

February 13, 2009

Taiwan Economics & Strategy

The TWD Moment

Depreciate Out of Recession: We see fundamental and policy reasons for TWD depreciation this year. In our base case, we forecast USD/TWD at 36.5 by end-2009; our bear case is 40 and our bull case is 34. The current account will be weaker this year and capital flows are likely to be unfavorable. External demand is not in Taiwan's control, but the exchange rate is. Depreciation can support exporters' earnings and competitiveness to free up resources from potentially bailing out exporters. It can also help avoid a dangerous vicious cycle in deflation. Nevertheless, we do not think TWD depreciation will get out of control.

Investment implications: Our simulation models take into account USD, EUR, and JPY, which account for 77% of revenue of our coverage universe (91% in tech universe). Our analysis shows that other factors being equal and excluding hedging effects, our TWD base case and bear case will likely boost our 2009 earnings forecasts by 51% and 87%, respectively. We note that company analysts still assume TWD/USD to stand at 33.0 in their earnings models to date. We attribute strong earnings elasticity to low base effects (Taiex 2009e ROE forecast at 3.6%).

We concur with conventional wisdom of being long tech exporters and short non-tech names during the TWD moment. Our analysis shows that the major winners are TSMC, Sunplus, Realtek, Compal, Foxconn Tech and Unimicron, among many others. We cite key losers including China Steel, Formosa Petrochemical, and China Airlines.

Model portfolio changes: Our model portfolio has outperformed the Taiex by 120bps since our last adjustment in early Feb, when we added beta to play the tech re-stocking theme. We now further increase our OW in tech sector on its deep dividend capacity and also the likely windfall FX gains. We have reduced exposure to FEDS and Teco due to the likely prolonged domestic demand slump and the worsening capex recessions.

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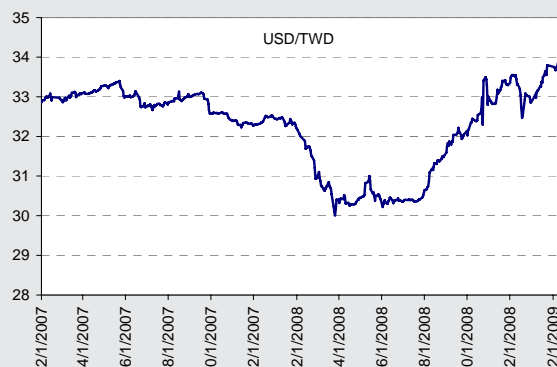
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Breaking New Highs



Source: CEIC and Morgan Stanley Research

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Taiwan Economics

Depreciate to Get Out of Recession

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Summary & Conclusions

Along with our GDP downgrade earlier this week, we have also revised our FX forecasts. In our base case, we expect USD/TWD at 36.5 by end-2009, implying the TWD to depreciate by roughly 7% from current levels. In our bear case, we look for USD/TWD at 40, implying depreciation of 18%; our bull case is 34, equal to current levels. We believe any surprise will be geared more toward the bear case scenario.

We forecast the Taiwanese economy will post a record fall this year at -6% because of the plunge in exports. The source of weakness is obviously coming from external. External demand is out of Taiwan government's control, but the exchange rate is not. Saving the exporters should be the top priority since it can stop the negative ripple effect onto the rest of the economy through corporate delinquency and unemployment. TWD depreciation should be the fastest and most direct way to help exporters, in our view, and to get the economy out of recession and vicious cycles. Confidence returns when growth returns.

Fundamentally, we also think the TWD should depreciate and underperform as we forecast it to be the weakest economy in the Non-Japan Asia region, with a smaller current account surplus this year and continued capital outflows.

The Underperformer in Growth in 2009

TWD was an outperformer in AXJ region 2008, depreciating only 1.1% against the USD. In fact, the TWD had a bull rally during 1H08, as the economy saw capital inflows betting on strong growth to be led by the new government. We think the new government has not disappointed in terms of its promised policy agenda on improving cross-strait relationship, but unfortunately such re-rating story was then dashed by a synchronized global recession.

TWD started to depreciate against USD as of August last year but at a very mild and gradual magnitude because the focus in 2H08 was the credit crunch, and liquidity was not a concern for Taiwan. Taiwan can overcome a credit crunch, but it cannot escape the global demand destruction brought about by this, since exports account for 70% of GDP. Taiwan exports have

been free falling since November and posted a record low of -44% in January. TWD has now started to depreciate more visibly so far this year, but it is not yet an underperformer relative to AXJ. However, we expect the recession in Taiwan to be the most severe in the AXJ region and therefore its currency should also be under more pressure.

Exhibit 1

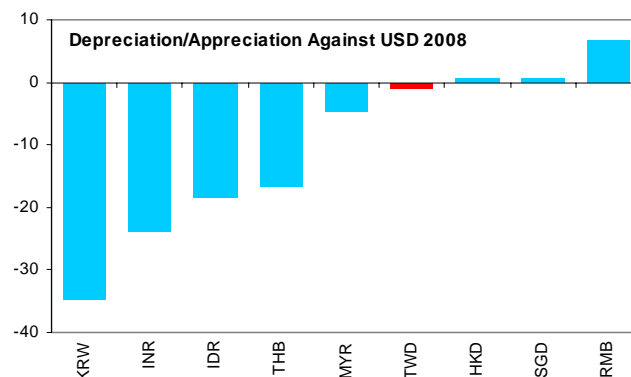
TWD Forecasts (Year-End)

	<u>2/11/2009</u>	<u>Bull</u>	<u>2009e Base</u>	<u>Bear</u>	<u>2010e Base</u>
USD	34.0	34.0	36.5	40.0	33.5
EUR	43.8	47.6	51.1	56.0	50.3
JPY (100)	37.0	40.0	42.9	47.1	33.5
KRW (100)	2.44	2.96	31.7	34.8	31.9

Source: Morgan Stanley Research

Exhibit 2

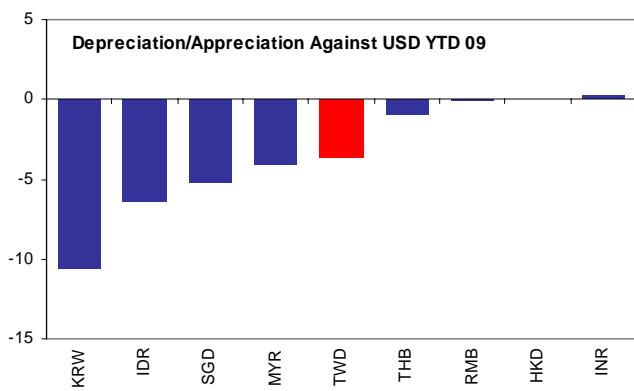
USD/TWD Little Changed in 2008



Source: CEIC and Morgan Stanley Research

Exhibit 3

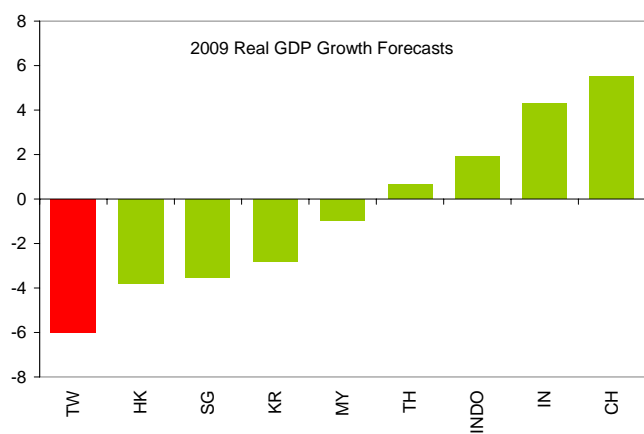
USD/TWD Starting to Move in 2009



Source: CEIC and Morgan Stanley Research

Exhibit 4

Taiwan Likely To Be the Weakest Link in 2009



Source: CEIC and Morgan Stanley Research

Weaker Current Account in 2009

With the fall in commodity prices and weak demand, one should expect Taiwan's trade balance to increase in 2009. Exports are free falling but the drop should be even more for imports due to plunging production and domestic demand. We do expect the trade balance will expand to 6.5% this year from an estimated 3.8% last year. However, this will not be a cause for a widening in the overall current account surplus.

The trade balance is only one part of current account balance: the two other major items for are services balance and income balance. The services balance improved significantly in 2008 and even saw its first-ever surplus (since data became available in 1980) in 1H08. That was because Taiwan provided considerably more financial and business services to foreigners in 1H08 amidst pre-election optimism. However,

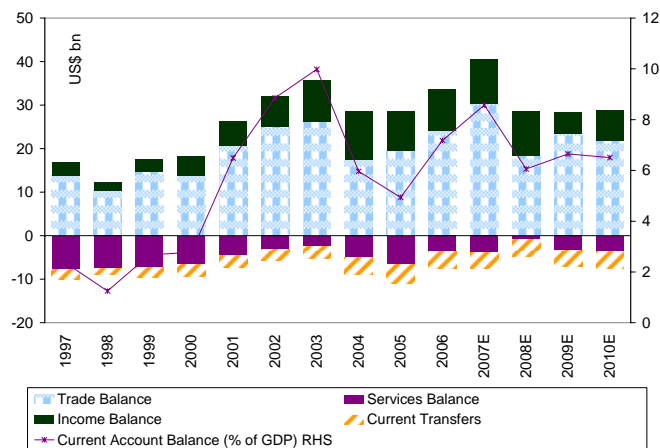
such services exports started to decline in 2H08, while the closer transportation links between Taiwan and Mainland China has failed to boost travel export enough to offset the other business services export. We believe the services balance in 2009 will be at a much bigger deficit than in 2008, thereby narrowing the widening trade balance in the current account.

Meanwhile, income balance will also deteriorate this year due to the drop in its direct investment income in China from factory closure and also in portfolio investment income in global markets.

As a result, even with a record fall in imports, it would be disappointing if Taiwan's current account does not expand this year. In absolute USD value, we expect 2009 current account balance to narrow to \$21 bn from \$24 bn in 2008. In terms of % of GDP, we forecast current account surplus at 6.1% of GDP in 2008 and to widen only slightly to 6.7% of GDP in 2009; this compares to the last recession in 2001 when current account surplus expanded from 2.8% of GDP in 2000 to 6.5% in 2001.

Exhibit 5

No Improvement Expected on Current Account



Source: CEIC and Morgan Stanley Research

Capital Outflow to Worsen in 2009

Taiwan recorded financial account surplus in 1H09, again due to cross-strait optimism and a normalization in TWD interest rate. Unfortunately, both sources of inflow are reversing. Needless to say, weak growth and the rising risk of delinquency at the banking system are also reasons to be negative to capital flows this year.

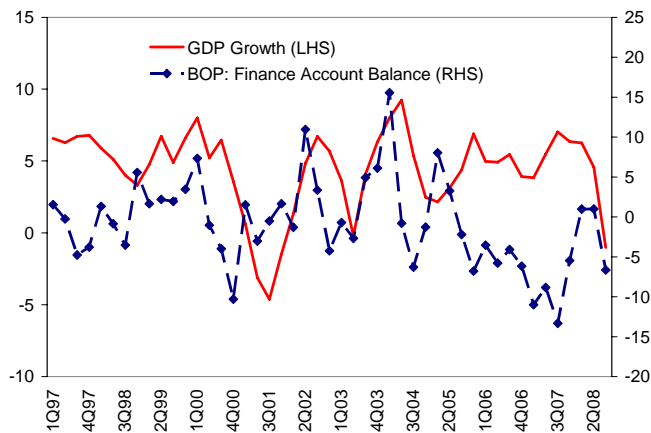
We have been bullish in advocating the positive prospects from the improving cross-strait relationship that will provide capital,

trade, human resources, and confidence to Taiwan. We have not changed our view. However, this story cannot play out when Mainland China itself is in a hard landing. CEPA boosted the Hong Kong economy when Mainland China was at the beginning of boom stage. Unfortunately, the timing is bad for Taiwan now, as our team expects the Chinese economy to slow to a 19-year low this year to 5.5%. As a result, the capital inflow betting that the cross-strait story will slow significantly from last year, or even reverses.

Low interest rate is another negative on capital flow. Current policy rate at 1.5% is not a historical low yet (the historical low was 1.375% in 2003-04), but we believe it will soon break that record. We forecast the central bank to cut its policy rate to 0.5% by 2Q09. While the policy rate is heading there, deposit rates are already at historical low levels with 3M NT\$ time deposit rate at 0.505% vs 3M US\$ deposit rate of 1% and 3M RMB rate at 1.71%. In the current environment with the preference for cash holding, NT\$ deposits do not look attractive.

Exhibit 6

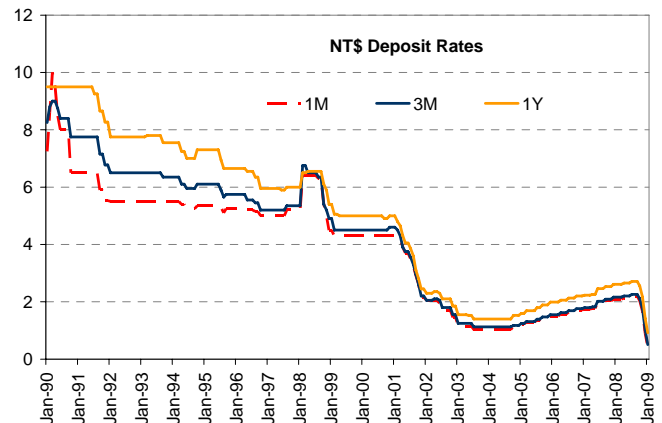
Declining GDP to Take a Toll on Capital Flows



Source: CEIC and Morgan Stanley Research

Exhibit 6

Unattractive TWD Deposits



Source: CEIC and Morgan Stanley Research

Depreciation to Help Exporters and Fight Deflation

Taiwan is experiencing an external-led recession, but unfortunately its domestic economy also has many structural weaknesses and cannot help offset the export slowdown. The external environment is not in Taiwan's control and it will take time and effort to push reforms to rejuvenate the domestic economy; but recession is already happening. Since the source of recession is exports, policy should start from alleviating the impact from the export downturn before it spills over to the rest of the economy through business closure and unemployment. Feasible policies could include bank loans to finance exporters, bailing out exporters, cutting tax rates, cutting interest rates, creating jobs, and currency depreciation. The government is carrying out all measures but the impact is so far limited since banks are risk averse, bails out involve lengthy debates and moral hazard, liquidity traps reduce the impact of rate cuts, and job creation is slow and low quality. The fastest and most direct way, in our view, are tax cuts and currency depreciation.

