# Slowing global momentum: "minor" risks to Asian earnings



### **Earnings outlook and context**

Our regional earnings analysis supports our view that Asian earnings may be only modestly impacted by a slowdown in global, largely G3, growth. The 2Q reporting season has started well and sensitivity to the US/Europe is less than most believe. However, we are less confident about what the market will pay for those earnings, if concerns about G3 growth persist and global valuations remain under pressure.

# Stressing regional earnings reveals moderate downside

Looking at the relationship between our GLI and Asian earnings, as well as the US/European exposure of Asian corporates, we feel a modest revision on the order of -2% might be necessary. Areas where we have concerns vs consensus include metals/mining, bulk shipping, India IT and Korea autos.

# Separating "minor" setbacks from "major" pullbacks

We look at major and minor index setbacks in the last 15 years and ensuing EPS change. We believe this episode will be 'minor' in terms of index risk and profit revisions, largely because starting valuations and EPS growth expectations were not elevated. That said, the ytd valuation decline may not be discounting specific Asian earnings risks, but concerns about medium term global growth, implying less room for valuations to rebound.

# 2Q has started on track; we look for potential surprises

10% of index cap has reported so far, and numbers are tracking 52% of full year estimates. We highlight potential upside and downside surprises based on margin and sales analysis, and our bottoms-up analyst estimates.

### Timothy Moe, CFA

+852-2978-1328 timothy.moe@gs.com Goldman Sachs (Asia) L.L.C.

### **Christopher Eoyang**

+81(3)6437-9888 christopher.eoyang@gs.com Goldman Sachs Japan Co., Ltd.

### Kinger Lau, CFA

+852-2978-1224 kinger.lau@gs.com Goldman Sachs (Asia) L.L.C.

#### **Caesar Maasry**

+852-2978-7213 caesar.maasry@gs.com Goldman Sachs (Asia) L.L.C.

#### **Richard Tang**

+852-2978-0722 richard.tang@gs.com Goldman Sachs (Asia) L.L.C.

The Goldman Sachs Group, Inc. does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision. For Reg AC certification, see the end of the text. Other important disclosures follow the Reg AC certification, or go to www.gs.com/research/hedge.html. Analysts employed by non-US affiliates are not registered/qualified as research analysts with FINRA in the U.S. This report is intended for distribution to GS institutional clients only.

### **Earnings in focus**

Asian earnings are in focus currently given the onset of the 2Q2010 reporting season and, more broadly, heightened investor concerns about downside risks to developed economy growth, notably in the US, in the wake of softer macro data.

We focus on three intertwined issues in this piece:

- The extent to which regional earnings may be at risk;
- The degree to which equities may have priced these risks in; and
- An analysis of the current earnings season, together with potential positive and negative surprise candidates.

The main takeaways are:

- Moderate downside revision risk: Downside risks to current consensus regional 2010-2011 EPS growth numbers of 31% and 14% appear moderate. Based on a) relationship between our GLI and Asian earnings, b) the US/European exposure of listed Asian companies, and c) consensus expectations for sales growth and margins, we feel a modest revision on the order of -2% might be necessary. Areas where we have concerns vs. consensus include metals/mining, bulk shipping, Indian IT, and Korean autos.
- Earnings risks may be discounted but global valuations may impede valuation recovery: Ytd equity market performance and valuations appear to discount moderate earnings risks: we note that the region trades at 12.3x forward P/E and a 7.2% implied equity risk premium, which are 0.7 and 1.3 standard deviations to the attractive side of their respective historical ranges. The region's price to trailing book value ratio is 2.0x, which is very close to the long-term mean. The principal valuation risk in our judgment lies in the global valuation backdrop: a rebound in Asian valuations may be constrained if developed market equity pricing remains under pressure, especially since the region trades at a modest P/E premium and a 10% price/book premium to the global index.
- Good 2Q start: The earnings season has started on a good footing: 10% of the MXAPJ market cap has reported results and their aggregate 1H10 profits equate to 52% of consensus 2010 estimates. A further 500 companies representing 78% of MXAPJ market cap will report by end-August.
- Surprises matter: In the shorter term, the relative performance of stocks with the most positive surprises outstrips those with negative surprises. Potential positive surprise candidates from our screens include Lite-On Tech, China Airlines, Korean Airlines, and PICC Property & Casualty. Negative surprise candidates include GOME, President Chain Store, Air China, and Foxconn (see Exhibit 37 for details).

### Big picture: Slowing macro momentum raises earnings concerns

In our recent conversations, we find that investors are increasingly focused on potential risks to Asian earnings in light of softer global macroeconomic data and a crest in the earnings revision cycle.

Noteworthy points include:

- **GLI rollover**. The yoy momentum of our updated Global Leading Indicator (GLI) peaked in March and has begun to soften from very elevated levels. While a normalization of momentum is unsurprising given base effects (we first flagged this last October), investors are uncertain over the extent to which this indicator may slow and whether earnings expectations will need to be reined in.
- Downside risks to our below-consensus US GDP forecast. Our US economists have consistently held a below-consensus view on 2H2010 GDP growth, because the boost in recent quarters from inventory accumulation and fiscal stimulus will fade as the inventory cycle turns and fiscal drag develops. Recent weak high frequency data, including the June ISM manufacturing index and employment reports, add credence to our below-consensus 1.5% annualized growth forecast for the last half of this year. Moreover, there may be downside risks to our expectation of a gradual reacceleration in growth to roughly 3% on a Q4/Q4 basis in 2011 given a more conservative fiscal policy climate. (See GS US Economics Analyst- The second half slowdown has begun, July 2.)
- **EU uncertainty**. We continue to hold above-consensus GDP growth forecasts of 1.4% and 2.2% for 2010-2011 and are encouraged by recent data such as Euro-zone manufacturing and service PMIs as well as the bank stress test results. However, fiscal consolidation in many parts of the Euro-zone brought on by sovereign debt problems suggests that investor confidence about the growth outlook may remain low.
- China cyclical slowdown, but policy flexibility to offset downside risks. We have recently reduced our 2010 China growth forecasts to 10.1% from 11.4% because of a significant tightening in financial conditions in response to the policy restraint that has been in effect for the past two quarters. However, we maintain our 2011 projection of trend 10% GDP growth and think that China has a good degree of policy flexibility to offset potential downside risks from renewed external shocks.

Overall, the risks to growth appear concentrated in the developed economies, with the US weakness the most notable recent development. Our Asian growth forecasts remain robust, at 7.6% and 7.2% for this year and next.

### Earnings revisions have begun to turn down

After over a year of consistent upward revisions to consensus forecasts for both 2010 and 2011 regional earnings, market expectations have begun to soften a bit during the past two months and currently stand at 31% and 14% EPS growth for this year and next. The level of 2010 consensus earnings has been stable, but 2011 estimates have declined about 0.5%, which is the first clear downshift in the momentum of estimate revisions since equity markets troughed in early 2009 (see Exhibits 1 and 2).

Somewhat counter-intuitively, India has had the largest downward revisions from recent peaks, while Korea has continued to see modest upward estimate changes. This serves as a reminder that any assessment of market earnings must involve not only fundamental analysis but also where consensus stands relative to underlying conditions, i.e. India analysts may have become overly optimistic on that market's domestically-led growth, while consensus became overly negative on Korea's external exposure.

We also see some disparities at the sector level between the degree of recent estimate changes and a given industry's exposure to areas of fundamental risk: for example, insurance estimates have declined noticeably while estimates have been firmer for tech, autos and chemicals, which tend to be more sensitive to conditions in the G3 economies (See Exhibits 3 and 4).

Exhibit 1: 2010E growth forecast has been stable; consensus has trimmed expectations of 2011E growth Evolution of consensus earnings growth estimates for MXAPJ index

EPS growth (%)

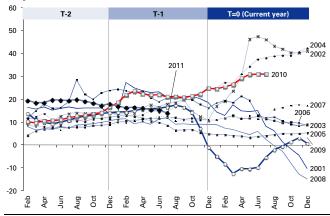
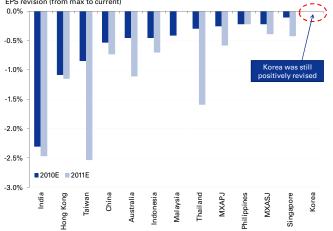


Exhibit 3: India 2010E EPS has been revised down most, whereas Korea's earnings momentum is still positive Changes in earnings estimates by markets

EPS revision (from max to current)



Source: FactSet, I/B/E/S, MSCI, Goldman Sachs Global ECS Research.

