

Seminar at Supply Chain & Logistics Asia

Economic and Market Analysis

Prepared for:
Supply Chain & Logistics Asia

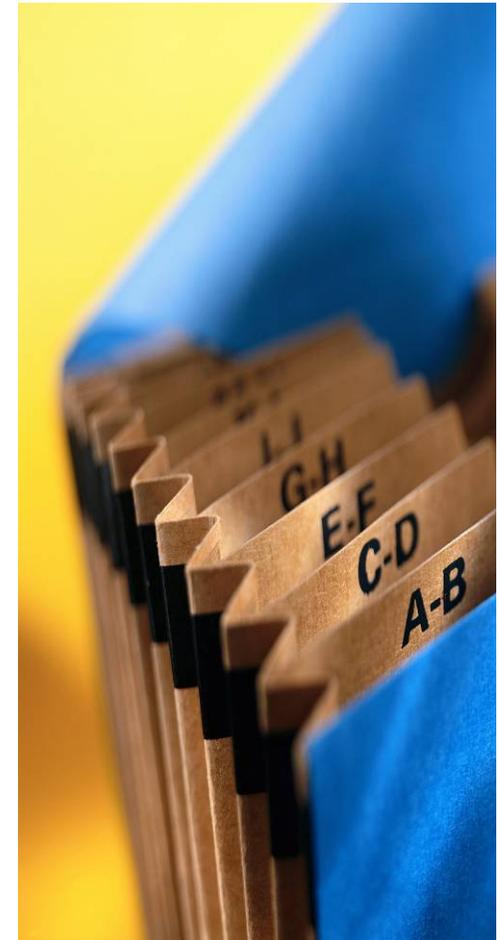
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Global Outlook

US Economic woes will hurt but not derail Asia

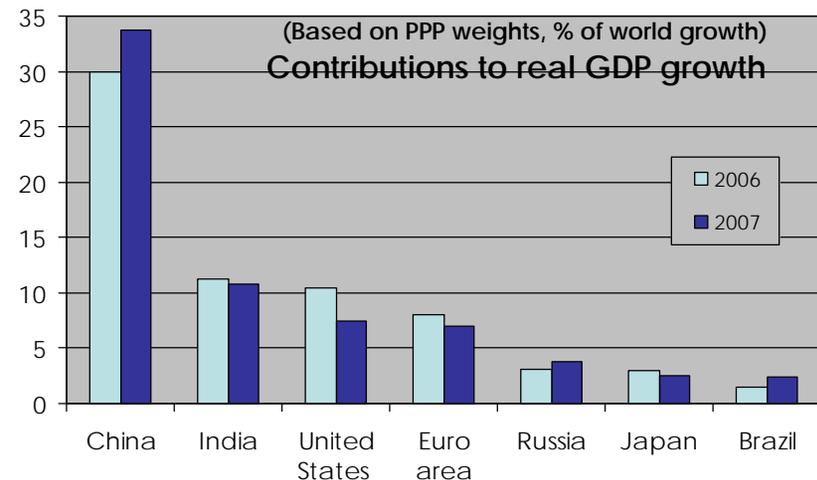


Has Asia decoupled from the US?

- US GDP growth will likely be negative (between 0% and -1%) in Q1 and Q208
- Asian stock markets have plunged on bad economic news coming out of the US since Jan 08 – write-offs from financial institutions & aggressive Fed rate cutting, which has tended to feed market panic
- The USD has weakened against Asian currencies significantly since Jan 08
- Risk factors moving forward:
 - Fed rate cuts + commodity price rises = inflationary spiral
 - Effect on US consumer sector yet to come
 - Multiplier effects of financial crisis (panic due to “mark to market” rule)
 - Asian exports will be hit to some degree
- Nightmare scenario – stagflation (recession + high inflation)

	2005	2006	Projected	
			2007	2008
World Output	4.8	5.4	5.2	4.8
United States	3.1	2.9	1.9	1.9
Euro Area	1.5	2.8	2.5	2.1
Germany	0.8	2.9	2.4	2.0
China	10.4	11.1	11.5	10.0
India	9.0	9.7	8.9	8.4

Source: IMF, World Economic Outlook, Oct 2007



- **BUT...** emerging markets (esp. China, India & Russia) will pick up some of the slack in global growth

Demand Outlook



Asia is so far holding steady, though the worst of the slowdown is yet to come

- Asia has accounted for more than half of global GDP growth since 2001
- China and India are on track for 8-10% GDP growth in 2008
- The IMF expects world growth to slow down but still remain solid at 4.8%, due to the major emerging markets taking over as leading contributors to global growth
- Other drivers of growth in Asia – **consumer spending**, exports to non-US destinations, fixed asset investment, FDI – are mostly on track
- Singapore, and to a lesser extent Taiwan and Korea, will be most affected by the US slow-down
- Hong Kong is partly cushioned by the currency peg