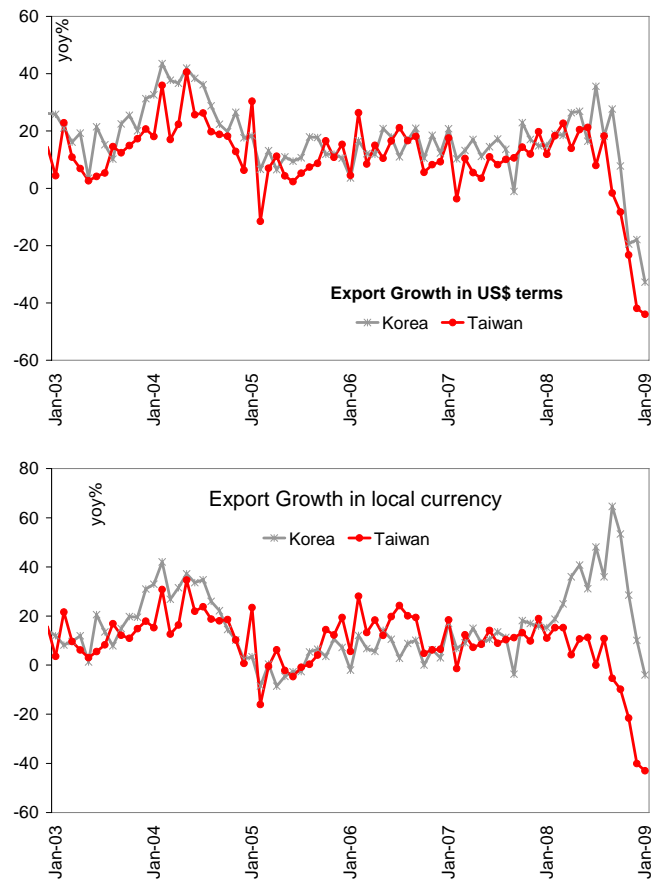
Currency depreciation has two impacts on exporters – earnings and competitiveness. Export growth is often reported in US\$ terms but it is the growth in local currency terms that is more relevant to corporate earnings after exporters convert their contract price earnings into local currency. In Taiwan's case, since USD/TWD was little changed, export growth in TWD terms fell just as much as that in US\$ terms. In January, Taiwan's export growth in US\$ terms fell -44% YoY and that in TWD terms also plunged -43%, similar to December last year which was -42% versus -40%. It is, however, a different situation in Korea where KRW has depreciated sharply. In January, Korea's export growth in US\$ terms plummeted -33%

but in KRW terms was only down -3%, and December was -18% versus +10%. Therefore, even though demand for Korean exports are also falling off the cliff, companies there are in a much better position than the Taiwanese exporters. Exporters are pillars for both economies and their financial health is the key to income and labor market. Simply because Korean exporters' earnings are in relatively less trouble, Korea's unemployment rate is little changed from 3% in the beginning of 2008 to 3.3% in January 2009; while in Taiwan it has already shot up from 3.9% to 5% during the same period.

It is also apparent that Taiwan is losing competitiveness to Korean exporters since TWD has appreciated about 40% against KRW since the beginning of last year. Therefore, although Taiwan's export price in US\$ terms is falling, it is falling slower than Korea's (Exhibit 8). Of course stronger export price growth itself is not a negative if it helps margin but it will affect competitiveness. Taiwan exporters started to lose share in the global market in 2000 when Korean exporters began to gain market share (Exhibit 9). Certainly, there are structural reasons behind such divergence as Korea goes for consumer branding while Taiwan is more of a component producer; but the impact of exchange rate competitiveness is not be ignored.

Exhibit 7

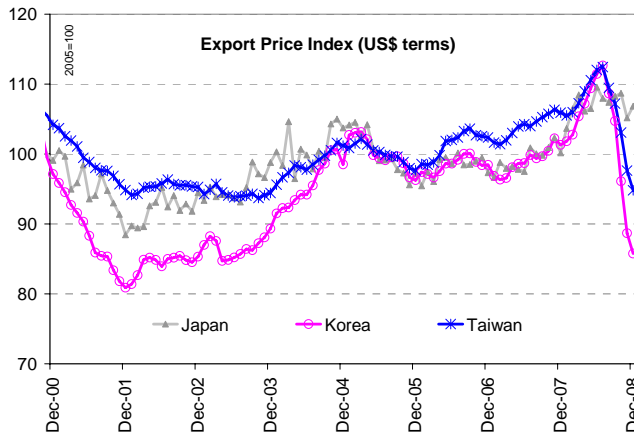
Korean Exporters Are Less Troubled Due to KRW Depreciation



Source: CEIC and Morgan Stanley Research

Exhibit 8

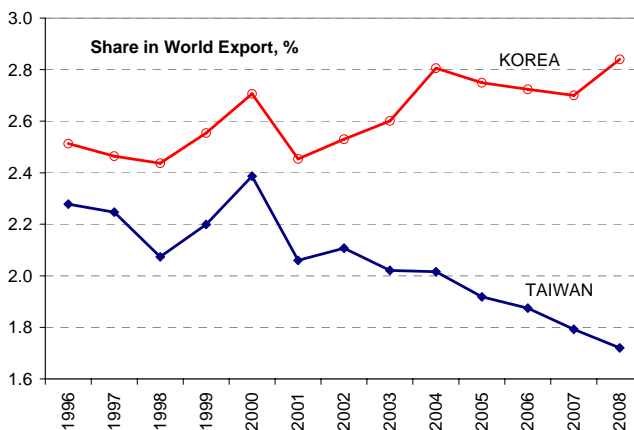
Taiwan's Export Price Growth Higher than Korea



Source: CEIC and Morgan Stanley Research

Exhibit 9

Taiwan Losing Market Share



Source: IMF and Morgan Stanley Research

Another major challenge that Taiwan has to face this year is deflation. Deflation is dangerous in an economy with very weak confidence, as it can easily develop into a vicious cycle. Currency depreciation can help fight deflation, although in a more passive way. Yet, we think it is important to stop the problem from getting worse first, or even to avoid it from happening in the first place. Confidence will revive faster without deflation when asset prices can be supported. Clearly high inflation is also undesirable, and that is one concern from currency depreciation and the impact on importers. However, with commodity and import prices falling rapidly in US\$ terms, it is much safer for currency depreciation not to bring in too much

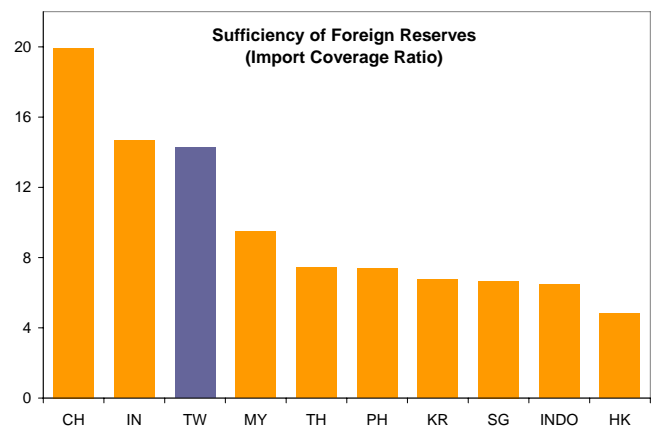
inflation, not to mention that exporters are in much bigger trouble than the importers so there is a priority to get it right.

Nevertheless, TWD Depreciation Will Not Get Out of Control

Although we believe TWD will depreciate for both fundamental and policy reasons, we look for a gradual and managed path of depreciation. We are confident that TWD exchange rate movement will not get out of control because the economy's strong balance sheet will fend off speculators. Taiwan's foreign reserves at \$292.7 billion is the fifth largest in the world and is enough to cover more than 3 times of its short-term external debt, although the accumulation in reserves this year should be slower due to the balance of payment dynamics we analyzed above. We do not expect the magnitude of KRW depreciation last year will happen to TWD as Korea has foreign reserves that can only cover 1.1 times of its short-term external debt. If the depreciation is gradual, a crisis of confidence should not occur. Also, we see TWD depreciation as more of a cyclical adjustment rather than a structural devaluation, and therefore it should return to fair value once the economy stabilizes. The key here is to get the economy out of recession as soon as possible, and we believe currency depreciation will achieve that through alleviating the hit on exporters' earnings and by preventing a vicious cycle in deflation, and in the end it will support confidence. If the recession extends longer, even currency appreciation will not help restore confidence. Growth matters.

Exhibit 10

Taiwan Has Strong Foreign Reserves to Assure Managed Currency Depreciation



Source: CEIC and Morgan Stanley Research

Taiwan Strategy

The FX Stimulus

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Following disappointing macro data releases of late, our Taiwan economist, Sharon Lam, revised down her 2009e/2010e GDP growth forecasts to minus 6% and 2.2%, respectively. Meantime, she also forecasts TWD to depreciate by year end to 36.5 against USD in the base case and 40.0 in the bear case (Exhibit 1). Her main arguments for TWD depreciation are to support exporters to stabilize the job market (ie, gross exports account for 70% of GDP) and also help reduce the tailing risks of deflation through inflated import prices. In this report, we attempt to quantify for equity investors the impacts of such a likely TWD movement on the profitability of the companies in our coverage universe.

Exhibit 2

Taiwan Macro Forecasts

YoY%, stated otherwise	2008E	2009E			2010E
		Bull	Base	Bear	
Nominal GDP	-2.1	-2.3	-7.0	-9.5	3.5
Real GDP	-0.2	-1.5	-6.0	-8.8	2.2
Private Consumption	-1.0	-1.5	-4.5	-8.0	0.0
Government Consumption	1.0	15.0	10.0	8.0	12.0
Construction Investment	-4.0	0.0	-15.0	-20.0	-2.0
Machinery Capex	-13.0	-15.0	-30.0	-37.0	-5.0
Exports (in US\$ term)	3.7	-18.0	-23.0	-30.0	8.0
Imports (in US\$ term)	9.9	-21.0	-27.0	-37.0	10.0
CPI	3.5	0.5	-1.0	-2.0	0.5
CBC Policy Rate (year-end, %)	2.00	1.00	0.50	0.00	1.25
USD/NT\$ (year-average)	31.5	34.4	35.7	37.6	36.1
USD/NT\$ (year-end)	32.9	34.0	36.5	40.0	33.5

Source: Morgan Stanley Research (E) estimates

TWD depreciation boosts corporate profitability

We presented in Exhibit 2 our TWD year-average forecasts against three major currencies of the world, including USD, EUR, and JPY. Investors should note that we assume here 1.33 for EUR/USD and 85 for USD/JPY, which are both provided by our FX Research Team.

Exhibit 3

MS 2009e Year-Average TWD Forecasts

	Bull Case	Base Case	Bear Case
USD	34.4	35.7	37.6
EUR	45.8	47.5	50.0
JPY	0.405	0.420	0.442

Source: Morgan Stanley Research

We present in Exhibit 3 the simulated changes in profitability of our coverage universe based on the base-case FX assumptions. Specifically, the depreciation of TWD to 35.7 against USD would likely boost profitability of our coverage universe by 38%. By the same token, our analysis shows that TWD depreciation against EUR to 47.5 and JPY to 0.42 could boost the profitability of our coverage universe by 16% and -4%, respectively. In short, we estimate that the base case scenario where TWD depreciation against USD/EUR/JPY is all materialized will likely yield a combined earnings upside of 51% from our current earnings forecasts.

We understand that most of our analysts still assume TWD/USD to stand at 33.0 at present. This is the reason why there remain earnings upsides in our base-case scenario. Meantime, the high earnings elasticity should also be due to the low-base effects. As we wrote in our note - *Post GDP Downgrade* dated February 10, we now forecast our coverage universe to deliver 2009e ROE of only 3.6%, which stands at unprecedented lows.

Exhibit 4

Base Case Impacts on our Net Income Forecasts

	USD to 35.7	EUR to 47.5	JPY to 0.420	Combined
Total (ex. Financials)	38%	16%	-4%	51%
Tech (ex. DRAM+TFT)	31%	14%	3%	47%
Non-Tech (ex. Financials)	-2%	2%	1%	1%

Source: Company data, Morgan Stanley Research

We present in Exhibit 4 the simulated changes in profitability of our coverage universe based on bear-case FX assumptions. In short, the profitability of our coverage universe could jump by 87% in such a scenario. Certainly, such results are based on the assumptions of all the other factors being unchanged. This means global economies are not worse than our expectations, buyers do not exercise their pricing power, or the currencies of major competing countries remain stable, etc.

Exhibit 5

Bear Case Impacts on our Net Income Forecasts

	USD to 37.6	EUR to 50.0	JPY to 0.442	Combined
Total (ex. Financials)	65%	28%	-6%	87%
Tech (ex. DRAM+TFT)	52%	24%	4%	80%
Non-Tech (ex. Financials)	-3%	3%	2%	2%

Source: Company data, Morgan Stanley Research

Investors should note that our simulation works do not take into considerations of off-balance-sheet derivatives contracts, which lack transparency and can hardly be quantified due to often custom-made terms and conditions. That said, it could

represent the sources of surprises to our simulated profitability. We present in Exhibit 5 our simulated results on the bull-case scenario assumptions for investors' information. We admit that the probability of such a scenario to materialize is waning.

Exhibit 6

Bull Case Impacts on our Net Income Forecast

	USD to 34.4	EUR to 45.8	JPY to 0.405	Combined
Total (ex. Financials)	20%	9%	-2%	26%
Tech (ex. DRAM+TFT)	16%	7%	2%	25%
Non-Tech (ex. Financials)	-1%	1%	1%	1%

Source: Company data, Morgan Stanley Research

FX impacts on different subsectors

We now carry the analysis into the sub-sector levels with the objective to find the major winning and losing sub-sectors in different scenarios of TWD depreciation against different major currencies.

1) What if TWD depreciates against USD

We presented in Exhibit 6 the simulated results on the changes of sector profitability, if TWD depreciates by 10% against USD. Investors may refer to Exhibit 15 for details on each individual corporate.

- Our analysis shows that USD accounts for 69% of revenue of our coverage universe and 66% of COGS. We attribute such a high intensity to the fact that the tech sector mostly trades in USD terms (82% of revenue).
- As a rule of thumb, the tech exporters will primarily benefit from TWD depreciation while the impacts on the non-tech sector are mostly negative, if not neutral.
- Among Taiwan's tech sector, the sub-sectors which are positively sensitive to FX volatility include semiconductor (the percentage of USD-denominated revenue is 71% higher than the percentage of USD-denominated COGS), followed by DRAM (65%), TFT-LCD (42%), IC designs (32%), backend foundry (31%), and networking (16%). The only significant loser within the tech universe is the solar sub-sector, whose USD-denominated costs are heavier than USD-denominated revenue.
- Taiwan's non-tech universe, except for the industrial (ie, Teco and Far Eastern Textile) and marine shipping sub-sectors, all the others will be negatively affected (if not neutral) by TWD depreciation against USD.

- Among the Formosa Group, Formosa Petrochemical is the only company suffering from TWD depreciation due to its significant exposure to domestic gasoline market. On the other hand, all other Formosa Group names will benefit from TWD depreciation.
- China Steel is among the major losers in TWD depreciation as USD accounts for only 18% of its revenue while most raw material inputs are denominated in USD.