## Exhibit 2: EPS estimates peaked in May, when Europe sovereign concerns heightened

2010E and 2011E earnings estimates for MSCI AC Asia Pacific ex Japan index

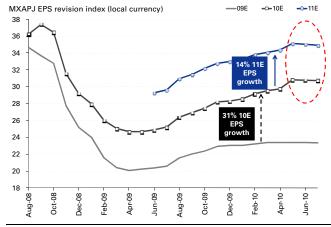
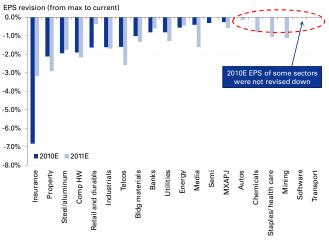


Exhibit 4: Sectors like software, chemicals, autos and semi, have been resilient

Change in earnings estimates by GS sectors



### Gauging potential downside to earnings expectations

Our core investment view, which we most recently reaffirmed in our quarterly strategy views (refer to *Asia Pacific: Portfolio Strategy: Asserting Asian earnings, attenuating global valuation*, June 17) and a piece on potential 3Q catalysts (refer to *Asia Pacific: Portfolio Strategy: Trigger points: Market catalysts may be near*, July 14), is that most Asian equity markets are inexpensively priced and that underlying earnings growth can drive roughly 20% returns over a 12m view, with further potential upside if valuations recover. To address concerns over the earnings cycle, we gauge the risks to earnings expectations from three perspectives:

- The link between earnings and our global leading indicator;
- Revenue splits by geography; and
- Revenue and margin analysis for selected sectors.

Overall, we conclude that the downward revision risk to 2011 earnings is moderate against the macro backdrop that we anticipate.

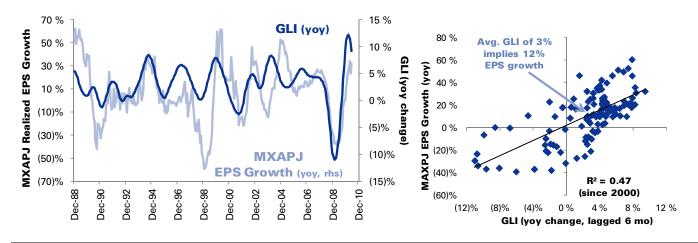
### 1) Earnings and GLI: good correlations

The link between Asian regional earnings growth and global macro momentum, as proxied by our Global Leading Indicator (GLI), has been good: over the past 10 years, the r-squared on a monthly basis is 0.47, with the GLI leading earnings growth by about 6 months. Since the global economy and Asian earnings growth are both cyclical and have recently "crested", the risk of a negative earnings revision cycle has appeared. Our economists expect GLI headline to reduce further, as macro indicators slow off a higher normalized base and, specifically for the US, downside growth risks have risen.

Using a "GLI approach", there appears to be moderate downside risk to consensus earnings growth estimates for 2011. We are mindful of the potential oversimplification of drawing a one-to-one relationship between macro growth and earnings, but the GLI can serve as a useful top-down tool to understand Asia's earnings sensitivity to lower growth, given their past linkages.

Assuming the GLI reverts to "average" year-over-year growth of 3% by the end of this year (which appears reasonable given base effects and our macro expectations), the regression of earnings growth on GLI suggests modest downside of about 2%: 12% EPS growth in 2011 versus current consensus estimates of 14%. We do note, however, that there has been a wide range of earnings growth rates at average GLI levels, so this broad top-down analysis must be complemented by other approaches to help narrow the range of potential EPS growth rates.

The effects of slowing macro momentum are likely to vary across sectors. The more cyclical sectors tend to have both a closer and stronger relationship to the GLI, as one might expect. Based solely upon the view of GLI deceleration, Information Technology and Consumer Discretionary could face the largest negative EPS revisions and the defensives, such as Consumer Staples and Health Care would likely remain largely unaffected.





Source: Factset, Goldman Sachs Global ECS Research

# 2) Geographic revenue splits: moderate overall US and Europe exposure

Given that macro concerns are largely focused on the US and Europe, we have updated the revenue composition for the 644 MXAPJ constituent stocks. Overall, the direct exposure is fairly low at 9% for each economic bloc and 18% combined, which may surprise some investors who continue to think of Asian equities as high-beta plays on western economic growth (see Exhibits 6-7). Three points bear mention:

- Market and sector differences. There are significant variations between the different regional markets and sectors regarding their US and Europe exposure. The Asean markets tend to have low revenue shares, while Taiwan and Hong Kong have larger direct exposure to the US and Europe. The tech sector has the highest developed economy exposure, although even here the mix is shifting: 15 years ago 74% of sales were to the G3 whereas now it is less than 50%.
- Index composition may differ from that of its underlying economy. China is a good example: only 4% of the MSCI China revenues stem directly from the US and Europe, whereas total exports are 28% of China's GDP of which 41% go to Europe and the US (23% and 18%, respectively). Most of the index is domestically oriented, given heavy weights in the banking, insurance, telecom and energy sectors.
- **Pass through effects.** While these revenue splits do not account for pass through or second order effects (e.g. on commodity pricing), the overall sensitivity to, for example, slower US growth is likely to be moderate as long as Asia's domestic growth engines continue to fire. Favorable policy backdrops suggest this is likely to be the case, although the policy 'ammunition' is generally not quite as substantial as it was early last year.

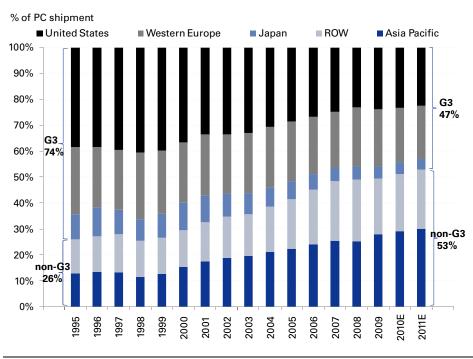
# Exhibit 6: Asia's exposure to America and Europe is 18%, probably lower than what most people thought, as domestic sectors like financials take up a large part of equity market Sales exposure by geography

Country	America	Europe	Asia	Other
Taiwan	22	22	53	4
Hong Kong	13	21	61	6
Australia	10	8	74	8
India	6	9	63	22
Korea	9	6	65	20
Singapore	6	7	58	30
Malaysia	2	7	85	6
China	2	2	93	4
Philippines	1	1	83	15
Thailand	0	1	99	0
Indonesia	0	0	81	19
MXAPJ	9	9	71	11

True sector	America	Europe	Asia	Other
India It Services	56	25	13	5
Australia Property	40	19	34	7
Semi & Hardware	26	24	47	3
Korea Autos	17	6	51	26
Transportation	13	8	53	26
Metals And Mining	8	13	68	12
Singapore Property	13	4	66	17
Chemicals	10	4	73	13
Capital Goods	2	6	61	31
Australia Banks	0	4	88	8
Energy	1	0	78	20
Taiwan Financials	1	0	99	0
Hong Kong Property	1	0	97	2
China Insurance	0	0	100	0
China Banks	0	0	99	1
China Property	0	0	96	4
China Telecom	0	0	100	0
Hong Kong Banks	0	0	100	0
India Financials	0	0	98	2
India Utilities	0	0	100	0
Korea Financials	0	0	100	0
Singapore Banks	0	0	96	4
MXAPJ	9	9	71	11

Source: Bloomberg, FactSet, MSCI, Goldman Sachs Research estimates, Goldman Sachs Global ECS Research.

### **Exhibit 7: Even for traditional exporters like tech, geographical focus has shifted from predominantly G3 to now more Asia and the rest of the world** Geographical breakdown of global PC shipment



Source: IDC, Goldman Sachs Research estimates, Goldman Sachs Global ECS Research.

# 3) Consensus revenue and margin expectations: in general, reasonable relative to the fundamental backdrop

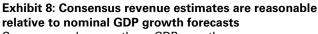
We have reviewed consensus forecasts of revenue growth and margins for both the aggregate index and the key sectors that make up the bulk of the regional earnings pool. As we have noted on numerous occasions, consensus expectations generally appear reasonable relative to historical ranges and the prospective macro environment, even allowing for the moderate downside risks we have been discussing. (Exhibit 14 shows **Z**-scores for consensus sales and margin forecasts.)

For example, at the regional level, 2011 consensus revenue growth forecasts are 11%, whereas at comparable levels of nominal GDP growth in the mid-2000s revenue growth was consistently around 15%. Consensus expects net margins for the MXAPJ index to rise to 11.3% next year, but these are still below the 11.6%-12.0% range recorded from 2004-2007. On an ex-banks basis, **2011 regional sales growth forecasts are at average levels, and margins are 0.5 SDs above mean levels**.

Sectorally, the picture is more varied. For the **technology hardware and semiconductor cluster**, which has some of the highest revenue exposures to the US and Europe, sales and margin forecasts are conservative relative to past ranges. This, along with numerous techspecific drivers that our analysts have described, such as new product cycles and rising EM demand, suggests that tech hardware earnings may be less vulnerable to US macro weakness than one might first think.

However, several sectors look more vulnerable to earnings downgrades.

- The consensus expects the **metals and mining** sector's net margin to rise 3ppt in 2010 and achieve all-time highs in 2011, exposing earnings estimates to downside risk if the global economy softens.
- The **bulk shipping** sector also appears vulnerable to downward revisions given significant recent weakness in the Baltic Dry index.
- India IT services, which has the highest direct US revenue exposure (56%) of all the main Asian regional sectors, also appears at risk from a weaker US growth, although this is buffered by low consensus revenue and margin assumptions.
- Korea autos are faring very well fundamentally, but margin assumptions are very high relative to range; unless a structural shift has occurred, downside revision risks are high.
- For the **India and Indonesia banks**, estimates of net interest income are at the top end of the range, also suggesting some potential downside vulnerability.



