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MALAYSIA EQUITY

TOWARDS ASEAN OPEN SKY

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EXECUTIVE SUMMARY

TOWARDS ASEAN OPEN SKY

- The introduction of the ASEAN Open Sky Policy or better known as the ASEAN Single Aviation Market (ASAM) is a policy framework towards the integration of the ASEAN aviation market even with the level of air freedom rights under the ASAM are not as extensive as the European and Trans-Tasman Open Sky Policies.
- Naturally, the level of acceptance of the ASAM varies from one nation to another due to differing development levels of the respective nations. The limitations are due to the physical infrastructure in place and readiness of the respective industry champions. Evidently, countries such as Indonesia and the Philippines were selective on the levels of acceptance of agreements underpinning the ASAM, namely the Multilateral Agreement on Air Service (MAAS), The Multilateral Agreement of Full Liberalisation of Air Freight Services (MAFLAFS) and Multilateral Agreement for Full Liberalisation of Passenger Air Services (MAFLPAS), as these would eventually supersede existing bilateral agreements amongst nation members. Meanwhile, Malaysia and Singapore are the strongest advocates of the policy due to their established aviation industry as well as industry champions.
- With the reduction of trade barriers, we foresee the ASAM having expansive impact to various sectors. The lower costs of air travel, as a result, not only benefit the tourism sector but would also encourage business travels and air freight logistics that could expedite economic growth.
- Specifically for the industry players, the Open Sky Policy could propagate the growth of established players which might also lead to some consolidation within the sector. Notwithstanding, we believe the less restrictive environment could pave the way for new players and/or provide opportunity for troubled or ailing airlines to reinvent its existing businesses. However, these would only be possible with high commitment from Association of South East Asian Nations (ASEAN) members to ensure a transparent industry practice. We shortlist the beneficiaries from the ASAM as shown in Table 1.

Table 1: Beneficiaries from the ASEAN Open Sky Policy

Stocks	Mkt Cap (USDm)	P/E (x)	P/B (x)	Net Gearing	Comments
AirAsia (MK)	2,282.24	10.5	1.5	1.8	Gains higher market share and traffic from routes previously dominated by Full Service Carriers (FSC)
AirAsia X (MK)	468.98	n.a.	1.9	1.4	Benefits from higher traffic via connecting flights from AirAsia
MAHB (MK)	2,679.35	62.6	1.6	0.8	Higher passenger service charge (PSC) collection and retail spending from increased traffic. klia2 should see higher traffic growth as LCC penetration increases
Cebu Pacific (PH)	1,151.35	26.7	2.3	1.1	Access new routes supported by rising middle income group and large migrant workforce
SAST (SP)	2,451.85	18.5	2.3	net cash	Growing demand for ground handling and catering service from Changi Airport
Tiger Air (SP)	431.55	n.a.	n.a.	0.7	Access new routes which results in higher passenger traffic
Airport of Thailand (TB)	12,292.42	33.1	4.2	net cash	Benefiting from rising travel demand and passenger traffic
Asia Aviation (TB)	675.39	n.a.	1.2	0.1	Gains new market access and spill-over of rising leisure travel demand within ASEAN
Nok Air (TB)	254.64	n.a.	2.2	net cash	Gains new market access and spill-over of rising leisure travel demand within ASEAN

Source: Bloomberg, MIDFR
As of 19 Dec 2014

A. INTRODUCTION

I. THE AVIATION MARKET UNDER ONE SKY

- Integrating ASEAN economies is very challenging and requires relentless efforts by its members. The various protectionist measures in place and inconsistent policies amongst the nations create artificial barriers and red tapes which further amplifies the risk of doing business. This is further complicated by ASEAN's expansive and geographically fragmented land area of 4.46m km^2. The growing competition from major economies such as China and India is a strong impetus for ASEAN members to create a more cohesive business environment.

- The Open Sky concept removes the restrictions on ticket prices and capacity limits, relaxes foreign ownerships and Air Freedom Rights (AFR). The policy aims to create an environment which promotes healthy competition and provide cohesiveness that eventually benefits end users across various sectors. However, the degree of liberalisation is dependent on the commitment levels of respective nations which are subject to the number of airlines and available capacity.

- In the supply chain of electronics products which accounts 20-50% of total export values for most ASEAN countries, air freight service is integral to ensure production costs remain competitive as well as the integrity and security of the cargo during transit. This is the case with other high value-to-weight cargo such as pharmaceuticals, medical devices and aerospace components. The limited number of sizeable and advance port facilities in the region and poor road network infrastructure in the less-developed nations limits the potential economic benefits that could be extracted from the ASEAN Economic Community (AEC) initiative.

- The benefits made available to the commercial services could be extended to the commercial passenger segment further compounding the economic multiplier effect from the liberalisation. This should benefit the Low-Cost Carriers (LCCs) in ASEAN while promoting a more conducive landscape that could pave the way for new players and/or provide the opportunity for troubled or ailing airlines to reinvigorate its existing businesses.

- Healthier competition amongst the airlines would also lead to cheaper fares, as well as quality and reliable services which could further propagate the ASEAN economy. Where tourism is concerned, the ASEAN region has been one of the most attractive destinations for tourists around the world due to the rich heritage and diverse cultures. Over the last five years, tourist arrivals to ASEAN have grown at about +8% CAGR, hitting 99.2m in 2013, and increased +11.7%yoy.

- The ASEAN Open Sky Policy is not the first aviation liberalisation policy introduced. Currently, a wide range of bilateral agreement is already in place with bespoke bilateral policies between nations. The commitment level amongst the ASEAN countries differ due to varying maturity of their respective aviation sectors. Understandably, countries with less-developed airlines prefer to see a gradual move towards liberalisation while those which are already seeing limited restrictions imposed in their respective airspace are keen to move towards full liberalisation.

- The policy takes its truest form under the Single European Sky (SES) as well as the Trans-Tasman Single Aviation Market (TTSAM) between Australia and New Zealand. The latter, however, is an extended form of a bilateral agreement rather than an outright open sky policy. The US-EU Open Sky (UEOS) Policy which was inked in 2008 (Phase 1) and 2010 (Phase 2) is also a diluted form of the Open Sky concept.

B. BACKGROUND

I. ASEAN OPEN SKY POLICY

- A wide range of bilateral agreements are currently in place amongst ASEAN nations with bespoke arrangements between the governments. These arrangements vary in degree of liberalisation according to the competitive landscape of the countries involved which includes the number of airlines competing and the amount of capacity offered.