Countries	Q1 07	Q2 07	Q3 07	Q4 07
Australia	3.8%	4.3%	4.3%	3.9%
China	11.1%	11.5%	11.5%	11.2%
Hong Kong	5.7%	6.9%	6.2%	6.7%
India	9.1%	9.3%	8.9%	8.4%
Indonesia	6.0%	6.3%	6.5%	6.3%
Japan	2.0%	2.3%	2.6%	2.0%
Malaysia	5.5%	5.7%	6.7%	7.3%
Singapore	7.0%	9.1%	9.5%	5.4%
South Korea	4.0%	5.0%	5.2%	5.5%
Taiwan	4.0%	5.1%	6.9%	6.4%

Source: EIU, Government data

Fundamentals of Demand Growth

Asia-Pacific growth looks sustainable



Asia-Pacific GDP Growth

Country	1992 - 1996	1997 - 2001	2002 - 2006
China	12.44	8.28	10.06
India	6.22	5.36	7.56
Singapore	9.12	4.36	6.12
Malaysia	9.56	3.04	5.64
Thailand	8.10	-0.10	5.64
Hong Kong	5.30	2.84	5.58
Philippines	3.46	3.16	5.18
Indonesia	7.36	0.28	5.10
South Korea	7.34	3.92	4.80
Taiwan	6.98	4.08	4.46

- Asia-Pacific growth in the past five years has generally not hit the peaks seen in the pre-1997 period, with the notable exception of India

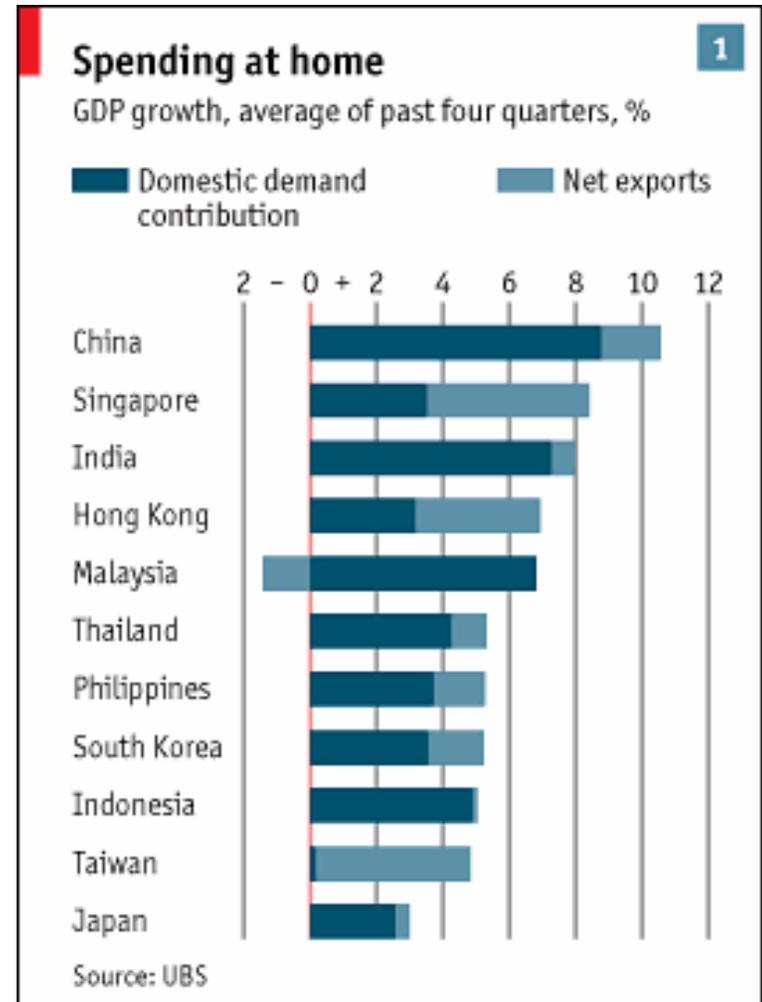
Source: IMF World Economic Outlook, April 2007

Consumer Demand



Asia-Pacific demand is largely led by domestic consumption...

- Consumption is a major driver of growth, as seen in booming markets for homes, cars and mobile phones
 - In China, retail sales grew >17% in the past few months
 - In India, it is likely to be ~8%
- Exports can swing the growth outlook in only some countries
- No major clouds on the horizon
 - Property bubbles are generally localized to cities like Mumbai, Bangalore and to some extent Shanghai