Consensus sales growth vs. GDP growth

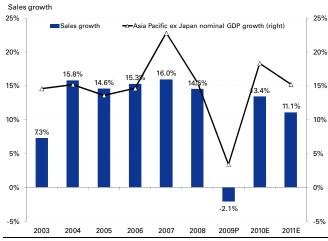


Exhibit 10: Tech's sales growth assumptions do not look aggressive, so downside risks should be relatively small MXAPJ tech sales growth vs. World GDP growth

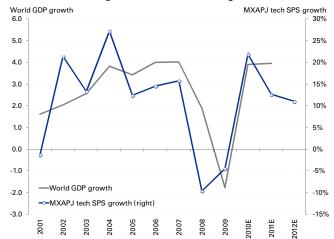
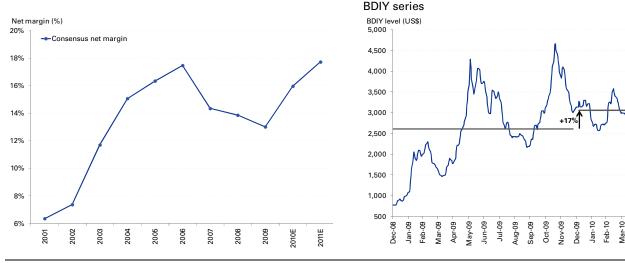


Exhibit 12: Consensus expects net mining margins to reach all-time-highs in 2011, which looks optimistic MXAPJ metals and mining net margin series



Source: FactSet, I/B/E/S, MSCI, Worldscope, Goldman Sachs Research estimates, Goldman Sachs Global ECS Research.

Exhibit 9: Consensus expects further margin recovery next year, but still below levels in the mid-2000s Net margin series, and ex-banks/losses

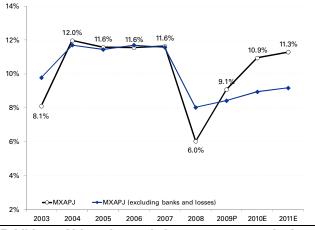


Exhibit 11: Although margin improvement may look large initially, it is mostly the normalization of losses MXAPJ tech margin

Net margin

Net margin

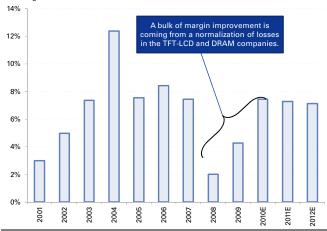


Exhibit 13: Supply growth has caused a sharp 60% fall in the Baltic Dry Index in the past 2 months; bulker earnings may be at risk

May-10

-10

'n

9

Apr-

		Sales g	rowth		Net margin			
	2010	Z-score	2011	Z-score	2010	Z-score	2011	Z-score
Energy	14%	-0.6	12%	-0.7	9%	-0.1	9%	0.1
Metals and mining	12%	-0.3	16%	-0.1	16%	0.9	18%	1.3
Chemicals	9%	0.0	6%	0.0	11%	0.2	11%	0.3
Capital Goods	11%	0.3	12%	0.3	6%	0.1	6%	0.2
Transportation	15%	0.8	10%	0.4	7%	0.2	8%	0.3
Semi & Hardware	23%	0.3	13%	0.0	7%	0.1	7%	0.1
AU Real Estate	-25%	-1.7	3%	-0.4	28%	0.3	28%	0.3
CN Real Estate	31%	0.0	21%	-0.4	18%	0.1	17%	0.0
HK Real Estate	8%	0.8	9%	0.9	40%	-0.1	40%	-0.1
SG Real Estate	5%	0.0	7%	0.1	28%	0.5	27%	0.5
KR Autos	7%	-0.1	5%	-0.2	10%	2.8	11%	3.0
IN IT services	10%	-1.3	18%	-0.9	22%	-0.3	22%	-0.3
CN Telecom	7%	-1.0	8%	-0.9	17%	-0.4	17%	-0.5
IN Utilities	13%	0.1	14%	0.2	12%	-1.1	12%	-1.1
MXAPJ ex banks	14%	0.0	11%	-0.1	9%	0.4	9%	0.5

**Exhibit 14: Current margin assumptions for metals and mining and Korea autos are on the high side of historical range** Consensus sales growth and net margin assumptions and Z-scores (relative to 10 year history) for 2010 and 2011

Source: FactSet, I/B/E/S, MSCI, Worldscope, Goldman Sachs Global ECS Research estimates.

Exhibit 15: Assumptions for India and Indonesia banks are at the top end of historical range, so any justification has to come from a structural shift in growth

Assumptions for earnings drivers of banks in Asia

		China	Hong Kong	Korea	Taiwan	India	Indonesia	Singapore
	10E	253	187	285	131	287	781	202
	10E NIM expansion	20	-6	27	9	10	30	-9
Net interest	11E	261	191	287	136	299	797	208
margin (NIM)	11E NIM expansion	8	4	2	5	12	16	6
	Historical peak	303	274	312	270	289	771	217
	10E to peak	49	87	27	139	2	-10	15
Loan growth	10E	18%	13%	7%	6%	26%	22%	12%
Loan growth	11E	17%	12%	7%	6%	24%	22%	10%
	10E	50	51	81	48	134	193	49
	10E increase/decrease	2	-2	-20	-26	3	-54	-31
Credit cost	11E	53	37	68	45	116	172	40
Credit Cost	11E increase/decrease	3	-14	-13	-3	-18	-20	-9
	Historical peak	109	215	430	432	276	477	255
	10E as % of peak credit cost	45%	24%	19%	11%	49%	40%	19%
EPS growth	10E for MSCI banks	32%	11%	110%	23%	17%	36%	21%
EFS growth	11E for MSCI banks	22%	21%	20%	29%	26%	18%	12%

Source: MSCI, Goldman Sachs Research estimates, Goldman Sachs Global ECS Research.

### How much potential earnings risk is priced in?

Given the forward-looking nature of the equity market, stock prices have no doubt already priced in the recent slowing in a number of economic indicators across the globe, and have likely incorporated some further slowing in 2H 2010. In order to assess how much slowing the market may be expecting, we consider three approaches: (1) empirical evidence of price performance heading into earnings downturn cycles; (2) valuation relative to growth and profitability; and (3) evidence of earnings revisions being priced across regional equity markets and sector slices.

Our conclusion is that, from an Asian historical perspective, the market appears to have priced in the risk of a moderate decline in earnings. However, the ytd valuation decline may not be discounting specific Asian earnings risks, but concerns about medium term global growth. A recovery in Asian valuations may be constrained if developed market equity pricing remains under pressure, especially since the region currently trades at modest P/E premium and a 10% price/book premium to the global index.

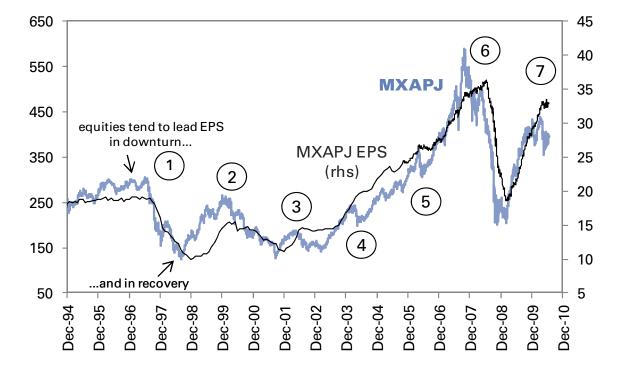
### (1) Price performance prior to earnings downturn cycles

The equity market tends to lead consensus earnings estimates, and the 19% pullback in MXAPJ from mid-April to late-May begs the question of whether current earnings estimates will remain intact. Although the equity market has recovered 14% from its lows, MXAPJ is still down 8% from its April 15 closing high, and investors remain focused on the downside risks to earnings.

Although analysis of historical precedent is limited in its ability to explain what might occur going forward, we highlight several historical events that we find most relevant to the current setup. Since 1995, there have been 3 major corrections in MXAPJ and 3 relatively minor sell-offs. The "majors" have been characterized by a 50% contraction in equity prices and sharp earnings cuts between 30-50%. The "minor" sell-offs show declines of 20% in terms of equity prices and stable EPS estimates with just 2% negative revisions.

In short, we believe the current scenario will pan out as one of the relatively "minor" contractions. In fact, the current statistics appear strikingly similar; MXAPJ fell 19% between April15 and May 25, while earnings estimates (so far) have declined a modest 2% (see Exhibit 16).

In terms of a recovery, the "minor" corrections show mixed results. The market recovered just 5% in the six months following the bottom after the global downturn/SARS scare in early 2003. On the other hand, during the six months after the 2004 China hard-landing fears and the 2006 mid-cycle slowing scare, the regional index rose 27% and 25%, respectively. We forecast MXAPJ will rise 9% over the next 6 months to the 440 index level, which would equate to a 22% recovery from the May lows.



