## VALENS RESEARCH

# UAFRS Performance and Valuation Prime Adjusting From As-Reported to Economic Reality

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# Fixing the financial reporting disaster of GAAP and IFRS: Uniform Adjusted Financial Reporting Standards

- Earnings
- Book Assets
- ROE, RONA, ROA
- CAPX
- Price
- Price-to-Book
- Price-to-earnings

# Fixing the financial reporting disaster of GAAP and IFRS: Uniform Adjusted Financial Reporting Standards

- Earnings  $\rightarrow$  E' = UAFRS earnings
- Book Assets  $\rightarrow$  A' = UAFRS assets
- ROE, RONA, ROA → ROA' (UAFRS-adjusted)
- CAPX → Asset' Growth (UAFRS-adjusted CAPX)
- Price → Enterprise value, V' (UAFRS-adjusted)
- Price-to-Book → V/A' (UAFRS-based P/B)
- Price-to-earnings → V/E' (UAFRS-based P/E)

## From inconsistent to consistent financial reporting

Automated Adjustments

Manual Adjustments

► Materiality versus Resources

#### JOLLIBEE FOODS CORPORATION AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF FINANCIAL POSETIONS December 31 ASSETS Current Assets Cash and cash equivalents (Notes 6, 30 and 31) P11,497,559,629 Short-term investments (Notes 6, 30 and 31) 922,317,012 Receivables (Notes 7, 30 and 31) 5,432,775,539 7**,9**37,404,797 Inventories (Note 8) 5,478,416,309 5,971,813,991 Derivative asset (Note 18) 9,868,242 Other current assets (Note 9) 3,828,229,080 2,493,699,399 Total Current Assets 27,169,165,811 24,021,391,454 Noncurrent Assets Available-for-sale financial assets (Notes 10, 30 and 31) 21,462,462 21,479,461 Interests in and advances to joint ventures, co-venturers and an associate (Note 11) 8,449,310,264 3,388,902,606 Property, plant and equipment (Note 12) 14,547,151,906 13,363,567,166 Investment properties (Note 13) 998,113,493 1,025,645,035 Goodwill and other intangible assets (Note 14) 9,412,134,199 9,385,110,293 Operating lease receivables (Notes 29, 30 and 31) 12,516,788 21,089,606 Derivative asset (Note 11) 75,031,052 Deferred tax assets - net (Note 24) 1,408,488,536 751,965,318 Other noncurrent assets (Notes 15, 30 and 31) 2,669,673,900 2,139,528,661 Total Noncurrent Assets 37,593,882,600 30,097,288,146 ₱64,763,048,411 ₱54,118,679,600

LIABILITIES AND EQUITY		
Current Liabilities		
Trade payables and other current liabilities (Notes 16, 30 and 31)	₱19 <b>,527,045,86</b> 4	₱16,295,665,17 <b>4</b>
Income tax payable	235,980,000	181,829,126
Short-term debt (Notes 18, 30 and 31)	282,360,000	1,865,000,000
Current portion of:		
Long-term debt (Notes 18, 30 and 31)	927,916,273	715,520,000
Liability for acquisition of businesses (Notes 11, 30 and 31)	94,852,231	32,906,018
Total Current Liabilities	21,068,154,368	19,090,920,318
Noncurrent Liabilities		
Provisions (Note 17)	30,500,639	30,500,639
Noncurrent portion of:		
Long-term debt (Notes 18, 30 and 31)	8,790,712,333	4,428,012,970
Liability for acquisition of businesses (Notes 11, 30 and 31)	-	101,064,311
Pension liability (Note 25)	1,466,530,394	832,390,250
Operating lease payables (Notes 29, 30 and 31)	1,615,639,498	1,544,846,191
Derivative liability (Notes 18, 30 and 31)	34,921,275	1,545,472
Deferred tax liabilities - net (Note 24)	-	11,377,928
Total Noncurrent Liabilities	11,938,304,139	6,949,737,761
Total Liabilities	33,006,458,507	26,040,658,079

Equity Attributable to Equity Holders	of the Parent Company (Note 30)		
Capital stock (Note 19)		1,086,149,410	1,081,040,314
Subscriptions receivable (Note 19)		(17,177,884)	(17,177,884)
Additional paid-in capital (Note 19)		5,055,293,439	4,452,162,323
Cumulative translation adjustments of for	eign subsidiaries and share in cumulative		
translation adjustment of an interest	15	107,225,186	(25,789,376)
Remeasurement loss on net defined benef	it plan - net of tax	(536,579,937)	(219,900,060)
Comprehensive loss on derivative liability		(35,449,264)	(2,395,155)
Excess of cost over the carrying value of		1	
acquired (Note 19)	Date Ann and	(542,764,486)	(542,764,486)
Retained earnings (Notes 19 and 30):	APR 0 8 2016		
Appropriated for future expansion		10,200,000,000	10,200,000,000
Unappropriated	The state of the s	15,487,039,084	12,445,662,470
	A second	30,803,735,548	27,370,838,146
Less cost of common stock held in treasur	y (Note 19)	180,511,491	180,511,491
	The same in the case of the ca	30,623,224,057	27,190,326,655
Non-controlling Interests		1,133,365,847	887,694,866
Total Equity		31,756,589,904	28,078,021,521
		₽64,763,048,411	₽54,118,679,600

See accompanying Nates to Cansolidated Financial Statements.

REVENUES		- 150.10 Co 100 100.	
Net sales	P95,810,688,792	₽86,209,777,710	₱76,313,489,585
Royalty, franchise fees and others (Note 20)	4,969,028,967	4,461,460,490	3,969,279,614
	100,779,717,759	90,671,238,200	80,282,769,199
COST OF SALES (Note 21)	82,891,701,255	73,727,792,141	65,284,763,064
GROSS PROFIT	17,888,016,504	16,943,446,059	14,998,006,135
EXPENSES			
General and administrative expenses (Note 22)	10,288,042,741	8,953,711,295	7,427,887,196
Advertising and promotions	2,244,943,336	1,852,967,633	1,639,022,544
	12,532,986,077	10,806,678,928	9,066,909,740
INTEREST INCOME (EXPENSE) (Note 23)			
Interest income	257,783,585	242,045,341	245,573,808
Interest expense	(225,544,319)	(152,471,253)	(152,920,028)
	32,239,266	89,574,088	92,653,780
EQUITY IN NET LOSSES OF JOINT VENTURES			
AND AN ASSOCIATE (Note 11)	(189,085,967)	(126,174,100)	(115,560,608)
OTHER INCOME (Note 23)	1,236,757,580	659,303,926	337,325,031
INCOME BEFORE INCOME TAX	6,434,941,306	6,759,471,045	6,245,514,598
PROVISION FOR INCOME TAX (Note 24)	•		
Current	1,926,077,984	1,694,768,550	1,521,966,682
Deferred	(537,470,070)	(424,239,011)	741,389
	1,388,607,914	1,270,529,539	1,522,708,071
NET INCOME	5,046,333,392	5,488,941,506	4,722,806,527
OTHER COMPREHENSIVE INCOME (LOSS)		AC	
Other comprehensive income to be reclassified to profit			
or loss in subsequent periods:			
Cumulative translation adjustments of foreign subsidiaries and share in		(7(0(70.00)	
cumulative translation adjustment of interests in joint ventures	144,873,513	(76,062,317)	414,851,757
Comprehensive gain (loss) on derivative asset or liability (Note 18) Unrealized loss on available-for-sale financial assets	(31,463,561)	1,882,127	6,806,839 (102,626,829)
Officanized loss on available-for-sale financial assets	113,409,952	(74,180,190)	319,031,767
Other comprehensive income not to be reclassified to profit or loss in	113,407,732	(74,100,130)	319,031,707
subsequent periods:			
Remeasurement gains (losses) on pension (Note 25)	(421,504,400)	358,528,285	(350,596,093)
Income tax effect (Note 24)	104,824,523	(106,374,133)	103,199,623
	(316,679,877)	252,154,152	(247,396,470)
	(203,269,925)	177,973,962	71,635,297
TOTAL COMPREHENSIVE INCOME	₽4,843,063,467	₱5,666,915,468	₱4,794,441,824
Net Income Attributable to:			
Equity holders of the Parent Company (Note 28)	<b>P4</b> ,928,236,228	₱5,361,978,768	P4,671,559,394
Non-controlling interests	118,097,164	126,962,738	51,247,133
	₽5,046,333,392	₱5,488,941,506	₽4,722,806,527

## JOLLIBEE FOODS CORPORATION AND SUBSIDIARIES

### CONSOLIDATED STATEMENTS OF CASH FLOWS

	Years Ended December 31					
	2015	2014	2013			
CASH FLOWS FROM OPERATING ACTIVITIES						
Income before income tax	₽6,434,941,306	₱6,759,471,045	₱6,245,514,598			
Adjustments for:	, , ,	,,,	,,,,			
Depreciation and amortization (Notes 12, 13, 14, 21 and 22)	3,425,676,922	3,186,379,730	3,072,455,820			
Interest income (Note 23)	(257,783,585)	(242,045,341)	(245,573,808)			
Interest expense (Note 23)	225,544,319	152,471,253	152,920,028			
Movement in pension liability (Notes 21, 22 and 25)	212,635,742	187,283,727	86,990,769			
Equity in net losses of joint ventures and an associate (Note 11)	189,085,967	126,174,100	115,560,608			
Stock options expense (Notes 22 and 26)	173,211,693	166,490,888	150,418,741			
Loss on disposals and retirements of property, plant and equipment	,,	,	,,			
and investment properties (Notes 12, 13 and 22)	136,746,521	156,615,427	446,158,983			
Impairment losses on:			., ,			
Receivables (Notes 7 and 22)	325,907,626	36,301,470	34,007,984			
Inventories (Notes 8 and 22)	11,048,562	11,066,386	9,367,464			
Property, plant and equipment, investment properties and security	,		.,,			
and other deposits (Notes 12, 13 and 22)	_	2,000,000	_			
Reversals of impairment losses on:		, ,				
Receivables (Notes 7 and 22)	(4,605,656)	(868,308)	_			
Inventories (Notes 8 and 22)	(12,047,290)	(8,489,305)	_			
Property, plant and equipment, investment properties and security	, , , , , ,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
and other deposits (Notes 12, 13 and 22)		(62,647,298)	(13,300,000)			
Deferred rent amortization - net	79,366,125	(24,047,625)	110,196,300			
Net unrealized foreign exchange loss (gain)	(31,602,975)	6,320,479	(34,235,766)			
Write off of AFS financial asset		-	4,343,148			
Income before working capital changes	10,908,125,277	10,452,476,628	10,134,824,869			
Decreases (increases) in:						
Receivables	2,269,039,596	(4,329,136,233)	(517,755,507)			
Inventories	494,396,411	(2,413,958,938)	(940,056,121)			
Other current assets	(1,510,842,807)	(1,288,316,588)	(447,087,313)			
Increases in trade payables and other current liabilities	2,976,473,345	1,794,597,130	2,041,413,463			
Net cash generated from operations	15,137,191,822	4,215,661,999	10,271,339,391			
Interest received	219,845,694	212,872,623	224,956,889			
Income taxes paid	(1,871,927,109)	(1,667,683,961)	(1,446,921,723)			
Net cash provided by operating activities	13,485,110,407	2,760,850,661	9,049,374,557			

CASH FLOWS FROM INVESTING ACTIVITIES			
Acquisitions of:		(=1 000 ====	
Interest in a joint ventures (Note 11)	(5,057,543,417)	(74,998,875)	(103,608,000)
Property, plant and equipment (Note 12)	(4,596,786,547)	(5,045,474,419)	(3,907,875,891)
Short-term investments	(922,317,012)	-	-
Intangible assets (Note 14)	(99,980,421)	(318,736,601)	(267,270,178)
Market entry fee (Notes 11 and 15)	(93,870,000)	_	-
Investment property (Note 13)	-	(277,484,623)	-
Available-for-sale financial assets	_	_	(300,000)
Proceeds from disposals of property, plant and equipment and			
investment properties	46,049,000	291,195,603	50,662,989
Decrease (increase) in other noncurrent assets	(89,368,653)	(270,947,498)	109,573,188
Net cash used in investing activities	(10,813,817,050)	(5,696,446,413)	(4,118,817,892)

	Years	Ended December	31
	2015	2014	2013
CASH FLOWS FROM FINANCING ACTIVITIES			
Payments of:			
Short-term debt (Note 18)	(9,191,000,000)	_	_
Cash dividends (Note 19)	(1,899,665,609)	(1,560,657,861)	(3,232,637,120)
Long-term debt (Note 18)	(734,360,000)	(1,096,987,500)	(3,149,351,766)
Liability for acquisition of businesses (Note 11)	(87,775,326)	(109,920,000)	(149,814,984)
Proceeds from:			
Short-term debt (Note 18)	P7,594,200,000	₱1,865,000,000	₽_
Long-term debt (Note 18)	5,176,600,000	1,053,535,000	2,582,580,000
Issuances of and subscriptions to capital stock	435,028,519	657,386,344	210,907,795
Interest paid	(188,647,612)	(123,473,583)	(141,263,440)
Contributions from non-controlling interests	177,627,620	_	29,416,042
Dividends paid to non-controlling interests	(63,503,302)	(40,228,716)	(30,000,000)
Net cash provided by (used in) financing activities	1,218,504,290	644,653,684	(3,880,163,473)
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	3,889,797,647	(2,290,942,068)	1,050,393,192
EFFECT OF EXCHANGE RATE CHANGES ON CASH			
AND CASH EQUIVALENTS	(10,711,285)	5,538,267	4,892,292
CASH AND CASH EQUIVALENTS AT BEGINNING OF YEAR	7,618,473,267	9,903,877,068	8,848,591,584
CASH AND CASH EQUIVALENTS AT END OF YEAR (Note 6)	P11,497,559,629	₽7,618,473,267	₽9,903,877,068

See accompanying Notes to Consolidated Financial Statements.

# JOLLIBEE FOODS CORPORATION AND SUBSIDIARIES NOTES TO AUDITED CONSOLIDATED FINANCIAL STATEMENTS

#### 1. Corporate Information

Jollibee Foods Corporation (the Parent Company) was incorporated in the Philippines. The Parent Company and its subsidiaries (collectively referred to as "the Jollibee Group") are involved primarily in the development, operation and franchising of quick service restaurants (QSR) under the trade names "Jollibee", "Chowking", "Greenwich", "Red Ribbon", "Yong He King", "Hong Zhuang Yuan", "Mang Inasal", "Burger King", "San Pin Wang", "Highlands Coffee", "Pho24", "12 Hotpot", "Dunkin' Donuts" and "Smashburger". The other activities of the Jollibee Group include manufacturing and property leasing in support of the quick service restaurant systems and other business activities (see Notes 2 and 5).

The common shares of the Parent Company were listed and have been traded in the Philippine Stock Exchange (PSE) beginning July 14, 1993.

The registered office address of the Parent Company is 10/F Jollibee Plaza Building, 10 F. Ortigas Jr. Ave., Ortigas Center, Pasig City.

The consolidated financial statements as at December 31, 2015 and 2014 and for each of the three years in the period ended December 31, 2015, were reviewed and recommended for approval by the Audit Committee as well as approved and authorized for issuance by the Board of Directors (BOD) on April 6, 2016.

## 2. Basis of Preparation, Statement of Compliance, Changes in Accounting Policies and Basis of Consolidation

#### Basis of Preparation

The consolidated financial statements of the Jollibee Group have been prepared on a historical cost basis, except for the derivative assets and liabilities and certain available-for-sale (AFS) financial assets, which are measured at fair value. The consolidated financial statements are presented in Philippine peso, which is the Parent Company's functional and presentation currency.

### **Judgments**

In the process of applying the Jollibee Group's accounting policies, management has made the following judgments, apart from those involving estimations, which have the most significant effect on the amounts recognized in the consolidated financial statements.

Functional Currency. Management has determined that the functional and presentation currency of the Parent Company and its Philippine-based subsidiaries is the Philippine peso, being the currency of the primary environment in which the Parent Company and its major subsidiaries operate. The functional currencies of its foreign operations are determined as the currency in the country where the subsidiary operates. For consolidation purposes, the foreign subsidiaries' balances are translated to Philippine peso which is the Parent Company's functional and presentation currency.

Operating Lease Commitments - Jollibee Group as Lessee. The Jollibee Group has entered into commercial property leases for its QSRs and offices as a lessee. Management has determined, based on an evaluation of the terms and condition of the arrangements that all the significant risks and benefits of ownership of these properties, which the Jollibee Group leases under various lease arrangements, remain with the lessors. Accordingly, the leases are accounted for as operating leases.

Rent expense amounted to ₱7,841.9 million, ₱7,702.7 million and ₱6,287.3 million in 2015, 2014 and 2013, respectively (see Notes 21, 22 and 29).



## 12. Property, Plant and Equipment

The rollforward analysis of property, plant and equipment are as follows:

				2015				
	Land and		-					
	Land And Land	Candominium Units and		and Food Processing	Furniture and	Transportation	Canstruction	f.
····	Improvements	Improvements	Improvements	Equipment	Fixtures	Equipment	in Progress	
				(In Thouse	inds)			
Cost								
Balance at beginning of year	₱666,643	₱2,513,950	P13,266,463	P11,986,533	P988,901	₱511,145	¥1,275,237	P31,200,872
Additions	-	16,322	740,028	1,030,269	126,336	43,782	2,640,049	4,596,786
Transfers	-	-	4,704	(4,004)	84	-	(784)	_
Retirements and disposals	-	_	(467,053)	(407,990)	(55,888)	(19,738)	(6,677)	(957,346)
Reclassifications (see Note 13)	_	340,641	1,224,413	1,089,394	61,109	6,792	(2,644,460)	77,889
Translation adjustments	3,092	3,048	144,227	65,755	10,495	780	4,533	231,930
Balance at end of year	669,735	2,873,961	14,912,782	13,759,957	1,123,037	542,761	1,267,898	35,150,131
Accumulated Depreciation and Amortization								
Balance at beginning of year	7,420	1,001,352	7,773,154	8,103,470	659,396	298,513		17,835,305
Depreciation and amortization (see Notes 21 and 22)	108	98,857	1,610,486	1,432,084	139,774	64,411	_	3,345,648
Transfers	-	_	2,274	(2,238)	(36)			-,0 .0,0
Retirements and disposals	-	-	(325,757)		(54,560)			(774,550)
Reclassifications (see Note 13)	_	57,437	(1,461)		(116)		_	57,437
Translation adjustments	_	314	79,497	50,640	6,138	558	-	137,147
Balance at end of year	7,528	1,157,960	9,138,113	9,206,534	750,596	340,248		20,600,979
Accumulated Impairment Losses						<del> </del>		
Balance at beginning and end of year	-			2,000			_	2,080
Net Book Value	P662,207	₽1,716,001	₽5,774,669	₽4,551,423	P372,441	₹202,513	P1,267,898	P14,547,152

## 14. Goodwill and Other Intangible Assets

This account consists of:

	2015	2014
Goodwill	₽6,822,526,341	₽6,822,526,341
Trademark	2,004,255,942	2,004,255,942
Computer software, net of accumulated amortization	559,241,901	536,291,694
Other intangible assets, net of accumulated		
amortization	26,110,015	22,036,316
	₽9,412,134,199	₱9,385,110,293

- Earnings or CFFO  $\rightarrow$  E' = "Enterprise Earnings"
- Book Assets  $\rightarrow$  A' = "Assets of the Enterprise"
- ROE, RONA, ROA → ROA'
- CAPX → Enterprise Asset Growth
- Price → Enterprise value, V'
- Price-to-Book → V/A'
- Price-to-earnings → V/E'

- Earnings or CFFO → E' = "Enterprise Earnings"
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- Price → Enterprise value, V'
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- Price-to-earnings → V/E'

#### **VALENS RESEARCH**

Worksheet

PSE:JFC Jollibee Foods Corp. Consumer Discretionary Hotels, Restaurants and Leisure

#### **CALCULATIONS FOR ROA' (ADJUSTED RETURN ON ASSETS)**

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
Net Assets'	21,392.4	23,698.1	28,590.0	31,775.7	37,026.0	48,240.5	51,609.6	54,921.1	68,070.8	71,484.2
Earnings'	2,071.1	2,357.6	2,218.1	2,684.8	2,785.8	3,129.9	3,869.5	5,199.2	5,277.6	4,788.4
Earnings' Margin	6.1%	6.1%	5.1%	5.6%	5.2%	5.0%	5.4%	6.5%	5.8%	4.8%
Net Asset' Turns	1.59	1.63	1.54	1.51	1.44	1.30	1.38	1.46	1.33	1.41
Earnings'	2,071.1	2,357.6	2,218.1	2,684.8	2,785.8	3,129.9	3,869.5	5,199.2	5,277.6	4,788.4
Net Assets'	21,392.4	23,698.1	28,590.0	31,775.7	37,026.0	48,240.5	51,609.6	54,921.1	68,070.8	71,484.2
ROA'	9.7%	9.9%	7.8%	8.4%	7.5%	6.5%	7.5%	9.5%	7.8%	6.7%
Growth rate - inflation-distorted	11.8%	10.8%	20.8%	14.0%	16.0%	26.9%	8.5%	6.4%	19.3%	7.3%
GDP Deflator - approximate	4.9%	3.1%	7.5%	2.8%	4.2%	4.0%	1.9%	2.0%	3.3%	2.1%
Real Growth Rate in Gross Assets'	6.9%	7.7%	13.2%	11.2%	11.7%	22.9%	6.6%	4.4%	16.0%	5.2%
Goodwill										
Goodwill	1,601.6	1,601.6	3,186.4	4,205.1	5,986.4	6,530.4	6,822.5	6,822.5	6,822.5	6,822.5
Earnings'	2,071.1	2,357.6	2,218.1	2,684.8	2,785.8	3,129.9	3,869.5	5,199.2	5,277.6	4,788.4
Net Assets'	22,994.0	25,299.7	31,776.3	35,980.9	43,012.4	54,770.9	58,432.2	61,743.6	74,893.3	78,306.7
ROA' wg (with goodwill)	9.0%	9.3%	7.0%	7.5%	6.5%	5.7%	6.6%	8.4%	7.0%	6.1%

