomed to. Hong Kong’s income level is currently five times that of Shanghai but is declining while Shanghai’s is rising. Hong Kong’s window of opportunity in China is closing rapidly as other regions in the country are catching up. Maintaining the status quo is not appropriate in today’s economic climate. Hong Kong needs to open its eyes to what is happening in China and around the world.

Recommendations

The following are recommendations arising from forum speakers and the panel discussion:

1. The HKSAR Government should take the lead, become a driving force for change and set a high-tech vision for Hong Kong. Local expertise in business and from the universities should be brought in to assist with strategy. Local consultants who understand China should be employed.

2. The Government should increase public investment in R&D and education using the newly developed economies in Asia Pacific as a benchmark. It should also provide full cost recovery to the universities for their support in executing ITF and other Government related research programs.
3. Push vigorously for economic integration with China, particularly with the PRD and South China.

4. Encourage private investment in technology firms and start-ups.

5. Ease immigration policies to allow talented people in from China.

6. Promote a change in mind-set with regard to technology/innovation and Hong Kong’s role vis-à-vis China. Make the community realize that time is short.

7. Encourage the community to learn more about China, and bring in leading figures who, from a position of knowledge about the Chinese Mainland, can drive Hong Kong forward.

Questions for Panel

The following questions were raised from the floor:

1. What steps can a fresh graduate take to succeed in entrepreneurship?

2. Prof Ko mentioned he had traveled around China for more than 20 months to understand why local integrated circuit companies had not been very successful in the past. Does Prof Ko now have the answer?

3. As mentioned, venture capital (VC) investment in Hong Kong is poor. We need solutions and action, not just talk. How can we resolve this and attract more VC activity to Hong Kong?

4. What are the top three priorities for the HKSAR Government in promoting technology and innovation in Hong Kong? What are the roles of the Government, university and industry with regard to Hong Kong’s link to the Chinese Mainland?

5. "It is not money, it is people that are the key." Does the panel believe this? Would those that do please give one short-term action and one long-term policy that would help convince Hong Kong’s future human resources that this is the case?

6. Given the fact that we need to push five to 10 years work into a brief period of time and many Hong Kong entrepreneurs are in the front line in this race, are we doing enough for entrepreneurs? What are research institutes doing to help them?

7. (i) 你認為香港政府對香港科技發展的資助及支持是否足夠？
(ii) 你又覺得香港政府在促進香港科技發展上有甚麼可以改善的地方？
SESSION 3
THE GOVERNMENT'S ROLE IN THE ECONOMY

12 July 2002  Island Shangri-La Hotel, Pacific Place

Welcome Address
Prof K C Chan (Session Chairman)
Acting Dean of Business and Management, HKUST

Opening Remarks
Prof Paul C W Chu
President, HKUST

Introduction
Prof Francis Lui (Moderator)
Director, Center for Economic Development and Professor of Economics, HKUST

Speeches
"A Non-conventional View"
Prof Edward Chen
President, Lingnan University

"Economic Policies and Politics in Hong Kong"
Prof Michael Enright
Professor of Business Administration,
The University of Hong Kong

"The Price of Selective Intervention"
Miss Christine Loh
CEO, Civic Exchange

"From Positive Non-interventionism to Proactive Market Enabler"
Mr Wilfred Wong
Vice-Chairman, Shui On Holdings

Panel Discussion
Moderator: Prof Francis Lui
Professor of Economics, HKUST

Panelists:  Prof Edward Chen
President, Lingnan University

Prof Leonard Cheng
Professor of Economics, HKUST

Prof Michael Enright
Professor of Business Administration, HKU

Miss Christine Loh
CEO, Civic Exchange

Mr Wilfred Wong
Vice-Chairman, Shui On Holdings

Questions and Answers

Luncheon Presentation
"Government: How Many Fingers in How Many Pies?"
Dr John C C Chan
Chairman, University Council, HKUST
Managing Director, KMB
Background

In the past five years, Hong Kong has experienced two recessions and is currently experiencing levels of unemployment of more than 7%. In the past 10 years, seismic changes have occurred in the economic landscape of Hong Kong and the global economy. The political handover in 1997, while maintaining daily life in the SAR, has altered the mental framework in which the Hong Kong Government operates.