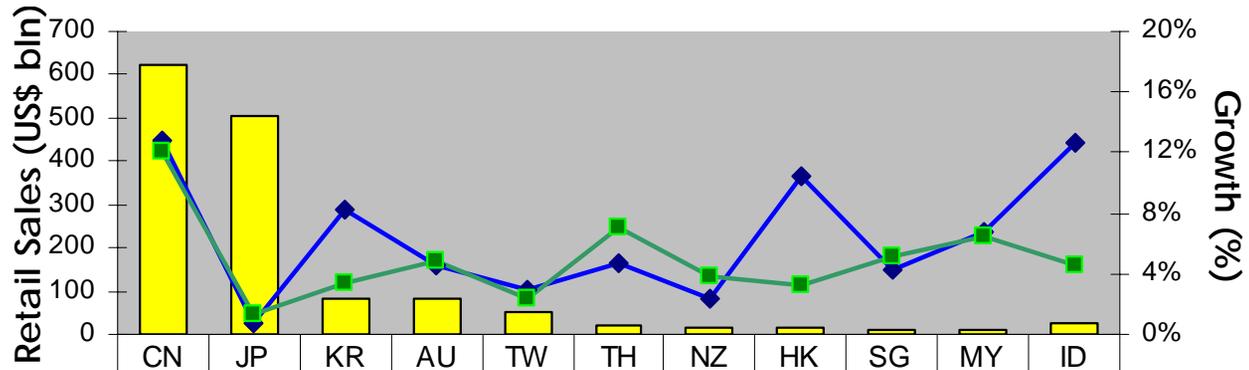




Asia-Pacific Outlook

...and Retail sales in AP will show continued growth

Estimated Retail Sales for 1H08



Retail sales (US\$ bln)	624.5	503.2	83.81	84.07	49.89	19.57	13.92	16.24	11.69	11.82	26.8
1H08 YOY growth (%)	12.8%	0.7%	8.2%	4.5%	2.9%	4.7%	2.4%	10.5%	4.2%	6.7%	12.6%
1H07 YOY growth (%)	12.0%	1.3%	3.4%	4.9%	2.3%	7.0%	3.8%	3.2%	5.2%	6.5%	4.6%

Source: Mastercard Worldwide, MasterIndex™ of Retail Forecast, 2008 (India and Vietnam were not included in the study)

Asia Pacific retail sales

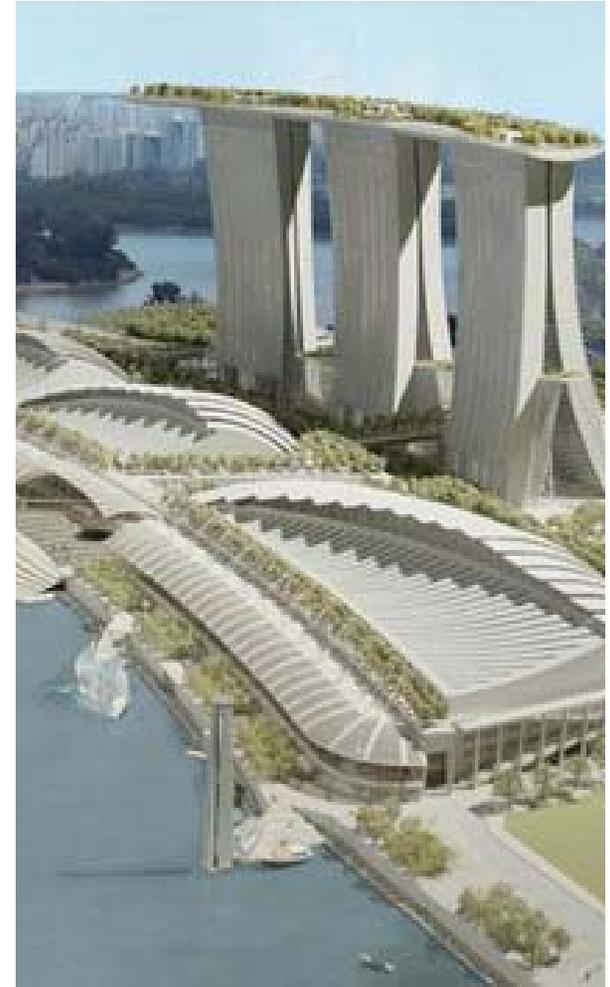
- Retail sales in most parts of the Asia-Pacific will see strong growth in 1Q08....
-with China leading the pack with a retail sales growth of 12.8% in 1H08
- Only Taiwan, Japan and New Zealand are expected to see slower growth in 2008

Other Demand Drivers

Fixed asset investment – an under-appreciated growth driver



- Construction has become a significant growth driver, resulting in tight markets for building materials
 - China is seeing double digit FAI growth, while more infrastructure investment will be pumped into the West (roads, pipelines) and South (Kunming-Singapore highway)
 - India's government will spend US\$101 bn on infrastructure in 2008 - 2012, not including 300 retail mall projects due to come on-stream in 2008
 - Malaysia is investing in the Iskandar Development Region (~US\$20b) and the Northern Corridor Economic Region
 - Singapore is seeing a construction boom, led by the Integrated Resorts and a rash of new properties
 - Hong Kong announced a clutch of major infrastructure projects in Oct 07
 - Australia's private and public construction is growing at 14%



Other Demand Drivers

FDI from US will be hit



- FDI is significant contributor to growth in Singapore, China and some of the ASEAN countries but increasingly India