Exhibit 7

Change of Profitability if TWD depreciates 10% to USD

(TWD / USD: 10%)	Revenue % in USD	COGS % in USD	Impacts Total	Net Inc 2009E	% Chg in Net Inc
Semiconductor	100%	29%	24,229	-139	n.m.
Solar	67%	86%	-1,254	-961	n.m.
IC Design	100%	68%	8,455	22,993	37%
Testing and Packaging	69%	38%	5,618	16,031	35%
PC Foodchain	80%	83%	29,849	127,560	23%
Handset Foodchain	75%	64%	10,130	42,314	24%
LED	30%	18%	338	989	34%
DRAM	95%	31%	-481	-93,247	n.m.
TFT LCD	94%	51%	20,146	-131,419	n.m.
Networking Equipment	62%	47%	1,678	2,444	69%
Telecom Service	1%	1%	743	72,612	1%
Transportation	66%	56%	5,381	-8,812	n.m.
Consumer/Retails	0%	0%	0	5,498	0%
Chemicals	47%	50%	-307	91,305	0%
Auto	40%	50%	-728	6,038	-12%
Materials	16%	69%	-11,057	32,052	-34%
Industrial	29%	14%	1,616	12,989	12%
Property	0%	0%	0	3,676	0%
Total (ex. Financials)	69%	66%	94,355	201,922	47%
Tech Universe	82%	73%	98,707	-13,436	n.m.
Tech (ex. DRAM+TFT)	80%	78%	79,043	211,230	37%
Non-Tech (ex. Financials)	37%	45%	-4,352	215,358	-2%

Source: Company data, Morgan Stanley Research

2) What if TWD depreciates against EUR

We present in Exhibit 7 the simulated results on the changes of sector profitability, if TWD depreciates by 10% against EUR. Investors may refer to Exhibit 16 for details on each individual corporate.

- Our analysis shows that EUR accounts for 5% of revenue of our coverage universe and 1% of COGS.
- The sectors with meaningful EUR revenue exposure are downstream hardware (both NB and handsets), networking, and solar, which will benefit from the TWD weakness to EUR. On the other hand, we note that several container companies in the transportation sub-sector will suffer due to their higher EUR-denominated costs.
- The major winners of TWD depreciation to EUR will include Acer, Asustek, Mitac, HTC, and D-Link, etc. Meantime, we note that the likely losers will include Evergreen and Yang Ming in the same scenario.

Exhibit 8

Change of Profitability if TWD depreciates 10% to EUR

(TWD / EUR: 10%)	Revenue % in EUR	COGS % in EUR	Impacts Total	Net Inc 2009E	% Chg in Net Inc
Semiconductor	0%	3%	-579	-139	n.m.
Solar	33%	14%	722	-961	n.m.
IC Design	0%	0%	0	22,993	0%
Testing and Packaging	0%	0%	0	16,031	0%
PC Foodchain	6%	0%	30,275	127,560	24%
Handset Foodchain	15%	2%	4,965	42,314	12%
LED	3%	0%	52	989	5%
DRAM	1%	0%	58	-93,247	n.m.
TFT LCD	0%	0%	0	-131,419	n.m.
Networking Equipment	18%	14%	373	2,444	15%
Telecom Service	0%	0%	0	72,612	0%
Transportation	11%	8%	1,692	-8,812	n.m.
Consumer/Retails	0%	0%	0	5,498	0%
Chemicals	2%	0%	2,497	91,305	3%
Auto	5%	0%	450	6,038	7%
Materials	0%	0%	67	32,052	0%
Industrial	2%	0%	152	12,989	1%
Property	0%	0%	0	3,676	0%
Total (ex. Financials)	5%	1%	40,726	201,922	20%
Tech Universe	6%	0%	35,867	-13,436	n.m.
Tech (ex. DRAM+TFT)	7%	0%	35,809	211,230	17%
Non-Tech (ex. Financials)	4%	2%	4,858	215,358	2%

Source: Company data, Morgan Stanley Research

3) What if TWD depreciates against JYP

We present in Exhibit 8 the simulated results on the changes of sector profitability, if TWD depreciates by 10% against JPY.

Investors may refer to Exhibit 17 for details on each individual corporate.

- Our analysis shows that JPY accounts for 2% revenue of our coverage universe and 3% of COGS.
- Several companies are more geared to JPY-denominated revenue. They are Foxconn Tech, Coretronic, Powertech and Taiwan Glass and will benefit from TWD weakness to JPY. On the other hand, we note that several companies have greater JPY-denominated costs and will lose in the same scenario. These names include AUO, CMO, SPIL and Powerchip.

Exhibit 9

Change of Profitability if TWD depreciates 10% to JPY

(TWD / JPY: 10%)	Revenue % in JPY	COGS % in JPY	Impacts Total	Net Inc 2009E	% Chg in Net Inc
Semiconductor	0%	3%	-579	-139	n.m.
Solar	0%	0%	0	-961	n.m.
IC Design	0%	0%	0	22,993	0%
Testing and Packaging	2%	6%	-443	16,031	-3%
PC Foodchain	2%	1%	6,959	127,560	5%
Handset Foodchain	0%	2%	-564	42,314	-1%
LED	2%	0%	45	989	5%
DRAM	1%	7%	-1,133	-93,247	n.m.
TFT LCD	3%	21%	-13,565	-131,419	n.m.
Networking Equipment	3%	2%	97	2,444	4%
Telecom Service	0%	0%	0	72,612	0%
Transportation	3%	1%	937	-8,812	n.m.
Consumer/Retails	0%	0%	0	5,498	0%
Chemicals	0%	0%	0	91,305	0%
Auto	5%	0%	450	6,038	7%
Materials	7%	4%	865	32,052	3%
Industrial	1%	0%	91	12,989	1%
Property	0%	0%	0	3,676	0%
Total (ex. Financials)	2%	3%	-6,839	201,922	-3%
Tech Universe	2%	4%	-9,182	-13,436	n.m.
Tech (ex. DRAM+TFT)	2%	1%	5,516	211,230	3%
Non-Tech (ex. Financials)	1%	1%	2,343	215,358	1%

Source: Company data, Morgan Stanley Research

Key Stock Implications

We now carry the simulation analysis to the company level, by assuming TWD to depreciate against multiple currencies (USD, EUR, and JPY) based on our base-case FX assumptions. Our analysis shows that the key winning corporates include TSMC, Sunplus, Realtek, Compal, Foxconn Tech, and Unimicron. On the other hand, the key losers include China Steel, FPCC, and China Airlines. Investors may refer to Exhibit 18-19 for simulation details.

Model Portfolio Changes

Our model portfolio has delivered a return of 8.6% since our last review, outperforming the Taiex Index by 120bps since our last review (Exhibit 10), contributing an accumulative outperformance of 140bps since early 2009 and 120bps since inception. We attributed the improving performance to the following reasons:

- We retained UW positions in both financials and global cyclicals, which have underperformed of late.
- We added tech exposure (including TSMC, Mediatek) at early February to play the re-stocking theme and also reduced exposure to consumer discretionary name (ie, Far Eastern Department Store) by 4ppt. The switch has so far generated positive results.

Following our recent GDP downgrade and a rising probability of the likely TWD movement, we have made some adjustments

to our model portfolio. In short, our moves are to discount that the domestic demand will experience a prolonged slowdown while the tech exporters will benefit from the windfall gains of TWD depreciation, in addition to strong and liquid balance sheets to sustain decent dividend yields throughout the downcycle. Specifically:

- We have removed completely Far Eastern Department Store (2ppt in weighting) from our portfolio. Our remaining exposure to the consumer discretionary sub-sector is Cheng Shin Rubber, where China accounts for 40% of its consolidated revenue.
- We reduced Teco by 2ppt weighting in our portfolio. Our analyst, Jeremy Chen, believes global capex cuts and project cancellations pose risks to demand for large electrical equipment. Meantime, we are also concerned of its exposure of NT\$4bn (11% of Teco's book value) to Taiwan High Speed Rail, which has reportedly proposed to syndicated banks to defer interest payments for three years.
- We added exposure to Mediatek (2ppt), TSMC (1ppt) and Hon Hai (1ppt) by 4ppt in total. They stand among major beneficiaries of the TWD depreciation within our model portfolio. Our analyst Bill Lu sees Mediatek as one of few companies with positive growth momentum in 2009, due to new product launches in H209 and China's accelerating 3G adoption. TSMC's profitability should receive a boost from the TWD depreciation. Its dividend discipline should also offer investors comfort. Lastly, we closed our UW gap on Hon Hai due to its appealing valuation (1.0x PBR), despite our analyst, Jasmine Lu, remaining cautious due to its margin pressure near term.

Investors can refer to Exhibit 10 for our renewed model portfolio and Exhibit 11 for our sector weighting breakdown.

Exhibit 10

MSTW Model Portfolio (Feb 3 – Feb 11)

	Close (NT\$)	MSCI Weight (%)	Portfolio Weight (%)	Over/Under Weight (%)	Performance (since last review) *	Performance (12 months)	Analyst Rating
Consumer Discretionary		1.52	5.0	3.5			
Cheng Shin	2105.TW	26.9	0.30	3.0	2.7	16.7%	Overweight
FEDS	2903.TW	15.4	0.19	2.0	1.8	5.5%	Equal-Weight
Consumer Staples		2.35	5.0	2.6			
PCSC	2912.TW	78.0	0.67	5.0	4.3	0.9%	Equal-Weight
Financials		16.35	9.0	-7.4			
Fubon FHC	2881.TW	21.5	1.44	6.0	4.6	9.7%	Overweight
Yuantia FHC	2885.TW	12.8	1.42	3.0	1.6	10.8%	Equal-Weight
Industrials		3.80	8.0	4.2			
Far Eastern Textile	1402.TW	22.5	0.99	4.0	3.0	7.4%	Overweight
Teco	1504.TW	9.8	0.29	4.0	3.7	4.0%	Overweight
Information Technology		51.41	55.0	3.6			
TSMC	2330.TW	46.1	15.14	18.0	2.9	10.2%	Equal-Weight
Acer	2353.TW	46.2	1.82	8.0	6.2	10.0%	Overweight
Hon Hai	2317.TW	64.5	5.96	5.0	-1.0	8.4%	Equal-Weight
Quanta	2382.TW	35.5	1.14	7.0	5.9	6.3%	Equal-Weight
HTC	2498.TW	389.5	3.37	6.0	2.6	21.0%	Equal-Weight
Delta	2308.TW	55.6	1.34	6.0	4.7	9.7%	Overweight
Mediatek	2454.TW	283.0	3.98	5.0	1.0	12.3%	Overweight
Materials		15.39	8.0	-7.4			
Taiwan Cement	1101.TW	27.0	1.15	4.0	2.8	13.0%	Overweight
Formosa Plastics	1301.TW	49.0	3.33	4.0	0.7	2.0%	Equal-Weight
Telecommunication Services		7.74	10.0	2.3			
Chunghwa Telecom	2412.TW	51.1	4.99	10.0	5.0	0.4%	Overweight
MSTW Model Portfolio		103.2	100.0			8.6%	
TAIEX		4576.0				7.4%	-40.4%

* Prices for last review dated on 2009/02/02

Source: TEJ, Company data, Morgan Stanley Research

Exhibit 11

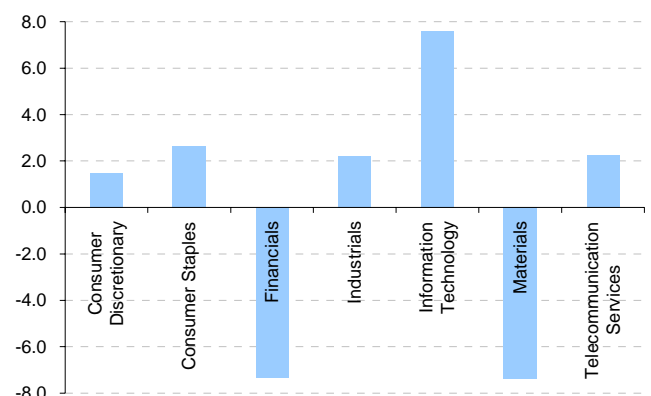
MSTW Model Portfolio (Renewal)

	Close (NT\$)	MSCI Weight (%)	Portfolio Weight (%)	Over/Under Weight (%)	Performance (12 months)	Analyst Rating	
Consumer Discretionary		1.52	3.0	1.5			
Cheng Shin	2105.TW	26.9	0.30	3.0	2.7	-33.0%	Overweight
Consumer Staples		2.35	5.0	2.6			
PCSC	2912.TW	78.0	0.67	5.0	4.3	-8.9%	Equal-Weight
Financials		16.35	9.0	-7.4			
Fubon FHC	2881.TW	21.5	1.44	6.0	4.6	-31.6%	Overweight
Yuantia FHC	2885.TW	12.8	1.42	3.0	1.6	-47.8%	Equal-Weight
Industrials		3.80	6.0	2.2			
Far Eastern Textile	1402.TW	22.5	0.99	4.0	3.0	-47.1%	Overweight
Teco	1504.TW	9.8	0.29	2.0 ↓	1.7	-29.6%	Overweight
Information Technology		51.41	59.0	7.6			
TSMC	2330.TW	46.1	15.14	19.0 ↑	3.9	-19.4%	Equal-Weight
Acer	2353.TW	46.2	1.82	8.0	6.2	0.5%	Overweight
Hon Hai	2317.TW	64.5	5.96	6.0 ↑	0.0	-54.9%	Equal-Weight
Quanta	2382.TW	35.5	1.14	7.0	5.9	5.9%	Equal-Weight
HTC	2498.TW	389.5	3.37	6.0	2.6	-9.8%	Equal-Weight
Delta	2308.TW	55.6	1.34	6.0	4.7	-23.8%	Overweight
Mediatek	2454.TW	283.0	3.98	7.0 ↑	3.0	5.5%	Overweight
Materials		15.39	8.0	-7.4			
Taiwan Cement	1101.TW	27.0	1.15	4.0	2.8	-36.0%	Overweight
Formosa Plastics	1301.TW	49.0	3.33	4.0	0.7	-30.0%	Equal-Weight
Telecommunication Services		7.74	10.0	2.3			
Chunghwa Telecom	2412.TW	51.1	4.99	10.0	5.0	-2.1%	Overweight
MSTW Model Portfolio		103.2	100.0				
TAIEX		4576.0				-40.4%	

Source: TEJ, Company data, Morgan Stanley Research

Exhibit 12

Over/Under-weighting over MSCI Taiwan (%)



Source: MSCI, Morgan Stanley Research

Appendix: Our methodology

We present below the methodology we adopted to analyze the possible impacts of a likely TWD depreciation on corporate profitability.

1. Revenue structure breakdown

First, we broke down topline and COGS of the companies under our coverage into three major currencies, including USD, EUR, and JPY. We present in Exhibit 13 such a breakdown on a sub-sector basis.

- Our analysis shows that USD accounts for 69% of revenue of our coverage universe and 65% of COGS. We attribute such a high intensity to the fact that the tech sector mostly trades in USD terms. Consequently, the profitability of the Taiex should be most sensitive to the TWD/USD volatility.
- Our analysis shows that EUR accounts for 6% of revenue of our coverage universe and only 1% of COGS. That said, TWD weakness against EUR would help boost the corporate profitability. The notable companies with meaningful EUR exposure include Acer (50%), Asustek (30%), Mitac (40%), HTC (35%) and D-Link (30%), etc. They are the major beneficiaries if TWD depreciates against EUR.
- Lastly, our analysis shows that JPY accounts for only 2% revenue of our coverage universe and 3% of COGS. That is, the Taiex will only benefit from TWD strength to JPY. We note that Foxconn Tech is most geared to JPY revenue (60%) whereas the companies such as AUO, CMO, SPIL, Powerchip have higher JPY-denominated costs.