#### CALCULATIONS FOR V/E' AND V/A' (ADJUSTED P/E AND ADJUSTED P/B)

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
Enterprise Value Prime	50,809.2	61,346.5	55,426.7	70,965.2	114,032.7	124,036.9	137,110.3	217,573.6	273,366.1	276,955.0
Earnings"	1,970.1	2,288.9	2,083.9	2,406.7	2,547.7	2,765.0	3,614.8	5,009.0	5,096.5	4,514.2
Book Equity'	12,514.2	15,130.1	15,557.6	17,655.7	15,003.5	17,934.2	20,939.9	19,510.1	24,064.6	28,785.5
Market Capitalization	41,931.1	52,778.6	42,394.3	56,845.1	92,010.2	93,730.7	106,440.5	182,162.5	229,359.9	234,256.3
V/A' - Enterpise Value/Net Assets'	2.4	2.6	1.9	2.2	3.1	2.6	2.7	4.0	4.0	3.9
P/B' - Market Cap/Book Equity'	3.4	3.5	2.7	3.2	6.1	5.2	5.1	9.3	9.5	8.1
Traditional Tangible P/B Equity	3.8	4.1	3.0	7.4	10.6	8.3	11.1	24.1	20.1	14.6
Forward V/E' - Enterprise Value -										
Earnings'	21.6	27.7	20.6	25.5	36.4	32.1	26.4	41.2	57.1	42.8
Forward P/E' - Market Cap/Earnings"	21.3	23.1	20.3	23.6	36.1	33.9	29.4	36.4	45.0	51.9
Traditional NTM P/E	16.9	18.0	16.6	19.2	26.4	26.2	26.5	35.3	37.5	36.6
Historic V/E' - Enterprise Value -										
Earnings'	24.5	26.0	25.0	26.4	40.9	39.6	35.4	41.8	51.8	57.8
Historic P/E' - Market Cap/Earnings"	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Traditional TTM P/E	21.0	21.2	19.4	22.5	30.9	30.4	29.4	42.2	44.9	42.8
Dividend Yield	1.4%	1.5%	2.0%	1.5%	1.1%	1.2%	1.2%	2.0%	0.8%	0.8%

#### **CALCULATIONS FOR E' (ADJUSTED EARNINGS)**

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
Earnings (Net Income)	2,156.6	2,386.7	2,319.1	2,664.6	3,197.8	3,262.6	3,727.1	4,671.6	5,362.0	4,928.2
Remove: Special Items adjusted after-tax effect Adjust: Recurring Special Items to include	50.9	(24.6)	(2.7)	167.7	365.1	348.5	255.9	100.6	330.9	712.5
in earnings	0.0	0.0	0.0	12.0	7.0	33.9	38.2	7.3	0.0	0.0
Add Back: Depreciation Expense Add Back: Op Lease Expense Add Back: R&D Expense	1,573.8 2,137.2 26.6	1,579.6 2,391.0 32.9	1,728.9 2,902.8 49.9	2,085.9 3,542.0 63.0	1,978.0 4,092.8 61.8	2,401.6 5,131.8 70.9	2,705.6 5,895.9 56.8	3,072.5 6,287.3 79.6	3,180.6 7,072.7 77.6	3,418.2 7,841.9 73.0
Add Back: Amortization Expense Add Back: Interest Expense Add Back: Minority Interest Expense	0.0 80.4 3.5	0.0 55.5 1.6	0.0 105.1 2.7	0.0 218.9 2.3	0.0 193.2 14.7	0.0 291.3 22.1	0.0 206.0 (15.1)	3.2 152.9 51.2	5.8 152.5 127.0	7.5 225.5 118.1
Add Back: Tax Expense Adjust: NOL Tax Shield Adjust: Interest Expense Tax Shield Subtract: Adjusted Tax Expense	742.8 0.0 20.6 763.4	746.7 51.7 13.2 811.5	889.2 0.0 29.1 918.3	988.3 0.0 59.2 1,047.5	973.4 44.8 44.9 1,063.2	1,110.2 0.0 73.6 1,183.8	1,149.7 0.0 48.7 1,198.4	1,522.7 0.0 37.3 1,560.0	1,270.5 322.1 28.7 1,621.3	1,388.6 134.1 48.7 1,571.4
Add Back: Pension and OPEB Costs	154.4	236.1	228.5	247.6	251.0	121.2	382.6	363.1	600.0	312.6
Subtract: Pension and OPEB Service Costs	121.6	166.9	173.9	189.1	186.4	121.2	280.2	319.7	550.4	244.8
Adjust: COGS from FIFO to LIFO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Adjust: Carrying Cost of Monetary Assets	(135.5)	(143.0)	(208.5)	(163.7)	(163.1)	(179.8)	(270.1)	(245.6)	(242.0)	(257.8)
Add: Gross earnings missing from acquisitions Subtract: Gross earnings included from	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
divestitures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtract: Equity Investment Income Add Back: Stock Option Expense (After-	(22.9)	0.0	0.0	0.0	(2.2)	0.3	(51.0)	(115.6)	(126.2)	(189.1)
Tax) Subtract: Capital Grants and Subsidies - Release to P&L	40.0 0.0	84.9 0.0	107.1 0.0	147.5 0.0	65.7 0.0	73.6	77.0 0.0	150.4 0.0	166.5 0.0	173.2 0.0
Gross Earnings'	5,867.0	6,418.1	7,035.4	8,404.2	9,059.9	10,685.8	12,270.0	14,251.5	15,396.7	15,889.5
-										

#### **CALCULATIONS FOR E' (ADJUSTED EARNINGS)**

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
Gross Earnings'	5,867.0	6,418.1	7,035.4	8,404.2	9,059.9	10,685.8	12,270.0	14,251.5	15,396.7	15,889.5
Maintenance CAPX/Economic Depreciation										
Depreciating Assets	31,916.9	35,354.9	42,762.1	50,759.1	58,414.7	71,037.1	78,987.2	84,038.4	93,964.9	104,682.9
Asset Life	8.4	8.7	8.9	8.9	9.3	9.4	9.4	9.3	9.3	9.4
Subtract: Economic Depreciation (aka Adj. MCAPX)	3,795.9	4,060.5	4,817.3	5,719.4	6,274.1	7,555.9	8,400.5	9,052.3	10,119.0	11,101.1
Earnings'	2,071.1	2,357.6	2,218.1	2,684.8	2,785.8	3,129.9	3,869.5	5,199.2	5,277.6	4,788.4
Share Count	1,002.1	1,019.4	1,029.1	1,032.5	1,039.4	1,043.9	1,060.9	1,071.5	1,082.1	1,088.3
EPS'	2.07	2.31	2.16	2.60	2.68	3.00	3.65	4.85	4.88	4.40
Traditional EPS	2.15	2.34	2.25	2.58	3.08	3.13	3.51	4.36	4.95	4.53
Earnings as a % of Earnings'	104.1%	101.2%	104.6%	99.2%	114.8%	104.2%	96.3%	89.9%	101.6%	102.9%
Adjustment for Equity Earnings'										
Earnings'	2,071.1	2,357.6	2,218.1	2,684.8	2,785.8	3,129.9	3,869.5	5,199.2	5,277.6	4,788.4
Subtract: Interest Expense	80.41	55.47	105.08	218.91	193.20	291.34	206.01	152.92	152.47	225.54
Subtract: Interest Expense Tax Shield	20.57	13.21	29.10	59.19	44.93	73.59	48.72	37.28	28.66	48.67
Earnings"	1,970.12	2,288.92	2,083.94	2,406.70	2,547.70	2,764.99	3,614.81	5,008.98	5,096.51	4,514.21
EPS"	1.97	2.25	2.02	2.33	2.45	2.65	3.41	4.67	4.71	4.15
Earnings as a % of Equity Earnings'	109.5%	104.3%	111.3%	110.7%	125.5%	118.0%	103.1%	93.3%	105.2%	109.2%

#### **CALCULATIONS FOR ADJUSTED NET WORKING CAPITAL**

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
Cash & Short-Term Investments	4,452.4	5,575.9	6,878.9	8,977.3	8,170.5	6,655.3	8,848.6	9,903.9	7,618.5	12,419.9
Excess Cash	2,756.9	3,573.9	4,684.3	6,515.9	5,385.3	3,527.6	5,223.9	5,845.2	3,021.2	7,277.2
Operating Cash & Short-Term	2,730.9	3,041.3	4,064.3	0,515.9	3,363.3	3,327.0	3,223.9	3,643.2	3,021.2	1,211.2
Investments	1,695.6	1,934.7	2,194.6	2,461.3	2,785.2	3,127.7	3,624.7	4,058.7	4,597.3	5,142.7
Accounts Receivable	1,488.4	1,818.3	1,805.1	1,754.5	1,837.7	2,388.6	2,454.6	2,853.9	7,270.3	5,055.1
Financial Subsidiary Receivable	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Accounts Receivable - Adi	1,488.4	1,818.3	1,805.1	1,754.5	1,837.7	2,388.6	2,454.6	2,853.9	7,270.3	5,055.1
Inventory	1,266.3	1,629.4	2,727.5	1,729.4	2,134.5	2,860.1	2,629.7	3,560.4	5,971.8	5,478.4
LIFO Reserve	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Inventory - Adj	1,266.3	1,629.4	2,727.5	1,729.4	2,134.5	2,860.1	2,629.7	3,560.4	5,971.8	5,478.4
Other Current Assets	450.9	1,142.8	517.1	240.2	784.4	1,354.9	662.8	953.1	1,679.4	2,466.8
Prepaid Expenses	221.3	222.3	395.8	509.9	519.0	0.0	751.4	909.5	1,191.2	1,526.0
Other Receivables	626.3	20.3	441.0	671.1	126.5	175.3	276.0	203.5	290.3	223.0
Other Current Assets - Adi	1,298.5	1,385.4	1,353.9	1,421.1	1,429.8	1,530.2	1,690.2	2,066.0	3,160.8	4,215.7
Current Assets	5,748.8	6,767.8	8,081.1	7,366.4	8,187.2	9,906.7	10,399.3	12,539.0	21,000.2	19,891.9
carrent Assets	3,740.0	0,707.0	0,001.1	7,300.4	0,107.2	3,300.7	10,555.5	12,333.0	21,000.2	15,651.5
Accounts Payable	2,813.7	2,257.3	3,508.7	3,720.4	3,601.6	10,165.6	4,717.1	6,006.6	6,575.9	9,433.8
Income Taxes Payable	8.9	83.7	82.5	135.9	167.8	154.7	79.0	154.7	181.8	236.0
Accrued Expenses, Total	1,762.3	2,294.2	2,491.7	4,508.9	4,886.9	0.0	5,986.5	7,256.6	8,543.0	8,669.6
Other Current Liabilities	1,731.5	2,721.2	2,421.3	909.9	854.4	104.8	1,265.9	1,094.4	1,209.7	1,518.6
Current Pension Liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Current Postretirement Liability	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Current Pension/Postretirement										
Liability	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Current Liabilities	3,493.8	5,015.4	4,913.0	5,418.8	5,741.3	104.8	7,252.4	8,351.0	9,752.7	10,188.1
Non Current Unearned Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Current Liabilities	6,316.3	7,356.4	8,504.3	9,275.1	9,510.6	10,425.1	12,048.4	14,512.3	16,510.4	19,857.9
N . W . L' . G . T . L	(567.5)	(500.6)	(422.2)	(4.000.7)	(4 222 4)	(540.4)	(4.540.4)	(4.072.2)	4 400 0	24.4
Net Working Capital	(567.5)	(588.6)	(423.2)	(1,908.7)	(1,323.4)	(518.4)	(1,649.1)	(1,973.3)	4,489.8	34.1

#### CALCULATIONS FOR NON-DEPRECIATING ASSETS

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
Net Working Capital	(567.5)	(588.6)	(423.2)	(1,908.7)	(1,323.4)	(518.4)	(1,649.1)	(1,973.3)	4,489.8	34.1
Land	724.7	732.1	670.9	651.0	657.2	679.3	1,329.8	1,333.8	1,642.7	1,645.6
Revaluations of Land	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Land & Improvements	724.7	732.1	670.9	651.0	657.2	679.3	1,329.8	1,333.8	1,642.7	1,645.6
Inflation Adjustment	164.0	158.6	169.0	176.4	187.9	184.8	305.3	266.7	329.0	280.8
Inflation Adjusted Land & Improvements	888.7	890.7	839.9	827.4	845.1	864.0	1,635.1	1,600.5	1,971.6	1,926.4
LT Investments @ Cost	0.0	46.2	76.8	155.2	179.1	123.8	1,262.6	1,143.7	1,092.5	5,922.5
Other Assets	1,921.0	2,183.0	2,515.9	2,401.6	2,455.6	5,272.6	4,231.3	4,870.9	5,230.4	6,713.9
Pension Assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Postretirement Assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pension Deferred Tax Assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Assets Adjusted for Pensions	1,921.0	2,183.0	2,515.9	2,401.6	2,455.6	5,272.6	4,231.3	4,870.9	5,230.4	6,713.9
Non-Depreciating Intangible Assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Non-Depreciating Assets	2,242.2	2,531.3	3,009.5	1,475.5	2,156.3	5,742.1	5,479.9	5,641.8	12,784.4	14,597.0
Total Non-Depreciating Assets (w/o LT Invest)	2,242.2	2,485.1	2,932.7	1,320.3	1,977.2	5,618.2	4,217.3	4,498.1	11,691.8	8,674.5

#### CALCULATIONS FOR DEPRECIATING ASSETS

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
GDP Deflator Adjusted Gross PP&E w/CIP	16,240.8	17,264.6	20.412.9	23,479.6	25,543.5	29,501.4	31,288.5	33,719.6	37,389.8	41,160.0
Capitalized Operating Leases	15,570.6	17,963.9	22,184.3	27,069.4	32,615.7	41,236.8	47,376.7	49,970.0	56,212.2	63,147.9
Capitalized Research & Development Intangibles Included in Depreciating	105.5	126.5	164.9	210.2	255.5	299.0	322.0	348.7	363.0	375.1
Assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Depreciating Assets	31.916.9	35.354.9	42.762.1	50.759.1	58.414.7	71.037.1	78.987.2	84.038.4	93.964.9	104.682.9

#### **CALCULATIONS FOR NET ASSETS' (ADJUSTED TOTAL ASSETS)**

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
Total Non-Depreciating Assets (w/o LT										
Invest)	2,242.2	2,485.1	2,932.7	1,320.3	1,977.2	5,618.2	4,217.3	4,498.1	11,691.8	8,674.5
Total Depreciating Assets	31,916.9	35,354.9	42,762.1	50,759.1	58,414.7	71,037.1	78,987.2	84,038.4	93,964.9	104,682.9
Total Assets'	34,159.1	37,840.0	45,694.8	52,079.4	60,391.9	76,655.4	83,204.5	88,536.5	105,656.8	113,357.4
Accumulated Depreciation'	12,766.8	14,142.0	17,104.8	20,303.6	23,365.9	28,414.9	31,594.9	33,615.4	37,586.0	41,873.2
Net Assets'	21,392,4	23,698.1	28,590.0	31.775.7	37.026.0	48.240.5	51,609.6	54.921.1	68.070.8	71.484.2

#### CALCULATIONS FOR EXCESS CASH

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
Excess Cash (2* Median R&D Expense)	43.8	53.2	65.7	99.8	123.7	126.0	123.7	141.8	155.2	155.2
Current Unearned Revenue	0.0	0.0	0.0	67.2	123.1	0.0	75.9	47.6	67.6	108.8
LT Unearned Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unearned COGS	0.0	0.0	0.0	63.4	116.6	0.0	71.7	44.5	63.7	103.7
Revenue	33,911.2	38,693.7	43,891.6	47,957.7	53,371.7	62,554.9	71,059.0	80,282.8	90,671.2	100,779.7
5% of Revenue	1,695.6	1,934.7	2,194.6	2,397.9	2,668.6	3,127.7	3,553.0	4,014.1	4,533.6	5,039.0
Total cash per the financials	4,452.4	5,575.9	6,878.9	8,977.3	8,170.5	6,655.3	8,848.6	9,903.9	7,618.5	12,419.9
Excess Cash (formula e.g. 4x R&D, etc.)	2,756.9	3,641.3	4,684.3	6,515.9	5,385.3	3,527.6	5,223.9	5,845.2	3,021.2	7,277.2
Cash restated for the GIC calculation (Curr										
assets)	1,695.6	1,934.7	2,194.6	2,461.3	2,785.2	3,127.7	3,624.7	4,058.7	4,597.3	5,142.7
Other non-operating assets manually										
removed above	0.0	46.2	76.8	155.2	179.1	123.8	1,262.6	1,143.7	1,092.5	5,922.5
Value of total non-operating cash/assets	2,756.9	3,687.4	4,761.0	6,671.2	5,564.4	3,651.4	6,486.5	6,988.9	4,113.8	13,199.8

#### **CALCULATIONS FOR ASSET LIFE**

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
PP&E Growth Rate Historic Organic Growth Rate of Combined Entity Implied CAPX									0.1	11.0%
Gross PP&E (excluding Land, CIP)	13,012.5	14,063.7	16,157.9	18,313.6	19,703.1	22,663.1	25,208.1	27,644.0	30,088.5	34,077.2
Depreciation Expense	1,573.8	1,579.6	1,728.9	2,085.9	1,978.0	2,401.6	2,705.6	3,072.5	3,180.6	3,418.2
Estimated Life of PP&E	8.3	8.9	9.3	8.8	10.0	9.4	9.3	9.0	9.5	10.0
Implied Maintenance Capex (Deflated Depreciation Expense)	1,929.6	1,916.9	2,155.1	2,624.4	2,524.6	3,055.0	3,325.6	3,685.3	3,820.3	3,990.5
Estimated Life of PP&E (3 year median)	8.4	8.7	8.9	8.9	9.3	9.4	9.4	9.3	9.3	9.5
Estimated Life of Leased Assets	8.4	8.7	8.9	8.9	9.3	9.4	9.4	9.3	9.3	9.5
Estimated Life of R&D	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Economic PP&E depreciation (PP&E/Life) Economic Cap. Leases depr. (Cap. Rent/life of leases)	1,927.2 1,847.7	1,977.6 2,057.7	2,292.7 2,491.6	2,637.1 3,040.3	2,733.1 3,489.8	3,126.2 4,369.8	3,315.6 5,020.5	3,619.2 5,363.4	4,013.1 6,033.3	4,350.9 6,675.2
Economic R&D Depr (Cap. R&D/Life)	21.1	25.3	33.0	42.0	51.1	59.8	64.4	69.7	72.6	75.0
Sum of Economic depreciation	3,795.9	4,060.5	4,817.3	5,719.4	6,274.1	7,555.9	8,400.5	9,052.3	10,119.0	11,101.1
Harmonic mean of estimated lives	8.4	8.7	8.9	8.9	9.3	9.4	9.4	9.3	9.3	9.4
Net PP&E/Gross PP&E Ratio	46.5	47.0	45.9	40.9	40.1	40.7	40.5	39.5	39.9	38.7
Implied Average Age of Assets	4.5	4.6	4.8	5.3	5.6	5.6	5.6	5.6	5.6	5.8
Two-year moving average of implied age	4.5	4.6	4.7	5.0	5.4	5.6	5.6	5.6	5.6	5.7
NP/GP Implied End of Year Accumulated Depreciation Balance Annual depreciation expense Less: retired accumulated depreciation Calculated end of year accumulated	6,964.1	7,459.0	8,738.2	10,818.0	11,795.2	13,434.8	14,998.8	16,734.4	18,072.9	20,886.2
depreciation	6,964.1	7,459.0	8,738.2	10,818.0	11,795.2	13,434.8	14,998.8	16,734.4	18,072.9	20,886.2