### **Exhibit 16: "Minor" corrections tend to have 20% price drops with stable earnings** Equity prices tend to lead earnings revisions,

	Ма	rket Downtur	'n	6-mo Recovery		
	Price	P/E	EPS	Price	P/E	EPS
Period	Decline	Contraction	Change	Recovery	Expansion	Change
1 Asian Financial Crisis	(55)%	(21)%	(47)%	26 %	44 %	9 %
2 TMT Market Bubble	(49)	(24)	(29)	37	14	30
3 Global Slowing & SARS	(22)	(29)	(3)	5	1	2
4 Hard-landing fears	(18)	(20)	(0)	27	13	13
5 Mid-cycle slowing	(18)	(16)	(2)	25	21	5
6 Global Financial Crisis	(56)	(38)	(46)	45	74	21
7 Tightening & Sov. Risk	(19)	(18)	(2)	11	8	3
"Major" correction avg (1,2&6)	(53)%	(28)%	(41)%	36 %	44 %	20 %
"Minor" corrections avg (3-5)	(19)%	(22)%	(2)%	19 %	12 %	6 %

Source: FactSet, I/B/E/S, Goldman Sachs Global ECS Research

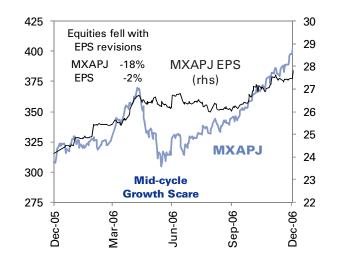




Exhibit 19: Global Slowing & SARS fears were "Minor"



Exhibit 21: Mid-cycle fears were a "Minor" pullback



Source: FactSet, I/B/E/S, Goldman Sachs Global ECS Research

Exhibit 18: TMT bubble was a "Major" pullback



Exhibit 20: Hard-landing fears were a "Minor" pullback

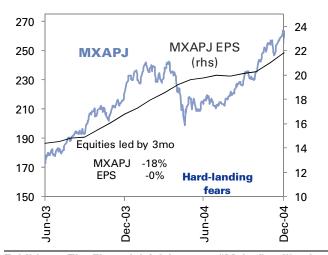
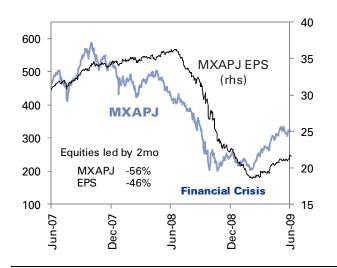


Exhibit 22: The Financial Crisis was a "Major" pullback



Source: FactSet, I/B/E/S, Goldman Sachs Global ECS Research





Source: FactSet, I/B/E/S, Goldman Sachs Global ECS Research

### (2) Valuation relative to growth and profitability

To refine our approach of gauging the extent to which equity markets have already priced in a potential reduction to earnings estimates, we incorporate valuation to move beyond simple price performance.

**Current price-to-book ratios imply a lower ROE than consensus forecasts.** A simple one-to-one regression suggests that the current trailing P/B ratio of 2.0x is consistent with a 14% forward ROE estimate. As consensus currently forecasts ROE of 16%, it appears the market has discounted analyst estimates. Holding all else equal, consensus earnings estimates would need to come down 15% in order to bring forward ROE in-line with its historical relationship with the market price-to-book ratio. From this perspective, equity markets seem to be discounting a more substantial earnings estimate reduction than we outline above (see Exhibit 26)

The implied equity risk premium also appears to be discounting a significant downturn. The current IERP is more than one standard deviation above long term average and has reached levels comparable to the Asian financial crisis and the SARS scare. Although the current IERP of 7.3% is still well below the record 9.6% IERP during the global financial crisis in 2008, we believe it is unlikely that the current environment would develop into a similar situation (see Exhibits 27 and 28).

Low starting valuations suggest the market is not demanding very high earnings growth and probably has limited downside. The major pullbacks of MXAPJ have been triggered by two factors (1) substantially negative earnings revision sentiment and (2) high starting valuations (see Exhibit 29). With a forward P/E multiple of just 12.3x, we believe the market is not demanding high earnings growth over the next 12 months. The three more severe pullbacks since 1995 had starting multiples of 16-21x. Although earnings revision sentiment has turned and now remains close to zero, we believe the low valuation serves as a buffer to potential moderate earnings cuts.

In short, we believe valuation metrics all suggest that slower growth is already priced into the market and that equities may rally if only moderate earnings reductions are realized. Summarizing the above points, P/B ratios suggest earnings may be revised down 15%, IERP suggests a similar situation to the Asian financial crisis or SARS fears, and P/E multiples are not flashing any signs of warning. All these signals point to our constructive view that moderate earnings reductions would not stunt the equity market's performance.

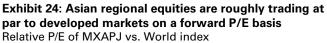
### 3) Potential earnings revisions at the market and sector level

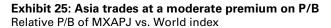
Digging underneath the regional index performance, we find that regional equity markets have digested potential earnings downgrades in areas we find most at risk.

Slicing the regional markets into "domestic", "tradables" (mostly commodity-related names), and "exporters", we find that domestically-focused equities have outperformed in almost every country in the region. One exception is Australia, in which the exporters rallied on back of the likely amending of the super-profits tax.

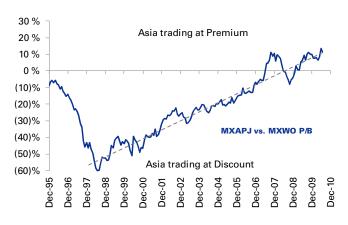
The general trend of domestically-focused companies outperforming is quite fitting, in our view, as we believe the economic risks remain primarily contained within the G3. Companies that rely on exports and those that are involved in commodities (whose prices are set in the global arena) are more likely to face negative earnings revisions.

The recent underperformance of these stocks suggests the market has taken a similar view and already discounted potential earnings cuts (see Exhibit 31). This trend is apparent at the country level as well. Markets with higher US/Europe revenue proportions have in general underperformed during the current downturn (see Exhibit 30).





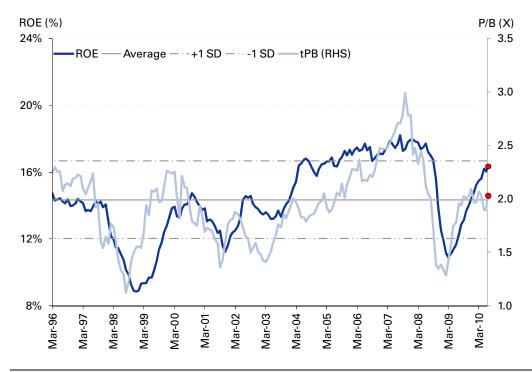




Source: FactSet, I/B/E/S, MSCI, Goldman Sachs Global ECS Research.

## Exhibit 26: It looks like the equity market has already priced in a more severe decline in profitability than current I/B/E/S consensus has assumed

Trailing P/B vs. 12M forward ROE of MSCI AC Asia Pacific ex Japan index



Source: FactSet, I/B/E/S, MSCI, Goldman Sachs Global ECS Research estimates.

### Exhibit 27: The implied equity risk premium has spiked up, and is now more than 1 SD above historical range Implied equity risk premium (IERP) of MXAPJ series

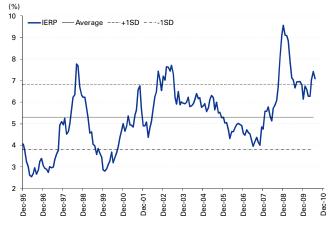
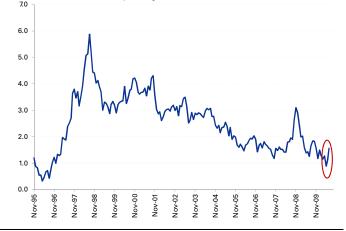


Exhibit 28: ERP hasn't fallen as much in Asia when compared to US and Europe in the recent rally IERP differential

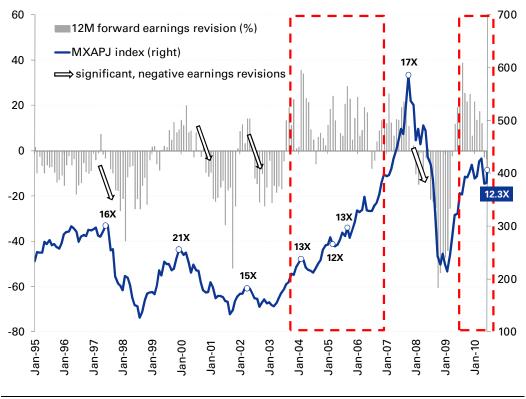
IERP differential (Asia - US/Europe average) 7.0 ¬



Source: FactSet, I/B/E/S, MSCI, Goldman Sachs Global ECS Research estimates.

# Exhibit 29: During cycles of reducing earnings momentum, a significant price fall is triggered by (a) substantial negative earnings revisions, and (b) high starting valuation; the current set up is a low starting valuation, and we believe the reduction in earnings is likely moderate

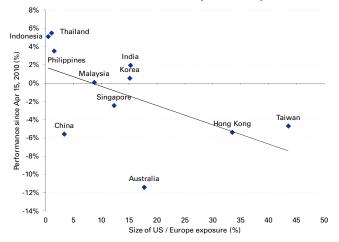
12M forward earnings revision vs. MXAPJ price index



Source: FactSet, I/B/E/S, MSCI, Goldman Sachs Global ECS Research estimates.