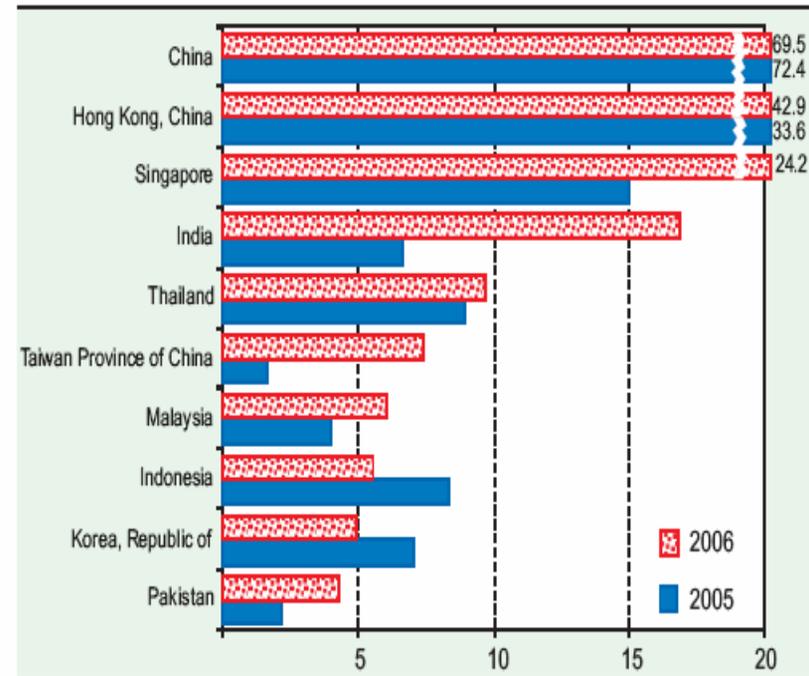
 - India has drawn US\$15 bn in FDI and US\$ 12 bn in portfolio investments in 1H 2007

- US FDI outflows to Asia may be hit by the softer economy and weaker dollar – affecting China to some extent and Singapore to a greater extent

- Intra-Asian FDI may pick up some of the slack - China is now one of the leading investors in Hong Kong, contributing US\$163.1 bn in cumulative FDI (31% of total stock) at end-2005

- More Asian companies are buying stakes in US firms, a trend that will continue through 2008

South, East & South-East Asia: top 10 recipients of FDI inflows, 2005 – 2006 (Billions of dollars)



Source: UNCTAD, FDI/TNC database (www.unctad.org/fdistatistics) and annex table B.1.

^a Ranked on the basis of the magnitude of FDI inflows in 2006.



Demand Driver

Exports will still grow albeit more slowly

- Exports have sustained strong growth in 2007
 - Exports to China and the EU have been rising
- Assembly activities continue to move from ASEAN, Taiwan and Korea to China
- There will be weaker US demand for exports due to the softening economy and a weaker US dollar
- Much will hinge on the EU, which is slowing (2.1% latest y-o-y growth)
- Trade liberalization will be a big fillip to exports
 - Vietnam's entry into WTO Jan 07
 - China-ASEAN FTA in a few years time
 - S Korea-USA FTA
 - A possible Taiwan-Singapore FTA and direct fights between Taiwan and China





Inflation

The region's Number One concern

- In 2008, inflation could hurt Asian growth (the big exception is Japan)
- China's CPI rose 8.7% for Feb 2008, versus 2.7% for Feb 2007
- Inflation is being driven by high Asian economic growth, income "tipping points" in China & India, coupled with energy and food scarcity
 - basic demand-supply imbalances
- High energy prices will be bad for Asia in general
 - there are few net oil exporters left in Asia
 - rising fuel prices will spark political fission as happened in Indonesia (2006) and Myanmar (2007)

% Change in consumer price index on a year ago	Feb 08	Feb 07
China	8.7	2.7
India*	5.5	6.7
Taiwan	3.9	-2.2
Singapore*	6.6	0.2
Japan*	0.7%	0%
Korea	3.6%	2.2%

Source: Economist Intelligence Unit
* Jan 08



Energy and Commodities

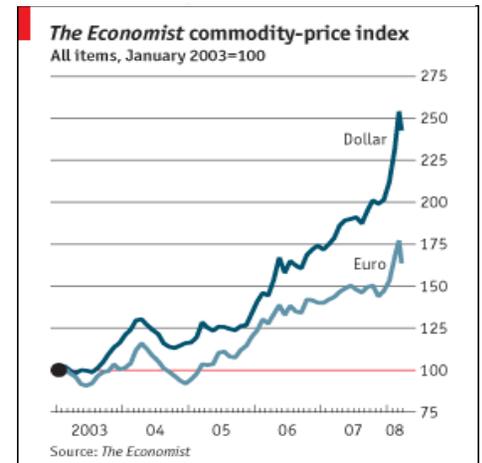
Commodities will drive inflation but benefit some verticals