#### **CALCULATIONS FOR DEPR ASSETS/LAND**

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
Calculation: GDP Deflator Adjusted Gross										
PP&E										
Gross PP&E	14,020.9	14,950.0	17,013.1	19,168.6	20,565.7	24,015.2	26,830.6	29,525.8	33,006.4	36,990.7
Less: Land	724.7	732.1	670.9	651.0	657.2	679.3	1,329.8	1,333.8	1,642.7	1,645.6
Less: Construction in Progress	283.7	154.2	184.3	203.9	205.5	672.8	292.8	548.0	1,275.2	1,267.9
Plus: Cumulative PP&E recaptured	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gross PP&E Adjusted:	13,012.5	14,063.7	16,157.9	18,313.6	19,703.1	22,663.1	25,208.1	27,644.0	30,088.5	34,077.2
Net PP&E	7,056.8	7,491.0	8,274.9	8,350.6	8,770.5	10,580.4	11,831.9	12,791.4	14,933.5	16,104.5
Less: Land	724.7	732.1	670.9	651.0	657.2	679.3	1,329.8	1,333.8	1,642.7	1,645.6
Less: Construction in Progress	283.7	154.2	184.3	203.9	205.5	672.8	292.8	548.0	1,275.2	1,267.9
Plus: Cumulative PP&E recaptured	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net PP&E Adjusted:	6,048.3	6,604.7	7,419.7	7,495.6	7,907.9	9,228.3	10,209.3	10,909.6	12,015.6	13,191.0
Asset Life (three-yr median of depr.										
Implied)	8.4	8.7	8.9	8.9	9.3	9.4	9.4	9.3	9.3	9.5
NP/GP Ratio	46.5	47.0	45.9	40.9	40.1	40.7	40.5	39.5	39.9	38.7
Implied Average Age of Assets	4.5	4.6	4.8	5.3	5.6	5.6	5.6	5.6	5.6	5.8
Two-year moving average of implied age	4.5	4.6	4.7	5.0	5.4	5.6	5.6	5.6	5.6	5.7
GDP Deflator	4.95%	3.09%	7.55%	2.77%	4.22%	4.02%	1.90%	1.98%	3.56%	3.57%
Average GDP Deflator given life of assets	4.63%	4.33%	4.78%	4.66%	4.60%	4.40%	3.75%	3.28%	3.32%	2.75%
GDP Deflator Adjustment	2,944.6	3,046.6	4,070.7	4,962.0	5,635.0	6,165.4	5,787.6	5,527.6	6,026.0	5,814.9
GDP Deflator Adj'd PP&E w/o CIP	15,957.1	17,110.3	20,228.6	23,275.7	25,338.1	28,828.6	30,995.7	33,171.6	36,114.5	39,892.1
Add back Construction In Progress	283.7	154.2	184.3	203.9	205.5	672.8	292.8	548.0	1,275.2	1,267.9
GDP Deflator Adjusted Gross PP&E	16,240.8	17,264.6	20,412.9	23,479.6	25,543.5	29,501.4	31,288.5	33,719.6	37,389.8	41,160.0
Growth		6.3%	18.2%	15.0%	8.8%	15.5%	6.1%	7.8%	10.9%	10.1%
Land GDP Deflator Factor for PP&E (assumed	724.7	732.1	670.9	651.0	657.2	679.3	1,329.8	1,333.8	1,642.7	1,645.6
for land)	1.2	1.2	1.3	1.3	1.3	1.3	1.2	1.2	1.2	1.2
GDP Deflator Adj'd Land	888.7	890.7	839.9	827.4	845.1	864.0	1,635.1	1,600.5	1,971.6	1,926.4

#### **CALCULATIONS FOR CAPITALIZED OPERATING LEASES**

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
Op Lease expense Estimated life of assets being leased (NOT the life of the lease but of the asset	2,137.2	2,391.0	2,902.8	3,542.0	4,092.8	5,131.8	5,895.9	6,287.3	7,072.7	7,841.9
leased)	8.4	8.7	8.9	8.9	9.3	9.4	9.4	9.3	9.3	9.5
Estim. REAL secured debt rate (e.g. Arated bond rate after before inflation)	3.2%	3.2%	3.2%	3.2%	3.2%	3.2%	3.2%	3.2%	3.2%	3.2%
Captialized Operating Leases (estimate if current gross value of leased assets had they been purchased)	15,570.6	17,963.9	22,184.3	27,069.4	32,615.7	41,236.8	47,376.7	49,970.0	56,212.2	63,147.9
Debt value of capitalized operating leases Op Lease expense taken out of ROa and free cash flows Economic depreciation recaptured through life of capitalized operating	2,137.2	2,391.0	2,902.8	3,542.0	4,092.8	5,131.8	5,895.9	6,287.3	7,072.7	7,841.9
leases	1,847.7	2,057.7	2,491.6	3,040.3	3,489.8	4,369.8	5,020.5	5,363.4	6,033.3	6,675.2
Annual claim lessors have on the EV of the firm	289.5	333.3	411.2	501.7	603.0	762.0	875.4	923.9	1,039.4	1,166.7
Cap. Lease Debt: Present value of all future claims	9,048.3	10,416.5	12,849.2	15,678.6	18,842.6	23,811.8	27,357.2	28,872.9	32,479.7	36,459.8
Percent of Capitalized Operating Leases	58.1%	58.0%	57.9%	57.9%	57.8%	57.7%	57.7%	57.8%	57.8%	57.7%

#### CALCULATIONS FOR CAPITALIZED RESEARCH AND DEVELOPMENT

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
R&D expense	26.6	32.9	49.9	63.0	61.8	70.9	56.8	79.6	77.6	73.0
Estimated life of R&D	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Multiple-based capitalization of R&D	133.0	164.3	249.5	314.9	309.2	354.6	283.8	398.0	388.0	365.0
MANUAL FORMULA changes after X yrs. GDP Deflator adjustment factor	94.9 1.1	115.9 1.1	149.9 1.1	194.3 1.1	234.2 1.1	278.5 1.1	302.4 1.1	332.1 1.1	346.7 1.0	357.9 1.0
GDP Deflator Adjusted Capitalized R&D	105.5	126.5	164.9	210.2	255.5	299.0	322.0	348.7	363.0	375.1

#### **CALCULATIONS FOR EV' (ADJUSTED ENTERPRISE VALUE)**

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
Book Value of Debt	228.1	300.9	2,929.4	2,796.7	4,234.7	5,620.0	5,450.2	5,173.8	7,010.1	10,035.9
+ Operating Lease Debt	9,048.3	10,416.5	12,849.2	15,678.6	18,842.6	23,811.8	27,357.2	28,872.9	32,479.7	36,459.8
+ Other Long Term Liabilities	1,262.2	1,069.0	1,079.4	1,040.7	1,338.7	1,552.7	1,641.9	1,728.6	1,676.4	1,646.1
+ Preferred Stock	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
+ Pension Obligations	778.2	463.6	453.8	240.7	163.7	0.0	521.6	932.8	832.4	1,466.5
+ Stock Option Claims	296.7	0.0	478.3	1,031.3	2,445.3	2,269.4	1,452.2	4,879.8	5,233.7	5,156.8
Total Debt'	11,613.5	12,250.0	17,790.1	20,788.0	27,025.0	33,254.0	36,423.1	41,587.9	47,232.3	54,765.1
Add: Minority Interest	21.5	5.4	3.3	3.2	561.9	703.7	733.1	812.1	887.7	1,133.4
Add: Market Cap	41,931.1	52,778.6	42,394.3	56,845.1	92,010.2	93,730.7	106,440.5	182,162.5	229,359.9	234,256.3
Subtract: Non-Operating EV (excess cash)	2,756.9	3,687.4	4,761.0	6,671.2	5,564.4	3,651.4	6,486.5	6,988.9	4,113.8	13,199.8
Enterprise Value Prime	50.809.2	61.346.5	55.426.7	70.965.2	114 032.7	124.036.9	137.110.3	217.573.6	273.366.1	276 955.0

#### **VALENS RESEARCH**

Worksheet

PSE:JFC Jollibee Foods Corp. Consumer Discretionary Hotels, Restaurants and Leisure

- Earnings or CFFO → E' = "Enterprise Earnings"
- Book Assets → A' = "Assets of the Enterprise"
- ROE, RONA, ROA → ROA'
- CAPX → Enterprise Asset Growth
- Price → Enterprise value, V'
- Price-to-Book → V/A'
- Price-to-earnings → V/E'

#### **CALCULATIONS FOR ROA' (ADJUSTED RETURN ON ASSETS)**

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
Net Assets'	21,392.4	23,698.1	28,590.0	31,775.7	37,026.0	48,240.5	51,609.6	54,921.1	68,070.8	71,484.2
Earnings'	2,071.1	2,357.6	2,218.1	2,684.8	2,785.8	3,129.9	3,869.5	5,199.2	5,277.6	4,788.4
Earnings' Margin	6.1%	6.1%	5.1%	5.6%	5.2%	5.0%	5.4%	6.5%	5.8%	4.8%
Net Asset' Turns	1.59	1.63	1.54	1.51	1.44	1.30	1.38	1.46	1.33	1.41
Earnings'	2,071.1	2,357.6	2,218.1	2,684.8	2,785.8	3,129.9	3,869.5	5,199.2	5,277.6	4,788.4
Net Assets'	21,392.4	23,698.1	28,590.0	31,775.7	37,026.0	48,240.5	51,609.6	54,921.1	68,070.8	71,484.2
ROA'	9.7%	9.9%	7.8%	8.4%	7.5%	6.5%	7.5%	9.5%	7.8%	6.7%
Growth rate - inflation-distorted	11.8%	10.8%	20.8%	14.0%	16.0%	26.9%	8.5%	6.4%	19.3%	7.3%
GDP Deflator - approximate	4.9%	3.1%	7.5%	2.8%	4.2%	4.0%	1.9%	2.0%	3.3%	2.1%
Real Growth Rate in Gross Assets'	6.9%	7.7%	13.2%	11.2%	11.7%	22.9%	6.6%	4.4%	16.0%	5.2%
Goodwill										
Goodwill	1,601.6	1,601.6	3,186.4	4,205.1	5,986.4	6,530.4	6,822.5	6,822.5	6,822.5	6,822.5
Earnings'	2,071.1	2,357.6	2,218.1	2,684.8	2,785.8	3,129.9	3,869.5	5,199.2	5,277.6	4,788.4
Net Assets'	22,994.0	25,299.7	31,776.3	35,980.9	43,012.4	54,770.9	58,432.2	61,743.6	74,893.3	78,306.7
ROA' wg (with goodwill)	9.0%	9.3%	7.0%	7.5%	6.5%	5.7%	6.6%	8.4%	7.0%	6.1%

## Translating, scrubbing, cleaning-up, apples-to-apples

- Earnings or CFFO → E' = "Enterprise Earnings"
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- CAPX → Enterprise Asset Growth
- Price → Enterprise value, V'
- Price-to-Book → V/A'
- Price-to-earnings → V/E'

#### CALCULATIONS FOR V/E' AND V/A' (ADJUSTED P/E AND ADJUSTED P/B)

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
Enterprise Value Prime	50,809.2	61,346.5	55,426.7	70,965.2	114,032.7	124,036.9	137,110.3	217,573.6	273,366.1	276,955.0
Earnings"	1,970.1	2,288.9	2,083.9	2,406.7	2,547.7	2,765.0	3,614.8	5,009.0	5,096.5	4,514.2
Book Equity'	12,514.2	15,130.1	15,557.6	17,655.7	15,003.5	17,934.2	20,939.9	19,510.1	24,064.6	28,785.5
Market Capitalization	41,931.1	52,778.6	42,394.3	56,845.1	92,010.2	93,730.7	106,440.5	182,162.5	229,359.9	234,256.3
V/A' - Enterpise Value/Net Assets'	2.4	2.6	1.9	2.2	3.1	2.6	2.7	4.0	4.0	3.9
P/B' - Market Cap/Book Equity'	3.4	3.5	2.7	3.2	6.1	5.2	5.1	9.3	9.5	8.1
Traditional Tangible P/B Equity	3.8	4.1	3.0	7.4	10.6	8.3	11.1	24.1	20.1	14.6
Forward V/E' - Enterprise Value -										
Earnings'	21.6	27.7	20.6	25.5	36.4	32.1	26.4	41.2	57.1	42.8
Forward P/E' - Market Cap/Earnings"	21.3	23.1	20.3	23.6	36.1	33.9	29.4	36.4	45.0	51.9
Traditional NTM P/E	16.9	18.0	16.6	19.2	26.4	26.2	26.5	35.3	37.5	36.6
Historic V/E' - Enterprise Value -										
Earnings'	24.5	26.0	25.0	26.4	40.9	39.6	35.4	41.8	51.8	57.8
Historic P/E' - Market Cap/Earnings"	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Traditional TTM P/E	21.0	21.2	19.4	22.5	30.9	30.4	29.4	42.2	44.9	42.8
Dividend Yield	1.4%	1.5%	2.0%	1.5%	1.1%	1.2%	1.2%	2.0%	0.8%	0.8%

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- Price → Enterprise value, V'
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- Price-to-earnings → V/E'

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015	
Earnings (Net Income)	2,156.6	2,386.7	2,319.1	2,664.6	3,197.8	3,262.6	3,727.1	4,671.6	5,362.0	4,928.2	
Remove: Special Items adjusted after-tax effect Adjust: Recurring Special Items to include	50.9	(24.6)	(2.7)	167.7	365.1	348.5	255.9	100.6	330.9	712.5	
in earnings	0.0	0.0	0.0	12.0	7.0	33.9	38.2	7.3	0.0	0.0	
Add Back: Depreciation Expense	1,573.8	1,579.6	1,728.9	2,085.9	1,978.0	2,401.6	2,705.6	3,072.5	3,180.6	3,418.2	
Add Back: Op Lease Expense	2,137.2	2,391.0	2,902.8	3,542.0	4,092.8	5,131.8	5,895.9	6,287.3	7,072.7	7,841.9	
Add Back: R&D Expense	26.6	32.9	49.9	63.0	61.8	70.9	56.8	79.6	77.6	73.0	
Add Back: Amortization Expense	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	5.8	7.5	
Add Back: Interest Expense	80.4	55.5	105.1	218.9	193.2	291.3	206.0	152.9	152.5	225.5	
Add Back: Minority Interest Expense	3.5	1.6	2.7	2.3	14.7	22.1	(15.1)	51.2	127.0	118.1	
Add Back: Tax Expense	742.8	746.7	889.2	988.3	973.4	1,110.2	1,149.7	1,522.7	1,270.5	1,388.6	
Adjust: NOL Tax Shield	0.0	51.7	0.0	0.0	44.8	0.0	0.0	0.0	322.1	134.1	
Adjust: Interest Expense Tax Shield	20.6	13.2	29.1	59.2	44.9	73.6	48.7	37.3	28.7	48.7	
Subtract: Adjusted Tax Expense	763.4	811.5	918.3	1,047.5	1,063.2	1,183.8	1,198.4	1,560.0	1,621.3	1,571.4	
Add Back: Pension and OPEB Costs	154.4	236.1	228.5	247.6	251.0	121.2	382.6	363.1	600.0	312.6	
Subtract: Pension and OPEB Service Costs	121.6	166.9	173.9	189.1	186.4	121.2	280.2	319.7	550.4	244.8	
Adjust: COGS from FIFO to LIFO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Adjust: Carrying Cost of Monetary Assets	(135.5)	(143.0)	(208.5)	(163.7)	(163.1)	(179.8)	(270.1)	(245.6)	(242.0)	(257.8)	
Add: Gross earnings missing from acquisitions Subtract: Gross earnings included from	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
divestitures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Subtract: Equity Investment Income Add Back: Stock Option Expense (After-	(22.9)	0.0	0.0	0.0	(2.2)	0.3	(51.0)	(115.6)	(126.2)	(189.1)	
Tax) Subtract: Capital Grants and Subsidies -	40.0	84.9	107.1	147.5	65.7	73.6	77.0	150.4	166.5	173.2	
Release to P&L	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Gross Earnings'	5,867.0	6,418.1	7,035.4	8,404.2	9,059.9	10,685.8	12,270.0	14,251.5	15,396.7	15,889.5	

Jerry: What happened to my stereo? It's all smashed up.

Kramer: That's right. Now it looks like it was broken during shipping and I insured it for \$400.



Jerry: But you were supposed to get me a refund.

Kramer: You can't get a refund. Your warranty expired two years ago.

Jerry: So we're going to make the Post Office pay for my new stereo?



Kramer: It's just a write off for them.

Jerry: How is it a write off?

Kramer: They just write it off.

Jerry: Write it off what?



### Kramer: Jerry, all these big companies they write off everything

Jerry: You don't even know what a write off is.

Kramer: Do you?

Jerry: No. I don't.



Kramer: But they do and they are the ones writing it off.

Jerry: I wish I just had the last twenty seconds of my life back.



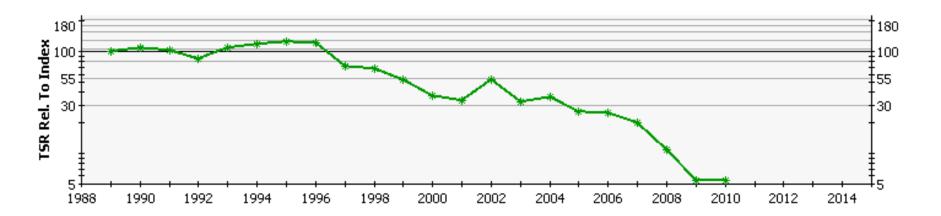
EK	12/1998	12/1999	12/2000	12/2001	12/2002	12/2003	12/2004	12/2005	12/2006	12/2007
	USD									
Net Income	1,390	1,392	1,407	76	793	238	81	(1,455)	(600)	(205)

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EK	12/1998 USD	12/1999 USD	12/2000 USD	12/2001 USD	12/2002 USD	12/2003 USD	12/2004 USD	12/2005 USD	12/2006 USD	12/2007 USD
Net Income	1,390	1,392	1,407	76	793	238	81	(1,455)	(600)	(205)
Minus: Special Items (after-tax)	(9)	(217)	(18)	(579)	(107)	(408)	(524)	(1.757)	(1.051)	(782)

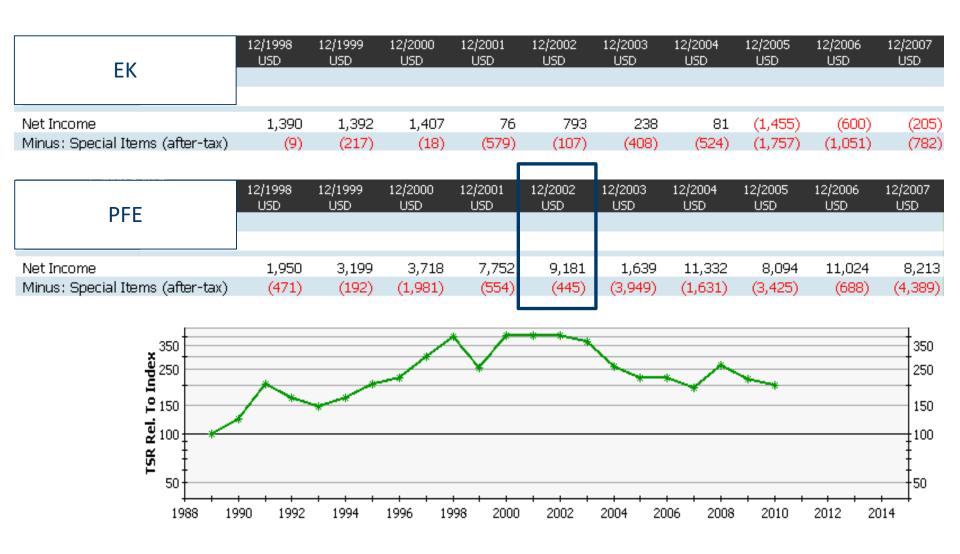
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EK	12/1998 USD	12/1999 USD	12/2000 USD	12/2001 USD	12/2002 USD	12/2003 USD	12/2004 USD	12/2005 USD	12/2006 USD	12/2007 USD
Net Income	1,390	1,392	1,407	76	793	238	81	(1,455)	(600)	(205)
Minus: Special Items (after-tax)	(9)	(217)	(18)	(579)	(107)	(408)	(524)	(1,757)	(1,051)	(782)



EK	12/1998 USD	12/1999 USD	12/2000 USD	12/2001 USD	12/2002 USD	12/2003 USD	12/2004 USD	12/2005 USD	12/2006 USD	12/2007 USD
Net Income	1,390	1,392	1,407	76	793	238	81	(1,455)	(600)	(205)
Minus: Special Items (after-tax)	(9)	(217)	(18)	(579)	(107)	(408)	(524)	(1,757)	(1,051)	(782)
PFE	12/1998 USD	12/1999 USD	12/2000 USD	12/2001 USD	12/2002 USD	12/2003 USD	12/2004 USD	12/2005 USD	12/2006 USD	12/2007 USD
Net Income	1,950	3,199	3,718	7,752	9,181	1,639	11,332	8,094	11,024	8,213
Minus: Special Items (after-tax)	(471)	(192)	(1,981)	(554)	(445)	(3,949)	(1,631)	(3,425)	(688)	(4,389)