- Working towards the Open Sky Policy, the ASEAN members have undertaken what is known as the ASAM. Eventually, the ASAM would supersede the various bilateral agreements among member states. The aim of the ASAM is to unify the aviation market which should lead to a more liberalised environment that would benefit the tourism, trade, service flows as well as stimulate investments. To-date, there are three major aviation agreements that underpin the ASAM, namely:

  » **The Multilateral Agreement on Air Service (MAAS)**
  The agreement was inked among ASEAN countries on 20th May 2009 in Manila. It was the first multilateral agreement which contained relaxation of third/fourth and fifth air freedom rights among ASEAN capital cities. Ironically, Philippines opted out of protocols 5 and 6 which restrict entry into Manila's Ninoy Aquino International Airport citing runway congestion and shortages of airport slots.

  » **The Multilateral Agreement of Full Liberalisation of Air Freight Services (MAFLAFS)**
  The agreement was ratified on 10th December 2009 to ensure a more efficient and competitive international air freight service which promotes regional economic growth. The agreement entails unlimited third/fourth and fifth air freedom rights among all international airports for air freight service. Indonesia opted out due to concerns of other regional freighters affecting its air cargo companies.

  » **The Multilateral Agreement for Full Liberalisation of Passenger Air Services (MAFLPAS)**
  The agreement was inked between member states on 10th November 2010. Similar to MAFLAFS, the MAFLPAS addresses passenger air services and adopts the third/fourth and fifth air freedom rights among all ASEAN secondary international airports. MAFLPAS supplements MAAS to cover access points in ASEAN other than those the capital cities. There were fewer acceptances with Indonesia, Laos and Cambodia opting out while Philippines signed MAFLPAS to allow entry into its secondary cities although access to the Ninoy Aquino International Airport remains restricted.

- The terms of the ASAM agreements were silent on foreign ownerships of airlines. This is expected to be addressed under the ASEAN Community Carrier concept. However, details of this concept remain sketchy but we believe it would address the issue of foreign ownership in national carriers.

- By and large, the sentiments amongst each ASEAN members towards a more liberalised market are mixed due to vested interest in their respective aviation industries. This is understandable given the different development levels of the aviation industry between these states. As such, certain ASEAN countries prefer to see a gradual move towards liberalisation while others, particularly those which already adopts less restrictive stance or have limited interest in the sector are keen to see a swifter adoption of the ASAM policies.

Table 2: Summary of ASEAN Open Sky Policy Agreements (as of October 2014)

Measures	Progress	Scope	Participating members
MAAS	Signed on 20 May 2009	Relaxation of 3rd/4th/5th air freedom rights for capital cities	All members except for Philippines
MAFLAFS	Signed on 10 Dec 2009	Unlimited access of 3rd/4th/5th air freedom rights for air freight among all international airports	All members except for Indonesia
MAFLPAS	Signed on 10 Nov 2010	Relaxation of 3rd/4th/5th air freedom rights for all secondary international airports	All members except for Indonesia, Laos, and Cambodia

Source: ASEAN, MIDFR

II. AIR FREEDOM RIGHTS

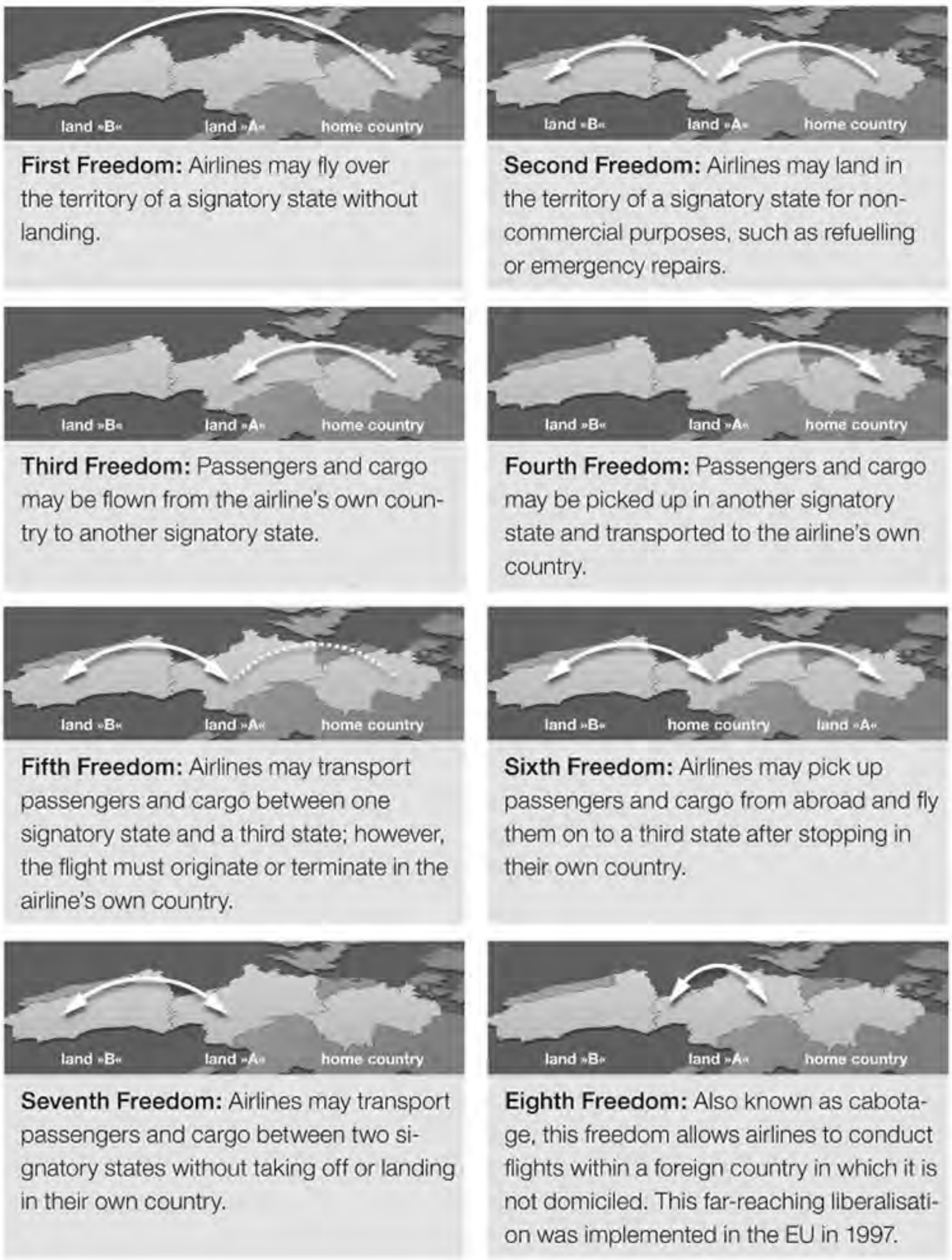
- The right for airlines to fly over or land in territory of another country, also known as AFR serves as the fundamental framework of international commercial aviation route network. Under the international norm, each state has the exclusive sovereignty over the airspace within its territory. The degree of AFRs grants commercial airlines the privilege to enter and/or land in another country's airspace.
- The first through fifth AFRs are officially defined by the Chicago Convention, while subsequent levels are not officially recognised by the international treaty but agreed by several countries. The lower AFR levels are relatively universal while the higher ones are rarer and more contentious as it allows foreign airlines to be domiciled. Thus far, only two developed single aviation markets had achieved the Ninth Freedom right: the SES and the TTSAM. The concepts of AFRs are illustrated in Figure 1.
- The granting of AFRs allows individual state to charge a nominal fee for the transiting aircraft using the designated air routes. For example, the Federal Aviation Administration (FAA) charges transiting fee from the point of entry to the point of exit of US-controlled airspace via two types of fee: (i) en-route fees of USD56.86 per 100 nautical miles (nm), and (ii) oceanic fee of USD21.63 per 100 nm.