# Exhibit 30: Markets with higher US/Europe revenue proportions have generally underperformed during the current downturn

Performance of markets vs. US/Europe sales exposure



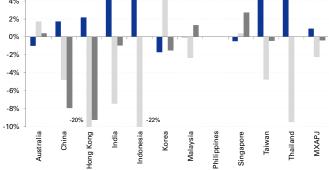
# Exhibit 31: Exporter and tradable sectors have underperformed, implying global slowdown concerns are at least partly discounted

Relative performance vs. market by sector buckets
Relative perf vs. market (local currency) since Apr 15 (%)

 10%
 ■ Domestic
 ■ Tradables
 ■ Exporters

 8%

 6%



Source: Bloomberg, FactSet, I/B/E/S, MSCI, Goldman Sachs Global ECS Research estimates.

### 2Q earnings: Good start; results calendar; potential surprises

The second quarter earnings season is now underway. Although earnings results are backward looking, there are three key reasons why we think it is important to monitor these releases.

- First, there is empirical evidence that, at least in the shorter term, stocks with the most positive surprises outperform those with negative surprises.
- Second, 2Q numbers will provide the initial evidence of Asia's sensitivity to slowing global macro momentum, given that the yoy change in our Global Leading Indicator peaked in March.
- Third, 2Q numbers will serve as an important indication of how earnings are tracking full year estimates, which in turn will provide perspective on the likelihood of further revisions (up or down) to these numbers.

### Earnings calendar and results so far

The 2Q reporting season for Asian companies mainly occurs from mid-July through end-August. We expect 500 MXAPJ index companies (78% of index cap) to report during this period.

So far, 71 MXAPJ index constituents (10% of index cap) have released their earnings results, and most are in line with consensus. Reported numbers are tracking 52% of full year estimates (Exhibit 33-35).

**India and Korea** companies have been the first to report, with 42% and 24% of the respective MSCI index constituents announcing earnings. 1H10 reported earnings are tracking 48% and 53% of full year estimates, and their 2Q quarterly profits grew 15% and 87% vs. a year ago.

36% of **Thailand** (by index cap) has also reported. Reported earnings are also tracking estimates well, with 1H equivalent to 53% of full year numbers.

The bulk of **Taiwan** earnings will be released in the last week of July and August. In particular, we will watch for any forward-looking guidance from management on the earnings visibility of US/Europe and how quickly China and other emerging markets are expanding their share of revenues. For **HK/China** and **Australia**, their reporting will spread over the whole month of August.

### **Potential surprise candidates**

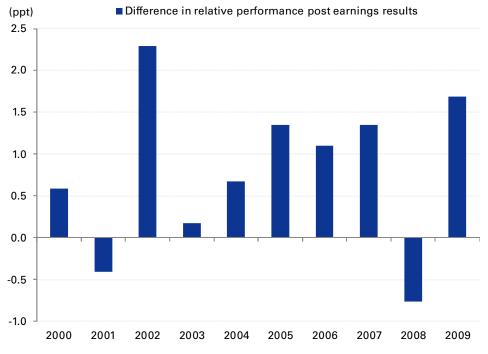
We screen for potential earnings surprise candidates in the MXAPJ universe by looking at (1) sales and margin recovery relative to historical range, as well as (2) recent earnings revisions, and/or out-of-consensus earnings estimates by GS forecasts (Exhibit 37).

Margin and sales recovery screen: We compare the rebound in I/B/E/S consensus 2010E net margin and sales growth from its low point in 2005-2009 to the range that has been achieved in the same period and compute a ratio of the two. If the expectation is high relative to historical numbers, there is a chance the actual earnings could fall short of estimates, and vice versa. From this screen we highlight Lite-On Tech as the potential upside surprise candidate; downside surprise candidates include GOME, President Chain Store, and Air China.

 Earnings revision and out-of-consensus screen: As highlighted in our study on earnings surprises, Asia Pacific: Portfolio Strategy: Surprise me!, February 14, 2007, earnings revisions appear to be positively correlated with subsequent earnings surprises. We look at companies' 3-month earnings revisions, and combine this with stocks where our analysts' estimates are most above or below consensus. Upside surprise candidates from this screen include Korean Air Lines, PICC Property & Casualty, China Airlines and EVA Airways; downside surprise candidates include Foxconn and Air China.

## Exhibit 32: Stocks with positive earnings surprises tend to have better short-term relative performance than stocks with negative surprises

Difference in relative performance (1-week, vs. market) post earnings results between stocks with the most positive and negative earnings surprise



Methodology: We rank MXAPJ constituents according to their SUE (standardized unexpected earnings) which is calculated as (actual earnings – consensus estimates) / standard deviation of analysts' estimates. We then divide the companies into 4 quartiles (such that 1<sup>st</sup> quartile has the most positive surprise and 4<sup>th</sup> quartile has the most negative surprise) and calculate the difference in their relative performance (vs. market) in each year. We use only final results because the quality of historical quarterly consensus estimates is poor.

Source: FactSet, I/B/E/S, MSCI, Goldman Sachs Global ECS Research estimates.

# Exhibit 33: Most Taiwan firms report in late-July and August; HK/China and Australia stocks will announce earnings next month

Earnings calendar by markets

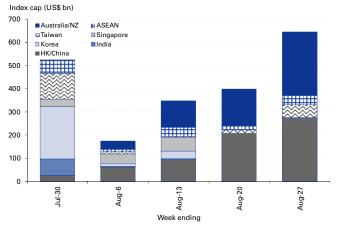
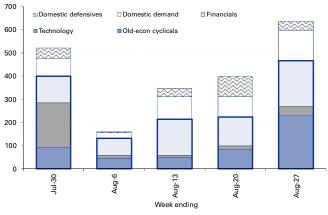


Exhibit 34: Most tech companies reporting in the end of July; management guidance on Asia vs. US/Europe outlook is worth watching

Earnings calendar by sectors

Index cap (US\$ bn)



Source: Bloomberg, FactSet, MSCI, Goldman Sachs Global ECS Research.

## Exhibit 35: 1H/2Q earnings in Asia have been on track; 1H reported earnings are 52% of full year estimates Summary of 1H/2Q earnings results

				EPS grow	rth (%)		1H actual
	Repo	rted Cos.	CY2O	10	CY1H10		vs. est.
	# of Cos.	% of MSCI cap	Yoy (%)	Qoq (%)	Yoy (%)	Hoh (%)	CY10
MSCI markets							
India	19	42%	15%	-7%	18%	12%	48%
Korea	20	24%	87%	-8%	293%	24%	53%
Malaysia	10	21%	18%	20%	19%	30%	53%
Singapore	5	13%	-25%	11%	-5%	-9%	50%
Thailand	7	36%	17%	4%	14%	16%	53%
MXAPJ	71	10%	61%	-2%	112%	21%	52%
MSCI AC Asia ex Japan sectors							
Financials	21	7%	26%	-4%	24%	3%	47%
Materials	7	11%	97%	-10%	144%	11%	58%
Information technology	8	15%	NM	4%	NM	52%	45%
Industrials	15	18%	20%	3%	31%	38%	66%
Telecommunication services	3	9%	10%	3%	9%	7%	52%
Energy	2	3%	16%	17%	13%	244%	57%
Consumer staples	5	10%	65%	78%	18%	41%	61%
Consumer discretionary	6	7%	28%	5%	61%	-3%	55%
Utilities	4	15%	-129%	-148%	8%	-78%	8%
Health care	1	8%	7%	-3%	30%	36%	47%

Source: Bloomberg, FactSet, I/B/E/S, MSCI, Worldscope, Goldman Sachs Global ECS Research estimates.