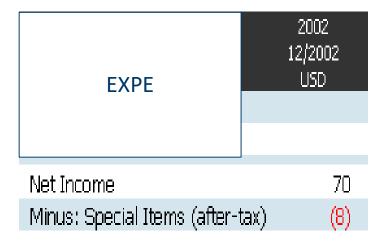
EK	12/1998 USD	12/1999 USD	12/2000 USD	12/2001 USD	12/2002 USD	12/2003 USD	12/2004 USD	12/2005 USD	12/2006 USD	12/2007 USD
Net Income	1,390	1,392	1,407	76	793	238	81	(1,455)	(600)	(205)
Minus: Special Items (after-tax)	(9)	(217)	(18)	(579)	(107)	(408)	(524)	(1,757)	(1,051)	(782)
				ſ		1				
DEE	12/1998 USD	12/1999 USD	12/2000 USD	12/2001 USD	12/2002 USD	12/2003 USD	12/2004 USD	12/2005 USD	12/2006 USD	12/2007 USD
PFE										
Net Income	1,950	3,199	3,718	7,752	9,181	1,639	11,332	8,094	11,024	8,213
Minus: Special Items (after-tax)	(471)	(192)	(1,981)	(554)	(445)	(3,949)	(1,631)	(3,425)	(688)	(4,389)



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EK	12/1998	12/1999	12/2000	12/2001	12/2002	12/2003	12/2004	12/2005	12/2006	12/2007
	USD	USD	USD	USD	USD	USD	USD	USD	USD	USD
Net Income	1,390	1,392	1,407	76	793	238	81	(1,455)	(600)	(205)
Minus: Special Items (after-tax)	(9)	(217)	(18)	(579)	(107)	(408)	(524)	(1,757)	(1,051)	(782)
PFE	12/1998	12/1999	12/2000	12/2001	12/2002	12/2003	12/2004	12/2005	12/2006	12/2007
	USD	USD	USD	USD	USD	USD	USD	USD	USD	USD
Net Income	1,950	3,199	3,718	7,752	9,181	1,639	11,332	8,094	11,024	8,213
Minus: Special Items (after-tax)	(471)	(192)	(1,981)	(554)	(445)	(3,949)	(1,631)	(3,425)	(688)	(4,389)
SHLD	1/1999	1/2000	1/2001	1/2002	1/2003	1/2004	1/2005	1/2006	1/2007	1/2008
	USD	USD	USD	USD	USD	USD	USD	USD	USD	USD
Net Income Minus: Special Items (after-tax)	518 (12)	633 n	(244) (459)	(2,587)	(3,262)	(618) (820)	1,106 581	948 189	1,490 (34)	826 55





EXPE	12	2002 1/2002 USD	2003 12/2003 USD
Net Income		70	111
Minus: Special Items (after-	tax)	(8)	(8)

EXPE	2002 12/2002 USD	2003 12/2003 USD	2004 12/2004 USD
Net Income	70	111	163
Minus: Special Items (after-t	ax) (8)	(8)	0

EXPE	2002 12/2002 USD	2003 12/2003 USD	2004 12/2004 USD	2005 12/2005 USD
Net Income	70	111	163	229
Minus: Special Items (after-t	ax) (8)	(8)	0	(15)

EXPE	2002 12/2002 USD	2003 12/2003 USD	2004 12/2004 USD	2005 12/2005 USD	2006 12/2006 USD
Net Income	70	111	163	229	245
Minus: Special Items (after-tax)	(8)	(8)	0	(15)	(31)

EXPE	2002 12/2002 USD	2003 12/2003 USD	2004 12/2004 USD	2005 12/2005 USD	2006 12/2006 USD	2007 12/2007 : USD
Net Income	70	111	163	229	245	296
Minus: Special Items (after-ta	x) (8)	(8)	0	(15)	(31)	8

EXPE	2002 12/2002 USD	2003 12/2003 USD	2004 12/2004 USD	2005 12/2005 USD	2006 12/2006 USD	2007 12/2007 USD	2008 12/2008 USD
Net Income	70	111	163	229	245	296	(2,518)
Minus: Special Items (after-tax)	(8)	(8)	0	(15)	(31)	8	(2,996)

# The Big Bath







EXPE	2002 12/2002 USD	2003 12/2003 USD	2004 12/2004 USD	2005 12/2005 USD	2006 12/2006 USD	2007 12/2007 USD	2008 12/2008 USD
Net Income	70	111	163	229	245	296	(2,518)
Minus: Special Items (after-tax)	(8)	(8)	0	(15)	(31)	8	(2,996)

EXPE	2002 12/2002 USD	2003 12/2003 USD	2004 12/2004 USD	2005 12/2005 USD	2006 12/2006 USD	2007 12/2007 USD	2008 12/2008 USD	2009 12/2009 USD
Net Income	70	111	163	229	245	296	(2,518)	300
Minus: Special Items (after-tax)	(8)	(8)	0	(15)	(31)	8	(2,996)	(64)

GSMI (Phil.)	2006 12/2006 PHP	2007 12/2007 PHP	2008 12/2008 PHP	2009 12/2009 PHP
Net Income	281	394	(279)	701
Minus: Special Items (after-tax)	NA	61	(389)	103



PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
Earnings (Net Income)	2,156.6	2,386.7	2,319.1	2,664.6	3,197.8	3,262.6	3,727.1	4,671.6	5,362.0	4,928.2
Remove: Special Items adjusted after-tax effect Adjust: Recurring Special Items to include	50.9	(24.6)	(2.7)	167.7	365.1	348.5	255.9	100.6	330.9	712.5
in earnings	0.0	0.0	0.0	12.0	7.0	33.9	38.2	7.3	0.0	0.0
Add Back: Depreciation Expense Add Back: Op Lease Expense	1,573.8 2,137.2	1,579.6 2,391.0	1,728.9 2,902.8	2,085.9 3,542.0	1,978.0 4,092.8	2,401.6 5,131.8	2,705.6 5,895.9	3,072.5 6,287.3	3,180.6 7,072.7	3,418.2 7,841.9
Add Back: R&D Expense	26.6	32.9	49.9	63.0	61.8	70.9	56.8	79.6	77.6	73.0
Add Back: Amortization Expense Add Back: Interest Expense	0.0 80.4	0.0 55.5	0.0 105.1	0.0 218.9	0.0 193.2	0.0 291.3	0.0 206.0	3.2 152.9	5.8 152.5	7.5 225.5
Add Back: Minority Interest Expense	3.5	1.6	2.7	2.3	14.7	22.1	(15.1)	51.2	127.0	118.1
Add Back: Tax Expense Adjust: NOL Tax Shield	742.8 0.0	746.7 51.7	889.2 0.0	988.3 0.0	973.4 44.8	1,110.2 0.0	1,149.7 0.0	1,522.7 0.0	1,270.5 322.1	1,388.6 134.1
Adjust: Interest Expense Tax Shield	20.6	13.2	29.1	59.2	44.8 44.9	73.6	48.7	37.3	28.7	48.7
Subtract: Adjusted Tax Expense	763.4	811.5	918.3	1,047.5	1,063.2	1,183.8	1,198.4	1,560.0	1,621.3	1,571.4
Add Back: Pension and OPEB Costs	154.4	236.1	228.5	247.6	251.0	121.2	382.6	363.1	600.0	312.6
Subtract: Pension and OPEB Service Costs	121.6	166.9	173.9	189.1	186.4	121.2	280.2	319.7	550.4	244.8
Adjust: COGS from FIFO to LIFO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Adjust: Carrying Cost of Monetary Assets	(135.5)	(143.0)	(208.5)	(163.7)	(163.1)	(179.8)	(270.1)	(245.6)	(242.0)	(257.8)
Add: Gross earnings missing from acquisitions Subtract: Gross earnings included from	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
divestitures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtract: Equity Investment Income Add Back: Stock Option Expense (After-	(22.9)	0.0	0.0	0.0	(2.2)	0.3	(51.0)	(115.6)	(126.2)	(189.1)
Tax) Subtract: Capital Grants and Subsidies -	40.0	84.9	107.1	147.5	65.7	73.6	77.0	150.4	166.5	173.2
Release to P&L	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gross Earnings'	5,867.0	6,418.1	7,035.4	8,404.2	9,059.9	10,685.8	12,270.0	14,251.5	15,396.7	15,889.5

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015	
Earnings (Net Income)	2,156.6	2,386.7	2,319.1	2,664.6	3,197.8	3,262.6	3,727.1	4,671.6	5,362.0	4,928.2	
Remove: Special Items adjusted after-tax effect Adjust: Recurring Special Items to include in earnings	50.9	(24.6)	(2.7)	167.7 12.0	365.1 7.0	348.5 33.9	255.9 38.2	100.6	330.9	712.5 0.0	
Add Back: Depreciation Expense Add Back: Op Lease Expense	1,573.8 2,137.2	1,579.6 2,391.0	1,728.9 2,902.8	2,085.9 3,542.0	1,978.0 4,092.8	2,401.6 5,131.8	2,705.6 5,895.9	3,072.5 6,287.3	3,180.6 7,072.7	3,418.2 7,841.9	
Add Back: R&D Expense	26.6	32.9	49.9	63.0	61.8	70.9	56.8	79.6	77.6	73.0	
Add Back: Amortization Expense	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	5.8	7.5	
Add Back: Interest Expense	80.4	55.5	105.1	218.9	193.2	291.3	206.0	152.9	152.5	225.5	
Add Back: Minority Interest Expense	3.5	1.6	2.7	2.3	14.7	22.1	(15.1)	51.2	127.0	118.1	
Add Back: Tax Expense	742.8	746.7	889.2	988.3	973.4	1,110.2	1,149.7	1,522.7	1,270.5	1,388.6	
Adjust: NOL Tax Shield	0.0	51.7	0.0	0.0	44.8	0.0	0.0	0.0	322.1	134.1	
Adjust: Interest Expense Tax Shield	20.6	13.2	29.1	59.2	44.9	73.6	48.7	37.3	28.7	48.7	
Subtract: Adjusted Tax Expense	763.4	811.5	918.3	1,047.5	1,063.2	1,183.8	1,198.4	1,560.0	1,621.3	1,571.4	
Add Back: Pension and OPEB Costs	154.4	236.1	228.5	247.6	251.0	121.2	382.6	363.1	600.0	312.6	
Subtract: Pension and OPEB Service Costs	121.6	166.9	173.9	189.1	186.4	121.2	280.2	319.7	550.4	244.8	
Adjust: COGS from FIFO to LIFO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Adjust: Carrying Cost of Monetary Assets	(135.5)	(143.0)	(208.5)	(163.7)	(163.1)	(179.8)	(270.1)	(245.6)	(242.0)	(257.8)	
Add: Gross earnings missing from acquisitions Subtract: Gross earnings included from	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
divestitures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Subtract: Equity Investment Income Add Back: Stock Option Expense (After-	(22.9)	0.0	0.0	0.0	(2.2)	0.3	(51.0)	(115.6)	(126.2)	(189.1)	
Tax) Subtract: Capital Grants and Subsidies -	40.0	84.9	107.1	147.5	65.7	73.6	77.0	150.4	166.5	173.2	
Release to P&L	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Gross Earnings'	5,867.0	6,418.1	7,035.4	8,404.2	9,059.9	10,685.8	12,270.0	14,251.5	15,396.7	15,889.5	

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
Earnings (Net Income)	2,156.6	2,386.7	2,319.1	2,664.6	3,197.8	3,262.6	3,727.1	4,671.6	5,362.0	4,928.2
Remove: Special Items adjusted after-tax effect Adjust: Recurring Special Items to include	50.9	(24.6)	(2.7)	167.7	365.1	348.5	255.9	100.6	330.9	712.5
in earnings	0.0	0.0	0.0	12.0	7.0	33.9	38.2	7.3	0.0	0.0
Add Back: Depreciation Expense Add Back: Op Lease Expense Add Back: R&D Expense	1,573.8 2,137.2 26.6	1,579.6 2,391.0 32.9	1,728.9 2,902.8 49.9	2,085.9 3,542.0 63.0	1,978.0 4,092.8 61.8	2,401.6 5,131.8 70.9	2,705.6 5,895.9 56.8	3,072.5 6,287.3 79.6	3,180.6 7,072.7 77.6	3,418.2 7,841.9 73.0
Add Back: Amortization Expense Add Back: Interest Expense Add Back: Minority Interest Expense	0.0 80.4 3.5	0.0 55.5 1.6	0.0 105.1 2.7	0.0 218.9 2.3	0.0 193.2 14.7	0.0 291.3 22.1	0.0 206.0 (15.1)	3.2 152.9 51.2	5.8 152.5 127.0	7.5 225.5 118.1
Add Back: Tax Expense	742.8	746.7	889.2	988.3	973.4	1,110.2	1,149.7	1,522.7	1,270.5	1,388.6
Adjust: NOL Tax Shield Adjust: Interest Expense Tax Shield	0.0 20.6	51.7 13.2	0.0 29.1	0.0 59.2	44.8 44.9	0.0 73.6	0.0 48.7	0.0 37.3	322.1 28.7	134.1 48.7
Subtract: Adjusted Tax Expense	763.4	811.5	918.3	1,047.5	1,063.2	1,183.8	1,198.4	1,560.0	1,621.3	1,571.4
Add Back: Pension and OPEB Costs	154.4	236.1	228.5	247.6	251.0	121.2	382.6	363.1	600.0	312.6
Subtract: Pension and OPEB Service Costs	121.6	166.9	173.9	189.1	186.4	121.2	280.2	319.7	550.4	244.8
Adjust: COGS from FIFO to LIFO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Adjust: Carrying Cost of Monetary Assets	(135.5)	(143.0)	(208.5)	(163.7)	(163.1)	(179.8)	(270.1)	(245.6)	(242.0)	(257.8)
Add: Gross earnings missing from acquisitions Subtract: Gross earnings included from	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
divestitures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtract: Equity Investment Income Add Back: Stock Option Expense (After-	(22.9)	0.0	0.0	0.0	(2.2)	0.3	(51.0)	(115.6)	(126.2)	(189.1)
Tax) Subtract: Capital Grants and Subsidies -	40.0	84.9	107.1	147.5	65.7	73.6	77.0	150.4	166.5	173.2
Release to P&L	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gross Earnings'	5,867.0	6,418.1	7,035.4	8,404.2	9,059.9	10,685.8	12,270.0	14,251.5	15,396.7	15,889.5

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
Earnings (Net Income)	2,156.6	2,386.7	2,319.1	2,664.6	3,197.8	3,262.6	3,727.1	4,671.6	5,362.0	4,928.2
Remove: Special Items adjusted after-tax effect Adjust: Recurring Special Items to include	50.9	(24.6)	(2.7)	167.7	365.1	348.5	255.9	100.6	330.9	712.5
in earnings	0.0	0.0	0.0	12.0	7.0	33.9	38.2	7.3	0.0	0.0
Add Back: Depreciation Expense Add Back: Op Lease Expense Add Back: R&D Expense	1,573.8 2,137.2 26.6	1,579.6 2,391.0 32.9	1,728.9 2,902.8 49.9	2,085.9 3,542.0 63.0	1,978.0 4,092.8 61.8	2,401.6 5,131.8 70.9	2,705.6 5,895.9 56.8	3,072.5 6,287.3 79.6	3,180.6 7,072.7 77.6	3,418.2 7,841.9 73.0
Add Back: Amortization Expense Add Back: Interest Expense Add Back: Minority Interest Expense	0.0 80.4 3.5	0.0 55.5 1.6	0.0 105.1 2.7	0.0 218.9 2.3	0.0 193.2 14.7	0.0 291.3 22.1	0.0 206.0 (15.1)	3.2 152.9 51.2	5.8 152.5 127.0	7.5 225.5 118.1
Add Back: Tax Expense Adjust: NOL Tax Shield Adjust: Interest Expense Tax Shield Subtract: Adjusted Tax Expense	742.8 0.0 20.6 763.4	746.7 51.7 13.2 811.5	889.2 0.0 29.1 918.3	988.3 0.0 59.2 1,047.5	973.4 44.8 44.9 1,063.2	1,110.2 0.0 73.6 1,183.8	1,149.7 0.0 48.7 1,198.4	1,522.7 0.0 37.3 1,560.0	1,270.5 322.1 28.7 1,621.3	1,388.6 134.1 48.7 1,571.4
Add Back: Pension and OPEB Costs	154.4	236.1	228.5	247.6	251.0	121.2	382.6	363.1	600.0	312.6
Subtract: Pension and OPEB Service Costs	121.6	166.9	173.9	189.1	186.4	121.2	280.2	319.7	550.4	244.8
Adjust: COGS from FIFO to LIFO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Adjust: Carrying Cost of Monetary Assets	(135.5)	(143.0)	(208.5)	(163.7)	(163.1)	(179.8)	(270.1)	(245.6)	(242.0)	(257.8)
Add: Gross earnings missing from acquisitions Subtract: Gross earnings included from	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
divestitures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtract: Equity Investment Income Add Back: Stock Option Expense (After-	(22.9)	0.0	0.0	0.0	(2.2)	0.3	(51.0)	(115.6)	(126.2)	(189.1)
Tax) Subtract: Capital Grants and Subsidies -	40.0	84.9	107.1	147.5	65.7	73.6	77.0	150.4	166.5	173.2
Release to P&L	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gross Earnings'	5,867.0	6,418.1	7,035.4	8,404.2	9,059.9	10,685.8	12,270.0	14,251.5	15,396.7	15,889.5

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
Earnings (Net Income)	2,156.6	2,386.7	2,319.1	2,664.6	3,197.8	3,262.6	3,727.1	4,671.6	5,362.0	4,928.2
Remove: Special Items adjusted after-tax effect Adjust: Recurring Special Items to include	50.9	(24.6)	(2.7)	167.7	365.1	348.5	255.9	100.6	330.9	712.5
in earnings	0.0	0.0	0.0	12.0	7.0	33.9	38.2	7.3	0.0	0.0
Add Back: Depreciation Expense Add Back: Op Lease Expense Add Back: R&D Expense	1,573.8 2,137.2 26.6	1,579.6 2,391.0 32.9	1,728.9 2,902.8 49.9	2,085.9 3,542.0 63.0	1,978.0 4,092.8 61.8	2,401.6 5,131.8 70.9	2,705.6 5,895.9 56.8	3,072.5 6,287.3 79.6	3,180.6 7,072.7 77.6	3,418.2 7,841.9 73.0
Add Back: Amortization Expense Add Back: Interest Expense Add Back: Minority Interest Expense	0.0 80.4 3.5	0.0 55.5 1.6	0.0 105.1 2.7	0.0 218.9 2.3	0.0 193.2 14.7	0.0 291.3 22.1	0.0 206.0 (15.1)	3.2 152.9 51.2	5.8 152.5 127.0	7.5 225.5 118.1
Add Back: Tax Expense Adjust: NOL Tax Shield Adjust: Interest Expense Tax Shield Subtract: Adjusted Tax Expense	742.8 0.0 20.6 763.4	746.7 51.7 13.2 811.5	889.2 0.0 29.1 918.3	988.3 0.0 59.2 1,047.5	973.4 44.8 44.9 1,063.2	1,110.2 0.0 73.6 1,183.8	1,149.7 0.0 48.7 1,198.4	1,522.7 0.0 37.3 1,560.0	1,270.5 322.1 28.7 1,621.3	1,388.6 134.1 48.7 1,571.4
Add Back: Pension and OPEB Costs	154.4	236.1	228.5	247.6	251.0	121.2	382.6	363.1	600.0	312.6
Subtract: Pension and OPEB Service Costs	121.6	166.9	173.9	189.1	186.4	121.2	280.2	319.7	550.4	244.8
Adjust: COGS from FIFO to LIFO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Adjust: Carrying Cost of Monetary Assets	(135.5)	(143.0)	(208.5)	(163.7)	(163.1)	(179.8)	(270.1)	(245.6)	(242.0)	(257.8)
Add: Gross earnings missing from acquisitions Subtract: Gross earnings included from	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
divestitures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtract: Equity Investment Income Add Back: Stock Option Expense (After-	(22.9)	0.0	0.0	0.0	(2.2)	0.3	(51.0)	(115.6)	(126.2)	(189.1)
Tax) Subtract: Capital Grants and Subsidies -	40.0	84.9	107.1	147.5	65.7	73.6	77.0	150.4	166.5	173.2
Release to P&L	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gross Earnings'	5,867.0	6,418.1	7,035.4	8,404.2	9,059.9	10,685.8	12,270.0	14,251.5	15,396.7	15,889.5

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
Earnings (Net Income)	2,156.6	2,386.7	2,319.1	2,664.6	3,197.8	3,262.6	3,727.1	4,671.6	5,362.0	4,928.2
Remove: Special Items adjusted after-tax effect Adjust: Recurring Special Items to include	50.9	(24.6)	(2.7)	167.7	365.1	348.5	255.9	100.6	330.9	712.5
in earnings	0.0	0.0	0.0	12.0	7.0	33.9	38.2	7.3	0.0	0.0
Add Back: Depreciation Expense	1,573.8	1,579.6	1,728.9	2,085.9	1,978.0	2,401.6	2,705.6	3,072.5	3,180.6	3,418.2
Add Back: Op Lease Expense	2,137.2	2,391.0	2,902.8	3,542.0	4,092.8	5,131.8	5,895.9	6,287.3	7,072.7	7,841.9
Add Back: R&D Expense	26.6	32.9	49.9	63.0	61.8	70.9	56.8	79.6	77.6	73.0
Add Back: Amortization Expense	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	5.8	7.5
Add Back: Interest Expense	80.4	55.5	105.1	218.9	193.2	291.3	206.0	152.9	152.5	225.5
Add Back: Minority Interest Expense	3.5	1.6	2.7	2.3	14.7	22.1	(15.1)	51.2	127.0	118.1
Add Back: Tax Expense	742.8	746.7	889.2	988.3	973.4	1,110.2	1,149.7	1,522.7	1,270.5	1,388.6
Adjust: NOL Tax Shield	0.0	51.7	0.0	0.0	44.8	0.0	0.0	0.0	322.1	134.1
Adjust: Interest Expense Tax Shield	20.6	13.2	29.1	59.2	44.9	73.6	48.7	37.3	28.7	48.7
Subtract: Adjusted Tax Expense	763.4	811.5	918.3	1,047.5	1,063.2	1,183.8	1,198.4	1,560.0	1,621.3	1,571.4
Add Back: Pension and OPEB Costs	154.4	236.1	228.5	247.6	251.0	121.2	382.6	363.1	600.0	312.6
Subtract: Pension and OPEB Service Costs	121.6	166.9	173.9	189.1	186.4	121.2	280.2	319.7	550.4	244.8
Adjust: COGS from FIFO to LIFO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Adjust: Carrying Cost of Monetary Assets	(135.5)	(143.0)	(208.5)	(163.7)	(163.1)	(179.8)	(270.1)	(245.6)	(242.0)	(257.8)
Add: Gross earnings missing from acquisitions Subtract: Gross earnings included from	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
divestitures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtract: Equity Investment Income Add Back: Stock Option Expense (After-	(22.9)	0.0	0.0	0.0	(2.2)	0.3	(51.0)	(115.6)	(126.2)	(189.1)
Tax) Subtract: Capital Grants and Subsidies -	40.0	84.9	107.1	147.5	65.7	73.6	77.0	150.4	166.5	173.2
Release to P&L	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gross Earnings'	5,867.0	6,418.1	7,035.4	8,404.2	9,059.9	10,685.8	12,270.0	14,251.5	15,396.7	15,889.5

Inventory Inconsistencies – earnings and assets

LIFO and FIFO

- LIFO
- FIFO

Inventory Inconsistencies – earnings and assets

LIFO and FIFO

- LIFOFIST
- FIFOLIST

Inventory Inconsistencies – earnings and assets

LIFO and FIFO

- LIFOFIST
- FIFOLIST

What is the most recent pricing for both COGS and Inventory?