Table 3: Fees imposed within U.S.-controlled Airspace

Overflight Fee Rates		
Effective Date	En-Route	Oceanic
1-Oct-12	USD 43.82	USD18.60
1-Oct-13	USD 49.95	USD 20.09
1-Oct-14	USD 56.86	USD 21.63

* Rates expressed per 100 nautical miles (nm), Great Circle Distance (GCD) from point of entry into point of exit from U.S. controlled airspace.
Source: Federal Aviation Administration (FAA), MIDFR

Figure 1: Concept of AFR



Source: ICAO, Lufthansagroup, MIDFR

III. KEY PROVISIONS OF OPEN SKIES

- The bilateral Air Service Agreement (ASA) defines the terms for international commercial air transport services between two countries and plays a vital role in air logistics. These early bilateral agreements are the precursor to the Open Sky Policies that the U.S. began to negotiate in the 1990s. In order to advance its international aviation policy, the U.S. Department of Transportation (DOT) announced in 1995 that it would seek liberalised aviation agreements with European countries and other partners for open entry on all air routes, unrestricted capacity and frequency on all routes. Today, the U.S. has Open Sky agreements with >100 countries. The principles in these agreements have become the gold standard for the ASAs in other countries.

Table 4: Types of Liberalisation of ASA

Agreement Type	Bilateral route	5^{th} AFR	Code share	Capacity	Designation	Pricing	Ownership	7^{th} AFR	Cabotage
Conventional Bilateral	P	P	P	R	R	R	R	R	R
US Open Sky	F	F	F	F	F	P	R	R	R
APEC Multilateral	F	F	F	F	F	F	P	R	R
SES	F	F	F	F	F	F	F	F	F
TTSAM	F	F	F	F	F	F	F	F	F

Note: R - Restricted, P - Partial Liberalised, F - Full Liberalised
Source: Miwa and Hanoka, ASEAN, MIDFR

- Taking cue from the ASAs, the Open Sky concept is an international policy concept which calls for the liberalisation of rules and regulations on commercial aviation industry. With minimum government intervention, the aviation industry is expected to be more competitive with the supply-demand dynamics being a key determinant to prices and available capacity. Currently, most of the existing open sky policies encompass a few key provisions which include:

  » **Free market competitions**
  No restrictions on international route rights; number of designated airlines; capacity frequencies; and types of aircraft.

  » **Pricing determined by market forces**
  A fare can be disallowed only if both government concur (double approval pricing) and only for certain, specified reasons intended to ensure competition.

  » **Fair and equal opportunity to compete**
  All carriers of both countries may establish sales office in the other country, and convert earnings and remit them in hard currency promptly and without restrictions; user charges are non-discriminatory and based on costs.

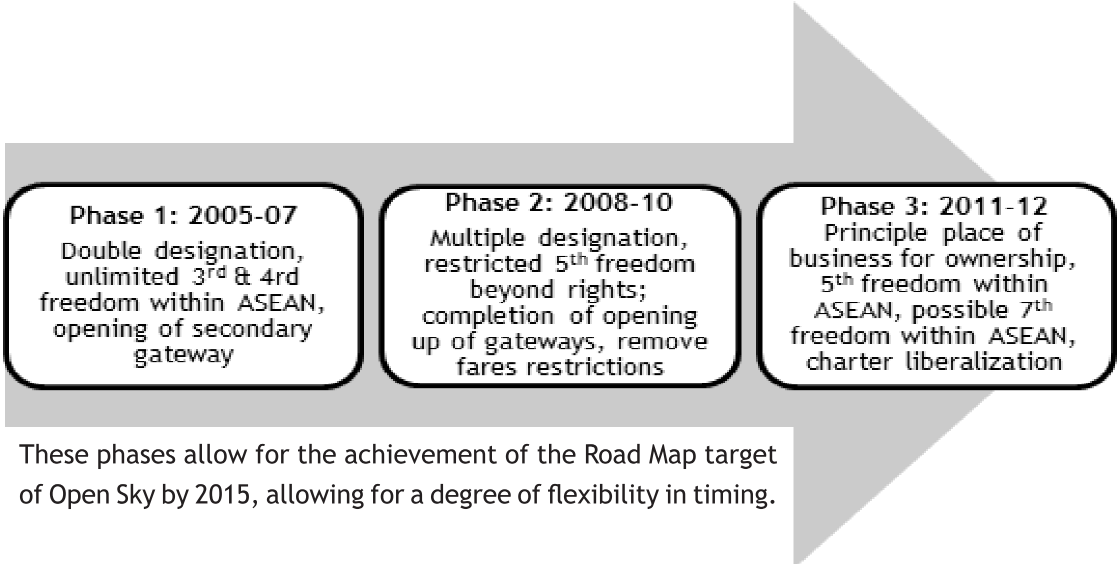
  » **Cooperative marketing agreement**
  Designated airlines may enter into code-sharing or leasing agreements with airlines of either country, or with those of third countries, subject to usual regulations.