Exhibit 13

Revenue/COGS Breakdown by Major Currencies

	Revenue			COGS		
	% in USD	% in EUR	% in JPY	% in USD	% in EUR	% in JPY
Semiconductor	100%	0%	0%	29%	3%	3%
Solar	67%	33%	0%	86%	14%	0%
IC Design	100%	0%	0%	68%	0%	0%
Testing and Packaging	69%	0%	2%	38%	0%	6%
PC Foodchain	80%	6%	2%	83%	0%	1%
Handset Foodchain	75%	15%	0%	64%	2%	2%
LED	30%	3%	2%	18%	0%	0%
DRAM	95%	1%	1%	31%	0%	7%
TFT LCD	94%	0%	3%	51%	0%	21%
Networking Equipment	62%	18%	3%	47%	14%	2%
Telecom Service	1%	0%	0%	1%	0%	0%
Transportation	66%	11%	3%	56%	8%	1%
Consumer/Retails	0%	0%	0%	0%	0%	0%
Chemicals	47%	2%	0%	50%	0%	0%
Auto	40%	5%	5%	50%	0%	0%
Materials	16%	0%	7%	69%	0%	4%
Industrial	29%	2%	1%	14%	0%	0%
Property	0%	0%	0%	0%	0%	0%
Total (ex. Financials)	69%	5%	2%	66%	1%	3%
Tech Universe	82%	6%	2%	73%	0%	4%
Tech (ex. DRAM+TFT)	80%	7%	2%	78%	0%	1%
Non-Tech (ex. Financials)	37%	4%	1%	45%	2%	1%

Source: Company data, Morgan Stanley Research

2) Balance sheet Structure Breakdown

As we present in Exhibit 14, we have also estimated the percentage of cash and gross debts in our coverage universe as denominated in USD. Our analysis shows that corporate Taiwan on average holds 25% of its idle cash in USD deposits while borrow 14% of its gross debts in USD loans. Interestingly, the total amount of USD deposits fully covers USD debts. It implies that corporate Taiwan has taken a neutral stance in its balance sheet exposure. We do not include other currencies (EUR and JPY) in this analysis as we see minimal likely impact.

Investors should note that the sectors with net USD surplus are semiconductor and PC-foodchain companies. They will benefit from TWD weakness against USD (from a purely balance sheet angle). On the other hand, the sectors with a net USD deficit include DRAMs, TFTs, chemicals and transportation. They would suffer in the same scenario.

Exhibit 14

% of Cash/Gross Debt Denominated in USD

	Cash		Gross Debt		Net Balance as % of Equity
	2009E	% in USD	2009E	% in USD	
Semiconductor	219,498	29%	33,511	19%	9.8%
Solar	2,071	85%	12,137	63%	-30.5%
IC Design	69,561	9%	500	20%	4.8%
Testing and Packaging	37,754	6%	70,855	21%	-9.7%
PC Foodchain	453,475	40%	347,951	19%	10.3%
Handset Foodchain	118,252	10%	32,830	46%	-1.7%
LED	8,818	6%	6,186	5%	0.5%
DRAM	20,109	11%	309,907	17%	-55.0%
TFT LCD	177,786	10%	459,779	12%	-7.4%
Networking Equipment	9,610	33%	1,175	73%	9.1%
Telecom Service	106,644	5%	35,096	0%	1.0%
Transportation	48,301	77%	342,909	14%	-4.4%
Consumer/Retails	15,414	0%	35,675	0%	0.0%
Chemicals	28,094	0%	489,553	5%	-2.5%
Auto	3,725	20%	26,190	30%	-19.5%
Materials	37,153	13%	104,067	0%	1.2%
Industrial	16,728	0%	61,888	0%	0.0%
Property	1,038	0%	22,236	0%	0.0%
Total (ex. Financials)	1,374,032	25%	2,392,447	14%	0.1%
Tech Universe	1,116,936	26%	1,274,832	17%	2.6%
Tech (ex. DRAM+TFT)	919,040	29%	505,146	22%	7.1%
Non-Tech (ex. Financials)	257,097	21%	1,117,616	9%	-1.8%

Source: Company data, Morgan Stanley Research (E) estimates

3) Off-balance-sheet activities

Investors should note that we have NOT taken into account off-balance-sheet activities in our analysis. This is because the hedging positions through derivatives contracts could quite significantly fluctuate from time to time. Meantime, the terms and conditions of out-of-counter derivatives contracts are also highly customized. This further increases the difficulties to be quantified. As a result, due to low transparency and structural complexity, we understand the risks that our FX sensitivity analysis may fail to accurately predict the real results.

Exhibit 15

Profitability Simulation if TWD Depreciates 10% against USD

(TWD / USD: 10%)												
Ticker	Company	Revenue			COGS			Cash	Gross Debt	Impacts	Net Inc	% Chg in
		% in USD	% in EUR	% in JPY	% in USD	% in EUR	% in JPY	% in USD	% in USD	Total	2009E	Net Inc
Semiconductor		100%	0%	0%	29%	3%	3%	29%	19%	24,229	(139)	n.m.
2303.TW	UMC	100%	0%	0%	25%	0%	0%	25%	20%	4,824 e	(16,508) e	n.m.
2330.TW	TSMC	100%	0%	0%	30%	4%	4%	30%	18%	19,405 e	16,369 e	119%
Solar		67%	33%	0%	86%	14%	0%	85%	63%	(1,254)	(961)	n.m.
3452.TWO	E-Ton	70%	30%	0%	80%	20%	0%	80%	60%	(691) e	(935) e	n.m.
6244.TWO	Motech	65%	35%	0%	90%	10%	0%	90%	80%	(562) e	(26) e	n.m.
IC Design		100%	0%	0%	68%	0%	0%	9%	20%	8,455	22,993	37%
2401.TW	Sunplus	100%	0%	0%	65%	0%	0%	10%	20%	223 e	194 e	115%
2454.TW	Mediatek	100%	0%	0%	70%	0%	0%	8%	0%	6,442 e	20,241 e	32%
6286.TW	Richtek	100%	0%	0%	65%	0%	0%	0%	0%	381 e	1,099 e	35%
2379.TW	Realtek	100%	0%	0%	65%	0%	0%	17%	0%	924 e	725 e	127%
3534.TW	Ralink	100%	0%	0%	60%	0%	0%	17%	0%	299 e	399 e	75%
8081.TW	GMT	100%	0%	0%	60%	0%	0%	0%	0%	186 e	334 e	56%
Testing and Packaging		69%	0%	2%	38%	0%	6%	6%	21%	5,618	16,031	35%
2311.TW	ASE	80%	0%	0%	60%	0%	0%	11%	25%	1,945 e	5,590 e	35%
2325.TW	SPIL	60%	0%	0%	15%	0%	15%	0%	0%	2,857 e	7,114 e	40%
6239.TW	Powertech	50%	0%	15%	18%	0%	5%	0%	9%	815 e	3,327 e	25%
PC Foodchain		80%	6%	2%	83%	0%	1%	40%	19%	29,849	127,560	23%
2324.TW	Compal	100%	0%	0%	80%	0%	0%	30%	10%	10,285 e	9,788 e	105%
2382.TW	Quanta	100%	0%	0%	95%	0%	0%	30%	15%	9,083 e	17,574 e	52%
2308.TW	Delta	90%	0%	0%	90%	0%	0%	30%	0%	3,709 e	11,481 e	32%
2315.TW	Mitac	40%	40%	0%	80%	0%	0%	20%	0%	(1,716) e	2,719 e	-63%
2317.TW	Hon Hai	85%	0%	0%	75%	0%	0%	60%	16%	39,280 e	48,357 e	81%
2353.TW	Acer	30%	40%	0%	90%	0%	0%	20%	0%	(25,181) e	11,258 e	-224%
2357.TW	Asustek	50%	30%	0%	95%	0%	0%	20%	15%	(7,078) e	11,027 e	-64%
3231.TW	Wistron	100%	0%	0%	95%	0%	0%	30%	95%	4,195 e	6,965 e	60%
2354.TW	Foxconn Tech	35%	0%	60%	50%	0%	20%	0%	45%	(2,857) e	7,617 e	-38%
3518.TW	Paragon Tech	60%	0%	0%	0%	0%	0%	10%	50%	130 e	775 e	17%
Handset Foodchain		75%	15%	0%	64%	2%	2%	10%	46%	10,130	42,314	24%
2498.TW	HTC	65%	35%	0%	95%	5%	0%	0%	0%	(24) e	25,083 e	0%
3037.TW	Unimicron	95%	0%	0%	15%	3%	10%	50%	50%	3,549 e	2,710 e	131%
8046.TW	Nan Ya PCB	90%	0%	0%	50%	0%	10%	1%	0%	1,779 e	6,058 e	29%
3044.TW	Tripod	85%	0%	0%	35%	0%	0%	60%	48%	1,801 e	2,418 e	74%
3311.TW	Silitech	60%	0%	10%	35%	0%	0%	7%	78%	232 e	848 e	27%
2439.TW	Merry	60%	0%	0%	40%	0%	0%	7%	0%	235 e	474 e	50%
2392.TW	Cheng Uei	75%	0%	0%	50%	0%	0%	7%	40%	1,213 e	1,439 e	84%
8078.TW	Compal Comm	80%	0%	0%	60%	0%	0%	4%	0%	971 e	942 e	103%
3008.TW	Largan	70%	0%	0%	20%	0%	0%	0%	0%	373 e	2,343 e	16%
LED		30%	3%	2%	18%	0%	0%	6%	5%	338	989	34%
2393.TW	Everlight	35%	5%	0%	20%	0%	0%	8%	0%	241 e	1,068 e	23%
2448.TW	Epistar	25%	0%	5%	15%	0%	0%	4%	10%	96 e	(79) e	n.m.
DRAM		95%	1%	1%	31%	0%	7%	11%	17%	(481)	(93,247)	n.m.
2408.TW	Nanya Tech	95%	0%	0%	75%	0%	0%	7%	7%	(1,273) e	(27,801) e	n.m.
2344.TW	Winbond	70%	5%	5%	45%	0%	0%	0%	0%	(66) e	(10,679) e	n.m.
5346.TWO	Powerchip	100%	0%	0%	0%	0%	20%	6%	13%	1,781 e	(36,728) e	n.m.
3474.TW	Inotera	100%	0%	0%	28%	0%	0%	93%	44%	(923) e	(18,038) e	n.m.
TFT LCD		94%	0%	3%	51%	0%	21%	10%	12%	20,146	(131,419)	n.m.
2409.TW	AUO	98%	0%	0%	60%	0%	25%	7%	6%	6,744 e	(56,364) e	n.m.
3009.TW	CMO	95%	0%	3%	20%	0%	30%	0%	17%	8,434 e	(72,010) e	n.m.
3481.TW	Innolux	90%	0%	0%	77%	0%	5%	31%	0%	2,582 e	(6,458) e	n.m.
3034.TW	Novatek	100%	0%	0%	50%	0%	0%	0%	0%	1,213 e	2,107 e	58%
5371.TWO	Coretronic	75%	0%	25%	80%	0%	12%	21%	0%	362 e	688 e	53%
6176.TW	Radiant	90%	0%	1%	65%	0%	10%	0%	0%	811 e	618 e	131%
Networking Equipment		62%	18%	3%	47%	14%	2%	33%	73%	1,678	2,444	69%
4906.TW	Gemtek	80%	0%	3%	60%	0%	0%	15%	95%	578 e	995 e	58%
2332.TW	D-Link	50%	30%	3%	35%	27%	3%	40%	35%	1,101 e	1,449 e	76%
Telecom Service		1%	0%	0%	1%	0%	0%	5%	0%	743	72,612	1%
2412.TW	Chunghwa Telecom	1%	0%	0%	1%	0%	0%	5%	0%	519 e	46,561 e	1%
3045.TW	Taiwan Mobile	1%	0%	0%	1%	0%	0%	5%	0%	143 e	15,455 e	1%
4904.TW	Far EastTone	1%	0%	0%	1%	0%	0%	5%	0%	80 e	10,597 e	1%
Transportation		66%	11%	3%	56%	8%	1%	77%	14%	5,381	(8,812)	n.m.
2603.TW	Evergreen	81%	7%	2%	58%	9%	1%	80%	35%	3,618 e	(1,045) e	n.m.
2609.TW	Yang Ming	85%	10%	0%	60%	15%	0%	70%	30%	2,953 e	(2,754) e	n.m.
2610.TW	China Airlines	38%	16%	5%	63%	1%	1%	50%	7%	(3,699) e	(2,817) e	n.m.
2615.TW	Wan Hai	74%	8%	3%	35%	9%	3%	85%	25%	3,666 e	740 e	496%
2618.TW	EVA Airways	45%	16%	5%	51%	5%	1%	50%	6%	(1,156) e	(2,936) e	n.m.
Consumer/Retails		0%	0%	0%	0%	0%	0%	0%	0%	0	5,498	0%
2903.TW	FEDS	0%	0%	0%	0%	0%	0%	0%	0%	0 e	1,087 e	0%
2912.TW	PCSC	0%	0%	0%	0%	0%	0%	0%	0%	0 e	4,411 e	0%
Chemicals		47%	2%	0%	50%	0%	0%	0%	5%	(307)	91,305	0%
1301.TW	FPC	60%	5%	0%	45%	0%	0%	5%	5%	2,415 e	21,886 e	11%
1303.TW	NYP	60%	2%	0%	45%	0%	0%	0%	5%	3,341 e	18,672 e	18%
1326.TW	FCFC	45%	2%	0%	30%	0%	0%	0%	5%	2,638 e	18,264 e	14%
6505.TW	FPCC	40%	2%	0%	60%	0%	0%	0%	5%	(8,701) e	32,483 e	-27%
Auto		40%	5%	5%	50%	0%	0%	20%	30%	(728)	6,038	-12%
2105.TW	Cheng Shin	40%	5%	5%	50%	0%	0%	20%	30%	(728) e	6,038 e	-12%
Materials		16%	0%	7%	69%	0%	4%	13%	0%	(11,057)	32,052	-34%
2002.TW	China Steel	18%	0%	8%	80%	0%	5%	10%	0%	(11,150) e	16,487 e	-68%
1101.TW	Taiwan Cement	10%	0%	0%	15%	0%	0%	0%	0%	(70) e	6,788 e	-1%
1102.TW	Asia Cement	10%	0%	0%	15%	0%	0%	0%	0%	(20) e	7,031 e	0%
1802.TW	Taiwan Glass	10%	5%	10%	20%	0%	0%	30%	0%	183 e	1,745 e	10%
Industrial		29%	2%	1%	14%	0%	0%	0%	0%	1,616	12,989	12%
1504.TW	Teco	40%	5%	3%	20%	0%	0%	0%	0%	699 e	2,172 e	32%
1722.TW	Taifex	0%	0%	0%	0%	0%	0%	0%	0%	0 e	2,826 e	0%
1402.TW	Far Eastern Textile	30%	0%	0%	15%	0%	0%	0%	0%	917 e	7,991 e	11%
Property		0%	0%	0%	0%	0%	0%	0%	0%	0	3,676	0%
2548.TW	Huaku	0%	0%	0%	0%	0%	0%	0%	0%	0 e	1,031 e	0%
5522.TW	Farglory	0%	0%	0%	0%	0%	0%	0%	0%	0 e	2,645 e	0%