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
Earnings (Net Income)	2,156.6	2,386.7	2,319.1	2,664.6	3,197.8	3,262.6	3,727.1	4,671.6	5,362.0	4,928.2
Remove: Special Items adjusted after-tax effect Adjust: Recurring Special Items to include	50.9	(24.6)	(2.7)	167.7	365.1	348.5	255.9	100.6	330.9	712.5
in earnings	0.0	0.0	0.0	12.0	7.0	33.9	38.2	7.3	0.0	0.0
Add Back: Depreciation Expense	1,573.8	1,579.6	1,728.9	2,085.9	1,978.0	2,401.6	2,705.6	3,072.5	3,180.6	3,418.2
Add Back: Op Lease Expense	2,137.2	2,391.0	2,902.8	3,542.0	4,092.8	5,131.8	5,895.9	6,287.3	7,072.7	7,841.9
Add Back: R&D Expense	26.6	32.9	49.9	63.0	61.8	70.9	56.8	79.6	77.6	73.0
Add Back: Amortization Expense	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	5.8	7.5
Add Back: Interest Expense	80.4	55.5	105.1	218.9	193.2	291.3	206.0	152.9	152.5	225.5
Add Back: Minority Interest Expense	3.5	1.6	2.7	2.3	14.7	22.1	(15.1)	51.2	127.0	118.1
Add Back: Tax Expense	742.8	746.7	889.2	988.3	973.4	1,110.2	1,149.7	1,522.7	1,270.5	1,388.6
Adjust: NOL Tax Shield	0.0	51.7	0.0	0.0	44.8	0.0	0.0	0.0	322.1	134.1
Adjust: Interest Expense Tax Shield	20.6	13.2	29.1	59.2	44.9	73.6	48.7	37.3	28.7	48.7
Subtract: Adjusted Tax Expense	763.4	811.5	918.3	1,047.5	1,063.2	1,183.8	1,198.4	1,560.0	1,621.3	1,571.4
Add Back: Pension and OPEB Costs	154.4	236.1	228.5	247.6	251.0	121.2	382.6	363.1	600.0	312.6
Subtract: Pension and OPEB Service Costs	121.6	166.9	173.9	189.1	186.4	121.2	280.2	319.7	550.4	244.8
Adjust: COGS from FIFO to LIFO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Adjust: Carrying Cost of Monetary Assets	(135.5)	(143.0)	(208.5)	(163.7)	(163.1)	(179.8)	(270.1)	(245.6)	(242.0)	(257.8)
Add: Gross earnings missing from acquisitions Subtract: Gross earnings included from	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
divestitures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtract: Equity Investment Income Add Back: Stock Option Expense (After-	(22.9)	0.0	0.0	0.0	(2.2)	0.3	(51.0)	(115.6)	(126.2)	(189.1)
Tax) Subtract: Capital Grants and Subsidies -	40.0	84.9	107.1	147.5	65.7	73.6	77.0	150.4	166.5	173.2
Release to P&L	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gross Earnings'	5,867.0	6,418.1	7,035.4	8,404.2	9,059.9	10,685.8	12,270.0	14,251.5	15,396.7	15,889.5

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
Earnings (Net Income)	2,156.6	2,386.7	2,319.1	2,664.6	3,197.8	3,262.6	3,727.1	4,671.6	5,362.0	4,928.2
Remove: Special Items adjusted after-tax effect Adjust: Recurring Special Items to include	50.9	(24.6)	(2.7)	167.7	365.1	348.5	255.9	100.6	330.9	712.5
in earnings	0.0	0.0	0.0	12.0	7.0	33.9	38.2	7.3	0.0	0.0
Add Back: Depreciation Expense Add Back: Op Lease Expense	1,573.8 2,137.2	1,579.6 2,391.0	1,728.9 2,902.8	2,085.9 3,542.0	1,978.0 4,092.8	2,401.6 5,131.8	2,705.6 5,895.9	3,072.5 6,287.3	3,180.6 7,072.7	3,418.2 7,841.9
Add Back: R&D Expense	26.6	32.9	49.9	63.0	61.8	70.9	56.8	79.6	77.6	73.0
Add Back: Amortization Expense Add Back: Interest Expense Add Back: Minority Interest Expense	0.0 80.4 3.5	0.0 55.5 1.6	0.0 105.1 2.7	0.0 218.9 2.3	0.0 193.2 14.7	0.0 291.3 22.1	0.0 206.0 (15.1)	3.2 152.9 51.2	5.8 152.5 127.0	7.5 225.5 118.1
Add Back: Tax Expense Adjust: NOL Tax Shield Adjust: Interest Expense Tax Shield	742.8 0.0 20.6	746.7 51.7 13.2	889.2 0.0 29.1	988.3 0.0 59.2	973.4 44.8 44.9	1,110.2 0.0 73.6	1,149.7 0.0 48.7	1,522.7 0.0 37.3	1,270.5 322.1 28.7	1,388.6 134.1 48.7
Subtract: Adjusted Tax Expense	763.4	811.5	918.3	1,047.5	1,063.2	1,183.8	1,198.4	1,560.0	1,621.3	1,571.4
Add Back: Pension and OPEB Costs	154.4	236.1	228.5	247.6	251.0	121.2	382.6	363.1	600.0	312.6
Subtract: Pension and OPEB Service Costs	121.6	166.9	173.9	189.1	186.4	121.2	280.2	319.7	550.4	244.8
Adjust: COGS from FIFO to LIFO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Adjust: Carrying Cost of Monetary Assets	(135.5)	(143.0)	(208.5)	(163.7)	(163.1)	(179.8)	(270.1)	(245.6)	(242.0)	(257.8)
Add: Gross earnings missing from acquisitions Subtract: Gross earnings included from	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
divestitures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtract: Equity Investment Income Add Back: Stock Option Expense (After-	(22.9)	0.0	0.0	0.0	(2.2)	0.3	(51.0)	(115.6)	(126.2)	(189.1)
Tax) Subtract: Capital Grants and Subsidies -	40.0	84.9	107.1	147.5	65.7	73.6	77.0	150.4	166.5	173.2
Release to P&L	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gross Earnings'	5,867.0	6,418.1	7,035.4	8,404.2	9,059.9	10,685.8	12,270.0	14,251.5	15,396.7	15,889.5

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
Earnings (Net Income)	2,156.6	2,386.7	2,319.1	2,664.6	3,197.8	3,262.6	3,727.1	4,671.6	5,362.0	4,928.2
Remove: Special Items adjusted after-tax effect Adjust: Recurring Special Items to include	50.9	(24.6)	(2.7)	167.7	365.1	348.5	255.9	100.6	330.9	712.5
in earnings	0.0	0.0	0.0	12.0	7.0	33.9	38.2	7.3	0.0	0.0
Add Back: Depreciation Expense Add Back: Op Lease Expense Add Back: R&D Expense	1,573.8 2,137.2 26.6	1,579.6 2,391.0 32.9	1,728.9 2,902.8 49.9	2,085.9 3,542.0 63.0	1,978.0 4,092.8 61.8	2,401.6 5,131.8 70.9	2,705.6 5,895.9 56.8	3,072.5 6,287.3 79.6	3,180.6 7,072.7 77.6	3,418.2 7,841.9 73.0
Add Back: Amortization Expense Add Back: Interest Expense Add Back: Minority Interest Expense	0.0 80.4 3.5	0.0 55.5 1.6	0.0 105.1 2.7	0.0 218.9 2.3	0.0 193.2 14.7	0.0 291.3 22.1	0.0 206.0 (15.1)	3.2 152.9 51.2	5.8 152.5 127.0	7.5 225.5 118.1
Add Back: Tax Expense Adjust: NOL Tax Shield Adjust: Interest Expense Tax Shield Subtract: Adjusted Tax Expense Add Back: Pension and OPEB Costs Subtract: Pension and OPEB Service Costs Adjust: COGS from FIFO to LIFO Adjust: Carrying Cost of Monetary Assets Add: Gross earnings missing from	742.8 0.0 20.6 763.4 154.4 121.6 0.0 (135.5)	746.7 51.7 13.2 811.5 236.1 166.9 0.0 (143.0)	889.2 0.0 29.1 918.3 228.5 173.9 0.0 (208.5)	988.3 0.0 59.2 1,047.5 247.6 189.1 0.0 (163.7)	973.4 44.8 44.9 1,063.2 251.0 186.4 0.0 (163.1)	1,110.2 0.0 73.6 1,183.8 121.2 121.2 0.0 (179.8)	1,149.7 0.0 48.7 1,198.4 382.6 280.2 0.0 (270.1)	1,522.7 0.0 37.3 1,560.0 363.1 319.7 0.0 (245.6)	1,270.5 322.1 28.7 1,621.3 600.0 550.4 0.0 (242.0)	1,388.6 134.1 48.7 1,571.4 312.6 244.8 0.0 (257.8)
acquisitions Subtract: Gross earnings included from divestitures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtract: Equity Investment Income Add Back: Stock Option Expense (After- Tax)	(22.9) 40.0	0.0 84.9	0.0 107.1	0.0 147.5	(2.2) 65.7	0.3 73.6	(51.0) 77.0	(115.6) 150.4	(126.2) 166.5	(189.1) 173.2
Subtract: Capital Grants and Subsidies - Release to P&L	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gross Earnings'	5,867.0	6,418.1	7,035.4	8,404.2	9,059.9	10,685.8	12,270.0	14,251.5	15,396.7	15,889.5

# Incomparable M&A Accounting Far more than just goodwill

## <u>Acquirer</u>

## **Acquired**

Book value assets

"Fair value" assets

R&D expensed

R&D capitalized

► Full year sales

Partial year sales

Full year earnings

Partial year earnings

► Full year cash flows

Partial year cash flows

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
Earnings (Net Income)	2,156.6	2,386.7	2,319.1	2,664.6	3,197.8	3,262.6	3,727.1	4,671.6	5,362.0	4,928.2
Remove: Special Items adjusted after-tax effect Adjust: Recurring Special Items to include	50.9	(24.6)	(2.7)	167.7	365.1	348.5	255.9	100.6	330.9	712.5
in earnings	0.0	0.0	0.0	12.0	7.0	33.9	38.2	7.3	0.0	0.0
Add Back: Depreciation Expense Add Back: Op Lease Expense	1,573.8 2,137.2	1,579.6 2,391.0	1,728.9 2,902.8	2,085.9 3,542.0	1,978.0 4,092.8	2,401.6 5,131.8	2,705.6 5,895.9	3,072.5 6,287.3	3,180.6 7,072.7	3,418.2 7,841.9
Add Back: R&D Expense	26.6	32.9	49.9	63.0	61.8	70.9	56.8	79.6	77.6	73.0
Add Back: Amortization Expense Add Back: Interest Expense Add Back: Minority Interest Expense	0.0 80.4 3.5	0.0 55.5 1.6	0.0 105.1 2.7	0.0 218.9 2.3	0.0 193.2 14.7	0.0 291.3 22.1	0.0 206.0 (15.1)	3.2 152.9 51.2	5.8 152.5 127.0	7.5 225.5 118.1
Add Back: Tax Expense Adjust: NOL Tax Shield Adjust: Interest Expense Tax Shield Subtract: Adjusted Tax Expense Add Back: Pension and OPEB Costs	742.8 0.0 20.6 763.4 154.4	746.7 51.7 13.2 811.5 236.1	889.2 0.0 29.1 918.3 228.5	988.3 0.0 59.2 1,047.5 247.6	973.4 44.8 44.9 1,063.2 251.0	1,110.2 0.0 73.6 1,183.8 121.2	1,149.7 0.0 48.7 1,198.4 382.6	1,522.7 0.0 37.3 1,560.0 363.1	1,270.5 322.1 28.7 1,621.3 600.0	1,388.6 134.1 48.7 1,571.4 312.6
Subtract: Pension and OPEB Service Costs  Adjust: COGS from FIFO to LIFO	121.6	166.9	173.9 0.0	189.1	186.4 0.0	121.2	280.2	319.7	550.4	244.8
Adjust: Cods from Fire to Eiro  Adjust: Carrying Cost of Monetary Assets	(135.5)	(143.0)	(208.5)	(163.7)	(163.1)	(179.8)	(270.1)	(245.6)	(242.0)	(257.8)
Add: Gross earnings missing from acquisitions Subtract: Gross earnings included from divestitures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtract: Equity Investment Income	(22.9)	0.0	0.0	0.0	(2.2)	0.3	(51.0)	(115.6)	(126.2)	(189.1)
Add Back: Stock Option Expense (After- Tax) Subtract: Capital Grants and Subsidies -	40.0	84.9	107.1	147.5	65.7	73.6	77.0	150.4	166.5	173.2
Release to P&L	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gross Earnings'	5,867.0	6,418.1	7,035.4	8,404.2	9,059.9	10,685.8	12,270.0	14,251.5	15,396.7	15,889.5

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
Earnings (Net Income)	2,156.6	2,386.7	2,319.1	2,664.6	3,197.8	3,262.6	3,727.1	4,671.6	5,362.0	4,928.2
Remove: Special Items adjusted after-tax effect Adjust: Recurring Special Items to include	50.9	(24.6)	(2.7)	167.7	365.1	348.5	255.9	100.6	330.9	712.5
in earnings	0.0	0.0	0.0	12.0	7.0	33.9	38.2	7.3	0.0	0.0
Add Back: Depreciation Expense	1,573.8	1,579.6	1,728.9	2,085.9	1,978.0	2,401.6	2,705.6	3,072.5	3,180.6	3,418.2
Add Back: Op Lease Expense	2,137.2	2,391.0	2,902.8	3,542.0	4,092.8	5,131.8	5,895.9	6,287.3	7,072.7	7,841.9
Add Back: R&D Expense	26.6	32.9	49.9	63.0	61.8	70.9	56.8	79.6	77.6	73.0
Add Back: Amortization Expense	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	5.8	7.5
Add Back: Interest Expense	80.4	55.5	105.1	218.9	193.2	291.3	206.0	152.9	152.5	225.5
Add Back: Minority Interest Expense	3.5	1.6	2.7	2.3	14.7	22.1	(15.1)	51.2	127.0	118.1
Add Back: Tax Expense	742.8	746.7	889.2	988.3	973.4	1,110.2	1,149.7	1,522.7	1,270.5	1,388.6
Adjust: NOL Tax Shield	0.0	51.7	0.0	0.0	44.8	0.0	0.0	0.0	322.1	134.1
Adjust: Interest Expense Tax Shield	20.6	13.2	29.1	59.2	44.9	73.6	48.7	37.3	28.7	48.7
Subtract: Adjusted Tax Expense	763.4	811.5	918.3	1,047.5	1,063.2	1,183.8	1,198.4	1,560.0	1,621.3	1,571.4
Add Back: Pension and OPEB Costs	154.4	236.1	228.5	247.6	251.0	121.2	382.6	363.1	600.0	312.6
Subtract: Pension and OPEB Service Costs	121.6	166.9	173.9	189.1	186.4	121.2	280.2	319.7	550.4	244.8
Adjust: COGS from FIFO to LIFO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Adjust: Carrying Cost of Monetary Assets	(135.5)	(143.0)	(208.5)	(163.7)	(163.1)	(179.8)	(270.1)	(245.6)	(242.0)	(257.8)
Add: Gross earnings missing from acquisitions Subtract: Gross earnings included from	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
divestitures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtract: Equity Investment Income Add Back: Stock Option Expense (After-	(22.9)	0.0	0.0	0.0	(2.2)	0.3	(51.0)	(115.6)	(126.2)	(189.1)
Tax) Subtract: Capital Grants and Subsidies -	40.0	84.9	107.1	147.5	65.7	73.6	77.0	150.4	166.5	173.2
Release to P&L	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gross Earnings'	5,867.0	6,418.1	7,035.4	8,404.2	9,059.9	10,685.8	12,270.0	14,251.5	15,396.7	15,889.5

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Add Back: Depreciation Expense	1,573.8	1,579.6	1,728.9	2,085.9	1,978.0	2,401.6	2,705.6	3,072.5	3,180.6	3,418.2
Add Back: Op Lease Expense	2,137.2	2,391.0	2,902.8	3,542.0	4,092.8	5,131.8	5,895.9	6,287.3	7,072.7	7,841.9
Add Back: R&D Expense	26.6	32.9	49.9	63.0	61.8	70.9	56.8	79.6	77.6	73.0
Add Back: Amortization Expense	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	5.8	7.5
Add Back: Interest Expense	80.4	55.5	105.1	218.9	193.2	291.3	206.0	152.9	152.5	225.5
Add Back: Minority Interest Expense	3.5	1.6	2.7	2.3	14.7	22.1	(15.1)	51.2	127.0	118.1
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Adjust: Carrying Cost of Monetary Assets	(135.5)	(143.0)	(208.5)	(163.7)	(163.1)	(179.8)	(270.1)	(245.6)	(242.0)	(257.8)
Add: Gross earnings missing from acquisitions Subtract: Gross earnings included from	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
divestitures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtract: Equity Investment Income	(22.9)	0.0	0.0	0.0	(2.2)	0.3	(51.0)	(115.6)	(126.2)	(189.1)
Add Back: Stock Option Expense (After- Tax)	40.0	84.9	107.1	147.5	65.7	73.6	77.0	150.4	166.5	173.2
Subtract: Capital Grants and Subsidies - Release to P&L	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gross Earnings'	5,867.0	6,418.1	7,035.4	8,404.2	9,059.9	10,685.8	12,270.0	14,251.5	15,396.7	15,889.5

"Financial statements [should] be prepared under the assumption that the users... understand not only the uses, but also the limitations, of GAAP"