  » **Provisions for dispute settlement and consultation**
  Model text includes procedures for resolving differences that arise under agreement.

  » **Liberal charter agreements**
  Carriers may choose to operate under the charter regulations of either country.

  » **Safety and security**
  Each government agrees to observe high standards of aviation safety and security, and to render assistance to the other in certain circumstance.

Figure 2: Staged process of air liberalisation for ASEAN



Source: ASEAN, MIDFR

IV. TYPES OF OPEN SKIES AGREEMENTS

- The Open Sky agreement takes its truest form under the SES and the TTSAM in which the highest degree of liberalisation with the relaxation of all eight AFRs. SES has been in effect since 1997 while TTSAM was implemented since 1996. This led to more routes being introduced and healthier competition which promoted greater choice and lower fares in these two regions.

- The UEOS Policy which was inked in 2008 (Phase 1) and 2010 (Phase 2) is a diluted form of the Open Sky concept. Foreign airlines have limited access to the US domestic market. The US Federal Aviation Act also prohibits foreigners from owning >25% of an American airline. This restrains the accessibility of foreign capital as well as limit growth opportunities and participations in the US aviation industry. The protectionist policies have discouraged competition amongst the US domestic airlines which resulted in lower productivity gain and limited fare options for air travellers.

Table 5: Selected key ASEAN indicators in 2013

Membership	10 states 2 observers
Headquarter	Indonesia
Total land area, km^2	4,435,617
Total population, '000	625,096
GDP at current prices, USD'm	2,398,550
GDP growth, %	5.1
FDI inflow, USD'm	122,377
HDI	0.669 (medium)

Source: ASEANstats, MIDFR

Table 6: ASEAN Airlines at a Glance

Countries	Types	Airlines	Operated fleet size	Orders	Fleet type
Brunei	FSC	Royal Brunei Airlines	10	8	n.a.
Cambodia	FSC	Cambodia Angkor Air	7	2	A321, ATR72-5
	n.a.	Cambodia Bayon Airlines	0	30	A320, MA-60
Indonesia	LCC	Citilink	31	59	A320
	LCC	Indonesia AirAsia	30	0	A320
	LCC	Lion Air	101	505	A320, B737,
	FSC	Garuda Indonesia	134	116	ATR72, A330, B737,
	FSC	Merpati Nusantara Airlines	25	40	B747, B777, CRJ1000
	FSC	Sriwijaya Air	34	11	B737
Laos	FSC	Lao Airlines	13	2	A320, ATR72-5/6, MA60
	FSC	Lao Central Airlines	3	2	B737, Sukhoi
Malaysia	LCC	AirAsia	170	322	A320
	LCC	AirAsia X	21	99	A330, A340
	FSC	Berjaya Air	7	0	ATR72-5, DHC-7
	FSC	Firefly	17	16	ATR72-5/6, B737
	LCC	Malindo	18	22	ATR72-6, B737
	FSC	MAS	96	24	A330, A380, B747, B777
Myanmar	LCC	Golden Myanmar Airlines	4	0	n.a.
	FSC	Myanmar Airways Int'l	9	n.a.	n.a.
Philippine	LCC	AirAsia Zest	18	0	A320
	LCC	Cebu Pacific	52	39	A320, A330, ATR72-5
	LCC	PAL Express	23	0	A320, A330, DCH8
	FSC	Philippine Airlines	50	41	A320, A330, A340, B777
Singapore	LCC	Jetstar Asia Airways	18	0	A320
	LCC	Scoot	6	20	B777, B787
	FSC	SilkAir	29	48	A320, B737
	FSC	SIA	107	115	A330, A380, B777
	LCC	Tigerair	33	37	A320
Thailand	FSC	Bangkok Airways	26	14	A320, ATR72-5
	LCC	Nok Air	n.a.	n.a.	n.a.
	LCC	Orient Thai Airlines	17	2	B737, B747, B767
	LCC	Thai AirAsia	40	23	A320
	LCC	Thai Lion Air	7	18	ATR72-6, B737
	FSC	Thai Airways	85	30	A320, A340, B737, B747, B777
	FSC	Thai Smile	16	4	A320
Vietnam	LCC	Jetstar Pacific Airlines	8	0	A320
	LCC	VietJet Air	16	100	A320
	FSC	Vietnam Airlines	88	22	A321, A330, ATR72-5, B777

Source: Companies, MIDFR

C. ASEAN MEMBERS DEVELOPMENTS

I. THE IMPEDIMENTS TO ASEAN OPEN SKY POLICY

- **The ASAM is less ambitious compared to that of the SES and TTSAM policies.** ASAM only adopts the third, fourth and fifth AFRs while foreign airlines (i.e. outside ASEAN) are not allowed to connect between two domestic points within the region. We believe there are huge economic benefits that could be extracted from this policy.

- However, it is not without its fair share of challenges that ranges from infrastructure capabilities at the respective airports and different business models adopted by the airlines. It is also challenging for the respective member state to stay objective in order to ensure market condition remains fair. The challenges or impediments that we have identified are:

  » **Various degrees of acceptance among ASEAN members.** Many ASEAN governments continue to adopt various degree of protectionism despite the potential benefits that could be had from the Open Sky Policy. In our opinion, this could be largely due to ensuring the survivability of national carriers in light of heavy investments made in prior years. Evidently, the Philippine government have adopted the Executive Order (EO29) to grant the AFRs to foreign carriers that serve its national interest which led to its commitment to the MAFLPAS. However, access to its international airport in Manila remains restricted. Meanwhile, Indonesia has committed to the MAAS (relaxes access to Jakarta) but access to airports in secondary cities are largely restricted. At this juncture, Indonesia has nominated five airports namely, Surabaya, Makassar, Bali, Medan and Jakarta to be open up under the MAFLPAS and MAFLAFS.

  » **Possible emerging of unethical market behaviour.** While the competitive environment may weed out financially-weaker carriers, it could also distort the aviation market. Full liberalisation of the aviation market raises concerns of anti-competitive behaviour such as predatory pricing, collusion, subsidy grants from governments, and prejudicial M&A activities. Most recent example was the rivalry between domestic carriers in Malaysia. In early FY13, MAS expanded its capacity and engaged on a price war with AirAsia X after the former's balance sheet received a boost of RM3.1b from a recapitalisation exercise. For long haul routes, MAS added more capacity whenever AirAsia X increased its route capacity. AirAsia X's capacity expansion was also to do with the company defending its market share against new LCC players. As a result of the aggressive fare cutting and overcapacity, both MAS and AirAsia X incurred huge losses.