Source: Company data, Morgan Stanley Research

Exhibit 16

Profitability Simulation if TWD Depreciates 10% against EUR

(TWD / EUR: 10%)													
Ticker	Company	Revenue			COGS			Cash	Gross Debt	Impacts	Net Inc	% Chg in	
		% in USD	% in EUR	% in JPY	% in USD	% in EUR	% in JPY	% in USD	% in USD	Total	2009E	Net Inc	
Semiconductor		100%	0%	0%	29%	3%	3%	29%	19%	(579)	(139)	n.m.	
2303.TW	UMC	100%	0%	0%	25%	0%	0%	25%	20%	0 e	(16,508) e	n.m.	
2330.TW	TSMC	100%	0%	0%	30%	4%	4%	30%	18%	(579) e	16,369 e	-4%	
Solar		67%	33%	0%	86%	14%	0%	85%	63%	722	(961)	n.m.	
3452.TWO	E-Ton	70%	30%	0%	80%	20%	0%	80%	60%	118 e	(935) e	n.m.	
6244.TWO	Motech	65%	35%	0%	90%	10%	0%	90%	80%	604 e	(26) e	n.m.	
IC Design		100%	0%	0%	68%	0%	0%	9%	20%	0	22,993	0%	
2401.TW	Sunplus	100%	0%	0%	65%	0%	0%	10%	20%	0 e	194 e	0%	
2454.TW	Mediatek	100%	0%	0%	70%	0%	0%	8%	0%	0 e	20,241 e	0%	
6286.TW	Richtek	100%	0%	0%	65%	0%	0%	0%	0%	0 e	1,099 e	0%	
2379.TW	Realtek	100%	0%	0%	65%	0%	0%	17%	0%	0 e	725 e	0%	
3534.TW	Ralink	100%	0%	0%	60%	0%	0%	17%	0%	0 e	399 e	0%	
8081.TW	GMT	100%	0%	0%	60%	0%	0%	0%	0%	0 e	334 e	0%	
Testing and Packaging		69%	0%	2%	38%	0%	6%	6%	21%	0	16,031	0%	
2311.TW	ASE	80%	0%	0%	60%	0%	0%	11%	25%	0 e	5,590 e	0%	
2325.TW	SPIL	60%	0%	0%	15%	0%	15%	0%	0%	0 e	7,114 e	0%	
6239.TW	Powertech	50%	0%	15%	18%	0%	5%	0%	9%	0 e	3,327 e	0%	
PC Foodchain		80%	6%	2%	83%	0%	1%	40%	19%	30,275	127,560	24%	
2324.TW	Compal	100%	0%	0%	80%	0%	0%	30%	10%	0 e	9,788 e	0%	
2382.TW	Quanta	100%	0%	0%	95%	0%	0%	30%	15%	0 e	17,574 e	0%	
2308.TW	Delta	90%	0%	0%	90%	0%	0%	30%	0%	0 e	11,481 e	0%	
2315.TW	Mitac	40%	40%	0%	80%	0%	0%	20%	0%	2,531 e	2,719 e	93%	
2317.TW	Hon Hai	85%	0%	0%	75%	0%	0%	60%	16%	0 e	48,357 e	0%	
2353.TW	Acer	30%	40%	0%	90%	0%	0%	20%	0%	20,325 e	11,258 e	181%	
2357.TW	Asustek	50%	30%	0%	95%	0%	0%	20%	15%	7,420 e	11,027 e	67%	
3231.TW	Wistron	100%	0%	0%	95%	0%	0%	30%	95%	0 e	6,965 e	0%	
2354.TW	Foxconn Tech	35%	0%	60%	50%	0%	20%	0%	45%	0 e	7,617 e	0%	
3518.TW	Paragon Tech	60%	0%	0%	0%	0%	0%	10%	50%	0 e	775 e	0%	
Handset Foodchain		75%	15%	0%	64%	2%	2%	10%	46%	4,965	42,314	12%	
2498.TW	HTC	65%	35%	0%	95%	5%	0%	0%	0%	5,078 e	25,083 e	20%	
3037.TW	Unimicron	95%	0%	0%	15%	3%	10%	50%	50%	(113) e	2,710 e	-4%	
8046.TW	Nan Ya PCB	90%	0%	0%	50%	0%	10%	1%	0%	0 e	6,058 e	0%	
3044.TW	Tripod	85%	0%	0%	35%	0%	0%	60%	48%	0 e	2,418 e	0%	
3311.TW	Silitech	60%	0%	10%	35%	0%	0%	7%	78%	0 e	848 e	0%	
2439.TW	Merry	60%	0%	0%	40%	0%	0%	7%	0%	0 e	474 e	0%	
2392.TW	Cheng Uei	75%	0%	0%	50%	0%	0%	7%	40%	0 e	1,439 e	0%	
8078.TW	Compal Comm	80%	0%	0%	60%	0%	0%	4%	0%	0 e	942 e	0%	
3008.TW	Largan	70%	0%	0%	20%	0%	0%	0%	0%	0 e	2,343 e	0%	
LED		30%	3%	2%	18%	0%	0%	6%	5%	52	989	5%	
2393.TW	Everlight	35%	5%	0%	20%	0%	0%	8%	0%	52 e	1,068 e	5%	
2448.TW	Epistar	25%	0%	5%	15%	0%	0%	4%	10%	(0) e	(79) e	n.m.	
DRAM		95%	1%	1%	31%	0%	7%	11%	17%	58	(93,247)	n.m.	
2408.TW	Nanya Tech	95%	0%	0%	75%	0%	0%	7%	7%	0 e	(27,801) e	n.m.	
2344.TW	Winbond	70%	5%	5%	45%	0%	0%	0%	0%	58 e	(10,679) e	n.m.	
5346.TWO	Powerchip	100%	0%	0%	0%	0%	20%	6%	13%	0 e	(36,728) e	n.m.	
3474.TW	Inotera	100%	0%	0%	28%	0%	0%	93%	44%	0 e	(18,038) e	n.m.	
TFT LCD		94%	0%	3%	51%	0%	21%	10%	12%	0	(131,419)	n.m.	
2409.TW	AUO	98%	0%	0%	60%	0%	25%	7%	6%	0 e	(56,364) e	n.m.	
3009.TW	CMO	95%	0%	3%	20%	0%	30%	0%	17%	0 e	(72,010) e	n.m.	
3481.TW	Innolux	90%	0%	0%	77%	0%	5%	31%	0%	0 e	(6,458) e	n.m.	
3034.TW	Novatek	100%	0%	0%	50%	0%	0%	0%	0%	0 e	2,107 e	0%	
5371.TWO	Coretronic	75%	0%	25%	80%	0%	12%	21%	0%	0 e	688 e	0%	
6176.TW	Radiant	90%	0%	1%	65%	0%	10%	0%	0%	0 e	618 e	0%	
Networking Equipment		62%	18%	3%	47%	14%	2%	33%	73%	373	2,444	15%	
4906.TW	Gemtek	80%	0%	3%	60%	0%	0%	15%	95%	(0) e	995 e	0%	
2332.TW	D-Link	50%	30%	3%	35%	27%	3%	40%	35%	373 e	1,449 e	26%	
Telecom Service		1%	0%	0%	1%	0%	0%	5%	0%	0	72,612	0%	
2412.TW	Chunghwa Telecom	1%	0%	0%	1%	0%	0%	5%	0%	0 e	46,561 e	0%	
3045.TW	Taiwan Mobile	1%	0%	0%	1%	0%	0%	5%	0%	0 e	15,455 e	0%	
4904.TW	Far EastTone	1%	0%	0%	1%	0%	0%	5%	0%	0 e	10,597 e	0%	
Transportation		66%	11%	3%	56%	8%	1%	77%	14%	1,692	(8,812)	n.m.	
2603.TW	Evergreen	81%	7%	2%	58%	9%	1%	80%	35%	(362) e	(1,045) e	n.m.	
2609.TW	Yang Ming	85%	10%	0%	60%	15%	0%	70%	30%	(799) e	(2,754) e	n.m.	
2610.TW	China Airlines	38%	16%	5%	63%	1%	1%	50%	7%	1,866 e	(2,817) e	n.m.	
2615.TW	Wan Hai	74%	8%	3%	35%	9%	3%	85%	25%	9 e	740 e	1%	
2618.TW	EVA Airways	45%	16%	5%	51%	5%	1%	50%	6%	978 e	(2,936) e	n.m.	
Consumer/Retails		0%	0%	0%	0%	0%	0%	0%	0%	0	5,498	0%	
2903.TW	FEDS	0%	0%	0%	0%	0%	0%	0%	0%	0 e	1,087 e	0%	
2912.TW	PCSC	0%	0%	0%	0%	0%	0%	0%	0%	0 e	4,411 e	0%	
Chemicals		47%	2%	0%	50%	0%	0%	0%	5%	2,497	91,305	3%	
1301.TW	FPC	60%	5%	0%	45%	0%	0%	0%	5%	705 e	21,886 e	3%	
1303.TW	NYP	60%	2%	0%	45%	0%	0%	0%	5%	367 e	18,672 e	2%	
1326.TW	FCFC	45%	2%	0%	30%	0%	0%	0%	5%	366 e	18,264 e	2%	
6505.TW	FPCC	40%	2%	0%	60%	0%	0%	0%	5%	1,060 e	32,483 e	3%	
Auto		40%	5%	5%	50%	0%	0%	20%	30%	450	6,038	7%	
2105.TW	Cheng Shin	40%	5%	5%	50%	0%	0%	20%	30%	450 e	6,038 e	7%	
Materials		16%	0%	7%	69%	0%	4%	13%	0%	67	32,052	0%	
2002.TW	China Steel	18%	0%	8%	80%	0%	5%	10%	0%	0 e	16,487 e	0%	
1101.TW	Taiwan Cement	10%	0%	0%	15%	0%	0%	0%	0%	0 e	6,788 e	0%	
1102.TW	Asia Cement	10%	0%	0%	15%	0%	0%	0%	0%	0 e	7,031 e	0%	
1802.TW	Taiwan Glass	10%	5%	10%	20%	0%	0%	30%	0%	67 e	1,745 e	4%	
Industrial		29%	2%	1%	14%	0%	0%	0%	0%	152	12,989	1%	
1504.TW	Teco	40%	5%	3%	20%	0%	0%	0%	0%	152 e	2,172 e	7%	
1722.TW	Taifex	0%	0%	0%	0%	0%	0%	0%	0%	0 e	2,826 e	0%	
1402.TW	Far Eastern Textile	30%	0%	0%	15%	0%	0%	0%	0%	0 e	7,991 e	0%	
Property		0%	0%	0%	0%	0%	0%	0%	0%	0	3,676	0%	
2548.TW	Huaku	0%	0%	0%	0%	0%	0%	0%	0%	0 e	1,031 e	0%	
5522.TW	Farglory	0%	0%	0%	0%	0%	0%	0%	0%	0 e	2,645 e	0%	