## Exhibit 36: Upcoming results up to mid-Aug (tentative dates) Companies with index cap > US\$5bn

Bloomberg	RIC	Stock name	GICS sector	ldx cap (US\$ mn)	Expected report date
012330 KP	012330.KS	Hyundai Mobis	Consumer Discretionary	11,522	Jul-28
101 HK	0101.HK	Hang Lung Prop	Financials	8,389	Jul-28
6 HK	0006.HK	Hongkong Electric	Utilities	8,271	Jul-28
066570 KP	066570.KS	LG Elec	Consumer Discretionary	7,709	Jul-28
2409 TT	2409.TW	AU Optronics	Information Technology	7,147	Jul-28
JSP IS	JNSP.NS	Jindal Steel & Power	Materials	5,046	Jul-28
2330 TT	2330.TW	Taiwan Semi Mfg	Information Technology	45,579	Jul-29
2498 TT	2498.TW	HTC	Information Technology	11,359	Jul-29
BBCA IJ	BBCA.JK	Bank Central Asia	Financials	8,032	Jul-29
035420 KP	035420.KS	NHN	Information Technology	6,580	Jul-29
000810 KP	000810.KS	Samsung Fire & Marine Insurance	Financials	5.862	Jul-29
ONGC IS	ONGC.NS	Oil & Natural Gas	Energy	5,259	Jul-29
005930 KP		Samsung Elec	Information Technology	73.041	Jul-30
DBS SP	DBSM.SI	DBS Group	Financials	18,048	Jul-30
055550 KP	055550.KS		Financials	16,141	Jul-30
105560 KP	105560.KS	Kookmin Bank	Financials	13,896	Jul-30
2454 TT	2454.TW	MediaTek	Information Technology	13,320	Jul-30
2002 TT	2002.TW	China Steel	Materials	9,291	Jul-30
TLKM IJ	TLKM.JK	Telekomunikasi Indonesia	Telecommunication Services	8,683	Jul-30
CAPL SP	CATL.SI	CapitaLand	Financials	6.867	Jul-30
015760 KP		Korea Electric Power	Utilities	6,774	Jul-30
086790 KP	086790.KS	Hana Finl	Financials	5,473	Jul-30
OCBC SP	OCBC.SI	Oversea-Chinese Banking	Financials	15,832	Aug-2
11 HK	0011.HK	Hang Seng Bank	Financials	10,378	Aug-2
2303 TT	2303.TW	United Microelec	Information Technology	5,522	Aug-2 Aug-4
RIO AU	RIO.AX	Rio Tinto	Materials		0
1 HK	0001.HK		Financials	25,449 16,580	Aug-5
13 HK		Cheung Kong	Industrials		Aug-5
13 HK 19 HK	0013.HK 0019.HK	Hutchison Whampoa Swire Pacific (A)	Financials	13,272 9.010	Aug-5
GENS SP	GENS.SI				Aug-5
		Genting Intl	Consumer Discretionary	5,187	Aug-6
3481 TT	3481.TW	InnoLux Display	Information Technology	5,349	Aug-7
UOB SP	UOBH.SI	United Overseas Bank	Financials	17,563	Aug-10
CBA AU	CBA.AX	Commonwealth Bank of Australia	Financials	67,226	Aug-11
700 HK	0700.HK	Tencent	Information Technology	18,001	Aug-11
388 HK	0388.HK	Hong Kong Exchanges & Clearing	Financials	16,035	Aug-11
588 HK	0688.HK	China Overseas Land & Inv	Financials	8,501	Aug-11
SGP AU	SGP.AX	Stockland Australia	Financials	8,030	Aug-11
66 HK	0066.HK	MTR	Industrials	5,029	Aug-11
ST SP	STEL.SI	Singapore Telecom	Telecommunication Services	18,043	Aug-12
TLS AU	TLS.AX	Telstra	Telecommunication Services	12,383	Aug-12
CIMB MK	CIMB.KL	Bumiputra-Commerce	Financials	8,767	Aug-12
CCL AU	CCL.AX	Coca-Cola Amatil	Consumer Staples	5,787	Aug-12
494 HK	0494.HK	Li & Fung	Consumer Discretionary	10,751	Aug-13
РТТ ТВ	PTT.BK	PTT	Energy	6,489	Aug-13
004170 KP	004170.KS	Shinsegae	Consumer Staples	6,289	Aug-13
003550 KP	003550.KS	LG Corp (KR)	Industrials	5,676	Aug-13
WIL SP	WLIL.SI	Wilmar Intl	Consumer Staples	5,587	Aug-13
2881 TT	2881.TW	Fubon Finl	Financials	5.834	Aug-13

Source: Bloomberg, Goldman Sachs Global ECS Research.

### Exhibit 37: Our screen on upside/downside earnings surprise candidates

Screen 1: S	Sales/margin recovery relative t	o historical rar	nge						
							Rebound relati	ive to range <sup>+</sup>	Expected
Bloomberg	Name	Market	GICS sector	Listed mkt cap (US\$mn)	6M ADVT (US\$mn)	GS Rating	Sales CY2010E	Margin CY2010E	reporting date
Upside surp	orises								
8277 HK	Wumart Stores	China	Consumer Staples	1,062	3	NC	0.55	-0.24	Aug-1
2301 TT	Lite-On Tech	Taiwan	Information Technology	2,667	8	В	-0.60	2.58	Aug-2
Downside s	urprise								
493 HK	GOME Electrical Appliances	China	Consumer Discretionary	4,958	24	RS		1.26	Aug-20
UNVR IJ	Unilever Indonesia	Indonesia	Consumer Staples	13,873	2	NC	0.20	1.52	Jul-29
2912 TT	President Chain Store	Taiwan	Consumer Staples	3,432	6	S	0.32	1.50	Aug-27
753 HK	Air China (H)	China	Industrials	4,828	18	N	1.77	0.99	Aug-2
Screen 2: E	Earnings revision in past 3 mont	ths, supplemer	nted by out-of-consensus	s GS estimates	s				
							CY20	10E	Expected
DI	N	<b>M</b> aulaat		Listed mkt	6M ADVT		00	3-month	reporting
Bloomberg	Name	Market	GICS sector	cap (US\$mn)	(US\$mn)	GS Rating	GS vs. cons.	revision	date
Upside surp	orises								
003490 KP	Korean Air Lines	Korea	Industrials	4,844	32	N	62%	40%	Aug-13
2328 HK	PICC Prop & Casualty	China	Financials	3,419	16	N	86%	32%	Aug-20
									A
2610 TT	China Airlines	Taiwan	Industrials	2,542	12	В	-22%	391%	Aug-3
2610 TT 2618 TT	China Airlines Eva Airways	Taiwan Taiwan	Industrials Industrials	2,542 1,841	12 10	B B*	-22% -21%	391% 237%	Aug-3 Aug-3
	Eva Airways								
2618 TT	Eva Airways								
2618 TT Downside s	Eva Airways urprise	Taiwan	Industrials	1,841	10	B*	-21%	237%	Aug-3
2618 TT Downside so 2600 HK	Eva Airways <b>urprise</b> Aluminum Corp of China (H)	Taiwan China	Industrials Materials	1,841 3,125	10 32	B* S	-21% 120%	237% -36%	Aug-3 Aug-24

Note: Sales rebound score and margin rebound score are the ratios of magnitude 2010E sales/margin rebound from the min. of 2005-2009 to the range between highest and lowest sales growth/margin achieved in 2005-2009. For sales growth, we have excluded the "high growth" samples simply due to a low 2009 base. For Screen 1, potential earnings surprise analysis on the above companies is based purely on a screen of consensus assumptions on sales and margin; we are not implying an investment view on them.

Source: FactSet, I/B/E/S, MSCI, Worldscope, Goldman Sachs Research estimates, Gao Hua Securities Research estimates, Goldman Sachs Global ECS Research.

### Earnings calendar for the top 5 stocks of key MXASJ sectors

### **Exhibit 38: Energy**

		Energy			
			Expected	Share o	of sector
Bloomberg	Name	Market	report date	MktCap	Earnings
883 HK	CNOOC	China	Aug-25	17%	17%
857 HK	PetroChina (H)	China	Aug-18	14%	15%
1088 HK	China Shenhua Energy (H)	China	Aug-28	7%	6%
386 HK	Sinopec (H)	China	Aug-23	7%	12%
PTT TB	PTT	Thailand	Aug-13	4%	5%
-			Top 5 Total	49%	55%

### **Exhibit 40: Industrials**

		Industrials			
			Expected	Share o	of sector
Bloomberg	Name	Market	report date	MktCap	Earnings
13 HK	Hutchison Whampoa	Hong Kong	Aug-5	6%	6%
SIME MK	Sime Darby	Malaysia	Aug-27	3%	2%
003550 KP	LG Corp (KR)	Korea	Aug-13	3%	5%
66 HK	MTR	Hong Kong	Aug-12	2%	2%
STE SP	Singapore Tech Engg	Singapore	Aug-3	2%	1%
			Top 5 Total	16%	15%

### **Exhibit 42: Consumer staples**

		Consumer staples			
			Expected	Share of	of sector
Bloomberg	Name	Market	report date	MktCap	Earnings
004170 KP	Shinsegae	Korea	Aug-13	6%	6%
WIL SP	Wilmar Intl	Singapore	Aug-13	5%	6%
IOI MK	101	Malaysia	Aug-26	5%	5%
151 HK	Want Want China	China	Aug-24	5%	3%
322 HK	Tingyi Cayman Islands	China	Aug-16	4%	2%
			Top 5 Total	24%	22%

### Exhibit 44: Banks

		Banks			
-		Expecte			of sector
Bloomberg	Name	Market	report date	MktCap	Earnings
1398 HK	ICBC (H)	China	Aug-26	10%	11%
939 HK	China Constr Bank (H)	China	Aug-20	9%	11%
3988 HK	Bank of China (H)	China	Aug-27	8%	10%
DBS SP	DBS Group	Singapore	Jul-30	5%	4%
UOB SP	United Overseas Bank	Singapore	Aug-10	4%	4%
			Top 5 Total	36%	41%

### **Exhibit 46: Property**

Property						
			Expected	Share of sector		
Bloomberg	Name	Market	report date	MktCap	Earnings	
1 HK	Cheung Kong	Hong Kong	Aug-5	10%	13%	
19 HK	Swire Pacific (A)	Hong Kong	Aug-5	6%	6%	
688 HK	China Overseas Land & Inv	China	Aug-11	5%	5%	
101 HK	Hang Lung Prop	Hong Kong	Jul-28	5%	4%	
4 HK	Wharf	Hong Kong	Aug-26	4%	4%	
			Top 5 Total	31%	32%	

### Exhibit 48: Telecommunications services

Telecommunication services						
			Expected	Share of sector		
Bloomberg	Name	Market	report date	MktCap	Earnings	
941 HK	China Mobile	China	Aug-20	41%	44%	
ST SP	Singapore Telecom	Singapore	Aug-12	12%	12%	
TLKM IJ	Telekomunikasi Indonesia	Indonesia	Jul-30	6%	6%	
762 HK	China Unicom	China	Aug-27	5%	2%	
728 HK	China Telecom	China	Aug-27	4%	3%	
			Top 5 Total	68%	66%	

Source: Bloomberg, MSCI, Goldman Sachs Research estimates, Gao Hua Securities Research estimates.