  » **Infrastructure and airports constraints.** The fundamental issues such as airport infrastructure, air traffic management and facilities would still need to be addressed. Facilities in some of the ASEAN airports are still inadequate to support air freight terminal handling, storage facilities, and not to mention the growing tourist arrivals. Major ASEAN airports such as Manila's Ninoy Aquino, Jakarta's Soekarno-Hatta and Bangkok's Suvarnabhumi have exceeded their designed capacity while Thailand reopened its Bangkok Don Mueng Airport to cater to the tremendous growth in the LCC sector. Nevertheless, infrastructure gaps are still prevalent between the airports in the region. This could limit the potential benefits arising from the Open Sky Policy. We also believe that the air navigation system and procedures would have to be streamlined to better optimise the benefits of the Open Sky policy.

Table 7: Top Five ASEAN Busiest Airports by Passenger Traffic

Airports	Location	Total Passengers	Global Ranking	Growth* (%yoy)
Soekarno-Hatta International Airport	Cengkareng, Tangerang, Banten, Indonesia	59,701,543	10	+3.4
Singapore Changi Airport	Changi, Singapore	53,726,087	13	+5.0
Suvarnabhumi Airport	Bang Phli, Samut Prakan, Thailand	51,363,451	17	-3.1
Kuala Lumpur International Airport	Sepang, Selangor, Malaysia	47,498,157	20	+19.1
Ninoy Aquino International Airport	Pasay/Parañaque, Metro Manila, Philippines	32,856,597	45	+3.1

*as of 2013
Source: Airports Council International, MIDFR

II. IS MALAYSIA READY FOR AIR LIBERALISATION?

- We believe Malaysia is poised to be one of the biggest beneficiaries of the ASEAN Open Sky Policy other than Singapore. With their respective airspaces having the least restrictions and the most advanced international airports in the region, these two nations are the strongest advocates of the policy. The two countries have also set up their respective national aviation regulators to coordinate the development of their aviation sectors.

- Specifically for Malaysia, the country boasts an established aviation support service industry which provides cost advantage to regional airlines. This is complemented by a large pool of multi-lingual and talented workforce which has seen strong demand from the Middle Eastern airliners.

- The Malaysian government has been instrumental in encouraging the growth of the aviation sector. This was evident with the aggressive global tourism promotions and various initiatives undertaken in prior years as well as with the construction of the klia2, a pioneering airport concept that caters to LCCs. Further attributes that supports Malaysia's advantage under the Open Sky Policy are as follows:

  » **Infrastructure is essential for the future growth.** Blessed with early-mover advantage, Malaysia possesses the most comprehensive aviation infrastructure and landscape within the region. In addition, the entry and incorporation of local bases western aviation players and established MRO companies contribute positively to its GDP. To-date, it is home to more than 30 MRO companies, which includes GE Aviation, Augusta Westland, Rolls Royce, Eurocopter, and MAS Aerospace Engineering. Meanwhile, the sizeable presence of three domestic carriers enables the country to see more upside potential once the Open Sky Policy is in place.

  » **Domestic LCCs could ride the waves of ASEAN single aviation market.** In our view, only AirAsia and Lion Air have shown strong interest to expand abroad while most airlines continue to struggle or remain entrenched in their domestic markets. With the unlimited granting of the fifth AFR, we believe that the established Malaysian LCC players are able to gain more access to other ASEAN countries. This was evident with the deregulation of the European aviation industry which saw the LCC sector experiencing quadruple-digit growth over the last 17 years.

» **Potential of klia2 to develop into key transfer hub for LCCs.** Since 2006, the LCCT had experienced exponential passenger growth underpinned by minimal daily operating costs, airport charges and passenger tariffs in addition to recieving various incentives. We believe the opening of klia2 could further enhance the position of Kuala Lumpur as the key regional transfer hub for LCCs. With annual capacity of 45m passenger traffic, klia2 could reach its full capacity by 2022, assuming an 8% CAGR. With LCC traffic growth outpacing FSC's, we foresee MAHB's revenue composition tilting towards indirect aeronautical income such as rental and retail spending of LCC travellers instead of higher airport tariff. This could further strengthen klia2's position within the region.

III. THE POSITIVE IMPACT OF THE OPEN SKY POLICY

- **Ease of access to support industry growth.** We believe established airlines are key beneficiaries of the ASEAN Open Sky policy especially amongst the LCCs. The region has the highest LCC penetration rate in the world and is home to some of the renowned LCCs such as AirAsia, Lion Air and Cebu Pacific. Fuelling the growth is the growing middle income group which propagates demand for leisure travel and intra-ASEAN trades and business activities.

- **Higher scale can be achieved.** A liberalised aviation sector would break up the monopoly of coveted routes, providing opportunities for other airlines to access these routes. This allows established LCCs to optimise their operations further. Efficiencies could be improved with the larger operating scale while risks from protectionist practices could be reduced and/or eliminated entirely.

- **Lower airfares on coveted routes to stimulate travel demand.** With the heightened competition, we believe service quality would remain largely intact while airfares can be dramatically reduced. This was evident when the dominance of SIA and MAS over the Kuala Lumpur-Singapore route ended in 2008. Consequently, airfare for the route was reduced from US$400 to US$100 while the annual traffic volume grew +34%yoy within the same year before surging by another +30%yoy in 2009. While the liberalisation clearly impacted the incumbent airlines, the impact was partially mitigated by the enlarged market size following the drop in airfares.