Source: Company data, Morgan Stanley Research

Exhibit 17

Profitability Simulation if TWD Depreciates 10% against JPY

(TWD / JPY: 10%)		Revenue			COGS			Cash	Gross Debt	Impacts	Net Inc	% Chg in
Ticker	Company	% in USD	% in EUR	% in JPY	% in USD	% in EUR	% in JPY	% in USD	% in USD	Total	2009E	Net Inc
Semiconductor												
2303.TW	UMC	100%	0%	0%	29%	3%	3%	29%	19%	(139)	(139)	n.m.
2330.TW	TSMC	100%	0%	0%	25%	0%	0%	25%	20%	0 e	(16,508) e	n.m.
		100%	0%	0%	30%	4%	4%	30%	18%	(579) e	16,369 e	-4%
Solar												
3452.TWO	E-Ton	67%	33%	0%	86%	14%	0%	85%	63%	(0)	(961)	n.m.
6244.TWO	Motech	70%	30%	0%	80%	20%	0%	80%	60%	(0) e	(935) e	n.m.
		65%	35%	0%	90%	10%	0%	90%	80%	0 e	(26) e	n.m.
IC Design												
2401.TW	Sunplus	100%	0%	0%	68%	0%	0%	9%	20%	0	22,993	0%
2454.TW	Mediatek	100%	0%	0%	65%	0%	0%	10%	20%	0 e	194 e	0%
6286.TW	Richtek	100%	0%	0%	70%	0%	0%	8%	0%	0 e	20,241 e	0%
2379.TW	Realtek	100%	0%	0%	65%	0%	0%	0%	0%	0 e	1,099 e	0%
3534.TW	Ralink	100%	0%	0%	65%	0%	0%	17%	0%	0 e	725 e	0%
8081.TW	GMT	100%	0%	0%	60%	0%	0%	17%	0%	0 e	399 e	0%
		100%	0%	0%	60%	0%	0%	0%	0%	0 e	334 e	0%
Testing and Packaging												
2311.TW	ASE	69%	0%	2%	38%	0%	6%	6%	21%	(443)	16,031	-3%
2325.TW	SPIL	80%	0%	0%	60%	0%	0%	11%	25%	0 e	5,590 e	0%
6239.TW	Powertech	60%	0%	0%	15%	0%	15%	0%	0%	(724) e	7,114 e	-10%
		50%	0%	15%	18%	0%	5%	0%	9%	281 e	3,327 e	8%
PC Foodchain												
2324.TW	Compal	80%	6%	2%	83%	0%	1%	40%	19%	6,959	127,560	5%
2382.TW	Quanta	100%	0%	0%	80%	0%	0%	30%	10%	0 e	9,788 e	0%
2308.TW	Delta	100%	0%	0%	95%	0%	0%	30%	15%	0 e	17,574 e	0%
2315.TW	Mitac	90%	0%	0%	90%	0%	0%	30%	0%	0 e	11,481 e	0%
2317.TW	Hon Hai	40%	40%	0%	80%	0%	0%	20%	0%	0 e	2,719 e	0%
2353.TW	Acer	85%	0%	0%	75%	0%	0%	60%	16%	0 e	48,357 e	0%
2357.TW	Asustek	30%	40%	0%	90%	0%	0%	20%	0%	0 e	11,258 e	0%
2321.TW	Wistron	50%	30%	0%	95%	0%	0%	20%	15%	0 e	11,027 e	0%
2354.TW	Foxconn Tech	32%	0%	0%	95%	0%	0%	30%	95%	0 e	6,965 e	0%
3518.TW	Paragon Tech	35%	0%	60%	50%	0%	20%	0%	45%	6,959 e	7,617 e	91%
		60%	0%	0%	0%	0%	0%	10%	50%	0 e	775 e	0%
Handset Foodchain												
2498.TW	HTC	75%	15%	0%	64%	2%	2%	10%	46%	(564)	42,314	-1%
3037.TW	Unimicron	65%	35%	0%	95%	5%	0%	0%	0%	0 e	25,083 e	0%
8046.TW	Nan Ya PCB	95%	0%	0%	15%	3%	10%	50%	50%	(375) e	2,710 e	-14%
3044.TW	Tripod	90%	0%	0%	50%	0%	10%	1%	0%	(281) e	6,058 e	-5%
3311.TW	Silitech	85%	0%	0%	35%	0%	0%	60%	48%	0 e	2,418 e	0%
2439.TW	Merry	60%	0%	10%	35%	0%	0%	7%	78%	92 e	848 e	11%
2392.TW	Cheng Uei	60%	0%	0%	40%	0%	0%	7%	0%	0 e	474 e	0%
8078.TW	Compal Comm	75%	0%	0%	50%	0%	0%	7%	40%	0 e	1,439 e	0%
3008.TW	Largan	80%	0%	0%	60%	0%	0%	4%	0%	0 e	942 e	0%
		70%	0%	0%	20%	0%	0%	0%	0%	0 e	2,343 e	0%
LED												
2393.TW	Everlight	30%	3%	2%	18%	0%	0%	6%	5%	45	989	5%
2448.TW	Epistar	35%	5%	0%	20%	0%	0%	8%	0%	0 e	1,068 e	0%
		25%	0%	5%	15%	0%	0%	4%	10%	45 e	(79) e	n.m.
DRAM												
2408.TW	Nanya Tech	95%	1%	1%	31%	0%	7%	11%	17%	(1,133)	(93,247)	n.m.
2344.TW	Winbond	95%	0%	0%	75%	0%	0%	7%	0%	0 e	(27,801) e	n.m.
5346.TWO	Powerchip	2344.TW	70%	5%	5%	45%	0%	0%	0%	58 e	(10,679) e	n.m.
3474.TW	Inotera	100%	0%	0%	0%	0%	20%	6%	13%	(1,191) e	(36,728) e	n.m.
		100%	0%	0%	28%	0%	0%	93%	44%	0 e	(18,038) e	n.m.
TFT LCD												
2409.TW	AUO	94%	0%	3%	51%	0%	21%	10%	12%	(13,565)	(131,419)	n.m.
3009.TW	CMO	98%	0%	0%	60%	0%	25%	7%	6%	(7,003) e	(56,364) e	n.m.
3481.TW	Innolux	95%	0%	3%	20%	0%	30%	0%	17%	(6,394) e	(72,010) e	n.m.
3034.TW	Novatek	90%	0%	0%	77%	0%	5%	31%	0%	(676) e	(6,458) e	n.m.
5371.TWO	Coretronic	100%	0%	0%	50%	0%	0%	0%	0%	0 e	2,107 e	0%
6176.TW	Radiant	75%	0%	25%	80%	0%	12%	21%	0%	717 e	688 e	104%
		90%	0%	1%	65%	0%	10%	0%	0%	(209) e	618 e	-34%
Networking Equipment												
4906.TW	Gemtek	62%	18%	3%	47%	14%	2%	33%	73%	97	2,444	4%
2332.TW	D-Link	80%	0%	3%	60%	0%	0%	15%	95%	66 e	995 e	7%
		50%	30%	3%	35%	27%	3%	40%	35%	31 e	1,449 e	2%
Telecom Service												
2412.TW	Chunghwa Telecom	1%	0%	0%	1%	0%	0%	5%	0%	0 e	46,561 e	0%
3045.TW	Taiwan Mobile	1%	0%	0%	1%	0%	0%	5%	0%	0 e	15,455 e	0%
4904.TW	Far EastTone	1%	0%	0%	1%	0%	0%	5%	0%	0 e	10,597 e	0%
Transportation												
2603.TW	Evergreen	66%	11%	3%	56%	8%	1%	77%	14%	937	(8,812)	n.m.
2609.TW	Yang Ming	81%	7%	2%	58%	9%	1%	80%	35%	36 e	(1,045) e	n.m.
2610.TW	China Airlines	85%	10%	0%	60%	15%	0%	70%	30%	(5) e	(2,754) e	n.m.
2615.TW	Wan Hai	38%	16%	5%	63%	1%	1%	50%	7%	508 e	(2,817) e	n.m.
2618.TW	EVA Airways	74%	8%	3%	35%	9%	3%	85%	25%	(7) e	740 e	-1%
		45%	16%	5%	51%	5%	1%	50%	6%	405 e	(2,936) e	n.m.
Consumer/Retails												
2903.TW	FEDS	0%	0%	0%	0%	0%	0%	0%	0%	0 e	1,087 e	0%
2912.TW	PCSC	0%	0%	0%	0%	0%	0%	0%	0%	0 e	4,411 e	0%
Chemicals												
1301.TW	FPC	47%	2%	0%	50%	0%	0%	0%	5%	0	91,305	0%
1303.TW	NYP	60%	5%	0%	45%	0%	0%	0%	5%	0 e	21,886 e	0%
1326.TW	FCFC	60%	2%	0%	45%	0%	0%	0%	5%	0 e	18,672 e	0%
6505.TW	FPCC	45%	2%	0%	30%	0%	0%	0%	5%	0 e	18,264 e	0%
		40%	2%	0%	60%	0%	0%	0%	5%	0 e	32,483 e	0%
Auto												
2105.TW	Cheng Shin	40%	5%	5%	50%	0%	0%	20%	30%	450 e	6,038 e	7%
Materials												
2002.TW	China Steel	16%	0%	7%	69%	0%	4%	13%	0%	865	32,052	3%
1101.TW	Taiwan Cement	18%	0%	8%	80%	0%	5%	10%	0%	731 e	16,487 e	4%
1102.TW	Asia Cement	10%	0%	0%	15%	0%	0%	0%	0%	0 e	6,788 e	0%
1802.TW	Taiwan Glass	10%	0%	0%	15%	0%	0%	0%	0%	0 e	7,031 e	0%
		10%	5%	10%	20%	0%	0%	30%	0%	135 e	1,745 e	8%
Industrial												
1504.TW	Teco	29%	2%	1%	14%	0%	0%	0%	0%	91	12,989	1%
1722.TW	Taifer	40%	5%	3%	20%	0%	0%	0%	0%	91 e	2,172 e	4%
1402.TW	Far Eastern Textile	0%	0%	0%	0%	0%	0%	0%	0%	0 e	2,826 e	0%
		30%	0%	0%	15%	0%	0%	0%	0%	0 e	7,991 e	0%
Property												
2548.TW	Huaku	0%	0%	0%	0%	0%	0%	0%	0%	0	3,676	0%
5522.TW	Farglory	0%	0%	0%	0%	0%	0%	0%	0%	0 e	1,031 e	0%
		0%	0%	0%	0%	0%	0%	0%	0%	0 e	2,645 e	0%

Source: Company data, Morgan Stanley Research

Exhibit 18

Profitability Simulation if TWD Depreciates at Base Case

(Base Case) Ticker	Company	Revenue			COGS			Cash	Gross Debt	Impacts Total	Net Inc 2009E	% Chg in Net Inc
		% in USD	% in EUR	% in JPY	% in USD	% in EUR	% in JPY					
Semiconductor		100%	0%	0%	29%	3%	3%	29%	19%	18,708	(139)	n.m.
2303.TW	UMC	100%	0%	0%	25%	0%	0%	25%	20%	3,947 e	(16,508) e	n.m.
2330.TW	TSMC	100%	0%	0%	30%	4%	4%	30%	18%	14,761 e	16,369 e	90%
Solar		67%	33%	0%	86%	14%	0%	85%	63%	(437)	(961)	n.m.
3452.TWO	E-Ton	70%	30%	0%	80%	20%	0%	80%	60%	(470) e	(935) e	n.m.
6244.TWO	Motech	65%	35%	0%	90%	10%	0%	90%	80%	33 e	(26) e	n.m.
IC Design		100%	0%	0%	68%	0%	0%	9%	20%	6,917	22,993	30%
2401.TW	Sunplus	100%	0%	0%	65%	0%	0%	10%	20%	182 e	194 e	94%
2454.TW	Mediatek	100%	0%	0%	70%	0%	0%	8%	0%	5,271 e	20,241 e	26%
6286.TW	Richtek	100%	0%	0%	65%	0%	0%	0%	0%	311 e	1,099 e	28%
2379.TW	Realtek	100%	0%	0%	65%	0%	0%	17%	0%	756 e	725 e	104%
3534.TW	Ralink	100%	0%	0%	60%	0%	0%	17%	0%	245 e	399 e	61%
8081.TW	GMT	100%	0%	0%	60%	0%	0%	0%	0%	152 e	334 e	45%
Testing and Packaging		69%	0%	2%	38%	0%	6%	6%	21%	4,104	16,031	26%
2311.TW	ASE	80%	0%	0%	60%	0%	0%	11%	25%	1,591 e	5,590 e	28%
2325.TW	SPIL	60%	0%	0%	15%	0%	15%	0%	0%	1,534 e	7,114 e	22%
6239.TW	Powertech	50%	0%	15%	18%	0%	5%	0%	9%	979 e	3,327 e	29%
PC Foodchain		80%	6%	2%	83%	0%	1%	40%	19%	56,851	127,560	45%
2324.TW	Compal	100%	0%	0%	80%	0%	0%	30%	10%	8,415 e	9,788 e	86%
2382.TW	Quanta	100%	0%	0%	95%	0%	0%	30%	15%	7,432 e	17,574 e	42%
2308.TW	Delta	90%	0%	0%	90%	0%	0%	30%	0%	3,035 e	11,481 e	26%
2315.TW	Mitac	40%	40%	0%	80%	0%	0%	20%	0%	660 e	2,719 e	24%
2317.TW	Hon Hai	85%	0%	0%	75%	0%	0%	60%	16%	32,138 e	48,357 e	66%
2353.TW	Acer	30%	40%	0%	90%	0%	0%	20%	0%	(4,024) e	11,258 e	-36%
2357.TW	Asustek	50%	30%	0%	95%	0%	0%	20%	15%	262 e	11,027 e	2%
3231.TW	Wistron	100%	0%	0%	95%	0%	0%	30%	95%	3,432 e	6,965 e	49%
2354.TW	Foxconn Tech	35%	0%	60%	50%	0%	20%	0%	45%	5,395 e	7,617 e	71%
3518.TW	Paragon Tech	60%	0%	0%	0%	0%	0%	10%	50%	106 e	775 e	14%
Handset Foodchain		75%	15%	0%	64%	2%	2%	10%	46%	11,712	42,314	28%
2498.TW	HTC	65%	35%	0%	95%	5%	0%	0%	0%	4,122 e	25,083 e	16%
3037.TW	Unimicron	95%	0%	0%	15%	3%	10%	50%	50%	2,395 e	2,710 e	88%
8046.TW	Nan Ya PCB	90%	0%	0%	50%	0%	10%	1%	0%	1,144 e	6,058 e	19%
3044.TW	Tripod	85%	0%	0%	35%	0%	0%	60%	48%	1,473 e	2,418 e	61%
3311.TW	Silitech	60%	0%	10%	35%	0%	0%	7%	78%	292 e	848 e	34%
2439.TW	Merry	60%	0%	0%	40%	0%	0%	7%	0%	192 e	474 e	41%
2392.TW	Cheng Uei	75%	0%	0%	50%	0%	0%	7%	40%	993 e	1,439 e	69%
8078.TW	Compal Comm	80%	0%	0%	60%	0%	0%	4%	0%	794 e	942 e	84%
3008.TW	Largan	70%	0%	0%	20%	0%	0%	0%	0%	305 e	2,343 e	13%
LED		30%	3%	2%	18%	0%	0%	6%	5%	369	989	37%
2393.TW	Everlight	35%	5%	0%	20%	0%	0%	8%	0%	240 e	1,068 e	23%
2448.TW	Epistar	25%	0%	5%	15%	0%	0%	4%	10%	129 e	(79) e	n.m.
DRAM		95%	1%	1%	31%	0%	7%	11%	17%	(1,606)	(93,247)	n.m.
2408.TW	Nanya Tech	95%	0%	0%	75%	0%	0%	7%	7%	(1,041) e	(27,801) e	n.m.
2344.TW	Winbond	70%	5%	5%	45%	0%	0%	0%	0%	57 e	(10,679) e	n.m.
5346.TWO	Powerchip	100%	0%	0%	0%	0%	20%	6%	13%	133 e	(36,728) e	n.m.
3474.TW	Inotera	100%	0%	0%	28%	0%	0%	93%	44%	(755) e	(18,038) e	n.m.
TFT LCD		94%	0%	3%	51%	0%	21%	10%	12%	1,411	(131,419)	n.m.
2409.TW	AUO	98%	0%	0%	60%	0%	25%	7%	6%	(2,264) e	(56,364) e	n.m.
3009.TW	CMO	95%	0%	3%	20%	0%	30%	0%	17%	(204) e	(72,010) e	n.m.
3481.TW	Innolux	90%	0%	0%	77%	0%	5%	31%	0%	1,362 e	(6,458) e	n.m.
3034.TW	Novatek	100%	0%	0%	50%	0%	0%	0%	0%	993 e	2,107 e	47%
5371.TWO	Coretronic	75%	0%	25%	80%	0%	12%	21%	0%	1,093 e	688 e	159%
6176.TW	Radiant	90%	0%	1%	65%	0%	10%	0%	0%	431 e	618 e	70%
Networking Equipment		62%	18%	3%	47%	14%	2%	33%	73%	1,785	2,444	73%
4906.TW	Gemtek	80%	0%	3%	60%	0%	0%	15%	95%	546 e	995 e	55%
2332.TW	D-Link	50%	30%	3%	35%	27%	3%	40%	35%	1,239 e	1,449 e	86%
Telecom Service		1%	0%	0%	1%	0%	0%	5%	0%	608	72,612	1%
2412.TW	Chunghwa Telecom	1%	0%	0%	1%	0%	0%	5%	0%	425 e	46,561 e	1%
3045.TW	Taiwan Mobile	1%	0%	0%	1%	0%	0%	5%	0%	117 e	15,455 e	1%
4904.TW	Far EastTone	1%	0%	0%	1%	0%	0%	5%	0%	66 e	10,597 e	1%
Transportation		66%	11%	3%	56%	8%	1%	77%	14%	6,824	(8,812)	n.m.
2603.TW	Evergreen	81%	7%	2%	58%	9%	1%	80%	35%	2,704 e	(1,045) e	n.m.
2609.TW	Yang Ming	85%	10%	0%	60%	15%	0%	70%	30%	1,758 e	(2,754) e	n.m.
2610.TW	China Airlines	38%	16%	5%	63%	1%	1%	50%	7%	(940) e	(2,817) e	n.m.
2615.TW	Wan Hai	74%	8%	3%	35%	9%	3%	85%	25%	2,999 e	740 e	405%
2618.TW	EVA Airways	45%	16%	5%	51%	5%	1%	50%	6%	302 e	(2,936) e	n.m.
Consumer/Retails		0%	0%	0%	0%	0%	0%	0%	0%	0	5,498	0%
2903.TW	FEDS	0%	0%	0%	0%	0%	0%	0%	0%	0 e	1,087 e	0%
2912.TW	PCSC	0%	0%	0%	0%	0%	0%	0%	0%	0 e	4,411 e	0%
Chemicals		47%	2%	0%	50%	0%	0%	0%	5%	1,786	91,305	2%
1301.TW	FPC	60%	5%	0%	45%	0%	0%	0%	5%	2,551 e	21,886 e	12%
1303.TW	NYP	60%	2%	0%	45%	0%	0%	0%	5%	3,033 e	18,672 e	16%
1326.TW	FCFC	45%	2%	0%	30%	0%	0%	0%	5%	2,457 e	18,264 e	13%
6505.TW	FPCC	40%	2%	0%	60%	0%	0%	0%	5%	(6,255) e	32,483 e	-19%
Auto		40%	5%	5%	50%	0%	0%	20%	30%	271	6,038	4%
2105.TW	Cheng Shin	40%	5%	5%	50%	0%	0%	20%	30%	271 e	6,038 e	4%
Materials		16%	0%	7%	69%	0%	4%	13%	0%	(8,030)	32,052	-25%
2002.TW	China Steel	18%	0%	8%	80%	0%	5%	10%	0%	(8,311) e	16,487 e	-50%
1101.TW	Taiwan Cement	10%	0%	0%	15%	0%	0%	0%	0%	(57) e	6,788 e	-1%
1102.TW	Asia Cement	10%	0%	0%	15%	0%	0%	0%	0%	(16) e	7,031 e	0%
1802.TW	Taiwan Glass	10%	5%	10%	20%	0%	0%	30%	0%	354 e	1,745 e	20%
Industrial		29%	2%	1%	14%	0%	0%	0%	0%	1,548	12,989	12%
1504.TW	Teco	40%	5%	3%	20%	0%	0%	0%	0%	797 e	2,172 e	37%
1722.TW	Taifer	0%	0%	0%	0%	0%	0%	0%	0%	0 e	2,826 e	0%
1402.TW	Far Eastern Textile	30%	0%	0%	15%	0%	0%	0%	0%	751 e	7,991 e	9%
Property		0%	0%	0%	0%	0%	0%	0%	0%	0	3,676	0%
2548.TW	Huaku	0%	0%	0%	0%	0%	0%	0%	0%	0 e	1,031 e	0%
5522.TW	Farglory	0%	0%	0%	0%	0%	0%	0%	0%	0 e	2,645 e	0%