Marty Whitman

# "A lot of what Wall Street does has nothing to do with the underlying value of a business."



Marty Whitman

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015	
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Remove: Special Items adjusted after-tax effect Adjust: Recurring Special Items to include	50.9	(24.6)	(2.7)	167.7	365.1	348.5	255.9	100.6	330.9	712.5	
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divestitures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subtract: Equity Investment Income Add Back: Stock Option Expense (After-	(22.9)	0.0	0.0	0.0	(2.2)	0.3	(51.0)	(115.6)	(126.2)	(189.1)
Tax)	40.0	84.9	107.1	147.5	65.7	73.6	77.0	150.4	166.5	173.2
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Gross Earnings'	5,867.0	6,418.1	7,035.4	8,404.2	9,059.9	10,685.8	12,270.0	14,251.5	15,396.7	15,889.5
Maintenance CAPX/Economic										
Depreciation										
Depreciating Assets	31,916.9	35,354.9	42,762.1	50,759.1	58,414.7	71,037.1	78,987.2	84,038.4	93,964.9	104,682.9
Asset Life	8.4	8.7	8.9	8.9	9.3	9.4	9.4	9.3	9.3	9.4
Subtract: Economic Depreciation (aka										
Adj. MCAPX)	3,795.9	4,060.5	4,817.3	5,719.4	6,274.1	7,555.9	8,400.5	9,052.3	10,119.0	11,101.1
Earnings'	2,071.1	2,357.6	2,218.1	2,684.8	2,785.8	3,129.9	3,869.5	5,199.2	5,277.6	4,788.4
Share Count	1,002.1	1,019.4	1,029.1	1,032.5	1,039.4	1,043.9	1,060.9	1,071.5	1,082.1	1,088.3
EPS'	2.07	2.31	2.16	2.60	2.68	3.00	3.65	4.85	4.88	4.40
Traditional EPS	2.15	2.34	2.25	2.58	3.08	3.13	3.51	4.36	4.95	4.53
Earnings as a % of Earnings'	104.1%	101.2%	104.6%	99.2%	114.8%	104.2%	96.3%	89.9%	101.6%	102.9%
Adjustment for Equity Earnings'										
Earnings'	2,071.1	2,357.6	2,218.1	2,684.8	2,785.8	3,129.9	3,869.5	5,199.2	5,277.6	4,788.4
Subtract: Interest Expense	80.41	55.47	105.08	218.91	193.20	291.34	206.01	152.92	152.47	225.54
Subtract: Interest Expense Tax Shield	20.57	13.21	29.10	59.19	44.93	73.59	48.72	37.28	28.66	48.67
Earnings"	1,970.12	2,288.92	2,083.94	2,406.70	2,547.70	2,764.99	3,614.81	5,008.98	5,096.51	4,514.21
EPS"	1.97	2.25	2.02	2.33	2.45	2.65	3.41	4.67	4.71	4.15
Earnings as a % of Equity Earnings'	109.5%	104.3%	111.3%	110.7%	125.5%	118.0%	103.1%	93.3%	105.2%	109.2%

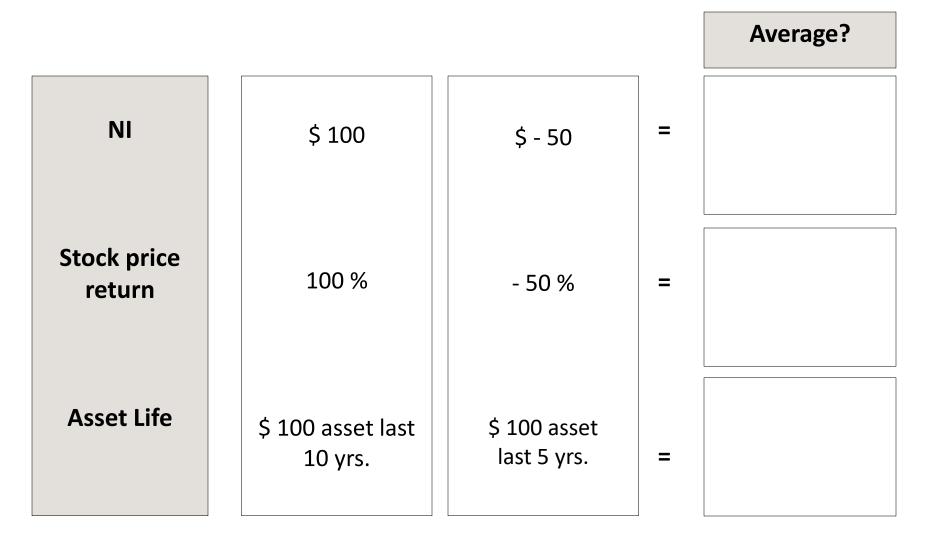
## **Asset Life**

- Range of lives of 4,000 plus firms
  - ▶ 4 to 28 years (4 to 30 Phil.)

- Wide range of median asset life across firms
  - ► Median of 12 years (15.5 Phil.)

- Very stable life within a firm
  - ► Median *change* YOY is near zero

# Be careful of what you "mean"



# Be careful of what you "mean"



#### Firm XYZ Asset schedule:

\$100 assets 10 year life

\$100 assets 5 year life

What is the average life of the assets of firm XYZ?

7.5 is a very problematic answer...

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If the average life is 7.5, and assets are \$200, how much MCAPX would this suggest?

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Yet, it's obvious that the real answer is \$30

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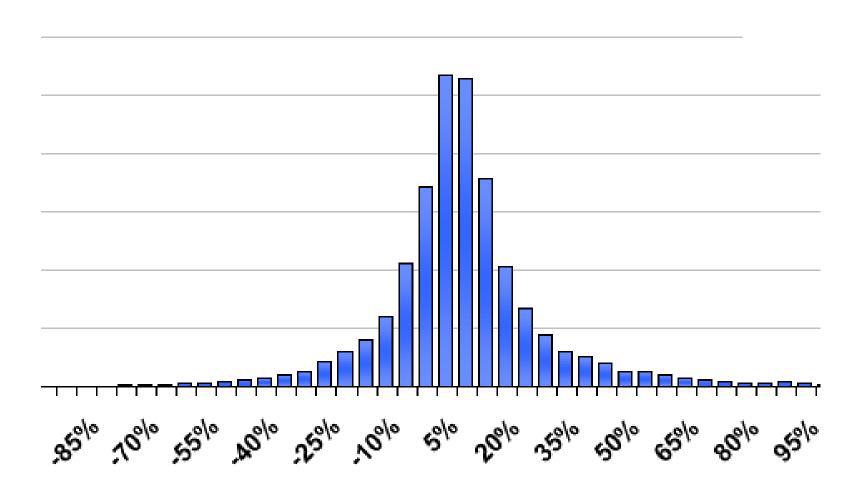
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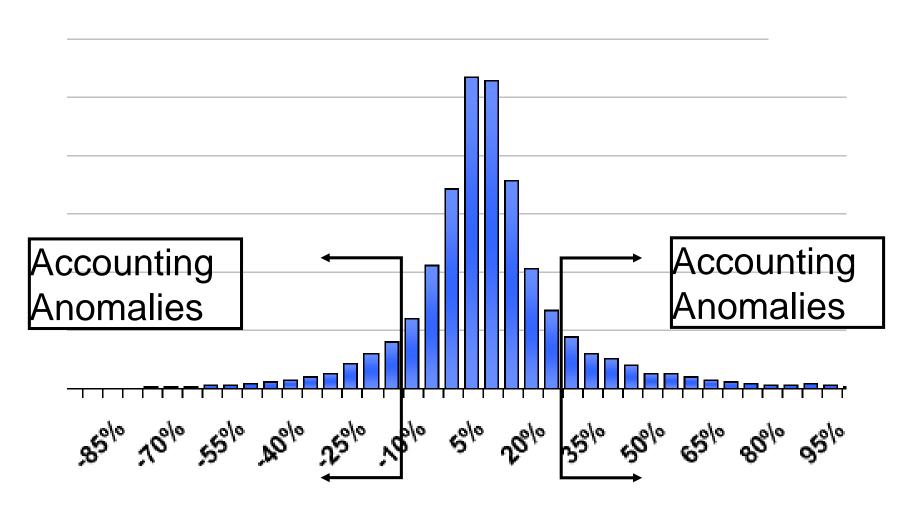
Yet, it's obvious that the real answer is \$30

### The MCAPX calc would be wrong by 11% every year

# Distribution Analysis - Change in Asset Life:



# Distribution Analysis - Change in Asset Life:



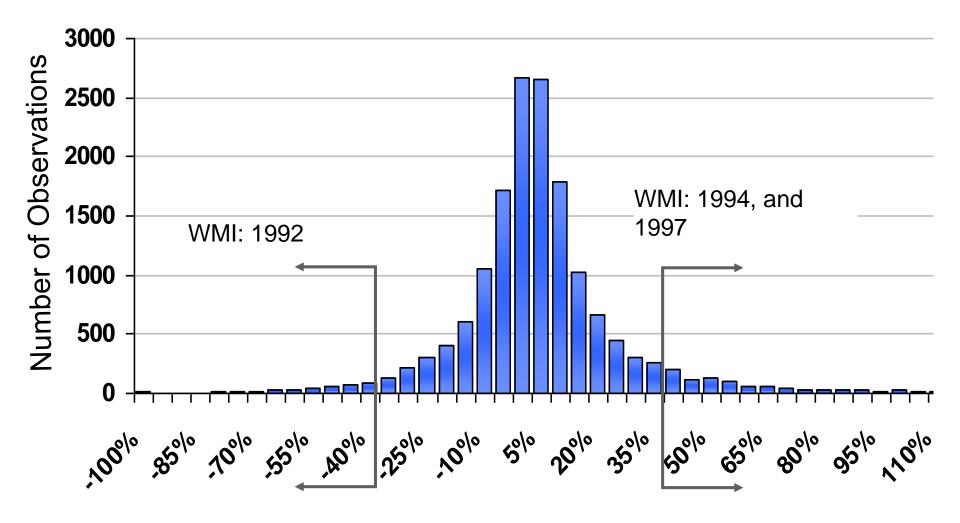
# Asset Life (Gross Plant) Asset Life (Gross Plant) 7.7 6.6 11.7

Studying accounting "anomalies"

Materiality

**Fluctuation** 

# **Asset Life: Financial Red Flag**



WMI's asset life changed by greater than 40%...3X times within a seven-year period 98

# "The Asset Life Signal" - e.g. WMI

# The New York Times

# Waste Management Stuck in Accounting Mire

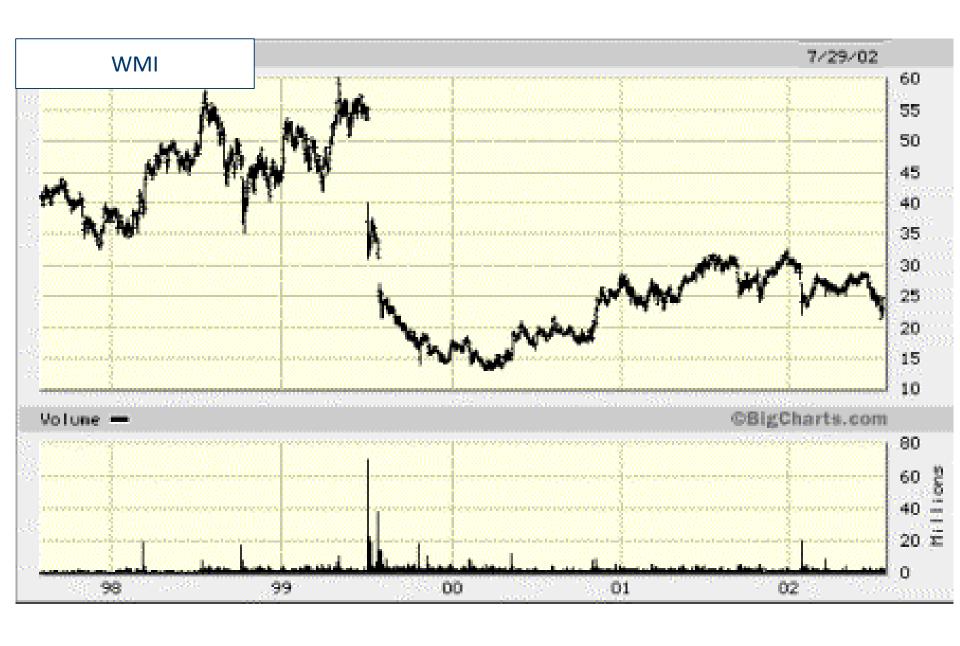
January 30, 1998 - "...its problem with misleading accounting goes back to 1992, not 1994 as previously announced;

"...huge charge against earnings... as company revises the way it has accounted for value of assets as well as ...expenses ...

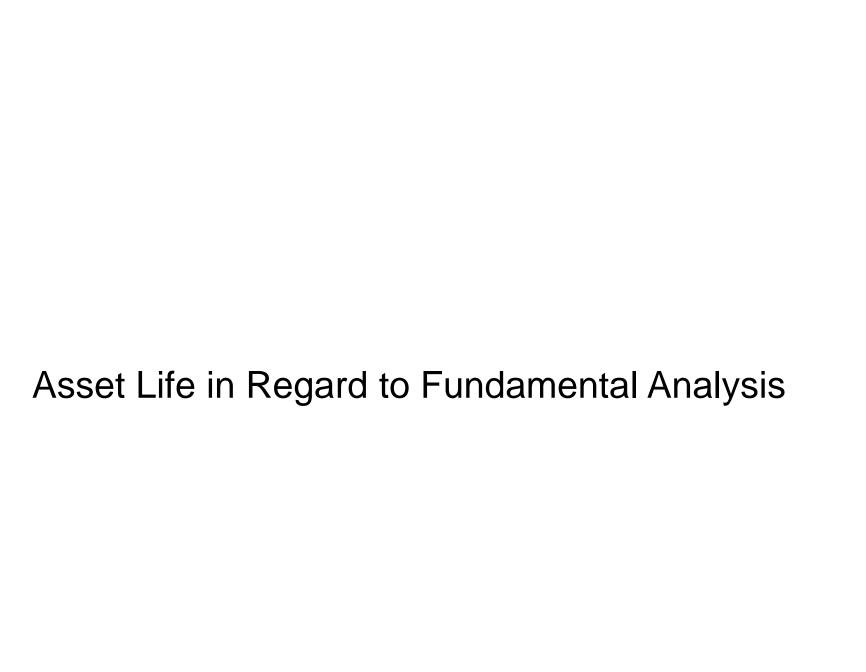
Source: www.nvtimes.com

"In April 2002, charges were filed by the SEC against Waste Management's former most senior officers, including Dean L. Buntrock, founder, chair of the board of directors, and chief executive officer.

"SEC complaint alleged: He set earnings targets, fostered a culture of fraudulent accounting, personally directed certain of the accounting changes to make the targeted earnings, and was the spokesperson who announced the company's phony numbers."



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# If GDP is generally positive:

- Average assets are slightly newer than they are old
- Less than half accumulated depreciation
- Average Net PP&E to Gross PP&E ratio >50%

MAN	2001 12/2001 USD	2002 12/2002 USD	2003 12/2003 USD	2004 12/2004 USD	2005 12/2005 USD	2006 12/2006 USD	2007 12/2007 USD	2008 12/2008 USD	2009 12/2009 USD
Depreciation Method	SL								
Net Plant/Gross Plant Ratio	41.5	35.1	30.6	33.1	30.3	28.9	28.9	28.3	24.7

- Free cash flow is based on CAPX, not depreciation
- What can be expected of CAPX in the near term?

## If GDP is generally positive:

- Average assets are slightly newer than they are old
- Less than half accumulated depreciation
- Average Net PP&E to Gross PP&E ratio >50%

MAN	2001 12/2001 USD	2002 12/2002 USD	2003 12/2003 USD	2004 12/2004 USD	2005 12/2005 USD	2006 12/2006 USD	2007 12/2007 USD	2008 12/2008 USD	2009 12/2009 USD
Depreciation Method	SL								
Net Plant/Gross Plant Ratio	41.5	35.1	30.6	33.1	30.3	28.9	28.9	28.3	24.7

MAN	Calendar Year Fiscal Year	2004 12/2004 USD	2005 12/2005 USD	2006 12/2006 USD	2007 12/2007 USD	2008 12/2008 USD	2009 12/2009 USD
Net Income		246	260	306	485	219	(9)
Minus: Special Items (after-t	ax)	9	(13)	(13)	97	(157)	(131)

TEL (PLDT Phil.)	2005 12/2005 PHP	2006 12/2006 PHP	2007 12/2007 PHP	2008 12/2008 PHP	2009 12/2009 PHP
<u> Asset Life (Gross Plant)</u>					
Gross Plant (Adjusted)	316,498	334,212	345,320	350,847	365,988
Depreciation Expense	30,822	31,869	28,613	24,709	25,607
Gross Plant Project Life - Straight Line	10.3	10.5	12.1	14.2	14.3
Net Plant/Gross Plant Ratio	51.5	45.2	40.5	38.2	37.3

- Financial Red Flags... are only flags
- Over-depreciated assets (too short a life in the past)?
- A signal to adjust MCAPX and CAPX forecasts

#### CALCULATIONS FOR ASSET LIFE

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
PP&E Growth Rate Historic Organic Growth Rate of Combined Entity Implied CAPX									0.1	11.0%
Gross PP&E (excluding Land, CIP)	13,012.5	14,063.7	16,157.9	18,313.6	19,703.1	22,663.1	25,208.1	27,644.0	30,088.5	34,077.2
Depreciation Expense	1,573.8	1,579.6	1,728.9	2,085.9	1,978.0	2,401.6	2,705.6	3,072.5	3,180.6	3,418.2
Estimated Life of PP&E	8.3	8.9	9.3	8.8	10.0	9.4	9.3	9.0	9.5	10.0
Implied Maintenance Capex (Deflated Depreciation Expense)	1,929.6	1,916.9	2,155.1	2,624.4	2,524.6	3,055.0	3,325.6	3,685.3	3,820.3	3,990.5
Estimated Life of PP&E (3 year median)	8.4	8.7	8.9	8.9	9.3	9.4	9.4	9.3	9.3	9.5
Estimated Life of Leased Assets	8.4	8.7	8.9	8.9	9.3	9.4	9.4	9.3	9.3	9.5
Estimated Life of R&D	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Economic PP&E depreciation (PP&E/Life) Economic Cap. Leases depr. (Cap. Rent/life of leases) Economic R&D Depr (Cap. R&D/Life) Sum of Economic depreciation	1,927.2 1,847.7 21.1 3,795.9	1,977.6 2,057.7 25.3 4,060.5	2,292.7 2,491.6 33.0 4,817.3	2,637.1 3,040.3 42.0 5,719.4	2,733.1 3,489.8 51.1 6,274.1	3,126.2 4,369.8 59.8 7,555.9	3,315.6 5,020.5 64.4 8,400.5	3,619.2 5,363.4 69.7 9,052.3	4,013.1 6,033.3 72.6 10,119.0	4,350.9 6,675.2 75.0 11,101.1
Harmonic mean of estimated lives	8.4	8.7	8.9	8.9	9.3	9.4	9.4	9.3	9.3	9.4
Net PP&E/Gross PP&E Ratio Implied Average Age of Assets	46.5 4.5	47.0 4.6	45.9 4.8	40.9	40.1 5.6	40.7 5.6	40.5	39.5 5.6	39.9 5.6	38.7 5.8
Two-year moving average of implied age	4.5	4.6	4.7	5.0	5.4	5.6	5.6	5.6	5.6	5.7
NP/GP Implied End of Year Accumulated Depreciation Balance Annual depreciation expense Less: retired accumulated depreciation Calculated end of year accumulated	6,964.1	7,459.0	8,738.2	10,818.0	11,795.2	13,434.8	14,998.8	16,734.4	18,072.9	20,886.2
depreciation	6,964.1	7,459.0	8,738.2	10,818.0	11,795.2	13,434.8	14,998.8	16,734.4	18,072.9	20,886.2

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
Gross Earnings'	5,867.0	6,418.1	7,035.4	8,404.2	9,059.9	10,685.8	12,270.0	14,251.5	15,396.7	15,889.5
Maintenance CAPX/Economic										
Depreciation										
Depreciating Assets	31,916.9	35,354.9	42,762.1	50,759.1	58,414.7	71,037.1	78,987.2	84,038.4	93,964.9	104,682.9
Asset Life	8.4	8.7	8.9	8.9	9.3	9.4	9.4	9.3	9.3	9.4
Subtract: Economic Depreciation (aka										
Adj. MCAPX)	3,795.9	4,060.5	4,817.3	5,719.4	6,274.1	7,555.9	8,400.5	9,052.3	10,119.0	11,101.1
Earnings'	2,071.1	2,357.6	2,218.1	2,684.8	2,785.8	3,129.9	3,869.5	5,199.2	5,277.6	4,788.4
	2,071.1	2,337.0	2,210.1	2,00 1.0	2,703.0	3,123.3	3,003.0	3,233.2	3,277.0	1,700.1
Share Count	1,002.1	1,019.4	1,029.1	1,032.5	1,039.4	1,043.9	1,060.9	1,071.5	1,082.1	1,088.3
EPS'	2.07	2.31	2.16	2.60	2.68	3.00	3.65	4.85	4.88	4.40
Traditional EPS	2.15	2.34	2.25	2.58	3.08	3.13	3.51	4.36	4.95	4.53
Earnings as a % of Earnings'	104.1%	101.2%	104.6%	99.2%	114.8%	104.2%	96.3%	89.9%	101.6%	102.9%
Adjustment for Equity Earnings'										
Earnings'	2,071.1	2,357.6	2,218.1	2,684.8	2,785.8	3,129.9	3,869.5	5,199.2	5,277.6	4,788.4
Subtract: Interest Expense	80.41	55.47	105.08	218.91	193.20	291.34	206.01	152.92	152.47	225.54
Subtract: Interest Expense Tax Shield	20.57	13.21	29.10	59.19	44.93	73.59	48.72	37.28	28.66	48.67
Earnings"	1,970.12	2,288.92	2,083.94	2,406.70	2,547.70	2,764.99	3,614.81	5,008.98	5,096.51	4,514.21
EPS"	1.97	2.25	2.02	2.33	2.45	2.65	3.41	4.67	4.71	4.15
Earnings as a % of Equity Earnings'	109.5%	104.3%	111.3%	110.7%	125.5%	118.0%	103.1%	93.3%	105.2%	109.2%