Table 8: Skytrax Ranking of Flag Carriers of ASEAN Countries

Country	Airline	Skytrax Ranking	Commenced operations
Brunei	Royal Brunei Airlines	3 star	1975
Cambodia	Cambodia Angkor Air	Unclassified	2009
Indonesia	Garuda Indonesia	3 star	1949
Laos	Lao Airlines	Unclassified	1976
Malaysia	Malaysia Airlines	5 star	1972
Myanmar	Myanmar Airways International	3 star	1946
Philippines	Philippine Airlines	3 star	1941
Singapore	Singapore Airlines	5 star	1972
Thailand	Thai Airways	4 star	1960
Vietnam	Vietnam Airlines	3 star	1956

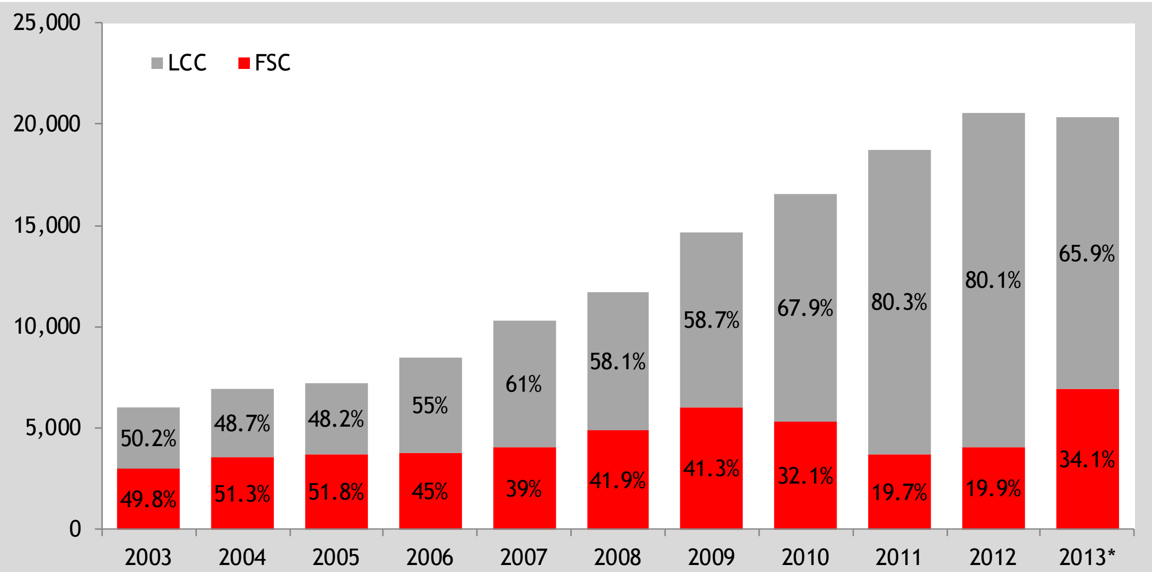
Source: Companies, MIDFR

- **MAS can capitalise on the ease of access to other markets.** After splitting with SIA in 1972, MAS has undergone several dramatic changes over the last four decades. Before the unfortunate major events befell the national carriers this year, MAS was regarded as one of the world's safest airlines. The prestigious services offered by the national carrier attracted multiple five-star ratings by Skytrax in 2013 – a coveted award within the aviation industry which is accorded to just seven airlines in the world. However, MAS eventually succumbed to spiralling jet fuel price and intensifying competition from LCCs and is currently undergoing a rigorous restructuring exercise. We believe the Open Sky policy presents MAS with a golden opportunity to reinvent its business as it capitalises on the ease of access to other markets.

IV. THE CASUALTIES OF THE OPEN SKY POLICY

- **Full service carriers may lose even more market share.** The LCCs have revolutionised air travel in the Southeast Asia region. Today, air travel is largely seen as an affordable means of travelling rather than a luxury option. This is evident in the diminishing presence of FSC's market share which was seen in several markets. The Philippines aviation sector which was deregulated in 1995 has seen the LCC market share expanding from 50% to 66% of the domestic seat capacity. The growth was driven by Cebu Pacific and Airphil Express at the expense of the Philippine Airlines (Chart 1). While some of the other ASEAN FSCs have created new brands to tap the LCC sector, it has not been successful in gaining market share from the full-fledged LCCs.

Chart 1: Market Share in between LCC and FSC in Philippine domestic market 2003-2013



* Airphil Express figures was consolidated into FSCs under PAL Group
Source: Cebu Pacific, Philippine CAB data, MIDFR

- **Less developed members.** Uneven developments and wide economic disparities between the ASEAN members are one of the key challenges towards achieving the goal of forming a cohesive economic block within the region. Under-developed nations such as Cambodia, Laos, Myanmar and Vietnam have not fully established their aviation industry, lagging behind in terms of physical infrastructure and an established carrier. The local aviation industry in these less developed member countries would have to face pressures from intensifying competitions from established airlines.

D. SECTORAL IMPLICATIONS

I. AVIATION

- **LCCs to proliferate under open sky policy.** Under the deregulated conditions, LCCs have a tendency to thrive. This is largely due to their dynamic cost structure, allowing these companies to be nimble as they negate through tough times and challenges while breaking into new markets. In many instances, the LCCs have been able to proliferate and gain a considerable amount of market share in routes which were once dominated by FSCs. A most recent example was the liberalisation of the KL-SG route which took effect from 2008. Today, LCCs garner about 60% market share of the KL-SG route.

Table 9: List of Low Cost Carriers in ASEAN

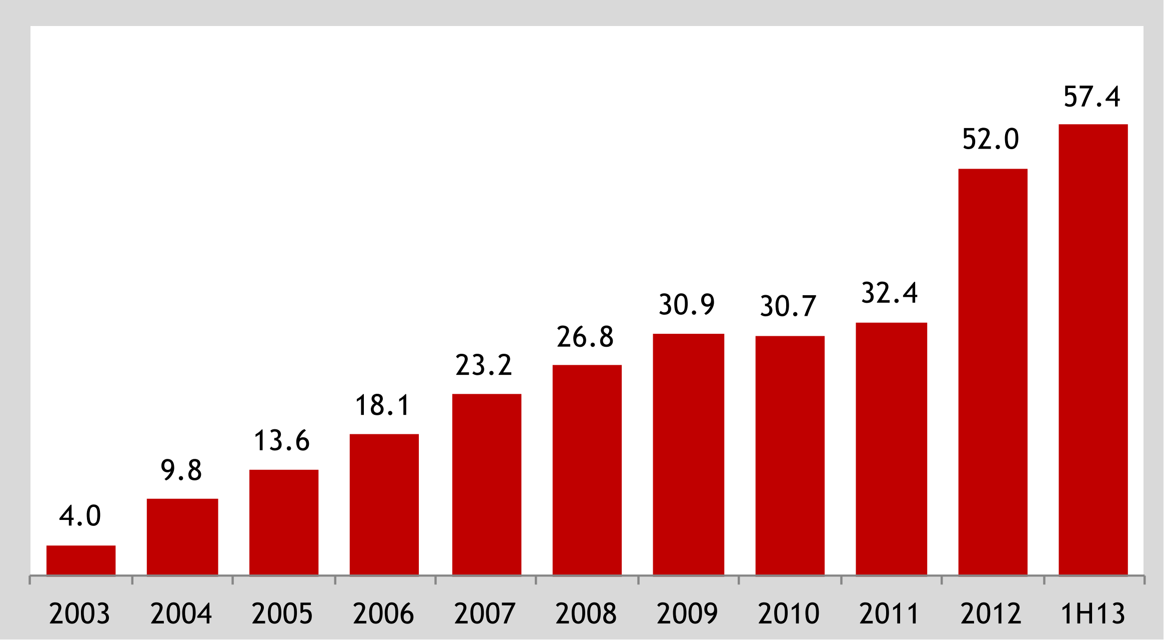
Country	Airline	Commenced operations	Fleet type
Malaysia, Thailand, Indonesia, Philippine,India and Japan (outside ASEAN)	AirAsia	1996 2002 (resold to Tune Air)	A320-200
Singapore, Australia, Indonesia (ceased operation), Philippine (rebranded)	Tiger Airways	2006	A319, A320-200
Indonesia, Malaysia, Thailand	Lion Air Thai Lion Air Malindo Air Wings Air Lion Bizjet	2000	B737-800, B737-900
Philippine	Cebu Pacific	1996	A319-100, A320-200, A330-300, ATR 72-50
Thailand	Nok Air	2004	B737-800, ATR 72-500
Malaysia	Firefly	2007	ATR 72-500, ATR 72-600
Singapore, Vietnam	Jetstar	2004	A320-200
Vietnam	VietJet Air	2011	A320-200