While the Government must have—as it always has had—a role in the economy, an apparent lack of direction over what that role should be has caused uncertainty in the community. This is not helped by the fact that the Government's past role in the economy is surrounded by misconceptions, and the poor quality of debate on issues of central political and economic importance.

With unemployment rising, the SAR Government cannot afford to let this situation continue. An overall vision for the community in relation to its economic position with the Chinese Mainland and the world economy, more informed discussion, a higher-educated workforce, and a different mind-set among those in Government will be critical in the coming years.

The economic downturn and budget deficit provide an opportunity to reassess priorities and the way Government allocates its financial resources. The community has been ill prepared to make the transition to the knowledge economy. However, Hong Kong's fundamentals are still strong. This gives grounds for optimism that with appropriate policy-making—which may in some cases turn out to be no policy-making—today’s dark picture can be rapidly transformed to tomorrow's vibrant knowledge economy.

Economic Crises of the Past

The current recession in Hong Kong is not a unique phenomenon. In 1974-5, the community experienced negative economic growth and unemployment reached 10% due to the global oil crisis. In the early 1980s, the second oil crisis and political uncertainty over the 1997 handover caused another downturn.

However, the circumstances in which Hong Kong faces this current recession have altered dramatically both locally and globally. Hong Kong's GDP is now 86% service-based. The dollar peg, the opening up of China as a low-cost manufacturing center, emigration and the subsequent professional skills shortage of the 1980s have driven up wages and the cost of living in Hong Kong.

In earlier economic crises, a flexible labor market and a drop in wages spurred recovery. Employers now complain of the difficulty of cutting wages. In addition, Hong Kong faces a mismatch in what had previously been one of its vital resources: human capital. It is no longer competitive as a low-value job center yet much of its workforce has not been equipped through education and/or training with the skills required to move up the value chain and into the knowledge economy.

Hong Kong still possesses one key advantage in comparison with other locations in Asia: its proximity to China. In the 1980s, the opening up of China helped provide Hong Kong entrepreneurs with a low-cost production base. This time the opportunity to rebound is likely to come through Hong Kong capitalizing on China's entry to the WTO.

To position Hong Kong correctly to take maximum advantage of this, various public misconceptions about the economy need to be addressed.
Hong Kong Economic Myths

Hong Kong's economy is often regarded by the community and society at large as one of the world's best examples of a free market economy in which the Hong Kong Government plays little part. It is, however, a myth. This and other misconceptions continue to obscure the economic realities on which Hong Kong operates and decision makers must take them into account when setting policy.

Myth 1: Hong Kong operates on a laissez-faire economic basis

Hong Kong is not laissez-faire because the Hong Kong Government has always dictated a crucial part of the economy: land. There has never been free allocation of resources in Hong Kong because the Government has always monopolized land. Every part of Hong Kong, except for St John's Cathedral, is owned by the Hong Kong Government. Control of land sales has helped perpetuate the idea that land is in short supply. In fact regeneration of land has been poor. Tracts of land exist in prime locations such as Sham Shui Po and Tai Kok Tsui that have not been redeveloped.

Myth 2: There is a competitive market in Hong Kong

Despite the popular view that Hong Kong is alive with competition, there has never been a very competitive market within Hong Kong, a basic requirement for a laissez-faire economy. Industries have been dominated by particular firms. There has been a banking cartel. There has been an inconsistent scheme of control for public utilities. Electricity companies, for example, were subject to control; telecommunications company Cable & Wireless was not, even though for many years it operated a monopoly.

Myth 3: The Government does not interfere in the economy

The Government has made—and continues to make—major interventions. Leading examples of the way in which the Government has exercised its influence are its control of land supply and public housing policy.

Myth 4: Hong Kong no longer has any manufacturing

While the nature of Hong Kong's relationship with manufacturing may have changed in the past decade, the SAR is still reliant on the sector. A recent survey by the Business and Professionals Federation found about 40% of Hong Kong's GDP was dependent on manufacturing and manufacturing support services. People who talk about Hong Kong being a services capital often forget who those services are aimed at.

Hong Kong is one of the most powerful, efficient capacity managers in the world in light manufacturing. Although Hong Kong is now using its hinterland as a production base, this does not mean that it is no longer involved in manufacturing. It still controls the back and front end of operations and has simply moved the lower valued-added services, where Hong Kong is no longer competitive, across the border.

