Major Differences between TIFRS and R.O.C. GAAP for TSMC

Starting 2013, TSMC prepares financial statements in accordance with TIFRS (International Financial Reporting Standards as endorsed for use in R.O.C.). The major differences between TIFRS and R.O.C. GAAP for TSMC are summarized below:

Balance Sheet

a) Allowance for sales returns and others

Under R.O.C. GAAP, allowance for sales returns and others is recorded as a deduction from accounts receivable. Under TIFRS, TSMC records it as a provision under other current liabilities due to the nature of the allowance.

b) Deferred income tax

Deferred income tax assets and liabilities are classified as either current or non-current based on the expected length of time of realization under R.O.C. GAAP, but classified as non-current assets or liabilities under TIFRS.

c) Pension plan

Under R.O.C. GAAP, actuarial losses from defined benefit plans are deferred and amortized as expenses over the expected average remaining working lives of the participating employees. Under TIFRS, the actuarial losses are recognized as a negative item in other comprehensive income and reflected in unappropriated earnings.

d) Capital surplus

Change of the Company's share of equity in equity method investee resulting from the decrease of ownership percentage is recorded in the capital surplus under R.O.C. GAAP, but treated as deemed disposal with disposal gain or loss under TIFRS when certain requirements are met.

e) Assets leased to others and idle assets

Assets leased to others and idle assets are reported as other non-current assets under R.O.C. GAAP, but as property, plant and equipment under TIFRS.

Statement of Comprehensive Income

f) Revenue

Technical service income is reclassified from non-operating income to revenue under TIFRS.

g) Other income and expenses

Certain non-operating income and expenses, such as rental revenue, net gain or loss on disposal of property, plant and equipment and other assets, and impairment loss on idle assets, are reported as other income and expenses under TIFRS based on the nature of the transactions.

h) Other comprehensive income

Under TIFRS, Income Statement is replaced by "Statement of Comprehensive Income". The key difference between the two is the addition of "Other Comprehensive Income", which is the change in equity resulting from transactions other than those with shareholders. For TSMC, the key items in other comprehensive income include: translation adjustment of foreign operations, net valuation gain on available-for-sale financial assets, share of other comprehensive income of equity method investee and actuarial losses from employee pension plan. Other comprehensive income is not included in the calculation of EPS.

Statement of Cash Flow

i) Classification of interest received, dividend received and the interest paid

Under R.O.C. GAAP, interest / dividend received and interest paid are categorized within operating activities. Under TIFRS, the Company reported interest / dividend received in investing activities, and interest paid in financing activities.

j) Income tax paid

Under TIFRS, income tax paid is required to be disclosed separately within operating activities, therefore, the statement of cash flow will start with income before income tax instead of net income.

k) Foreign exchange gain and loss

Under TIFRS, cash flow related to change in foreign exchange rate is reported in conjunction with the related assets or liabilities.

Based on aforementioned discussion, the differences between TSMC's 2012 financial statements under TIFRS and R.O.C. GAAP are illustrated in the following sections.