Source: Companies, MIDFR

- In ASEAN, some of the FSCs have pursued the multi-branding strategy by introducing their own LCC brand to capture the expanding LCC market segment while retaining their presence within the FSC sector. Notable examples include the Thai Airways-Nok Air, Garuda-Citilink and SIA-Tiger Air while the top three independent LCCs within ASEAN are the AirAsia Group, Cebu Pacific and Lion Air.

- **Strong growth in the LCC sector.** Currently, LCC penetration rate within ASEAN exceeds 50%, after more than 10 years of steady growth which started from a low base of <5% in 2003 (Chart 2). In 1H13, the ASEAN LCC fleet had grown circa +20%yoy, with almost 500 aircrafts. Of the 10 countries in ASEAN, three countries have reached >50% LCC penetration rate namely, Indonesia, Malaysia and the Philippines (Table 10). The Myanmar and Vietnam market should see more room for the LCCs to grow as LCC penetration rates in 2013 is only 23% and 20% respectively in 2013. Laos, a landlocked country, remains one of the poorest countries in ASEAN. The potential of LCC demand in Laos would be dependent on the future growth of the local spending power.

Chart 2: Intra-Southeast Asia LCC capacity share (% of total seats): 2001 to 1H2013



* Surge in penetration rate from 2011-2012 was driven by re-classification of Lion Air from FSC to LCC
Source: OAG, CAPA, MIDFR

- **Competitions heat up to spur industry consolidations.** A more liberalised aviation market tends to benefit established LCCs which are able to leverage on a larger operating scale due to their diversified networks and dynamic cost structure. Competition would also intensify as the removal of capacity and route restrictions would see wider choices being made available to travellers at lower fares. The brand reach is essential in determining survivability of an airline. With intensifying competition, consolidation amongst smaller aviation players appears to be inevitable. We expect to see consolidation activities to take place in Indonesia and the Philippines, given the high number of domestic airlines and sizeable population. Some of it has already taken place such as the Tiger-Mandala, AirAsia-Zest Air, and AirAsia-Bataria.

Table 10: LCC penetration rates (% of total seats) in Southeast Asia by country in 2013

Countries	System-wide LCC penetration rate
Thailand	29%
Malaysia	50%
Singapore	31%
Philippines	50%
Vietnam	20%
Cambodia	16%
Myanmar	23%
Laos	5%
Brunei	15%

* based on capacity data for July 2013
Source: Innovata, CAPA, MIDFR

- **More innovative solutions offered by aviation players.** On the flipside, the liberalisation could also pave the way for newcomers as well as enabling existing players to re-invent their businesses. The ingenuity of the airline business model is the crux to the success of AirAsia which grew strongly within a market dominated by established FSCs. A similar situation is occurring for Cebu Pacific which now extends its services to long-haul routes, leveraging on their brand establishment amongst Filipino migrant workers.

Table 11: ASEAN International Capacity at a Glance (Seats) by Countries

Countries	Seats	Available Seat Kilometres (ASK)	GDP (USD'b)	Population (mn)
Singapore	1,355,735	4,513,321,060	304.1	5.5
Thailand	1,258,241	3,997,304,619	373.6	68.6
Malaysia	1,083,506	2,965,177,154	343	30.1
Indonesia	758,932	2,080,280,701	859.3	251.5
Philippines	476,244	1,623,472,877	291.8	99.4
Vietnam	406,627	981,657,270	187.8	90.6
Cambodia	136,937	172,583,272	16.9	15.6
Myanmar	88,954	128,887,144	60.3	66.2
Brunei	42,101	101,162,715	16.8	0.4
Laos	35,866	27,813,666	10.8	6.9

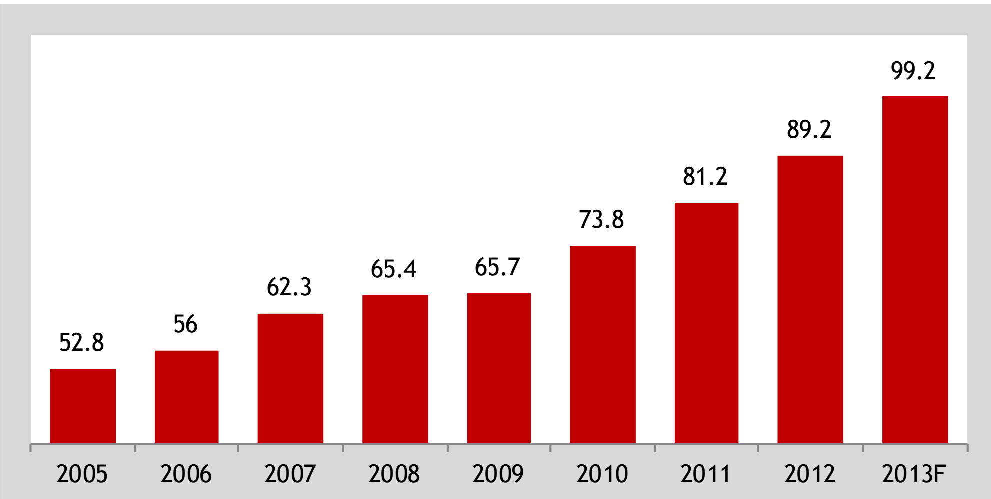
* based on capacity data for 8-Sep-2014 to 14-Sep-2014
Source: Centre for Aviation, OAG, IMF and World Economic Outlook Database, MIDFR

II. TOURISM

- **Significance of tourism sector in ASEAN.** In 2012, the tourism sector contributed USD256b or 11% of ASEAN's GDP with USD92b receipts generated by international tourists. The sector is a significant driver of economic prosperity and social development as it provides huge economic multiplier to the local community while it also goes to preserve cultural heritage. ASEAN has emerged as the fifth most visited region in the world, receiving nearly 100m international tourists in 2013 (Chart 3).