Source: Company data, Morgan Stanley Research

Exhibit 19

Profitability Simulation if TWD Depreciates at Bear Case

Ticker	Company	Revenue			COGS			Cash	Gross Debt	Impacts Total	Net Inc 2009E	% Chg in Net Inc
		% in USD	% in EUR	% in JPY	% in USD	% in EUR	% in JPY					
Semiconductor												
		100%	0%	0%	29%	3%	3%	29%	19%	31,982	(139)	n.m.
2303.TW	UMC	100%	0%	0%	25%	0%	0%	25%	20%	6,724 e	(16,508) e	n.m.
2330.TW	TSMC	100%	0%	0%	30%	4%	4%	30%	18%	25,258 e	16,369 e	154%
Solar												
		67%	33%	0%	86%	14%	0%	85%	63%	(743)	(961)	n.m.
3452.TWO	E-Ton	70%	30%	0%	80%	20%	0%	80%	60%	(800) e	(935) e	n.m.
6244.TWO	Motech	65%	35%	0%	90%	10%	0%	90%	80%	57 e	(26) e	n.m.
IC Design												
		100%	0%	0%	68%	0%	0%	9%	20%	11,785	22,993	51%
2401.TW	Sunplus	100%	0%	0%	65%	0%	0%	10%	20%	311 e	194 e	160%
2454.TW	Mediatek	100%	0%	0%	70%	0%	0%	8%	0%	8,980 e	20,241 e	44%
6286.TW	Richtek	100%	0%	0%	65%	0%	0%	0%	0%	531 e	1,099 e	48%
2379.TW	Realtek	100%	0%	0%	65%	0%	0%	17%	0%	1,287 e	725 e	178%
3534.TW	Ralink	100%	0%	0%	60%	0%	0%	17%	0%	417 e	399 e	105%
8081.TW	GMT	100%	0%	0%	60%	0%	0%	0%	0%	259 e	334 e	77%
Testing and Packaging												
		69%	0%	2%	38%	0%	6%	6%	21%	7,077	16,031	44%
2311.TW	ASE	80%	0%	0%	60%	0%	0%	11%	25%	2,711 e	5,590 e	49%
2325.TW	SPIL	60%	0%	0%	15%	0%	15%	0%	0%	2,751 e	7,114 e	39%
6239.TW	Powertech	50%	0%	15%	18%	0%	5%	0%	9%	1,615 e	3,327 e	49%
PC Foodchain												
		80%	6%	2%	83%	0%	1%	40%	19%	95,580	127,560	75%
2324.TW	Compal	100%	0%	0%	80%	0%	0%	30%	10%	14,336 e	9,788 e	146%
2382.TW	Quanta	100%	0%	0%	95%	0%	0%	30%	15%	12,661 e	17,574 e	72%
2308.TW	Delta	90%	0%	0%	90%	0%	0%	30%	0%	5,170 e	11,481 e	45%
2315.TW	Mitac	40%	40%	0%	80%	0%	0%	20%	0%	1,129 e	2,719 e	42%
2317.TW	Hon Hai	85%	0%	0%	75%	0%	0%	60%	16%	54,753 e	48,357 e	113%
2353.TW	Acer	30%	40%	0%	90%	0%	0%	20%	0%	(8,822) e	11,258 e	-61%
2357.TW	Asustek	50%	30%	0%	95%	0%	0%	20%	15%	458 e	11,027 e	4%
3231.TW	Wistron	100%	0%	0%	95%	0%	0%	30%	95%	5,847 e	6,965 e	84%
2354.TW	Foxconn Tech	35%	0%	60%	50%	0%	20%	0%	45%	7,866 e	7,617 e	103%
3518.TW	Paragon Tech	60%	0%	0%	0%	0%	0%	10%	50%	181 e	775 e	23%
Handset Foodchain												
		75%	15%	0%	64%	2%	2%	10%	46%	20,069	42,314	47%
2498.TW	HTC	65%	35%	0%	95%	5%	0%	0%	0%	7,032 e	25,083 e	28%
3037.TW	Unimicron	95%	0%	0%	15%	3%	10%	50%	50%	4,152 e	2,710 e	153%
8046.TW	Nan Ya PCB	90%	0%	0%	50%	0%	10%	1%	0%	2,003 e	6,058 e	33%
3044.TW	Tripod	85%	0%	0%	35%	0%	0%	60%	48%	2,510 e	2,418 e	104%
3311.TW	Silitech	60%	0%	10%	35%	0%	0%	7%	78%	480 e	848 e	57%
2439.TW	Merry	60%	0%	0%	40%	0%	0%	7%	0%	328 e	474 e	69%
2392.TW	Cheng Uei	75%	0%	0%	50%	0%	0%	7%	40%	1,691 e	1,439 e	118%
8078.TW	Compal Comm	80%	0%	0%	60%	0%	0%	4%	0%	1,353 e	942 e	144%
3008.TW	Largan	70%	0%	0%	20%	0%	0%	0%	0%	520 e	2,343 e	22%
LED												
		30%	3%	2%	18%	0%	0%	6%	5%	620	989	63%
2393.TW	Everlight	35%	5%	0%	20%	0%	0%	8%	0%	409 e	1,068 e	38%
2448.TW	Epistar	25%	0%	5%	15%	0%	0%	4%	10%	211 e	(79) e	n.m.
DRAM												
		95%	1%	1%	31%	0%	7%	11%	17%	(2,520)	(93,247)	n.m.
2408.TW	Nanya Tech	95%	0%	0%	75%	0%	0%	7%	7%	(1,774) e	(27,801) e	n.m.
2344.TW	Winbond	70%	5%	5%	45%	0%	0%	0%	0%	87 e	(10,679) e	n.m.
5346.TWO	Powerchip	100%	0%	0%	0%	0%	20%	6%	13%	454 e	(36,728) e	n.m.
3474.TW	Inotera	100%	0%	0%	28%	0%	0%	93%	44%	(1,287) e	(18,038) e	n.m.
TFT LCD												
		94%	0%	3%	51%	0%	21%	10%	12%	4,989	(131,419)	n.m.
2409.TW	AUO	98%	0%	0%	60%	0%	25%	7%	6%	(2,523) e	(56,364) e	n.m.
3009.TW	CMO	95%	0%	3%	20%	0%	30%	0%	17%	871 e	(72,010) e	n.m.
3481.TW	Innolux	90%	0%	0%	77%	0%	5%	31%	0%	2,449 e	(6,458) e	n.m.
3034.TW	Novatek	100%	0%	0%	50%	0%	0%	0%	0%	1,691 e	2,107 e	80%
5371.TWO	Coretronic	75%	0%	25%	80%	0%	12%	21%	0%	1,726 e	688 e	251%
6176.TW	Radiant	90%	0%	1%	65%	0%	10%	0%	0%	775 e	618 e	125%
Networking Equipment												
		62%	18%	3%	47%	14%	2%	33%	73%	3,024	2,444	124%
4906.TW	Gemtek	80%	0%	3%	60%	0%	0%	15%	9%	918 e	995 e	92%
2332.TW	D-Link	50%	30%	3%	35%	27%	3%	40%	35%	2,106 e	1,449 e	145%
Telecom Service												
		1%	0%	0%	1%	0%	0%	5%	0%	1,035	72,612	1%
2412.TW	Chunghwa Telecom	1%	0%	0%	1%	0%	0%	5%	0%	723 e	46,561 e	2%
3045.TW	Taiwan Mobile	1%	0%	0%	1%	0%	0%	5%	0%	200 e	15,455 e	1%
4904.TW	Far EastTone	1%	0%	0%	1%	0%	0%	5%	0%	112 e	10,597 e	1%
Transportation												
		66%	11%	3%	56%	8%	1%	77%	14%	11,450	(8,812)	n.m.
2603.TW	Evergreen	81%	7%	2%	58%	9%	1%	80%	35%	4,600 e	(1,045) e	n.m.
2609.TW	Yang Ming	85%	10%	0%	60%	15%	0%	70%	30%	2,995 e	(2,754) e	n.m.
2610.TW	China Airlines	38%	16%	5%	63%	1%	1%	50%	7%	(1,695) e	(2,817) e	n.m.
2615.TW	Wan Hai	74%	8%	3%	35%	9%	3%	85%	25%	5,111 e	740 e	691%
2618.TW	EVA Airways	45%	16%	5%	51%	5%	1%	50%	6%	439 e	(2,936) e	n.m.
Consumer/Retails												
		0%	0%	0%	0%	0%	0%	0%	0%	0	5,498	0%
2903.TW	FEDS	0%	0%	0%	0%	0%	0%	0%	0%	0 e	1,087 e	0%
2912.TW	PCSC	0%	0%	0%	0%	0%	0%	0%	0%	0 e	4,411 e	0%
Chemicals												
		47%	2%	0%	50%	0%	0%	0%	5%	3,047	91,305	3%
1301.TW	FPC	60%	5%	0%	45%	0%	0%	0%	5%	4,347 e	21,886 e	20%
1303.TW	NYP	60%	2%	0%	45%	0%	0%	0%	5%	5,167 e	18,672 e	28%
1326.TW	FCFC	45%	2%	0%	30%	0%	0%	0%	5%	4,187 e	18,264 e	23%
6505.TW	FPCC	40%	2%	0%	60%	0%	0%	0%	5%	(10,654) e	32,483 e	-33%
Auto												
		40%	5%	5%	50%	0%	0%	20%	30%	376	6,038	6%
2105.TW	Cheng Shin	40%	5%	5%	50%	0%	0%	20%	30%	376 e	6,038 e	6%
Materials												
		16%	0%	7%	69%	0%	4%	13%	0%	(13,846)	32,052	-43%
2002.TW	China Steel	18%	0%	8%	80%	0%	5%	10%	0%	(14,299) e	16,487 e	-87%
1101.TW	Taiwan Cement	10%	0%	0%	15%	0%	0%	0%	0%	(98) e	6,788 e	-1%
1102.TW	Asia Cement	10%	0%	0%	15%	0%	0%	0%	0%	(27) e	7,031 e	0%
1802.TW	Taiwan Glass	10%	5%	10%	20%	0%	0%	30%	0%	578 e	1,745 e	33%
Industrial												
		29%	2%	1%	14%	0%	0%	0%	0%	2,620	12,989	20%
1504.TW	Teco	40%	5%	3%	20%	0%	0%	0%	0%	1,341 e	2,172 e	62%
1722.TW	Taifer	0%	0%	0%	0%	0%	0%	0%	0%	0 e	2,826 e	0%
1402.TW	Far Eastern Textile	30%	0%	0%	15%	0%	0%	0%	0%	1,279 e	7,991 e	16%
Property												
		0%	0%	0%	0%	0%	0%	0%	0%	0	3,676	0%
2548.TW	Huaku	0%	0%	0%	0%	0%	0%	0%	0%	0 e	1,031 e	0%
5522.TW	Farglory	0%	0%	0%	0%	0%	0%	0%	0%	0 e	2,645 e	0%

Source: Company data, Morgan Stanley Research

Taiwan Foundry and IC Design

TWD Depreciation

Morgan Stanley Asia Limited

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Implications

Overall, a potential depreciation of TWD against the U.S. dollar is definitely a positive for revenues and earnings. In the case of foundries, the impact is quite significant. However, as shown below, the impact to share prices is less apparent.

As far as how the currency impacts fundamentals, there are several factors to consider:

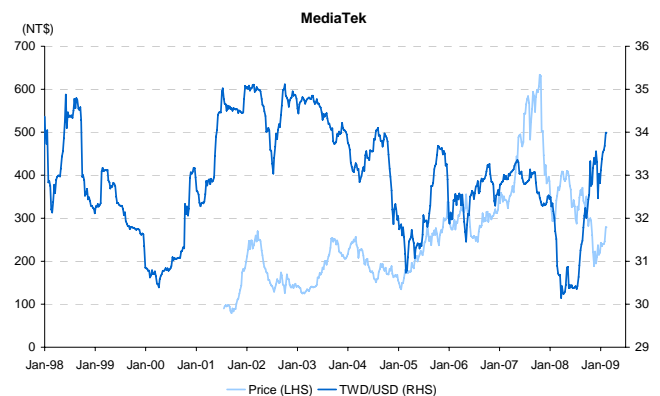
1. Positive for revs as most sales are denominated in USD for foundries and IC design.
2. Positive for foundry GM as depreciation is in TWD, lower impact for IC design because they pay their suppliers in USD.
3. Positive for assets that are denominated in USD.
4. Positive for market share vs. foreign competitors as TW corporates have more pricing flexibility. Likely a bigger factor for IC design as TSMC has essentially no competitors in U.S. and Europe.
5. Longer-term, negative for foundry capex and depreciation because the same equipment will now cost more than before.

Since 2008 will be a small capex year, the positives should far outweigh the negatives. However, if the TWD is to stay weak for multiple years, the implications would be higher capex to rev ratios for TSMC/UMC and therefore lower margins longer-term. We note that the magnitude of impact for the foundries is partially a function of relatively low levels of net income for the year. Lastly, the magnitude of impact would also depend on whether the companies would pass the savings onto the customers or turn it into higher margins. Our view is that the IC design companies are more likely to use pricing as a competitive tool since they compete with foreign firms, but in the case of the foundries, there is probably not a lot of motivation to cut prices as the biggest players (TSMC and UMC) are both Taiwanese and neither gains an advantage in doing so.

Although the local currency depreciation should be positive for revenues and earnings, analysis would show that the historical correlation between FX and share prices has been small, both on way up and way down. Our take is investors understand this to be a temporary phenomenon and thus strip out the impact, QFII investors calculate returns in their own currencies, and also volatility in the semi industry is typically large and thus outweigh the FX changes in terms of driving share prices. Having said that, TWD to USD exchange rate has stayed in a fairly tight range between NT\$30-35, and thus if TWD is to depreciate to the 35-40 range, it goes beyond the range in the historical data.