- Commodity prices have surged on structural demand-supply imbalances, rising further after the Fed's rate cuts (recent falls do not affect this fundamental outlook)
- Oil prices will vary in the band of US\$80-120, having surpassed US\$100 in Feb 2008
 - This has been driven by a weakening US\$ & political tensions in the Middle-East
 - There is a major demand-supply imbalance for oil
 - However oil now makes up a much smaller % of global GDP than in the 1970s, and alternative energy sources are growing
- Some beneficiaries of high commodity/energy prices:
 - Palm oil and biofuel producers in Malaysia and Indonesia
 - Extractive industries in Australia and Indonesia
 - Agri-food in Vietnam, Thailand and Australia/New Zealand
 - Producers of extractive industry technology, eg. oil rigs

The Economist commodity-price index
2000=100

	Mar 10th	Mar 17th*	% change on	
			one month	one year
Dollar index				
All items	270.1	259.9	+3.1	+33.5
Food	271.2	258.3	+2.6	+62.1
Industrials				
All	268.6	262.1	+3.6	+9.0
Nfa†	191.7	192.8	+1.2	+24.7
Metals	310.7	300.0	+4.4	+4.4
Sterling index				
All items	204.4	197.0	+0.5	+30.7
Euro index				
All items	162.9	152.5	-3.6	+12.6
Gold				
\$ per oz	974.90	1011.60	+9.0	+53.3
West Texas Intermediate				
\$ per barrel	108.64	105.94	+6.4	+85.0

*Provisional †Non-food agriculturals.



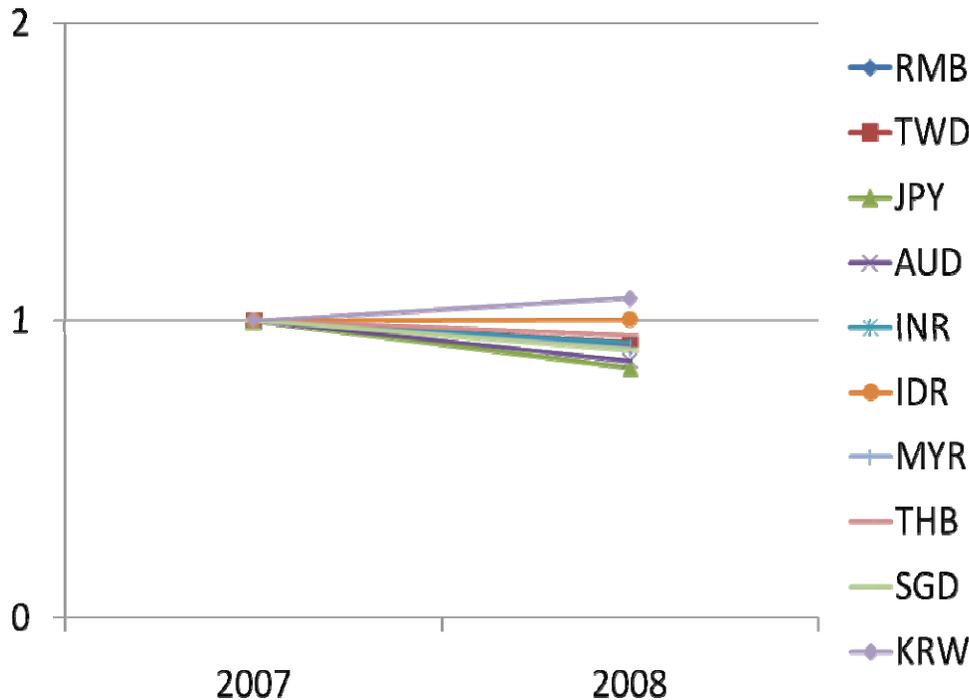


Currency

The US dollar will weaken a little before it gets stronger towards late 2008

Asian Currency Movement Index against the USD

Currency units, per USD	RMB	TWD	JPY	AUD	INR	IDR	MYR	THB	SGD	KRW
2007	7.74	33.1	117	1.25	43.8	9,155	3.50	32.9	1.53	942
2008	7.08	30.7	98.2	1.08	40.5	9,185	3.17	31.2	1.38	1,014



- A weakened US dollar is here to stay
- The Fed may continue to cut rates, but less aggressively
- A weaker US\$ will hit some exporters more than others...
 - ...especially electronics and automotive exporters in Singapore, Korea and Taiwan
- But many AP exporting nations are diversified, eg. China exports more to EU than USA
- Scenario of radical collapse of US dollar highly unlikely

Public Policy Issues

2008: fiscal stimulus and cautious monetary policy



- Expect more government spending and tax cuts going forward
- Monetary policy will be cautious in China, India and Japan, but excessive tightening is unlikely
 - China will try for a soft landing with interest rate hikes (already raised many times in 07), reserve floor hikes and export taxes for some industries (eg. steel), but so far these have failed to curb inflation and share speculative bubbles
 - India will push ahead with SEZs in spite of some political setbacks
- AP corporate taxes fell 2.1 percentage points between 1997 and 2007
 - Seen in Australia, Singapore and Hong Kong in 2007
 - China is the big exception, raising corporate tax on MNCs