A major reason for this misconception is that the companies within this sector tend to be relatively small, unlisted and are not included in statistical studies or analyses.

Labeling the Government's Role in the Economy

By the 1970s, the Government itself had already moved away from the concept of laissez-faire, preferring to describe its role in the economy as positive non-interventionism. Laissez-faire sounded too passive, as former Financial Secretary Sir Philip Haddon-Cave noted.

Since that time a series of labels has been attached to the Government's role in the economy by various Financial Secretaries. Phrases include "Hong Kong-style consensus capitalism", "maximum support, minimum intervention" and the latest, "proactive market enabler". Though
they have taken different forms, these labels essentially follow the same theme, presenting the Hong Kong Government’s role as one of active participation, limited to if and when necessary.

Such terminology has helped to perpetuate the public perception that the Government’s role in the economy is a minor one.

Meanwhile, structural problems, such as over-dependence on land revenues, and misconceptions about the Government’s role remained hidden or ignored in the 1980s and early 1990s due to strong economic growth and the impending change of administration in 1997.

Industrial Policy-Making

Though the British administration downplayed its role through such semantics, its active involvement in the Hong Kong economy is in itself not surprising. There has always been a role for the Government in providing infrastructure, information, setting and administering the rules of operation, training and education, regulating the economy and creating the right atmosphere for entrepreneurs to thrive.

However, industrial policy-making in Hong Kong has traditionally been limited. One major current concern relates to the development of core industries identified with the SAR and what the Government’s role should be in such industry “clustering”.

In developing industry clusters, key industries may need initial government support. The education system must also be able to supply an appropriately skilled workforce. Such investment can be costly and, in the case of industrial development, risky, but these factors must be weighed against the risks involved in inaction. The market by itself does not guarantee complementary firms will appear. To avoid such “coordination failure” it may be necessary for a government to step in to prevent a “bad equilibrium” through policy-making. Success can kick-start the knowledge economy and provide the human resources to sustain value-added jobs.

On the other hand, government intervention may fail. An administration may not know what direction to go in, or be able to carry out a policy effectively. Certain moves by the Hong Kong Government in the past, such as the Science Park, which took 10 years to build, and matching grants for applied technology in the early 1990s that failed to attract the anticipated response, illustrate the results of a lack of follow-through. If the Government is to successfully participate, it must define and communicate its policy objectives clearly.

Challenges of the Knowledge Economy

While some people argue Hong Kong is already so far behind in the knowledge economy there is no reason for the Government to intervene, others believe this is precisely why it must do so. When the information and communication technology (ICT) revolution took off, Hong Kong was largely unprepared for the new demands of the knowledge-based economy that would secure the standard of living the community had become accustomed to in the boom of the 1980s and 1990s.

The ICT revolution differs from previous revolutions because applications are available in many different locations at the same time and technological changes are continuous rather than separated by a period of years. With technology now much more user-friendly, human capital has taken on more importance than machines.

Two of the major reasons put forward for Hong Kong’s difficulties in adjusting to this particular economic transition are: lack of an appropriate workforce and not enough investment in R&D.

Although the Government had sought to assist high-tech industry, the education system that would produce the human resources required to fuel the new revolution was, in the main, out of date. For the past 30 years, Hong Kong’s education system has been geared to producing technical professionals, not enterprising all-rounders who are creative and innovative.
community therefore faces a severe shortage of people equipped to succeed in the new economic climate.

There has also been too little importance attached to R&D. Hong Kong still spends less than 1% of its GDP on R&D, which generates the innovations that spark the new businesses of a high-tech economy. China spends far more.

The Role of R&D in Hong Kong

Hong Kong's R&D situation is a complex one. A breakdown of economic activities associated with R&D in OECD countries shows the major industries connected to R&D, such as space technology and defense, appear inappropriate for Hong Kong. Some would also argue that Hong Kong is not doing badly by international standards anyway. Statistics simply tend not to reflect the large amount of R&D being carried out by Hong Kong's small and medium-sized enterprises that are fiercely competitive in product development and design in the world market.

However, there are other R&D activities that fall outside both these scenarios. These are the research areas that take time to develop, cannot have an immediate pay-off for industry but are anticipated to bring long-term benefits to the community economically and socially. These areas require investment and here Hong Kong Government spending is comparatively low.