### Exhibit 39: Materials

		Materials			
			Expected	Share of sector	
Bloomberg	Name	Market	report date	MktCap	Earnings
2002 TT	China Steel	Taiwan	Jul-30	6%	6%
1301 TT	Formosa Plastics	Taiwan	Aug-31	5%	4%
1303 TT	Nan Ya Plastics	Taiwan	Aug-31	5%	4%
1326 TT	Formosa Chem & Fibre	Taiwan	Aug-31	4%	4%
JSP IS	Jindal Steel & Power	India	Jul-28	3%	1%
			Top 5 Total	23%	19%

### **Exhibit 41: Consumer discretionary**

Consumer discretionary						
			Expected	Share of sector		
Bloomberg	Name	Market	report date	MktCap	Earnings	
005380 KP	Hyundai Motor	Korea	Jul-30	10%	14%	
012330 KP	Hyundai Mobis	Korea	Jul-28	7%	9%	
ASIIIJ	PT Astra Intl	Indonesia	Jul-29	6%	5%	
494 HK	Li & Fung	Hong Kong	Aug-13	6%	3%	
066570 KP	LG Elec	Korea	Jul-28	5%	8%	
			Top 5 Total	34%	39%	

### Exhibit 43: Health care

Health care						
			Expected	Share o	of sector	
Bloomberg	Name	Market	report date	MktCap	Earnings	
SUNP IS	Sun Pharma Ind	India	Jul-28	14%	13%	
8199 HK	Shandong Weigao Medical	China	Aug-11	9%	6%	
RBXY IS	Ranbaxy Lab	India	Aug-12	6%	15%	
PIHC IS	Piramal Healthcare	India	Jul-30	6%	6%	
000100 KP	Yuhan	Korea	Jul-28	6%	11%	
			Top 5 Total	42%	50%	

### Exhibit 45: Insurance and other financial services

Expected Share of secto								
Bloomberg	Name	Market	report date	MktCap	Earnings			
2628 HK	China Life Insurance (H)	China	Aug-25	24%	22%			
388 HK	Hong Kong Exchanges	Hong Kong	Aug-11	12%	10%			
2318 HK	Ping An Insurance (H)	China	Aug-17	10%	8%			
000810 KP	Samsung Fire & Marine	Korea	Jul-29	4%	6%			
SGX SP	Singapore Exchange	Singapore	Aug-2	3%	4%			
			Top 5 Total	54%	51%			

### **Exhibit 47: Information technology**

Information technology						
			Expected	Share of sector		
Bloomberg	Name	Market	report date	MktCap	Earnings	
005930 KP	Samsung Elec	Korea	Jul-30	19%	25%	
2330 TT	Taiwan Semi Mfg	Taiwan	Jul-29	12%	12%	
2317 TT	Hon Hai Precision Ind	Taiwan	Aug-31	7%	7%	
700 HK	Tencent	China	Aug-11	5%	2%	
2454 TT	MediaTek	Taiwan	Jul-30	3%	3%	
			Top 5 Total	46%	49%	

### Exhibit 49: Utilities

			Expected	Share of sector	
Bloomberg	Name	Market	report date	MktCap	Earnings
2 HK	CLP	Hong Kong	Aug-16	16%	17%
3 HK	Hong Kong & China Gas	Hong Kong	Aug-27	12%	7%
6 HK	Hongkong Electric	Hong Kong	Jul-28	10%	11%
PGAS IJ	Perusahaan Gas Negara	Indonesia	Aug-31	6%	6%
NATP IS	NTPC	India	Jul-30	4%	4%
			Top 5 Total	48%	46%

## **Reg AC**

We, Timothy Moe, CFA and Christopher Eoyang, hereby certify that all of the views expressed in this report accurately reflect our personal views about the subject company or companies and its or their securities. We also certify that no part of our compensation was, is or will be, directly or indirectly, related to the specific recommendations or views expressed in this report.

## **Investment Profile**

The Goldman Sachs Investment Profile provides investment context for a security by comparing key attributes of that security to its peer group and market. The four key attributes depicted are: growth, returns, multiple and volatility. Growth, returns and multiple are indexed based on composites of several methodologies to determine the stocks percentile ranking within the region's coverage universe.

The precise calculation of each metric may vary depending on the fiscal year, industry and region but the standard approach is as follows:

**Growth** is a composite of next year's estimate over current year's estimate, e.g. EPS, EBITDA, Revenue. **Return** is a year one prospective aggregate of various return on capital measures, e.g. CROCI, ROACE, and ROE. **Multiple** is a composite of one-year forward valuation ratios, e.g. P/E, dividend yield, EV/FCF, EV/EBITDA, EV/DACF, Price/Book. **Volatility** is measured as trailing twelve-month volatility adjusted for dividends.

## Quantum

Quantum is Goldman Sachs' proprietary database providing access to detailed financial statement histories, forecasts and ratios. It can be used for in-depth analysis of a single company, or to make comparisons between companies in different sectors and markets.

## Disclosures

### Coverage group(s) of stocks by primary analyst(s)

Compendium report: please see disclosures at http://www.gs.com/research/hedge.html. Disclosures applicable to the companies included in this compendium can be found in the latest relevant published research.

### **Option Specific Disclosures**

**Price target methodology:** Please refer to the analyst's previously published research for methodology and risks associated with equity price targets.

**Pricing Disclosure:** Option prices and volatility levels in this note are indicative only, and are based on our estimates of recent mid-market levels. All prices and levels exclude transaction costs unless otherwise stated.

**Buying Options** - Investors who buy call (put) options risk loss of the entire premium paid if the underlying security finishes below (above) the strike price at expiration. Investors who buy call or put spreads also risk a maximum loss of the premium paid. The maximum gain on a long call or put spread is the difference between the strike prices, less the premium paid.

**Selling Options** - Investors who sell calls on securities they do not own risk unlimited loss of the security price less the strike price. Investors who sell covered calls (sell calls while owning the underlying security) risk having to deliver the underlying security or pay the difference between the security price and the strike price, depending on whether the option is settled by physical delivery or cash-settled. Investors who sell puts risk loss of the strike price less the premium received for selling the put. Investors who sell put or call spreads risk a maximum loss of the difference between the strikes less the premium received, while their maximum gain is the premium received.

For options settled by physical delivery, the above risks assume the options buyer or seller, buys or sells the resulting securities at the settlement price on expiry.

### **Company-specific regulatory disclosures**

Compendium report: please see disclosures at http://www.gs.com/research/hedge.html. Disclosures applicable to the companies included in this compendium can be found in the latest relevant published research.

### Distribution of ratings/investment banking relationships

Goldman Sachs Investment Research global coverage universe

	Rating Distribution			Investment Banking Relations			tionships
	Buy	Hold	Sell		Buy	Hold	Sell
Global	31%	53%	16%		47%	44%	34%

As of July 1, 2010, Goldman Sachs Global Investment Research had investment ratings on 2,814 equity securities. Goldman Sachs assigns stocks as Buys and Sells on various regional Investment Lists; stocks not so assigned are deemed Neutral. Such assignments equate to Buy, Hold and Sell for the purposes of the above disclosure required by NASD/NYSE rules. See 'Ratings, Coverage groups and views and related definitions' below.

### Price target and rating history chart(s)

Compendium report: please see disclosures at http://www.gs.com/research/hedge.html. Disclosures applicable to the companies included in this compendium can be found in the latest relevant published research.

### **Regulatory disclosures**

### Disclosures required by United States laws and regulations

See company-specific regulatory disclosures above for any of the following disclosures required as to companies referred to in this report: manager or co-manager in a pending transaction; 1% or other ownership; compensation for certain services; types of client relationships; managed/co-managed public offerings in prior periods; directorships; for equity securities, market making and/or specialist role. Goldman Sachs usually makes a market in fixed income securities of issuers discussed in this report and usually deals as a principal in these securities.

The following are additional required disclosures: **Ownership and material conflicts of interest:** Goldman Sachs policy prohibits its analysts, professionals reporting to analysts and members of their households from owning securities of any company in the analyst's area of coverage. **Analyst compensation:** Analysts are paid in part based on the profitability of Goldman Sachs, which includes investment banking revenues. **Analyst as officer or director:** Goldman Sachs policy prohibits its analysts, persons reporting to analysts or members of their households from serving as an officer, director, advisory board member or employee of any company in the analyst's area of coverage. **Non-U.S. Analysts:** Non-U.S. analysts may not be associated persons of Goldman Sachs & Co. and therefore may not be subject to NASD Rule 2711/NYSE Rules 472 restrictions on communications with subject company, public appearances and trading securities held by the analysts.

**Distribution of ratings:** See the distribution of ratings disclosure above. **Price chart:** See the price chart, with changes of ratings and price targets in prior periods, above, or, if electronic format or if with respect to multiple companies which are the subject of this report, on the Goldman Sachs website at http://www.gs.com/research/hedge.html.