2008 – A Political Year

This adds to the uncertainty that will cloud investment planning



- Asia Pacific elections in late 2007 & 2008:
 - Thailand elections Dec 07
 - Korean elections Dec 07
 - Taiwan Presidential & legislative elections Jan-Mar 08
 - Malaysia Mar 08
 - Pakistan Jan 08
 - New Zealand Parliamentary elections – late 08
 - United States Presidential elections – Dec 08
 - Korean Presidential elections – Dec 07
- Elections tend to provide some stimulus to the economy but also hold out potential for disruptions to business
- Results of elections in US might be problematic for the economic status quo



Security

Intra-state instability probably a greater concern than inter-state conflict or terrorism



● Political hot spots in Asia in 2008:

- China-Taiwan: China flexing military muscles in space and cyberspace, but no flare-ups likely in election year; new Taiwan President will improve ties
- Pakistan: economy will take a hit; India-Pakistan relations will be in stalemate
- Myanmar and North Korea: unlikely to see sudden regime change, but may spark tensions in their respective regions
- Thailand: return to democracy progressing well
- Terrorism/security issues not likely to loom large:
 - Terrorist JI network – critically weakened after Nov 2005 and Jun 2007 arrests in Indonesia
 - Progress seen in Indonesian insurgencies (Aceh and West Papua)
 - On-going political conflicts where risks loom – terrorism in India and Southern Thailand

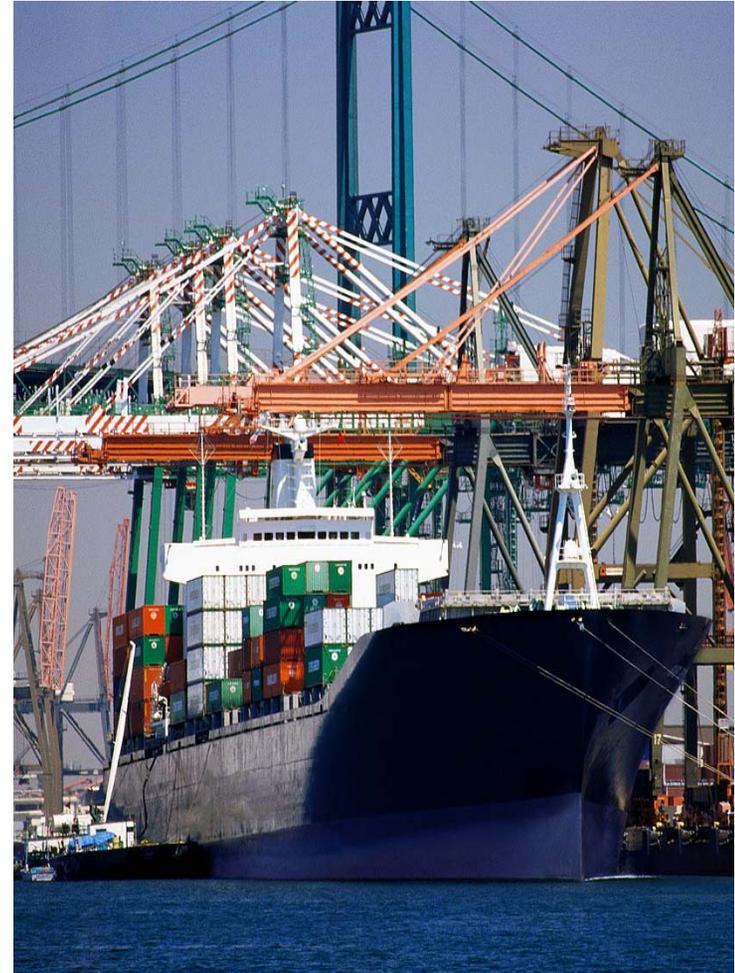


Air/Ocean Freight

Growth will continue but at a slower rate compared to 2007



- Fuelled by strong trans-Pacific and East Asian trade, air and ocean freight volumes have been increasing steadily
- Air freight demand grew 3.6% in October 2007 compared to the year before, but this is down from the 5.0% y-o-y growth recorded in September, and partly reverses the strong pick up of freight growth seen in mid-2007
 - By 2025, 2,990 aircraft will be added to freighter fleets around the world, with three out of four of those planes being converted from passenger jets
- Double-digit growth in demand for international container shipping services in 2007
 - Prompted operators to go on a buying spree – cape-size ships, the largest type of bulk carrier, have almost tripled in price to US\$96 million from 1998



Government Initiatives

ASEAN integrates further into single market



- The ASEAN logistics market has seen an upward trend for the past 3-4 years, and is expected to continue growing strongly over the next five years
- Under the ASEAN Free Trade Area (Afta), significant progress has been achieved in reducing goods tariffs
 - 99.8 per cent of goods under the Inclusion List for the Asean-6 countries (Brunei, Indonesia, Malaysia, the Philippines, Singapore and Thailand) are in the tariff range of 0-5 per cent
 - ASEAN governments have also committed themselves to liberalizing their nations' services sectors, the first of which is to establish an ASEAN Open Skies Agreement in 2008
- China implemented the China-ASEAN Trade in Goods (TIG) Agreement in July 2005
 - The CAFTA-TIG Agreement covers tariff-lines representing more than 95% of China-ASEAN trade, which grew annually by 23% from 1997-2005 to reach US\$130.5 billion
 - Trade with ASEAN represented about 9% of China's total trade in 2005, making ASEAN its fifth largest trading partner following the EU, US, Japan and Hong Kong