- **Lower fare to stimulate travel demand.** The liberalisation of fares and certain trunk routes would boost travel demand growth. This is further enhanced by a sustained growth of the middle income group in the region. With increasing competition across all sectors, the lower fares would also stimulate demand from cost-conscious business travellers whom might have otherwise used other forms of transportation or communication. Naturally, this benefits the LCCs which offer comparatively lower fares.

Chart 3: International Tourists Arrivals to ASEAN (mn)



Source: ASEAN, MIDFR

- **Relaxation of restrictions to gateways.** With the opening up of service routes, a new gateway to smaller or secondary cities provides better convenience for tourist access and stimulates the local economic growth either through tourism-related developments and/or prospective businesses. Consequently, this would promote infrastructure investments which would benefit the social-economic conditions of the domestic community.

III. TRADE AND MANUFACTURING

- **Air freight liberalisation fosters growth in trades.** We foresee ample growth in trade activities as better air travel services enhances people-to-people contacts which could also create new trade opportunities. The competitiveness of selected manufactured goods would also be reliant on the capability of transportation services, which is culpable in enabling the free movement of goods.

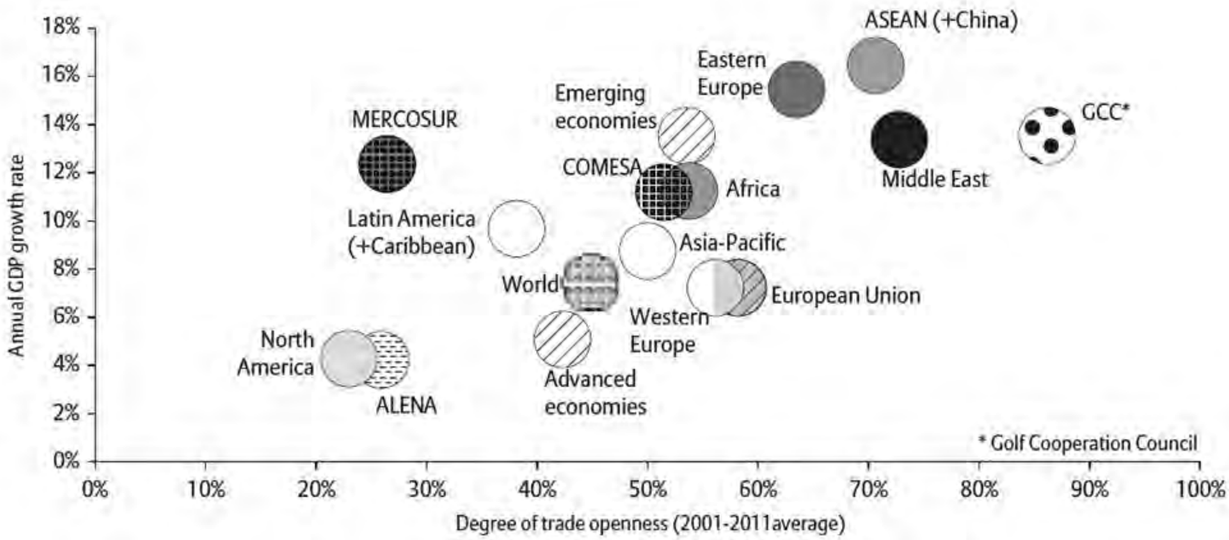
- **The ASEAN-China Free Trade Agreement (ACFTA) has been the best performing trade pact globally.** This is not only a strong testament to the high degree of trade liberalisation but also to the improved air freight connectivity (Chart 4). The opening up of trade liberalisation should facilitate the "catching up" effect within emerging economic blocs such as ASEAN.

- **Reliable and efficient air transport system to drive growth in** high value-to-weight ratio (**HVW) products.** Typically, about 75% of the international air cargo value comprises by pharmaceuticals, microelectronics, medical devices, aerospace components and other HVW products with most of the volume (i.e. 40%) consisting by the electronics sector.

- In fact, within ASEAN, the electronics sector alone accounts for 20-50% of the total export value for some of the ASEAN countries and this is largely explained by the air freight of hard drives since as over 80% of global hard drive supply are made in the region.

- Therefore, an efficient, secure and integrated transport network within ASEAN is vital in realising the full potential of the manufacturing of semiconductor and high technology products in the region. As a result of air freight liberalisation, a more efficient, reliable and cheaper transportation solution is made available for the export of these products within the region. Hence, an improved form of air freight services could attract more foreign direct investments and enhance the competitiveness of ASEAN's trade and manufacturing activities.

Chart 4: Trade Liberalisation 2001-2010 and growth rate by region



Source: HIS global insight, Euler Hermes forecasts, MIDFR

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BUY	Total return is expected to be >15% over the next 12 months.
TRADING BUY	Stock price is expected to *rise* by >15% within 3-months after a Trading Buy rating has been assigned due to positive newsflow.
NEUTRAL	Total return is expected to be between -15% and +15% over the next 12 months.
SELL	*Negative* total return is expected to be -15% over the next 12 months.
TRADING SELL	Stock price is expected to *fall* by >15% within 3-months after a Trading Sell rating has been assigned due to negative newsflow.
SECTOR RECOMMENDATIONS	
POSITIVE	The sector is expected to outperform the overall market over the next 12 months.
NEUTRAL	The sector is to perform in line with the overall market over the next 12 months.
NEGATIVE	The sector is expected to underperform the overall market over the next 12 months.

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Business Address:
11 & 12 th Floor, Menara MIDF,
82, Jalan Raja Chulan, 50200
Kuala Lumpur.
Tel: 2173 8888
Fax: 2173 8380