### Additional disclosures required under the laws and regulations of jurisdictions other than the United States

The following disclosures are those required by the jurisdiction indicated, except to the extent already made above pursuant to United States laws and regulations. Australia: This research, and any access to it, is intended only for "wholesale clients" within the meaning of the Australian Corporations Act. Canada: Goldman Sachs & Co. has approved of, and agreed to take responsibility for, this research in Canada if and to the extent it relates to equity securities of Canadian issuers. Analysts may conduct site visits but are prohibited from accepting payment or reimbursement by the company of travel expenses for such visits. Hong Kong: Further information on the securities of covered companies referred to in this research may be obtained on request from Goldman Sachs (Asia) L.L.C. India: Further information on the subject company or companies referred to in this research may be obtained from Goldman Sachs (India) Securities Private Limited; Japan: See below. Korea: Further information on the subject company or companies referred to in this research may be obtained from Goldman Sachs (Asia) L.L.C., Seoul Branch. Russia: Research reports distributed in the Russian Federation are not advertising as defined in the Russian legislation, but are information and analysis not having product promotion as their main purpose and do not provide appraisal within the meaning of the Russian legislation on appraisal activity. Singapore: Further information on the covered companies referred to in this research may be obtained from Goldman Sachs (Singapore) Pte. (Company Number: 198602165W). Taiwan: This material is for reference only and must not be reprinted without permission. Investors should carefully consider their own investment risk. Investment results are the responsibility of the individual investor. United Kingdom: Persons who would be categorized as retail clients in the United Kingdom, as such term is defined in the rules of the Financial Services Authority, should read this research in conjunction with prior Goldman Sachs research on the covered companies referred to herein and should refer to the risk warnings that have been sent to them by Goldman Sachs International. A copy of these risks warnings, and a glossary of certain financial terms used in this report, are available from Goldman Sachs International on request.

**European Union:** Disclosure information in relation to Article 4 (1) (d) and Article 6 (2) of the European Commission Directive 2003/126/EC is available at http://www.gs.com/client\_services/global\_investment\_research/europeanpolicy.html which states the European Policy for Managing Conflicts of Interest in Connection with Investment Research.

Japan: Goldman Sachs Japan Co., Ltd. is a Financial Instrument Dealer under the Financial Instrument and Exchange Law, registered with the Kanto Financial Bureau (Registration No. 69), and is a member of Japan Securities Dealers Association (JSDA) and Financial Futures Association of Japan (FFAJ). Sales and purchase of equities are subject to commission pre-determined with clients plus consumption tax. See company-specific disclosures as to any applicable disclosures required by Japanese stock exchanges, the Japanese Securities Dealers Association or the Japanese Securities Finance Company.

#### Ratings, coverage groups and views and related definitions

**Buy (B), Neutral (N), Sell (S)** -Analysts recommend stocks as Buys or Sells for inclusion on various regional Investment Lists. Being assigned a Buy or Sell on an Investment List is determined by a stock's return potential relative to its coverage group as described below. Any stock not assigned as a Buy or a Sell on an Investment List is determed Neutral. Each regional Investment Review Committee manages various regional Investment Lists to a global guideline of 25%-35% of stocks as Buy and 10%-15% of stocks as Sell; however, the distribution of Buys and Sells in any particular coverage group may vary as determined by the regional Investment Review Committee. Regional Conviction Buy and Sell lists represent investment recommendations focused on either the size of the potential return or the likelihood of the realization of the return.

**Return potential** represents the price differential between the current share price and the price target expected during the time horizon associated with the price target. Price targets are required for all covered stocks. The return potential, price target and associated time horizon are stated in each report adding or reiterating an Investment List membership.

**Coverage groups and views:** A list of all stocks in each coverage group is available by primary analyst, stock and coverage group at http://www.gs.com/research/hedge.html. The analyst assigns one of the following coverage views which represents the analyst's investment outlook on the coverage group relative to the group's historical fundamentals and/or valuation. **Attractive (A)**. The investment outlook over the following 12 months is favorable relative to the coverage group's historical fundamentals and/or valuation. **Neutral (N)**. The investment outlook over the following 12 months is neutral relative to the coverage group's historical fundamentals and/or valuation. **Cautious (C)**. The investment outlook over the following 12 months is unfavorable relative to the coverage group's historical fundamentals and/or valuation. **Cautious (C)**. The investment outlook over the following 12 months is unfavorable relative to the coverage group's historical fundamentals and/or valuation.

Not Rated (NR). The investment rating and target price have been removed pursuant to Goldman Sachs policy when Goldman Sachs is acting in an advisory capacity in a merger or strategic transaction involving this company and in certain other circumstances. Rating Suspended (RS). Goldman Sachs Research has suspended the investment rating and price target for this stock, because there is not a sufficient fundamental basis for determining an investment rating or target. The previous investment rating and price target, if any, are no longer in effect for this stock and should not be relied upon. Coverage Suspended (CS). Goldman Sachs has suspended coverage of this company. Not Covered (NC). Goldman Sachs does not cover this company. Not Available or Not Applicable (NA). The information is not available for display or is not applicable. Not Meaningful (NM). The information is not meaningful and is therefore excluded.

### **Global product; distributing entities**

The Global Investment Research Division of Goldman Sachs produces and distributes research products for clients of Goldman Sachs, and pursuant to certain contractual arrangements, on a global basis. Analysts based in Goldman Sachs offices around the world produce equity research on industries and companies, and research on macroeconomics, currencies, commodities and portfolio strategy. This research is disseminated in Australia by Goldman Sachs JBWere Pty Ltd (ABN 21 006 797 897) on behalf of Goldman Sachs; in Canada by Goldman Sachs & Co. regarding Canadian equities and by Goldman Sachs & Co. (all other research); in Hong Kong by Goldman Sachs (Asia) L.L.C.; in India by Goldman Sachs (India) Securities Private Ltd.; in Japan by Goldman Sachs Japan Co., Ltd.; in the Republic of Korea by Goldman Sachs; in Singapore by Goldman Sachs (Singapore) Pte. (Company Number: 198602165W); and in the United States of America by Goldman Sachs & Co. Goldman Sachs International has approved this research in connection with its distribution in the United Kingdom and European Union.

**European Union:** Goldman Sachs International, authorized and regulated by the Financial Services Authority, has approved this research in connection with its distribution in the European Union and United Kingdom; Goldman Sachs & Co. oHG, regulated by the Bundesanstalt für Finanzdienstleistungsaufsicht, may also distribute research in Germany.

### **General disclosures**

This research is for our clients only. Other than disclosures relating to Goldman Sachs, this research is based on current public information that we consider reliable, but we do not represent it is accurate or complete, and it should not be relied on as such. We seek to update our research as appropriate, but various regulations may prevent us from doing so. Other than certain industry reports published on a periodic basis, the large majority of reports are published at irregular intervals as appropriate in the analyst's judgment.

Goldman Sachs conducts a global full-service, integrated investment banking, investment management, and brokerage business. We have investment banking and other business relationships with a substantial percentage of the companies covered by our Global Investment Research Division. Goldman Sachs & Co., the United States broker dealer, is a member of SIPC (http://www.sipc.org).

Our salespeople, traders, and other professionals may provide oral or written market commentary or trading strategies to our clients and our proprietary trading desks that reflect opinions that are contrary to the opinions expressed in this research. Our asset management area, our proprietary trading desks and investing businesses may make investment decisions that are inconsistent with the recommendations or views expressed in this research.

We and our affiliates, officers, directors, and employees, excluding equity and credit analysts, will from time to time have long or short positions in, act as principal in, and buy or sell, the securities or derivatives, if any, referred to in this research.

This research is not an offer to sell or the solicitation of an offer to buy any security in any jurisdiction where such an offer or solicitation would be illegal. It does not constitute a personal recommendation or take into account the particular investment objectives, financial situations, or needs of individual clients. Clients should consider whether any advice or recommendation in this research is suitable for their particular circumstances and, if appropriate, seek professional advice, including tax advice. The price and value of investments referred to in this research and the income from them may fluctuate. Past performance is not a guide to future performance, future returns are not guaranteed, and a loss of original capital may occur. Fluctuations in exchange rates could have adverse effects on the value or price of, or income derived from, certain investments.

Certain transactions, including those involving futures, options, and other derivatives, give rise to substantial risk and are not suitable for all investors. Investors should review current options disclosure documents which are available from Goldman Sachs sales representatives or at http://www.theocc.com/publications/risks/riskchap1.jsp. Transactions cost may be significant in option strategies calling for multiple purchase and sales of options such as spreads. Supporting documentation will be supplied upon request.

All research reports are disseminated and available to all clients simultaneously through electronic publication to our internal client websites. Not all research content is redistributed to our clients or available to third-party aggregators, nor is Goldman Sachs responsible for the redistribution of our research by third party aggregators. For all research available on a particular stock, please contact your sales representative or go to http://360.gs.com.

Disclosure information is also available at http://www.gs.com/research/hedge.html or from Research Compliance, 200 West Street, New York, NY 10282.

#### Copyright 2010 The Goldman Sachs Group, Inc.

No part of this material may be (i) copied, photocopied or duplicated in any form by any means or (ii) redistributed without the prior written consent of The Goldman Sachs Group, Inc.