Exhibit 20

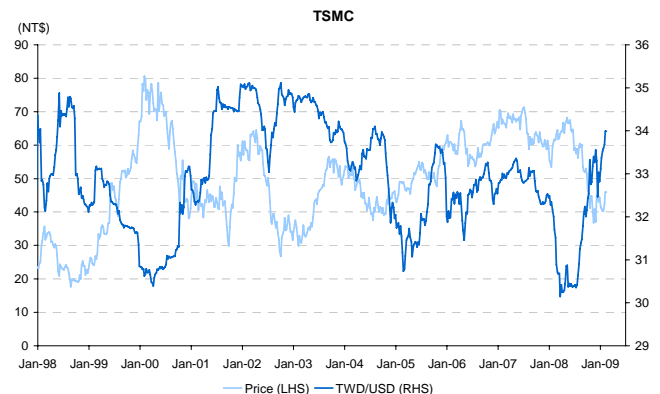
MediaTek: Share Price vs. TWD/USD



Source: TEJ, Company data, Morgan Stanley Research

Exhibit 21

TSMC: Share Price vs. TWD/USD



Source: TEJ, Company data, Morgan Stanley Research

Taiwan Hardware

TWD Depreciation

Morgan Stanley Asia Limited

Jasmine Lu

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Implications

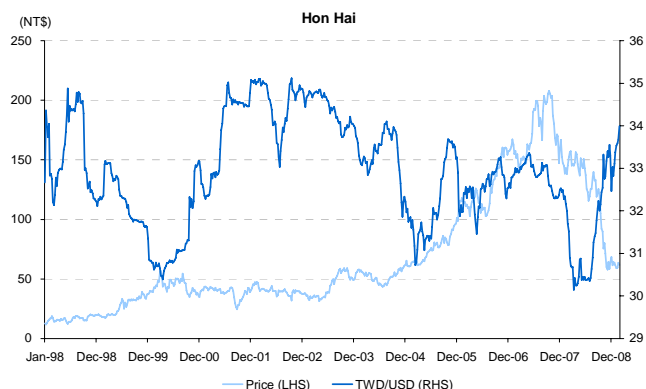
In general, a potential depreciation of TWD against the US dollar would be more a neutral to positive sentiment catalyst to most if not all ODM/component players. Our sensitivity shows that it would have greater positive earnings impact to ODM names, followed by components. At the operating level, as most of revenues are denominated in USD for ODM and component companies whereas smaller COGS denominated in USD, this should read as a positive factor to margins overall. At the non-operating level, as most of assets (especially A/R) are denominated in USD against liabilities, most of companies will recognize FX gains as TWD depreciates under the condition that those companies do not overly hedge their position. We however tend to believe the market might be inclined to overlook the impact from currency movement, which is more a short-term driver. Negative impact from substantial drop-off on top-line and thus utilization should weigh on the impact from TWD depreciation.

The impact is neutral to slightly negative to EMS and selective brand names. While EMS and brand companies have more diversified exposure to different regions in terms of end markets (particularly Europe where Taiwanese brand names have bigger exposure) and manufacturing sites (mainly China on top of a few overseas sites), they might need to manage their currency risks not only on TWD against USD but also RMB, Euro dollar and Japanese yen movement against USD. That said, share price might not highly correlate to TWD depreciation against USD given net impact to margins remain unknown.

Long-term, if this trend proves to be true, this might widen the pricing gap between components names that head-to-head compete with Japanese rivals. Nonetheless, we learned that most of global brands would like to pass on pricing pressure to Japanese makers instead of 100% shifting their sourcing to Taiwanese suppliers on concern of supplier risk. We are also aware that the component sourcing trend shifting to Taiwanese makers on the back of cost advantage has been ongoing for years, and this might not substantially bring in additional order wins especially for components where Japanese makers still lead in technology such as passives and PCB/substrates.

Exhibit 22

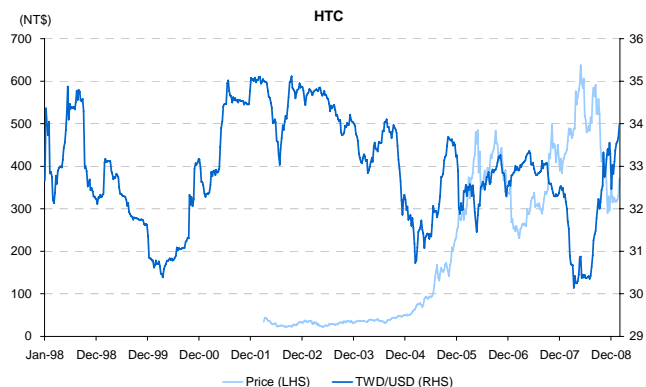
Hon Hai: Share Price vs. TWD/USD



Source: TEJ, Company data, Morgan Stanley Research

Exhibit 23

HTC: Share Price vs. TWD/USD



Source: TEJ, Company data, Morgan Stanley Research

Taiwan TFT/DRAM/Backend

TWD Depreciation

Morgan Stanley Asia Limited

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Taiwan TFT LCD

Positive impact on P&L: A potential depreciation of TWD against the US dollar would be a positive. Korean Won depreciation trend has been a negative to Taiwan panel makers – 1. Korean panel makers have cost advantage vs. Taiwan when USD based panel prices translate into domestic currencies. 2. Taiwan component makers with growing Korean panel customer exposure also face higher margin pressure. 3. A weaker Won also means less incentive for Korean panel buyers on Taiwan produced panels vs. incumbent production. 4. The currency advantage leads the 30%+ utilization difference in Korea vs. Taiwan that further widens the margin difference.

On sensitivity, for example, if TWD depreciates 10% against the US dollar this year, we see AUO's 2009 revenue to fall less at 37% Y/Y instead of 42% Y/Y decline and its 2009 losses would narrow by 13%.

Less capital competitive: Although a weak TWD currency would help to improve revenue, margin and record translation gain on USD based assets (i.e., accounts receivables), new USD based capital spending would lead to higher future depreciation expense that would reduce future competitiveness. But given the depressed market environment in 2009, TFT capital spending will likely be slashed by 50-70% by AUO and CMO, TWD depreciation impact on capital spending risk will be minimal compared to the potential benefits in 2009 earnings improvement.

Opinion on the stocks: For AUO, for example, supply/demand and panel price trends still matter the most. But in a period of TWD depreciation, the stock tends to perform better than in a period of TWD appreciation.

DRAM

Positive variance on P&L: Like TFT, DRAM is mostly priced in USD. A potential depreciation of TWD vs. US dollar is a positive – 1. Higher TWD based revenue, margin, and operating profits. 2. Potential foreign exchange translation gain on USD based assets.

On sensitivity, for example, if TWD depreciates 10% against the US dollar this year, we see Inotera's 2009 revenue would fall less at 6% Y/Y decline instead of 14% Y/Y and its losses would improve by ~4%.

Less capital competitive: USD based capital spending would lead to higher depreciation that reduces future competitiveness. But given DRAM over-supply, Taiwan DRAM 2009 capex will be minimal, and so less negative impact to future earnings.

Opinion on the stocks: For Inotera, as an example, supply/demand and DRAM price trends still matter the most. But in a period of TWD depreciation, the stock tends to perform better than in a period of TWD appreciation.

Backend Foundry

Positive variance on P&L: 1. Positive for revenue as majority of revenue is denominated in USD. 2. Positive for gross margin as depreciation is already booked in TWD. Raw material cost (~40% of revenue) would wash out some positive variance as it is mostly priced in USD or Yen. 3. Potential foreign exchange translation gain from USD based assets (i.e., accounts receivables).

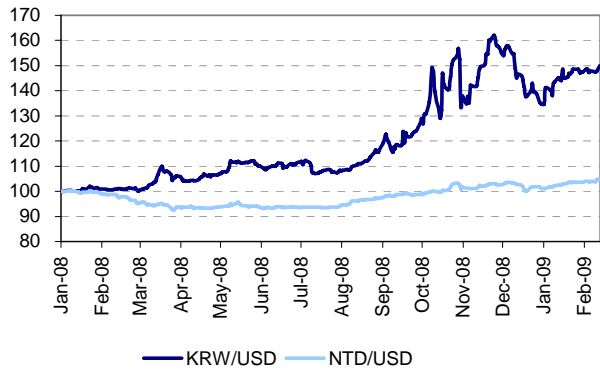
On sensitivity, as an example, if TWD depreciates 10% against the US dollar this year, we see SPIL's 2009 revenue falling less at 30% Y/Y instead of 34% Y/Y decline and its earnings would improve significantly.

Less capital competitive: USD based capital spending would lead to higher depreciation that reduces future competitiveness. But on capital discipline in the semiconductor downturn, Taiwan Backend Foundry capital spending will likely be minimal this year. TWD depreciation impact is more positive than negative.

Opinion on the stocks: For SPIL, as an example, the stock has had weaker correlation with NTD compared to TFT/DRAM stocks like AUO/Inotera. In 2002-07, SPIL stock outperformed despite currency movements due to a re-rating. We think TWD depreciation will still be a positive catalyst for SPIL stock.

Exhibit 1

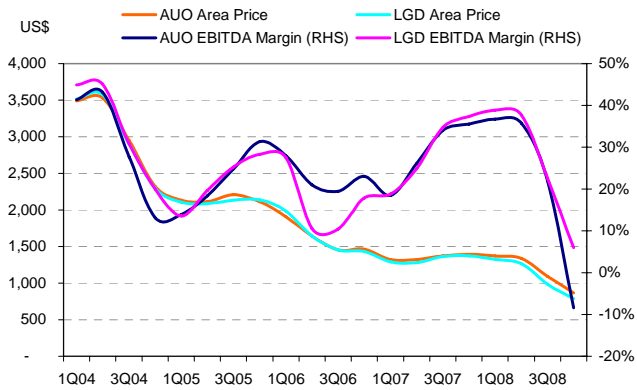
Korean Won vs Taiwan NTD



Source: Company data, Morgan Stanley Research

Exhibit 2

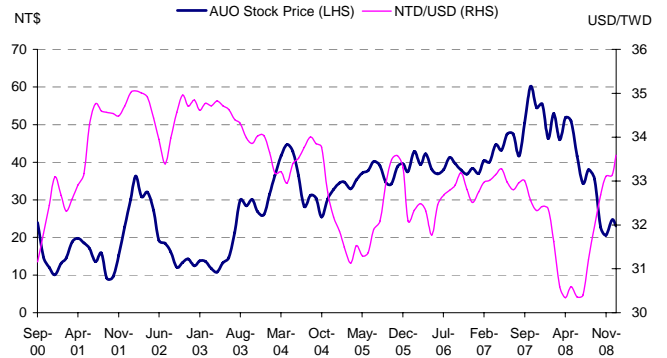
AUO vs. LGD on EBITDA Margin and Area Price:



Source: Company data, Morgan Stanley Research

Exhibit 3

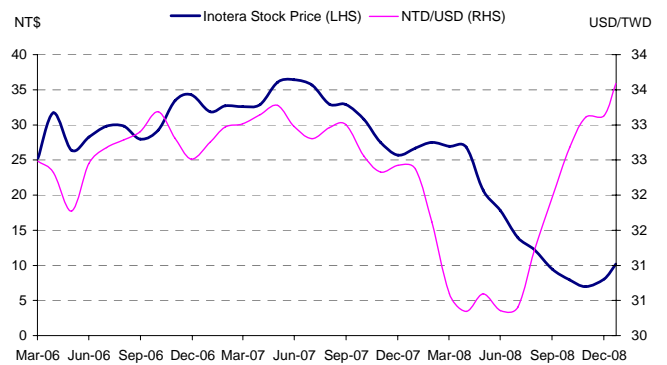
AUO: Share Price vs. FX



Source: Company data, Morgan Stanley Research

Exhibit 4

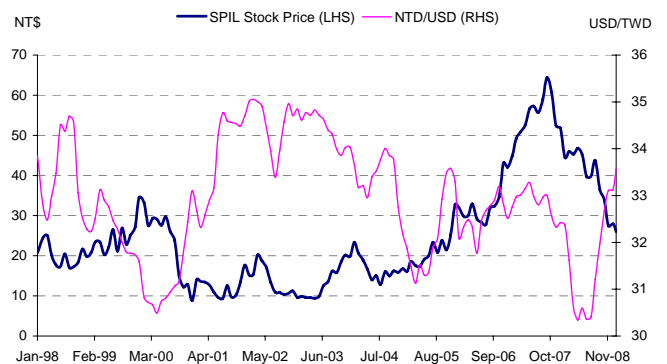
Inotera: Share Price vs. FX



Source: Company data, Morgan Stanley Research

Exhibit 5

SPIL Share Price vs. FX



Source: Company data, Morgan Stanley Research

Morgan Stanley

Exhibit 6

IS/BS Impact if NTD depreciates 10% to USD

NT\$m	Revenue				COGs				I/S Impacts	B/S Impacts			Total Impacts	
	2009E	% in USD	% in NTD	% in Others	2009E	% in USD	% in NTD	% in Others	Total I/S Impact	Gross Debt /Cash	AR / AP	Hedging	Total B/S Impact	
AUO	243,948	98%	2%	0%	279,018	60%	15%	25%	11,820	(862)	(92)	658	(295)	11,525
CMO	184,503	95%	2%	3%	231,577	20%	50%	30%	20,956	(7,251)	380	(60,439)	(67,310)	(46,354)
Innolux	131,523	90%	10%	0%	135,190	77%	19%	5%	2,429	1,773	712	1,285	3,770	6,200
Novatek	18,600	100%	0%	0%	13,016	50%	50%	0%	1,965	7	870	-	877	2,842
Coretronic	50,174	75%	25%	0%	44,743	80%	8%	12%	298	297	450	1,060	1,807	2,106
Radiant	25,993	90%	9%	1%	23,509	75%	15%	10%	936	-	973	1,194	2,167	3,103
Nanya	23,561	95%	5%	0%	37,842	75%	25%	0%	(975)	(1,094)	(440)	-	(1,533)	(2,508)
Powerchip	32,830	100%	0%	0%	59,567	0%	80%	20%	5,335	(2,441)	80	(10,348)	(12,709)	(7,374)
Winbond	11,592	70%	20%	10%	19,507	45%	55%	0%	(108)	-	21	136	156	49
Inotera	32,130	100%	0%	0%	48,518	28%	72%	0%	3,014	(4,514)	270	(7,615)	(11,859)	(8,845)
ASE	59,609	80%	20%	0%	53,858	60%	40%	0%	2,498	(1,528)	1,040	(367)	(854)	1,644
SPIL	39,708	60%	40%	0%	35,975	15%	70%	15%	2,995	-	491	-	491	3,486
Powertech	26,534	50%	35%	15%	21,643	18%	77%	5%	1,523	(198)	702	-	504	2,026

Source: Company data, Morgan Stanley Research

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(as of January 31, 2009)

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Stock Rating Category	Coverage Universe		Investment Banking Clients (IBC)		
	Count	% of Total	Count	Total IBC	% of Rating Category
Overweight/Buy	773	33%	223	37%	29%
Equal-weight/Hold	1044	44%	266	44%	25%
Not-Rated/Hold	33	1.4%	8	1.3%	24.2%
Underweight/Sell	498	21%	101	17%	20%
Total	2,348		598		

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