Government Initiatives

New routes to facilitate logistics in Asia



- China is dealing with its infrastructure shortcomings aggressively and is expected to add 23% more roads over the next five years
 - It will also construct 100,000 km of new rail lines, one-third of that being high-speed passenger lines
 - Plans for a 4-lane highway from Hanoi to Kunming – the construction will add a section to the ambitious Asian Highway program under which 27 Asian countries have pledged to build a 140,000-kilometer network of roads that meet minimum uniform standards
- Taiwan government enacted legislation in 2003 to increase and develop Free Trade Zones on the island
 - Five were officially inaugurated in January 2006: Kaohsiung Harbor, Taichung Port, Taipei Port, Keelung Port, and Taoyuan Airport





Government Initiatives

New routes to facilitate logistics in Asia (cont'd)

- Two Thai routes are expected to materialize by 2008
 - North-South Economic Corridor, a transport project focusing on a rail system
 - East-West Economic Corridor, a road project
- Philippines is building the Subic-Clark-Tarlac Expressway in Central Luzon, expected to be finished by November 2007
 - US\$430 million project will put in place all enabling components of the "logistics hub" as part of the Luzon Urban Beltway super regions' blueprint of President Gloria Macapagal Arroyo
- India SEZs develop routes
 - Highways & Road development projects worth USD12 billion being implemented through National Highway Authority of India (NHAI)
 - Moves to augment rail infrastructure through private sector being brought in place



Emerging Hubs in the Asia-Pacific

AP countries are committed to investing heavily in logistics



- Singapore is already home to the world's largest container port, connecting to 123 countries and more than 600 ports
 - Economic Development Board (EDB) has been developing a full range of logistics and supply chain management capabilities
- Hong Kong is world's 3rd busiest container port in 1st half of 2007 and has been ranked the busiest airport for international cargo since 1996
 - Handled 9.35 million TEUs, followed by Singapore (11.1 mil) and Shanghai (10.3 mil)
 - In 2006, Hong Kong's air cargo reached 3.6 million tonnes and express air cargo is expected to grow about 13% annually for the next decade
- Malaysia's Senai Airport Terminal Services aims to invest M\$1 billion over the next 10 years to upgrade the airport's infrastructure
 - Senai Airport, which currently handles 7,000 tons of cargo, plans to increase its throughput to around 328,000 tons
- Taiwan's logistics industry saw business revenues of NTD 791.9 billion in 2006
 - Government policies have also been revised to streamline trading, customs clearance and shipping procedures, eliminating the need for long and tedious paperwork



Emerging Hubs in the Asia-Pacific

AP countries are committed to investing heavily in logistics (cont'd)

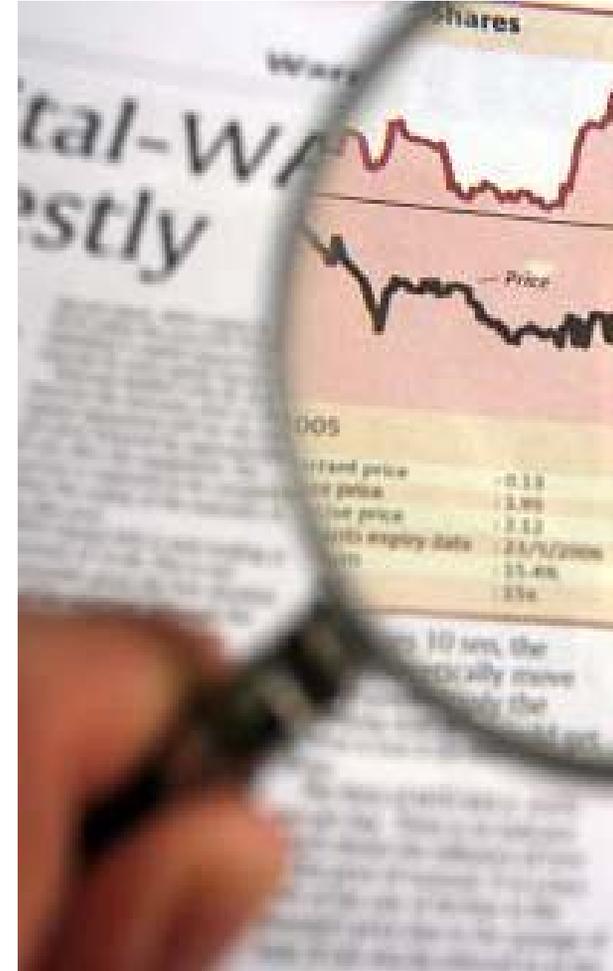
- Korea will provide world-class logistical infrastructure including Incheon International Airport (IIA) and Gwangyang and Busan seaports
 - IIA is currently the 4th largest air freight handler worldwide
 - The freight terminal will be expanded from the current 132,000 to 429,000 square meters by 2020
- Thailand is upgrading logistics facilities and technology infrastructure to increase the nation's freight handling capacity and assure faster, more efficient cargo movement
 - Construction of a new international airport, expansion of premier deep-sea port, improvements in multi-modal linkages, the proliferation of e-logistics and RFID electronic container and seal systems to achieve paperless Free Zone operations by 2008
- Vietnam to collaborate with Singapore in the development and integration of port and logistics facilities in Vietnam
 - PSA has formed a Joint Venture with Saigon Port to develop a container terminal in the Ba Ria-Vung Tau province while NOL Group has a stake in the Vietnam International Container Terminals, the first dedicated container port in Vietnam
 - Between 2004 and 2006, bilateral trade grew by 47% to reach S\$11.3 billion