Although the cost of land is a factor in setting up R&D activities in Hong Kong, relative to the cheaper costs of the Chinese hinterland, this must be assessed in relation to the social reasons for investing in R&D activities specifically developed in Hong Kong. A certain amount of R&D is necessary in both small and large economies to sustain market presence. And the presence of such activities in Hong Kong is essential, not only for the breakthroughs they aim to bring, but to create a culture, a mentality, that prepares people for the challenges of the modern economy.

The Financial Secretary has identified four sectors of strength in the economy: tourism, financial services, logistics and professional/producer services. These are economically sound choices as they emphasize Hong Kong's current and future comparative advantage. But to achieve high productivity to pay wages and make profits, each must still be driven by technological and managerial innovations. Hong Kong needs an R&D policy that reflects this awareness and supports the development of such innovations.

Quality of Debate

The R&D question is just one example of the substantial discussion and input required to gain understanding and a solid foundation for economic policy-making in a knowledge economy. However, the quality of the discussion in Hong Kong about such policy issues tends to be superficial and does not draw the right variety of people into the discussion.

The need to understand what is happening across the border adds another level of complexity to the debate. Hong Kong has a relatively weak research system, particularly with regard to public policy research. China however has an extensive system and it would be useful to learn about the research on Hong Kong and cross-border issues that have already been carried out by mainland institutes.

There is a desperate need to move away from the way public policy is currently debated. Hong Kong's typical method of deliberation is to call in consultants from overseas to do our thinking for us. The Government carries a defensive legacy with regard to information. Critical pieces of information are not shared. Commissioned research papers are often not released publicly as that would then engender discussion and comment.

When an issue is raised in the community, it may be discussed in the newspapers for a short time, the Legislative Council might hold a debate but in three months it is off the agenda. Hong Kong needs to realize it requires a continuous stream of research and analysis, information,
data collection and collation, and different viewpoints to enrich deliberations and bring better understanding of the way Hong Kong works and what it requires for its future success.

**Policy Problems**

1. Over-dependence on land sales revenue. The entire tax base has been supported by land sales. 70% of Hong Kong’s revenue has been related to the property sector. This was never going to be sustainable and once this sector deteriorated the deficit problems of today were inevitable.

2. Attempts to prop up the property market have created enough uncertainty so that potential sellers are holding out hoping the Government will help them get a higher price, while buyers do not think the Government’s efforts will work, leading to an evaporation of transactions and collapse of the construction market and higher unemployment than otherwise.

3. The Government has abrogated responsibility in the area of competition because of local politics. While not suggesting an EU or US-style competition policy given the size of Hong Kong, the lack of basic structures in this area may have led to over-indulgence of older businesses and not enough encouragement of new and emerging businesses.

4. Failure to recognize and institute policies early enough to enable Hong Kong’s education system to produce people with appropriate skills for the new knowledge-based economy has led to a drastic shortage of human resources in Hong Kong.

5. There is a lack of vision to inspire and motivate the community. The "Hong Kong as Asia’s world city" campaign created a great opportunity to present Hong Kong people with a strategy, an aspiration for everyone to work towards. But the community has not been asked to stretch itself in order to overcome its current problems and “become” Asia’s world city. Instead the Government has treated the campaign as a slogan and presented a fait accompli.

6. Hong Kong has failed to take a leadership role with regard to the Pearl River Delta. Areas such as Zhuhai and Shenzhen are now preparing to push forward economic development on their own. Zhuhai is already trying to attract leading mainland universities and students to gain the human capital required to operate a knowledge-based economy.

7. There is inconsistency in the length of time required for economic policy-making. Some major projects involving huge amounts of money, such as Disneyland, are pushed through in months, while it is now more than five years since the handover and the decision to extend border opening hours is still pending.

8. The public blames the Government for the recession and expects the Government to “do something” to immediately solve the current problems. This adds pressure to rush through policies before there has been time for proper consideration and, if it is not addressed, the demand for “instant results” will place heavy strain on the new ministerial system.

**Recommendations**

The following are recommendations arising from the presentations and panel discussion:

1. Confidence needs to be restored and people rallied to work for common goals. This could be brought about through a large-scale project that captures people’s imagination. This does not necessarily mean yet more infrastructures. It may mean using intellectual capital to drive our economy forward.