#### **CALCULATIONS FOR E' (ADJUSTED EARNINGS)**

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
Gross Earnings'	5,867.0	6,418.1	7,035.4	8,404.2	9,059.9	10,685.8	12,270.0	14,251.5	15,396.7	15,889.5
Maintenance CAPX/Economic										
Depreciation										
Depreciating Assets	31,916.9	35,354.9	42,762.1	50,759.1	58,414.7	71,037.1	78,987.2	84,038.4	93,964.9	104,682.9
Asset Life	8.4	8.7	8.9	8.9	9.3	9.4	9.4	9.3	9.3	9.4
Subtract: Economic Depreciation (aka										
Adj. MCAPX)	3,795.9	4,060.5	4,817.3	5,719.4	6,274.1	7,555.9	8,400.5	9,052.3	10,119.0	11,101.1
Earnings'	2,071.1	2,357.6	2,218.1	2,684.8	2,785.8	3,129.9	3,869.5	5,199.2	5,277.6	4,788.4
Share Count	1,002.1	1,019.4	1,029.1	1,032.5	1,039.4	1,043.9	1,060.9	1,071.5	1,082.1	1,088.3
EPS'	2.07	2.31	2.16	2.60	2.68	3.00	3.65	4.85	4.88	4.40
Traditional EPS	2.15	2.34	2.25	2.58	3.08	3.13	3.51	4.36	4.95	4.53
Earnings as a % of Earnings'	104.1%	101.2%	104.6%	99.2%	114.8%	104.2%	96.3%	89.9%	101.6%	102.9%
Adjustment for Equity Earnings'										
Earnings'	2,071.1	2,357.6	2,218.1	2,684.8	2,785.8	3,129.9	3,869.5	5,199.2	5,277.6	4,788.4
Subtract: Interest Expense	80.41	55.47	105.08	218.91	193.20	291.34	206.01	152.92	152.47	225.54
Subtract: Interest Expense Tax Shield	20.57	13.21	29.10	59.19	44.93	73.59	48.72	37.28	28.66	48.67
Earnings"	1,970.12	2,288.92	2,083.94	2,406.70	2,547.70	2,764.99	3,614.81	5,008.98	5,096.51	4,514.21
EPS"	1.97	2.25	2.02	2.33	2.45	2.65	3.41	4.67	4.71	4.15
Earnings as a % of Equity Earnings'	109.5%	104.3%	111.3%	110.7%	125.5%	118.0%	103.1%	93.3%	105.2%	109.2%

# Translating, scrubbing, cleaning-up, apples-to-apples

- Earnings or CFFO → E' = "Enterprise Earnings"
- Book Assets  $\rightarrow$  A' = "Assets of the Enterprise"
- ROE, RONA, ROA → ROA'
- CAPX → Enterprise Asset Growth
- Price → Enterprise value, V'
- Price-to-Book → V/A'
- Price-to-earnings → V/E'

# Translating, scrubbing, cleaning-up, apples-to-apples

- Earnings or CFFO → E' = "Enterprise Earnings"
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- ROE, RONA, ROA → ROA'
- CAPX → Enterprise Asset Growth
- Price → Enterprise value, V'
- Price-to-Book → V/A'
- Price-to-earnings → V/E'

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
Cash & Short-Term Investments	4,452.4	5,575.9	6,878.9	8,977.3	8,170.5	6,655.3	8,848.6	9,903.9	7,618.5	12,419.9
Excess Cash	2,756.9	3,573.9	4,684.3	6,515.9	5,385.3	3,527.6	5,223.9	5,845.2	3,021.2	7,277.2
Operating Cash & Short-Term	2,730.9	3,041.3	4,064.3	0,515.9	3,363.3	3,327.0	3,223.9	3,643.2	3,021.2	1,211.2
Investments	1,695.6	1,934.7	2,194.6	2,461.3	2,785.2	3,127.7	3,624.7	4,058.7	4,597.3	5,142.7
Accounts Receivable	1,488.4	1,818.3	1,805.1	1,754.5	1,837.7	2,388.6	2,454.6	2,853.9	7,270.3	5,055.1
Financial Subsidiary Receivable	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Accounts Receivable - Adi	1,488.4	1,818.3	1,805.1	1,754.5	1,837.7	2,388.6	2,454.6	2,853.9	7,270.3	5,055.1
Inventory	1,266.3	1,629.4	2,727.5	1,729.4	2,134.5	2,860.1	2,629.7	3,560.4	5,971.8	5,478.4
LIFO Reserve	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Inventory - Adj	1,266.3	1,629.4	2,727.5	1,729.4	2,134.5	2,860.1	2,629.7	3,560.4	5,971.8	5,478.4
Other Current Assets	450.9	1,142.8	517.1	240.2	784.4	1,354.9	662.8	953.1	1,679.4	2,466.8
Prepaid Expenses	221.3	222.3	395.8	509.9	519.0	0.0	751.4	909.5	1,191.2	1,526.0
Other Receivables	626.3	20.3	441.0	671.1	126.5	175.3	276.0	203.5	290.3	223.0
Other Current Assets - Adi	1,298.5	1,385.4	1,353.9	1,421.1	1,429.8	1,530.2	1,690.2	2,066.0	3,160.8	4,215.7
Current Assets	5,748.8	6,767.8	8,081.1	7,366.4	8,187.2	9,906.7	10,399.3	12,539.0	21,000.2	19,891.9
carrent Assets	3,740.0	0,707.0	0,001.1	7,300.4	0,107.2	3,300.7	10,555.5	12,333.0	21,000.2	15,651.5
Accounts Payable	2,813.7	2,257.3	3,508.7	3,720.4	3,601.6	10,165.6	4,717.1	6,006.6	6,575.9	9,433.8
Income Taxes Payable	8.9	83.7	82.5	135.9	167.8	154.7	79.0	154.7	181.8	236.0
Accrued Expenses, Total	1,762.3	2,294.2	2,491.7	4,508.9	4,886.9	0.0	5,986.5	7,256.6	8,543.0	8,669.6
Other Current Liabilities	1,731.5	2,721.2	2,421.3	909.9	854.4	104.8	1,265.9	1,094.4	1,209.7	1,518.6
Current Pension Liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Current Postretirement Liability	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Current Pension/Postretirement										
Liability	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Current Liabilities	3,493.8	5,015.4	4,913.0	5,418.8	5,741.3	104.8	7,252.4	8,351.0	9,752.7	10,188.1
Non Current Unearned Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Current Liabilities	6,316.3	7,356.4	8,504.3	9,275.1	9,510.6	10,425.1	12,048.4	14,512.3	16,510.4	19,857.9
N . W . L' . G . T . L	(567.5)	(F00.6)	(422.2)	(4.000.7)	(4 222 4)	(540.4)	(4.540.4)	(4.072.2)	4 400 0	24.4
Net Working Capital	(567.5)	(588.6)	(423.2)	(1,908.7)	(1,323.4)	(518.4)	(1,649.1)	(1,973.3)	4,489.8	34.1

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
Cash & Short-Term Investments	4,452.4	5,575.9	6,878.9	8,977.3	8,170.5	6,655.3	8,848.6	9,903.9	7,618.5	12,419.9
Excess Cash	2,756.9	3,641.3	4,684.3	6,515.9	5,385.3	3,527.6	5,223.9	5,845.2	3,021.2	7,277.2
Operating Cash & Short-Term										
Investments	1,695.6	1,934.7	2,194.6	2,461.3	2,785.2	3,127.7	3,624.7	4,058.7	4,597.3	5,142.7
Accounts Receivable	1,488.4	1,818.3	1,805.1	1,754.5	1,837.7	2,388.6	2,454.6	2,853.9	7,270.3	5,055.1
Financial Subsidiary Receivable	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Accounts Receivable - Adj	1,488.4	1,818.3	1,805.1	1,754.5	1,837.7	2,388.6	2,454.6	2,853.9	7,270.3	5,055.1
Inventory	1,266.3	1,629.4	2,727.5	1,729.4	2,134.5	2,860.1	2,629.7	3,560.4	5,971.8	5,478.4
LIFO Reserve	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Inventory - Adj	1,266.3	1,629.4	2,727.5	1,729.4	2,134.5	2,860.1	2,629.7	3,560.4	5,971.8	5,478.4
Other Current Assets	450.9	1,142.8	517.1	240.2	784.4	1,354.9	662.8	953.1	1,679.4	2,466.8
Prepaid Expenses	221.3	222.3	395.8	509.9	519.0	0.0	751.4	909.5	1,191.2	1,526.0
Other Receivables	626.3	20.3	441.0	671.1	126.5	175.3	276.0	203.5	290.3	223.0
Other Current Assets - Adj	1,298.5	1,385.4	1,353.9	1,421.1	1,429.8	1,530.2	1,690.2	2,066.0	3,160.8	4,215.7
Current Assets	5,748.8	6,767.8	8,081.1	7,366.4	8,187.2	9,906.7	10,399.3	12,539.0	21,000.2	19,891.9
Accounts Payable	2,813.7	2,257.3	3,508.7	3,720.4	3,601.6	10,165.6	4,717.1	6,006.6	6,575.9	9,433.8
Income Taxes Payable	8.9	83.7	82.5	135.9	167.8	154.7	79.0	154.7	181.8	236.0
Accrued Expenses, Total	1,762.3	2,294.2	2,491.7	4,508.9	4,886.9	0.0	5,986.5	7,256.6	8,543.0	8,669.6
Other Current Liabilities	1,731.5	2,721.2	2,421.3	909.9	854.4	104.8	1,265.9	1,094.4	1,209.7	1,518.6
Current Pension Liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Current Postretirement Liability Current Pension/Postretirement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Liability	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Current Liabilities	3,493.8	5,015.4	4,913.0	5,418.8	5,741.3	104.8	7,252.4	8,351.0	9,752.7	10,188.1
Non Current Unearned Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Current Liabilities	6,316.3	7,356.4	8,504.3	9,275.1	9,510.6	10,425.1	12,048.4	14,512.3	16,510.4	19,857.9
Net Working Capital	(567.5)	(588.6)	(423.2)	(1,908.7)	(1,323.4)	(518.4)	(1,649.1)	(1,973.3)	4,489.8	34.1

How much of Excess Cash is truly "excess"?

The problem with "net debt"

- Ask a credit analyst
- More than just a "warchest"
- 10% of sales is an unfortunate "averaging"

What does the data say?

How much of Excess Cash is truly excess?

2,890 companies over 10 years, so 28,900 individual datapoints

- 1x Cash to Un-incurred Operating Expenditures
- 2x Cash to R&D Expense
- 5% of sales in Cash

### **CALCULATIONS FOR EXCESS CASH**

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
Excess Cash (2* Median R&D Expense)	43.8	53.2	65.7	99.8	123.7	126.0	123.7	141.8	155.2	155.2
Current Unearned Revenue	0.0	0.0	0.0	67.2	123.1	0.0	75.9	47.6	67.6	108.8
LT Unearned Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unearned COGS	0.0	0.0	0.0	63.4	116.6	0.0	71.7	44.5	63.7	103.7
Revenue	33,911.2	38,693.7	43,891.6	47,957.7	53,371.7	62,554.9	71,059.0	80,282.8	90,671.2	100,779.7
5% of Revenue	1,695.6	1,934.7	2,194.6	2,397.9	2,668.6	3,127.7	3,553.0	4,014.1	4,533.6	5,039.0
Total cash per the financials	4,452.4	5,575.9	6,878.9	8,977.3	8,170.5	6,655.3	8,848.6	9,903.9	7,618.5	12,419.9
Excess Cash (formula e.g. 4x R&D, etc.)	2,756.9	3,641.3	4,684.3	6,515.9	5,385.3	3,527.6	5,223.9	5,845.2	3,021.2	7,277.2
Cash restated for the GIC calculation (Curr										
assets)	1,695.6	1,934.7	2,194.6	2,461.3	2,785.2	3,127.7	3,624.7	4,058.7	4,597.3	5,142.7
Other non-operating assets manually										
removed above	0.0	46.2	76.8	155.2	179.1	123.8	1,262.6	1,143.7	1,092.5	5,922.5
Value of total non-operating cash/assets	2,756.9	3,687.4	4,761.0	6,671.2	5,564.4	3,651.4	6,486.5	6,988.9	4,113.8	13,199.8

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
Cash & Short-Term Investments	4,452.4	5,575.9	6,878.9	8,977.3	8,170.5	6,655.3	8,848.6	9,903.9	7,618.5	12,419.9
Excess Cash	2,756.9	3,641.3	4,684.3	6,515.9	5,385.3	3,527.6	5,223.9	5,845.2	3,021.2	7,277.2
Operating Cash & Short-Term										
Investments	1,695.6	1,934.7	2,194.6	2,461.3	2,785.2	3,127.7	3,624.7	4,058.7	4,597.3	5,142.7
Accounts Receivable	1,488.4	1,818.3	1,805.1	1,754.5	1,837.7	2,388.6	2,454.6	2,853.9	7,270.3	5,055.1
Financial Subsidiary Receivable	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Accounts Receivable - Adj	1,488.4	1,818.3	1,805.1	1,754.5	1,837.7	2,388.6	2,454.6	2,853.9	7,270.3	5,055.1
Inventory	1,266.3	1,629.4	2,727.5	1,729.4	2,134.5	2,860.1	2,629.7	3,560.4	5,971.8	5,478.4
LIFO Reserve	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Inventory - Adj	1,266.3	1,629.4	2,727.5	1,729.4	2,134.5	2,860.1	2,629.7	3,560.4	5,971.8	5,478.4
Other Current Assets	450.9	1,142.8	517.1	240.2	784.4	1,354.9	662.8	953.1	1,679.4	2,466.8
Prepaid Expenses	221.3	222.3	395.8	509.9	519.0	0.0	751.4	909.5	1,191.2	1,526.0
Other Receivables	626.3	20.3	441.0	671.1	126.5	175.3	276.0	203.5	290.3	223.0
Other Current Assets - Adj	1,298.5	1,385.4	1,353.9	1,421.1	1,429.8	1,530.2	1,690.2	2,066.0	3,160.8	4,215.7
Current Assets	5,748.8	6,767.8	8,081.1	7,366.4	8,187.2	9,906.7	10,399.3	12,539.0	21,000.2	19,891.9
Accounts Payable	2,813.7	2,257.3	3,508.7	3,720.4	3,601.6	10,165.6	4,717.1	6,006.6	6,575.9	9,433.8
Income Taxes Payable	8.9	83.7	82.5	135.9	167.8	154.7	79.0	154.7	181.8	236.0
Accrued Expenses, Total	1,762.3	2,294.2	2,491.7	4,508.9	4,886.9	0.0	5,986.5	7,256.6	8,543.0	8,669.6
Other Current Liabilities	1,731.5	2,721.2	2,421.3	909.9	854.4	104.8	1,265.9	1,094.4	1,209.7	1,518.6
Current Pension Liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Current Postretirement Liability	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Current Pension/Postretirement										
Liability	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Current Liabilities	3,493.8	5,015.4	4,913.0	5,418.8	5,741.3	104.8	7,252.4	8,351.0	9,752.7	10,188.1
Non Current Unearned Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Current Liabilities	6,316.3	7,356.4	8,504.3	9,275.1	9,510.6	10,425.1	12,048.4	14,512.3	16,510.4	19,857.9
Net Working Capital	(567.5)	(588.6)	(423.2)	(1,908.7)	(1,323.4)	(518.4)	(1,649.1)	(1,973.3)	4,489.8	34.1

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
Cash & Short-Term Investments	4,452.4	5,575.9	6,878.9	8,977.3	8,170.5	6,655.3	8,848.6	9,903.9	7,618.5	12,419.9
Excess Cash	2,756.9	3,641.3	4,684.3	6,515.9	5,385.3	3,527.6	5,223.9	5,845.2	3,021.2	7,277.2
Operating Cash & Short-Term										
Investments	1,695.6	1,934.7	2,194.6	2,461.3	2,785.2	3,127.7	3,624.7	4,058.7	4,597.3	5,142.7
Accounts Receivable	1,488.4	1,818.3	1,805.1	1,754.5	1,837.7	2,388.6	2,454.6	2,853.9	7,270.3	5,055.1
Financial Subsidiary Receivable	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Accounts Receivable - Adj	1,488.4	1,818.3	1,805.1	1,754.5	1,837.7	2,388.6	2,454.6	2,853.9	7,270.3	5,055.1
Inventory	1,266.3	1,629.4	2,727.5	1,729.4	2,134.5	2,860.1	2,629.7	3,560.4	5,971.8	5,478.4
LIFO Reserve	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Inventory - Adj	1,266.3	1,629.4	2,727.5	1,729.4	2,134.5	2,860.1	2,629.7	3,560.4	5,971.8	5,478.4
Other Current Assets	450.9	1,142.8	517.1	240.2	784.4	1,354.9	662.8	953.1	1,679.4	2,466.8
Prepaid Expenses	221.3	222.3	395.8	509.9	519.0	0.0	751.4	909.5	1,191.2	1,526.0
Other Receivables	626.3	20.3	441.0	671.1	126.5	175.3	276.0	203.5	290.3	223.0
Other Current Assets - Adj	1,298.5	1,385.4	1,353.9	1,421.1	1,429.8	1,530.2	1,690.2	2,066.0	3,160.8	4,215.7
Current Assets	5,748.8	6,767.8	8,081.1	7,366.4	8,187.2	9,906.7	10,399.3	12,539.0	21,000.2	19,891.9
Accounts Payable	2,813.7	2,257.3	3,508.7	3,720.4	3,601.6	10,165.6	4,717.1	6,006.6	6,575.9	9,433.8
Income Taxes Payable	8.9	83.7	82.5	135.9	167.8	154.7	79.0	154.7	181.8	236.0
Accrued Expenses, Total	1,762.3	2,294.2	2,491.7	4,508.9	4,886.9	0.0	5,986.5	7,256.6	8,543.0	8,669.6
Other Current Liabilities	1,731.5	2,721.2	2,421.3	909.9	854.4	104.8	1,265.9	1,094.4	1,209.7	1,518.6
Current Pension Liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Current Postretirement Liability Current Pension/Postretirement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Liability	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Current Liabilities	3,493.8	5,015.4	4,913.0	5,418.8	5,741.3	104.8	7,252.4	8,351.0	9,752.7	10,188.1
Non Current Unearned Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Current Liabilities	6,316.3	7,356.4	8,504.3	9,275.1	9,510.6	10,425.1	12,048.4	14,512.3	16,510.4	19,857.9
Net Working Capital	(567.5)	(588.6)	(423.2)	(1,908.7)	(1,323.4)	(518.4)	(1,649.1)	(1,973.3)	4,489.8	34.1

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
Cash & Short-Term Investments	4,452.4	5,575.9	6,878.9	8,977.3	8,170.5	6,655.3	8,848.6	9,903.9	7,618.5	12,419.9
Excess Cash	2,756.9	3,641.3	4,684.3	6,515.9	5,385.3	3,527.6	5,223.9	5,845.2	3,021.2	7,277.2
Operating Cash & Short-Term										
Investments	1,695.6	1,934.7	2,194.6	2,461.3	2,785.2	3,127.7	3,624.7	4,058.7	4,597.3	5,142.7
Accounts Receivable	1,488.4	1,818.3	1,805.1	1,754.5	1,837.7	2,388.6	2,454.6	2,853.9	7,270.3	5,055.1
Financial Subsidiary Receivable	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Accounts Receivable - Adj	1,488.4	1,818.3	1,805.1	1,754.5	1,837.7	2,388.6	2,454.6	2,853.9	7,270.3	5,055.1
Inventory	1,266.3	1,629.4	2,727.5	1,729.4	2,134.5	2,860.1	2,629.7	3,560.4	5,971.8	5,478.4
LIFO Reserve	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
nventory - Adj	1,266.3	1,629.4	2,727.5	1,729.4	2,134.5	2,860.1	2,629.7	3,560.4	5,971.8	5,478.4
Other Current Assets	450.9	1,142.8	517.1	240.2	784.4	1,354.9	662.8	953.1	1,679.4	2,466.8
Prepaid Expenses	221.3	222.3	395.8	509.9	519.0	0.0	751.4	909.5	1,191.2	1,526.0
Other Receivables	626.3	20.3	441.0	671.1	126.5	175.3	276.0	203.5	290.3	223.0
Other Current Assets - Adj	1,298.5	1,385.4	1,353.9	1,421.1	1,429.8	1,530.2	1,690.2	2,066.0	3,160.8	4,215.7
Current Assets	5,748.8	6,767.8	8,081.1	7,366.4	8,187.2	9,906.7	10,399.3	12,539.0	21,000.2	19,891.9
Accounts Payable	2,813.7	2,257.3	3,508.7	3,720.4	3,601.6	10,165.6	4,717.1	6,006.6	6,575.9	9,433.8
ncome Taxes Payable	8.9	83.7	82.5	135.9	167.8	154.7	79.0	154.7	181.8	236.0
Accrued Expenses, Total	1,762.3	2,294.2	2,491.7	4,508.9	4,886.9	0.0	5,986.5	7,256.6	8,543.0	8,669.6
Other Current Liabilities	1,731.5	2,721.2	2,421.3	909.9	854.4	104.8	1,265.9	1,094.4	1,209.7	1,518.6
Current Pension Liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Current Postretirement Liability Current Pension/Postretirement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Liability	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Current Liabilities	3,493.8	5,015.4	4,913.0	5,418.8	5,741.3	104.8	7,252.4	8,351.0	9,752.7	10,188.1
Non Current Unearned Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Current Liabilities	6,316.3	7,356.4	8,504.3	9,275.1	9,510.6	10,425.1	12,048.4	14,512.3	16,510.4	19,857.9
Net Working Capital	(567.5)	(588.6)	(423.2)	(1,908.7)	(1,323.4)	(518.4)	(1,649.1)	(1,973.3)	4,489.8	34.1