I. Balance Sheet

(In NT billions) ASSETS		TIFRS 2012		C GAAP		
				2012	Difference	
		mount	P	Amount	Amount	
Current Assets						
Cash and Cash Equivalents	\$	143.41	\$	143.41	-	
Investments in Marketable Financial Instruments		7.51		7.51	-	(4)
Accounts Receivable Inventories		58.13 37.83		52.09 37.83	6.04	(1)
Other Current Assets		37.63 3.45		37.03 11.45	(8.00)	(2)
Total Current Assets		250.33		252.29	(1.96)	(2)
Non-current Assets						
Long-term Investments		65.72		65.79	(0.07)	(3)
Property, Plant and Equipment		617.56		617.53	0.03	(4)
Intangible and Other Non-current Assets		27.75		19.43	8.32	(5)
Total Non-current Assets		711.03		702.75	8.28	
Total Assets	\$	961.36	\$	955.04	\$ 6.32	
LIABILITIES AND SHAREHOLDERS' EQUITY						
Current Liabilities						
Short-term Loans	\$	34.72	\$	34.72	-	
Accounts Payables		15.24		15.24	-	
Payables to Contractors and Equipment Suppliers		44.83		44.83	-	
Accrued Expenses and Other Current Liabilities		53.56		47.52	6.04	(1)
Current Portion of Bonds Payable and Long-term Debts		0.13		0.13	-	
Total Current Liabilities		148.48		142.44	6.04	
Non-current Liabilities						
Bonds Payable		80.00		80.00	-	
Other Non-current Liabilities		9.79		6.84	2.95	(6)
Total Non-current Liabilities		89.79		86.84	2.95	
Total Liabilities		238.27		229.28	8.99	
Shareholders' Equity						
Capital Stock at Par Value		259.25		259.25	-	
Capital Surplus		55.68		56.14	(0.46)	(7)
Legal Capital Reserve		115.82		115.82	-	
Special Capital Reserve		7.61		7.61	-	
Unappropriated Earnings		284.99		287.18	(2.19)	(8)
Others		(2.79)		(2.79)		
Equity Attributable to Shareholders of the Parent		720.56		723.21	(2.65)	
Noncontrolling Interests		2.53		2.55	(0.02)	
Total Shareholders' Equity		723.09		725.76	(2.67)	
Total Liabilities & Shareholders' Equity	\$	961.36	\$	955.04	\$ 6.32	
Key Indices						
A/R Turnover Days		38		34	4	
Current Ratio (x)		1.7		1.8	(0.1)	
Net Working Capital		101.85		109.85	(8.00)	

- (1) Accounts receivable increased NT\$6.04 billion due to the reclassification of allowance for sales return and others from current assets to other current liabilities.
- (2) Other current assets decreased NT\$8.00 billion as deferred tax assets was reclassified as non-current assets.
- (3) Decrease in long-term investments reflected TIFRS adoption adjustments from equity method investees.
- (4) Assets leased to others and idle assets were reclassified from other non-current assets to property, plant and equipment.
- (5) Other non-current assets increased NT\$8.32 billion mainly due to the reclassification of deferred tax assets NT\$8.00 billion from current assets and recognition of deferred tax assets of NT\$0.35 billion related to actuarial losses of employee pension plan.
- (6) Recognition of actuarial losses of employee pension plan
- (7) The decrease reflected the reclassification from capital surplus to unappropriated earnings resulting from change in share of equity in equity method investees.
- (8) Mainly attributed to actuarial losses of employee pension plan (net of tax impact) of NT\$2.6 billion, partially offset by the reclassification from capital surplus.

As a result of aforementioned adjustments from TIFRS adoption, our 2012 days of receivable increased 4 days to 38 days, net working capital decreased to NT\$101.85 billion, and current ratio decreased to 1.7x.

II. Statement of Comprehensive Income

	TIFRS	RC	OC GAAP	Difference	-
(In NT billions)	2012		2012		
	Amount		Amount	Amount	
Net Revenue	\$ 506	•	506.25	0.50	(1)
Cost of Revenue	(262	_	(262.65)	0.04	(2)
Gross Profit	244	.14	243.60	0.54	,
Operating Expenses					
Research and Development Expenses	(40	.38)	(40.40)	0.02	(2)
Sales, General and Administrative Expenses	(22	.13)	(22.14)	0.01	(2)
Total Operating Expenses	(62	.51)	(62.54)	0.03	
Other Income and Expenses	(0	.45)		(0.45)	(3)
Income from Operations	181	.18	181.06	0.12	
Non-operating Income and Expenses					
Share of Profits of Associates and Joint Venture	2	.07	2.03	0.04	(4)
Other Gains and Losses	(1	.58)	(1.53)	(0.05)	(1) (3)
Total Non-operating Income and Expenses	0	.49	0.50	(0.01)	
Income before Income Tax	181	.67	181.56	0.11	
Income Tax Expenses	(15	.55)	(15.60)	0.05	(5)
Net Income	166	.12	165.96	0.16	
Other Comprehensive Income	4	.26_		4.26	(6)
Comprehensive Income	<u>\$ 170</u>	.38 \$	165.96	4.42	:
Net Income (Losses) Attributable to:					
Shareholders of the Parent	\$ 166	.32 \$	166.16	0.16	
Noncontrolling interests	(0	.20)	(0.20)		
	\$ 166	.12 \$	165.96	0.16	