2. Create a more transparent land policy to put certainty into the market.
3. If particular types of activities are important to Hong Kong, put enough land on the market so that the market price of land makes those economic activities viable in Hong Kong, instead of selecting individual types of enterprises to subsidize.

4. The Government needs to re-think its policy on higher education. While universities can be run more efficiently, this does not necessarily mean spending on higher education should be cut. A knowledge-based economy depends on the human resources and research that higher education institutions produce.

5. There must be greater integration with the Pearl River Delta and Hong Kong should be encouraged to think it can take a leadership role in the region. Planned spending on infrastructure needs to be re-assessed to ensure the original projections are still relevant today. The Hong Kong community needs to learn more about the Chinese Mainland. The border should be opened 24 hours a day.

6. The Government must take immediate action to build up the four key sectors it has identified. It must facilitate this by bringing together the relevant people involved in each area to identify what needs to be improved, what type of education is necessary and what technology is required to maintain and increase competitive advantage. Systematic and carefully deliberated policies together with well-planned projects must then be instituted to raise productivity in these key areas. Proposals to develop Hong Kong’s “local community economy” in a bid to address unemployment should not distract the Government from the drive to improve the key sectors. Hong Kong’s ability to serve the needs of other economies is ultimately where the community’s economic future lies.

7. Information must be shared not controlled in order to increase the standard and amount of debate.

8. A change in mind-set within the Government is required. The idea of encouraging businesses to bring back low-value jobs from across the border should be abandoned. The creation of higher value jobs, and the people to staff them, must be the priority in order for Hong Kong to continue to play an intermediary role between China and the rest of the world.

9. There needs to be open discussion of the Government’s role in the economy so that the community understands why action is necessary in certain areas and may not be in others; why some decisions can be made immediately and others require longer consideration.

**Conclusion**

The Forum discussion clearly indicates that the Government has a role to play in Hong Kong’s economy and in helping the community make the necessary adjustments to succeed in the new economic circumstances arising from changes in the global economy and in the Chinese Mainland. One of the central difficulties the Government faces in this current recession is a lack of understanding as to what the knowledge economy actually means in the Hong Kong context and how Hong Kong people can best equip themselves to participate successfully in it. This in turn brings uncertainty and saps confidence. To restore buoyancy—both economically and psychologically—there must be rapid improvement in the quality of public debate in the community to increase vision and aid direction setting. There must be investment in skills, capabilities and knowledge so Hong Kong can continue to move up the value chain.

The Government does not have to involve itself in every aspect of kick-starting the economy. What it must do is identify where it is necessary to engage and ensure that such engagement is as effective as possible through widespread consultation, informed debate and coordinated policy-making. Once the Government does this, it will also then be clear what it does not need to do.
Questions for Panel

The following questions were submitted to panel members from the floor:

1. Is the HKSAR Government’s preoccupation with the budget deficit justified in view of other seemingly more important priorities and issues that the economy faces?

2. A recent City University survey showed that about 28% of HKSAR families are living below the poverty line. What policies should the HKSAR Government and private sector adopt to deal with this serious social and human problem?

3. What role should the HKSAR Government play in leading the development of the Pearl River Delta? Given the “one country, two systems” policy, what are the obstacles?

4. The technology industry is currently declining even in Silicon Valley. With the economic recession in the SAR, will more R&D investment in Hong Kong worsen the economy?

5. If Hong Kong does not invest in R&D, what should the SAR invest in?

6. What is the outlook for Hong Kong’s economy in 10 years? 20 years? What are the driving factors?

7. Prof Chen commented that Hong Kong people have not been trained to deal with the new economy. What are the problems with our education system? Will the recent reforms help solve the problems?

8. There is a popular view that many of the present economic problems have been caused by the inflexibility of the dollar peg. Should the peg stay or go? What are the risks and opportunities?

9. Which of the following roles are more important for the HKSAR Government to play: a. Leader—showing Hong Kong people the way forward? b. Facilitator—providing the basic infrastructure and legal system? c. “Referee”—providing a level playing field and a fair environment? d. “Balancer”—balancing the interests of various groups?