Country Outlooks



While China dominates, India & Vietnam are fast rising & ASEAN is healthy

- China – strong growth, no disruptive state policy changes till 2009
 - Tibet uprising unlikely to have major impact on economy
 - Some backlash against China-made consumer products will be seen globally, but in the longer-term, this will help push up production standards
- India – strong growth, some inflation risks, watch for some stock exchange correction and property bubbles in some cities; more attention to 2nd tier cities
- Vietnam – strong export growth with WTO entry, more liberalization of FDI rules for services going into 2009
- Indonesia – healthy retail sales and growth, with relative political and currency stability

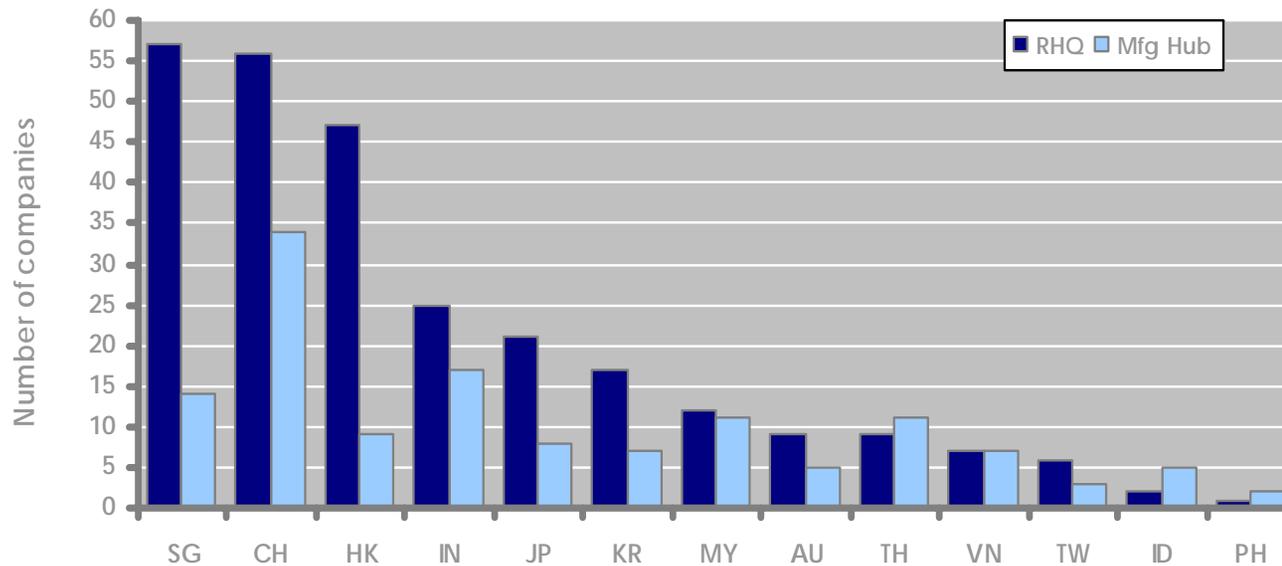


Country Outlooks

China and India are seen as the production hubs of the future



Perceived attractive, up-and-coming hubs for
RHQs and manufacturing



Source: Spire Research and Consulting, based on survey of 105 international companies operating in Asia Pacific

- Spire's research among 105 international firms in 7 Asia Pacific countries revealed that:
 - China is still seen as the production location of the future, followed surprisingly closely by India and ASEAN (Singapore/Thailand/Malaysia)
 - Singapore, China and Hong Kong will remain the region's key regional headquarters locations

In Short: The Big Issues



- Asia Pacific economic growth will still be healthy into 2008, albeit slowing significantly from 2007 thanks to the US slow-down
- Plenty of Asian domestic demand to go around to cushion against weaker exports
- The outlook for international trade and logistics is positive – governments in Asia are prepared to invest in transport and logistics infrastructure
- Inflation, high commodity/energy prices and a weaker US dollar are the biggest worries
- China, India and parts of ASEAN will be the key production centers of the future, with Singapore and Hong Kong remaining as the key regional HQ locations
- Trends to look out for in future
 - China-Taiwan trade
 - Exports out of India
 - Reverse logistics



The Knowledge to Decide