- (1) Net revenue increased NT\$0.50 billion due to the inclusion of technical service income.
- (2) Under TIFRS, actuarial losses from employee pension plan are no longer amortized as cost / expense.
- (3) Mainly due to the reclassification of loss on impairment of idle assets from non-operating income and expenses.
- (4) The increase reflected TIFRS adoption adjustment from equity method investees.
- (5) The decrease reflected the adjustment to income tax expenses resulting from TIFRS adoption.
- (6) Other comprehensive income is mainly comprised of net valuation gain on available-for-sale financial assets of NT\$9.53 billion, partially offset by translation adjustments of foreign operations of NT\$4.32 billion, actuarial losses from employee pension plan of NT\$0.68 billion and adjustments of deferred tax assets related to other comprehensive income items of NT\$0.33 billion.

III. Statement of Cash Flow

	TIFRS		RC	C GAAP		
(In NT billions)	2012 Amount		2012		Difference	
				Amount	Amount	
Cash Flows from Operating Activities:						
Income before Income Tax	\$	181.68			\$ 181.68	(1)
Net Income			\$	165.96	(165.96)	(1)
Depreciation & Amortization		131.35		131.35	-	
Share of Profits of Associates and Joint Venture		(2.07)		(2.03)	(0.04)	
Income Tax Paid		(11.31)			(11.31)	(1)
Deferred Income Tax				0.57	(0.57)	(1)
Changes in Working Capital & Others		(14.68)		(6.78)	(7.90)	(1) (2) (3) (4)
Net Cash Generated by Operating Activities		284.97		289.07	(4.10)	(0) (1)
Cash Flows from Investing Activities:						
Interest Received		1.72			1.72	(2)
Cash Dividend Received		2.16			2.16	(2)
Acquisitions of:						. ,
Property, Plant and Equipment		(246.14)		(246.14)	-	
Marketable Financial Instruments		(31.53)		(31.53)	-	
Financial Assets Carried at Cost		(0.06)		(0.06)	-	
Proceeds from Disposal or Redemption of:						
Property, Plant and Equipment		0.16		0.16	-	
Marketable Financial Instruments		3.68		3.68	-	
Financial Assets Carried at Cost		0.35		0.35	-	
Others		0.34		0.34		
Net Cash Used In Investing Activities		(269.32)		(273.20)	3.88	
Cash Flows from Financing Activities:						
Increase in Short-term Loans		9.75		8.79	0.96	(3)
Issuance of Bonds Payable		62.00		62.00	-	` '
Repayment of Bonds Payable		(4.50)		(4.50)	-	
Interest Paid		(0.74)			(0.74)	(4)
Cash Dividends Paid for Common Stock		(77.75)		(77.75)	-	
Others		(2.35)		(2.35)		
Net Cash Used by Financing Activities		(13.59)		(13.81)	0.22	
Effect of Exchange Rate Changes on Cash and Cash Equivalents		(2.12)		(2.12)		
Net Increase in Cash and Cash Equivalents		(0.06)		(0.06)	-	
Cash and Cash Equivalents at Beginning of Period		143.47		143.47		
Cash and Cash Equivalents at End of Period	\$	143.41	\$	143.41		
Free Cash Flow		38.83		42.93	(4.10)	

- (1) Under TIFRS, income tax paid is reported as a separate item in the statement of cash flow; therefore, net income is replaced by income before income tax and deferred income tax / income tax payable are removed.
- (2) Cash dividend received of NT\$2.16 billion and interest received of NT\$1.72 billion are reported as investing activities.
- (3) The foreign exchange gain of NT\$0.96 billion related to short-term loan is reclassified to financing activities.
- (4) Interest payment of NT\$0.74 billion is reclassified to financing activities.