10. Do the panelists think that the HKSAR Government is trying to solve Hong Kong’s recession problems on too many fronts—as a financial center, tourist center, logistics center, high-tech center? With regard to the allocation of resources, how should the so-called sunset industries, such as textiles and garments, and new industries, such as biotech, be handled?

11. What are the speakers’ views about the role of leadership in Hong Kong’s economic restructuring?

12. To what extent would a competition law benefit the economy given the difficulties it might cause the business sector? Does a competition law have much relevance to the problems/challenges Hong Kong faces, for example, unemployment and restructuring the economy?

13. What is the enabling culture that can foster and drive the growth of Hong Kong? What is the HKSAR Government’s role, if any?

14. Speakers proposed education and science policy changes that will take at least two to three generations before value materializes. What are the appropriate government policies for the current transition?

15. The increasing outflow of capital from Hong Kong through consumption of the masses—mainly the lower-middle classes—in the Chinese Mainland hurts small businesses and entrepreneurs in Hong Kong. Should there be concern about this?
16. What kind of economic transformation should Hong Kong undertake? Can IT and biotechnology help Hong Kong emerge from the current economic doldrums? Or should Hong Kong continue its role as a financial hub?

17. The root of the land problem is that Chinese people are obsessed with concrete things, such as owning property. Every one of us strives for success simply to buy a multi-million dollar apartment. Do you agree?

18. One of Hong Kong's main problems is unemployment. What should the HKSAR Government do to address this situation?

19. Could you elaborate on how the Government should intervene in areas such as logistics, ERP and CRM? Will such intervention be sufficient to turn the economy around? If not, what more is needed?

20. Given the policy responses Prof Chen advocates, involving significant investment in science and R&D, how should the HKSAR Government restore fiscal prudence?

21. What is the main factor that changes a "winning team" to a "losing team"?

22. We have heard broad concepts about creating human capital that is more knowledge and technology-based, and about "transforming Hong Kong". What are some specific technological fields in which Hong Kong would be competitive and likely to succeed?

23. How is Hong Kong—as a light industry powerhouse and strong manufacturing service center—going to stay competitive with Mainland Chinese businesses whose operations may be low or no-cost due to the Central Government's heavy subsidies, grants, cheap/free land and lower wages?

24. There has been much discussion in the media on whether the bridge to Zhuhai/Macau should be built. What is the panel's view?

25. After this forum, what are we going to do with the views, ideas and policy recommendations that have emerged?
PARTICIPATION

More than 600 people attended the three-session Forum, excluding speakers, the media and staff.
ACKNOWLEDGMENTS

The organizers of the HKUST Forum on the Future Development of Hong Kong would like to thank all the people from within and outside the University who contributed to making the event a success. Our appreciation also goes to all the attendees, whose participation was pivotal to engendering a lively public debate.

Credit should be given to colleagues in the Office of University Development and Public Affairs, School of Engineering, School of Business and Management, Office of the Vice-President for Research and Development, Information Technology Services Center and Publishing Technology Center for their contributions. Special acknowledgment should be extended to Prof Alvin So and Prof Erik Baark for serving as rapporteurs of Session 1.

Our sincere thanks to the chairs, speakers, panelists and special guests below, who offered their insights into the topics discussed:

Dr John C C Chan
Mr Johnny K C Chan
Prof Edward K Y Chen
Mr Philip N L Chen
Dr Cheng-Wen Cheng
Prof Leonard K H Cheng
Dr Paul Y S Cheung
Prof Raymond K Cheung
Mr Philip K F Chok
Mrs Selina Chow
Prof Tony Eastham
Prof Michael J Enright
Dr Ting Ho
Mr Ting Kay Ho
Mr David K Kao
Prof Ping K Ko
Mr Jeffrey Lam
Dr Jack Lau
Mr Antony Leung
Mr Humphrey K W Leung
Mr Raymond Leung

Dr Zexiang Li
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Mr S C Liu
Dr Vincent H S Lo
Miss Christine Loh
Prof Francis T Lui
Mr Roger K H Luk
Mr P O Mak
Mr John Patrick Mullen
Mr Hong Hoon Ong
Mr Sin-Por Shiu
Mr Cliff K Sun
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Prof Mitchell M Tseng
Mr Andrew Tsui
Mr C C Tung
Prof Simon Wong
Mr Wilfred Y W Wong
Sir Gordon Y S Wu
Ms Marjorie Yang