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015	
Cash & Short-Term Investments	4,452.4	5,575.9	6,878.9	8,977.3	8,170.5	6,655.3	8,848.6	9,903.9	7,618.5	12,419.9	
Excess Cash	2,756.9	3,641.3	4,684.3	6,515.9	5,385.3	3,527.6	5,223.9	5,845.2	3,021.2	7,277.2	
Operating Cash & Short-Term											
Investments	1,695.6	1,934.7	2,194.6	2,461.3	2,785.2	3,127.7	3,624.7	4,058.7	4,597.3	5,142.7	
Accounts Receivable	1,488.4	1,818.3	1,805.1	1,754.5	1,837.7	2,388.6	2,454.6	2,853.9	7,270.3	5,055.1	
Financial Subsidiary Receivable	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Accounts Receivable - Adj	1,488.4	1,818.3	1,805.1	1,754.5	1,837.7	2,388.6	2,454.6	2,853.9	7,270.3	5,055.1	
Inventory	1,266.3	1,629.4	2,727.5	1,729.4	2,134.5	2,860.1	2,629.7	3,560.4	5,971.8	5,478.4	
LIFO Reserve	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Inventory - Adj	1,266.3	1,629.4	2,727.5	1,729.4	2,134.5	2,860.1	2,629.7	3,560.4	5,971.8	5,478.4	
Other Current Assets	450.9	1,142.8	517.1	240.2	784.4	1,354.9	662.8	953.1	1,679.4	2,466.8	
Prepaid Expenses	221.3	222.3	395.8	509.9	519.0	0.0	751.4	909.5	1,191.2	1,526.0	
Other Receivables	626.3	20.3	441.0	671.1	126.5	175.3	276.0	203.5	290.3	223.0	
Other Current Assets - Adj	1,298.5	1,385.4	1,353.9	1,421.1	1,429.8	1,530.2	1,690.2	2,066.0	3,160.8	4,215.7	
Current Assets	5,748.8	6,767.8	8,081.1	7,366.4	8,187.2	9,906.7	10,399.3	12,539.0	21,000.2	19,891.9	
Accounts Payable	2,813.7	2,257.3	3,508.7	3,720.4	3,601.6	10,165.6	4,717.1	6,006.6	6,575.9	9,433.8	
Income Taxes Payable	8.9	83.7	82.5	135.9	167.8	154.7	79.0	154.7	181.8	236.0	
Accrued Expenses, Total	1,762.3	2,294.2	2,491.7	4,508.9	4,886.9	0.0	5,986.5	7,256.6	8,543.0	8,669.6	
Other Current Liabilities	1,731.5	2,721.2	2,421.3	909.9	854.4	104.8	1,265.9	1,094.4	1,209.7	1,518.6	
Current Pension Liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Current Postretirement Liability Current Pension/Postretirement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Liability	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Other Current Liabilities	3,493.8	5,015.4	4,913.0	5,418.8	5,741.3	104.8	7,252.4	8,351.0	9,752.7	10,188.1	
Non Current Unearned Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Current Liabilities	6,316.3	7,356.4	8,504.3	9,275.1	9,510.6	10,425.1	12,048.4	14,512.3	16,510.4	19,857.9	
Net Working Capital	(567.5)	(588.6)	(423.2)	(1,908.7)	(1,323.4)	(518.4)	(1,649.1)	(1,973.3)	4,489.8	34.1	

Inventory Inconsistencies – earnings and assets

LIFO and FIFO

- LIFOFIST
- FIFOLIST

What is the most recent pricing for both COGS and Inventory?

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
Cash & Short-Term Investments	4,452.4	5,575.9	6,878.9	8,977.3	8,170.5	6,655.3	8,848.6	9,903.9	7,618.5	12,419.9
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Operating Cash & Short-Term										
Investments	1,695.6	1,934.7	2,194.6	2,461.3	2,785.2	3,127.7	3,624.7	4,058.7	4,597.3	5,142.7
Accounts Receivable	1,488.4	1,818.3	1,805.1	1,754.5	1,837.7	2,388.6	2,454.6	2,853.9	7,270.3	5,055.1
Financial Subsidiary Receivable	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Accounts Receivable - Adj	1,488.4	1,818.3	1,805.1	1,754.5	1,837.7	2,388.6	2,454.6	2,853.9	7,270.3	5,055.1
Inventory	1,266.3	1,629.4	2,727.5	1,729.4	2,134.5	2,860.1	2,629.7	3,560.4	5,971.8	5,478.4
LIFO Reserve	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Inventory - Adj	1,266.3	1,629.4	2,727.5	1,729.4	2,134.5	2,860.1	2,629.7	3,560.4	5,971.8	5,478.4
Other Current Assets	450.9	1,142.8	517.1	240.2	784.4	1,354.9	662.8	953.1	1,679.4	2,466.8
Prepaid Expenses	221.3	222.3	395.8	509.9	519.0	0.0	751.4	909.5	1,191.2	1,526.0
Other Receivables	626.3	20.3	441.0	671.1	126.5	175.3	276.0	203.5	290.3	223.0
Other Current Assets - Adj	1,298.5	1,385.4	1,353.9	1,421.1	1,429.8	1,530.2	1,690.2	2,066.0	3,160.8	4,215.7
Current Assets	5,748.8	6,767.8	8,081.1	7,366.4	8,187.2	9,906.7	10,399.3	12,539.0	21,000.2	19,891.9
Accounts Payable	2,813.7	2,257.3	3,508.7	3,720.4	3,601.6	10,165.6	4,717.1	6,006.6	6,575.9	9,433.8
Income Taxes Payable	8.9	83.7	82.5	135.9	167.8	154.7	79.0	154.7	181.8	236.0
Accrued Expenses, Total	1,762.3	2,294.2	2,491.7	4,508.9	4,886.9	0.0	5,986.5	7,256.6	8,543.0	8,669.6
Other Current Liabilities	1,731.5	2,721.2	2,421.3	909.9	854.4	104.8	1,265.9	1,094.4	1,209.7	1,518.6
Current Pension Liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Current Postretirement Liability Current Pension/Postretirement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Liability	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Current Liabilities	3,493.8	5,015.4	4,913.0	5,418.8	5,741.3	104.8	7,252.4	8,351.0	9,752.7	10,188.1
Non Current Unearned Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Current Liabilities	6,316.3	7,356.4	8,504.3	9,275.1	9,510.6	10,425.1	12,048.4	14,512.3	16,510.4	19,857.9
Net Working Capital	(567.5)	(588.6)	(423.2)	(1,908.7)	(1,323.4)	(518.4)	(1,649.1)	(1,973.3)	4,489.8	34.1

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
Cash & Short-Term Investments	4,452.4	5,575.9	6,878.9	8,977.3	8,170.5	6,655.3	8,848.6	9,903.9	7,618.5	12,419.9
Excess Cash	2,756.9	3,641.3	4,684.3	6,515.9	5,385.3	3,527.6	5,223.9	5,845.2	3,021.2	7,277.2
Operating Cash & Short-Term										
Investments	1,695.6	1,934.7	2,194.6	2,461.3	2,785.2	3,127.7	3,624.7	4,058.7	4,597.3	5,142.7
Accounts Receivable	1,488.4	1,818.3	1,805.1	1,754.5	1,837.7	2,388.6	2,454.6	2,853.9	7,270.3	5,055.1
Financial Subsidiary Receivable	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Accounts Receivable - Adj	1,488.4	1,818.3	1,805.1	1,754.5	1,837.7	2,388.6	2,454.6	2,853.9	7,270.3	5,055.1
Inventory	1,266.3	1,629.4	2,727.5	1,729.4	2,134.5	2,860.1	2,629.7	3,560.4	5,971.8	5,478.4
LIFO Reserve	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Inventory - Adj	1,266.3	1,629.4	2,727.5	1,729.4	2,134.5	2,860.1	2,629.7	3,560.4	5,971.8	5,478.4
Other Current Assets	450.9	1,142.8	517.1	240.2	784.4	1,354.9	662.8	953.1	1,679.4	2,466.8
Prepaid Expenses	221.3	222.3	395.8	509.9	519.0	0.0	751.4	909.5	1,191.2	1,526.0
Other Receivables	626.3	20.3	441.0	671.1	126.5	175.3	276.0	203.5	290.3	223.0
Other Current Assets - Adj	1,298.5	1,385.4	1,353.9	1,421.1	1,429.8	1,530.2	1,690.2	2,066.0	3,160.8	4,215.7
Current Assets	5,748.8	6,767.8	8,081.1	7,366.4	8,187.2	9,906.7	10,399.3	12,539.0	21,000.2	19,891.9
Accounts Payable	2,813.7	2,257.3	3,508.7	3,720.4	3,601.6	10,165.6	4,717.1	6,006.6	6,575.9	9,433.8
Income Taxes Payable	8.9	83.7	82.5	135.9	167.8	154.7	79.0	154.7	181.8	236.0
Accrued Expenses, Total	1,762.3	2,294.2	2,491.7	4,508.9	4,886.9	0.0	5,986.5	7,256.6	8,543.0	8,669.6
Other Current Liabilities	1,731.5	2,721.2	2,421.3	909.9	854.4	104.8	1,265.9	1,094.4	1,209.7	1,518.6
Current Pension Liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Current Postretirement Liability Current Pension/Postretirement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Liability	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Current Liabilities	3,493.8	5,015.4	4,913.0	5,418.8	5,741.3	104.8	7,252.4	8,351.0	9,752.7	10,188.1
Non Current Unearned Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Current Liabilities	6,316.3	7,356.4	8,504.3	9,275.1	9,510.6	10,425.1	12,048.4	14,512.3	16,510.4	19,857.9
Net Working Capital	(567.5)	(588.6)	(423.2)	(1,908.7)	(1,323.4)	(518.4)	(1,649.1)	(1,973.3)	4,489.8	34.1

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
Cash & Short-Term Investments	4,452.4	5,575.9	6,878.9	8,977.3	8,170.5	6,655.3	8,848.6	9,903.9	7,618.5	12,419.9
Excess Cash	2,756.9	3,641.3	4,684.3	6,515.9	5,385.3	3,527.6	5,223.9	5,845.2	3,021.2	7,277.2
Operating Cash & Short-Term										
Investments	1,695.6	1,934.7	2,194.6	2,461.3	2,785.2	3,127.7	3,624.7	4,058.7	4,597.3	5,142.7
Accounts Receivable	1,488.4	1,818.3	1,805.1	1,754.5	1,837.7	2,388.6	2,454.6	2,853.9	7,270.3	5,055.1
Financial Subsidiary Receivable	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Accounts Receivable - Adj	1,488.4	1,818.3	1,805.1	1,754.5	1,837.7	2,388.6	2,454.6	2,853.9	7,270.3	5,055.1
Inventory	1,266.3	1,629.4	2,727.5	1,729.4	2,134.5	2,860.1	2,629.7	3,560.4	5,971.8	5,478.4
LIFO Reserve	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Inventory - Adj	1,266.3	1,629.4	2,727.5	1,729.4	2,134.5	2,860.1	2,629.7	3,560.4	5,971.8	5,478.4
Other Current Assets	450.9	1,142.8	517.1	240.2	784.4	1,354.9	662.8	953.1	1,679.4	2,466.8
Prepaid Expenses	221.3	222.3	395.8	509.9	519.0	0.0	751.4	909.5	1,191.2	1,526.0
Other Receivables	626.3	20.3	441.0	671.1	126.5	175.3	276.0	203.5	290.3	223.0
Other Current Assets - Adj	1,298.5	1,385.4	1,353.9	1,421.1	1,429.8	1,530.2	1,690.2	2,066.0	3,160.8	4,215.7
Current Assets	5,748.8	6,767.8	8,081.1	7,366.4	8,187.2	9,906.7	10,399.3	12,539.0	21,000.2	19,891.9
Accounts Payable	2,813.7	2,257.3	3,508.7	3,720.4	3,601.6	10,165.6	4,717.1	6,006.6	6,575.9	9,433.8
Income Taxes Payable	8.9	83.7	82.5	135.9	167.8	154.7	79.0	154.7	181.8	236.0
Accrued Expenses, Total	1,762.3	2,294.2	2,491.7	4,508.9	4,886.9	0.0	5,986.5	7,256.6	8,543.0	8,669.6
Other Current Liabilities	1,731.5	2,721.2	2,421.3	909.9	854.4	104.8	1,265.9	1,094.4	1,209.7	1,518.6
Current Pension Liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Current Postretirement Liability	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Current Pension/Postretirement	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Liability	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Current Liabilities	3,493.8	5,015.4	4,913.0	5,418.8	5,741.3	104.8	7,252.4	8,351.0	9,752.7	10,188.1
Non Current Unearned Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Current Liabilities	6,316.3	7,356.4	8,504.3	9,275.1	9,510.6	10,425.1	12,048.4	14,512.3	16,510.4	19,857.9

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
Cash & Short-Term Investments	4,452.4	5,575.9	6,878.9	8,977.3	8,170.5	6,655.3	8,848.6	9,903.9	7,618.5	12,419.9
Excess Cash	2,756.9	3,641.3	4,684.3	6,515.9	5,385.3	3,527.6	5,223.9	5,845.2	3,021.2	7,277.2
Operating Cash & Short-Term										
Investments	1,695.6	1,934.7	2,194.6	2,461.3	2,785.2	3,127.7	3,624.7	4,058.7	4,597.3	5,142.7
Accounts Receivable	1,488.4	1,818.3	1,805.1	1,754.5	1,837.7	2,388.6	2,454.6	2,853.9	7,270.3	5,055.1
Financial Subsidiary Receivable	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Accounts Receivable - Adj	1,488.4	1,818.3	1,805.1	1,754.5	1,837.7	2,388.6	2,454.6	2,853.9	7,270.3	5,055.1
Inventory	1,266.3	1,629.4	2,727.5	1,729.4	2,134.5	2,860.1	2,629.7	3,560.4	5,971.8	5,478.4
LIFO Reserve	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Inventory - Adj	1,266.3	1,629.4	2,727.5	1,729.4	2,134.5	2,860.1	2,629.7	3,560.4	5,971.8	5,478.4
Other Current Assets	450.9	1,142.8	517.1	240.2	784.4	1,354.9	662.8	953.1	1,679.4	2,466.8
Prepaid Expenses	221.3	222.3	395.8	509.9	519.0	0.0	751.4	909.5	1,191.2	1,526.0
Other Receivables	626.3	20.3	441.0	671.1	126.5	175.3	276.0	203.5	290.3	223.0
Other Current Assets - Adj	1,298.5	1,385.4	1,353.9	1,421.1	1,429.8	1,530.2	1,690.2	2,066.0	3,160.8	4,215.7
Current Assets	5,748.8	6,767.8	8,081.1	7,366.4	8,187.2	9,906.7	10,399.3	12,539.0	21,000.2	19,891.9
Accounts Payable	2,813.7	2,257.3	3,508.7	3,720.4	3,601.6	10,165.6	4,717.1	6,006.6	6,575.9	9,433.8
Income Taxes Payable	8.9	83.7	82.5	135.9	167.8	154.7	79.0	154.7	181.8	236.0
Accrued Expenses, Total	1,762.3	2,294.2	2,491.7	4,508.9	4,886.9	0.0	5,986.5	7,256.6	8,543.0	8,669.6
Other Current Liabilities	1.731.5	2,721.2	2,421.3	909.9	854.4	104.8	1,265.9	1,094.4	1,209.7	1,518.6
Current Pension Liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Current Postretirement Liability	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Current Pension/Postretirement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Liability	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Current Liabilities	3.493.8	5,015.4	4,913.0	5,418.8	5,741.3	104.8	7,252.4	8,351.0	9,752.7	10,188.1
Non Current Unearned Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Current Liabilities	6,316.3	7,356.4	8,504.3	9,275.1	9,510.6	10,425.1	12,048.4	14,512.3	16,510.4	19,857.9
Not Working Capital	/E67 E\	(E00 6)	(422.2)	(1 000 7)	(1 222 4)	(E10 4)	(1 6/0 1)	(1.072.2)	4 490 9	24.1
Net Working Capital	(567.5)	(588.6)	(423.2)	(1,908.7)	(1,323.4)	(518.4)	(1,649.1)	(1,973.3)	4,489.8	34.1

# "NIBCLS"

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015	
Cash & Short-Term Investments	4,452.4	5,575.9	6,878.9	8,977.3	8,170.5	6,655.3	8,848.6	9,903.9	7,618.5	12,419.9	
Excess Cash	2,756.9	3,641.3	4,684.3	6,515.9	5,385.3	3,527.6	5,223.9	5,845.2	3,021.2	7,277.2	
Operating Cash & Short-Term											
Investments	1,695.6	1,934.7	2,194.6	2,461.3	2,785.2	3,127.7	3,624.7	4,058.7	4,597.3	5,142.7	
Accounts Receivable	1,488.4	1,818.3	1,805.1	1,754.5	1,837.7	2,388.6	2,454.6	2,853.9	7,270.3	5,055.1	
Financial Subsidiary Receivable	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Accounts Receivable - Adj	1,488.4	1,818.3	1,805.1	1,754.5	1,837.7	2,388.6	2,454.6	2,853.9	7,270.3	5,055.1	
Inventory	1,266.3	1,629.4	2,727.5	1,729.4	2,134.5	2,860.1	2,629.7	3,560.4	5,971.8	5,478.4	
LIFO Reserve	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Inventory - Adj	1,266.3	1,629.4	2,727.5	1,729.4	2,134.5	2,860.1	2,629.7	3,560.4	5,971.8	5,478.4	
Other Current Assets	450.9	1,142.8	517.1	240.2	784.4	1,354.9	662.8	953.1	1,679.4	2,466.8	
Prepaid Expenses	221.3	222.3	395.8	509.9	519.0	0.0	751.4	909.5	1,191.2	1,526.0	
Other Receivables	626.3	20.3	441.0	671.1	126.5	175.3	276.0	203.5	290.3	223.0	
Other Current Assets - Adj	1,298.5	1,385.4	1,353.9	1,421.1	1,429.8	1,530.2	1,690.2	2,066.0	3,160.8	4,215.7	
Current Assets	5,748.8	6,767.8	8,081.1	7,366.4	8,187.2	9,906.7	10,399.3	12,539.0	21,000.2	19,891.9	
Accounts Payable	2,813.7	2,257.3	3,508.7	3,720.4	3,601.6	10,165.6	4,717.1	6,006.6	6,575.9	9,433.8	
Income Taxes Payable	8.9	83.7	82.5	135.9	167.8	154.7	79.0	154.7	181.8	236.0	
Accrued Expenses, Total	1,762.3	2,294.2	2,491.7	4,508.9	4,886.9	0.0	5,986.5	7,256.6	8,543.0	8,669.6	
Other Current Liabilities	1,731.5	2,721.2	2,421.3	909.9	854.4	104.8	1,265.9	1,094.4	1,209.7	1,518.6	
Current Pension Liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Current Postretirement Liability	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Current Pension/Postretirement											
Liability	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Other Current Liabilities	3,493.8	5,015.4	4,913.0	5,418.8	5,741.3	104.8	7,252.4	8,351.0	9,752.7	10,188.1	
Non Current Unearned Revenue	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Current Liabilities	6,316.3	7,356.4	8,504.3	9,275.1	9,510.6	10,425.1	12,048.4	14,512.3	16,510.4	19,857.9	
Net Working Capital	(567.5)	(588.6)	(423.2)	(1,908.7)	(1,323.4)	(518.4)	(1,649.1)	(1,973.3)	4,489.8	34.1	

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
Net Working Capital	(567.5)	(588.6)	(423.2)	(1,908.7)	(1,323.4)	(518.4)	(1,649.1)	(1,973.3)	4,489.8	34.1
Land	724.7	732.1	670.9	651.0	657.2	679.3	1,329.8	1,333.8	1,642.7	1,645.6
Revaluations of Land	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Land & Improvements	724.7	732.1	670.9	651.0	657.2	679.3	1,329.8	1,333.8	1,642.7	1,645.6
Inflation Adjustment	164.0	158.6	169.0	176.4	187.9	184.8	305.3	266.7	329.0	280.8
Inflation Adjusted Land & Improvements	888.7	890.7	839.9	827.4	845.1	864.0	1,635.1	1,600.5	1,971.6	1,926.4
LT Investments @ Cost	0.0	46.2	76.8	155.2	179.1	123.8	1,262.6	1,143.7	1,092.5	5,922.5
Other Assets	1,921.0	2,183.0	2,515.9	2,401.6	2,455.6	5,272.6	4,231.3	4,870.9	5,230.4	6,713.9
Pension Assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Postretirement Assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pension Deferred Tax Assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Assets Adjusted for Pensions	1,921.0	2,183.0	2,515.9	2,401.6	2,455.6	5,272.6	4,231.3	4,870.9	5,230.4	6,713.9
Non-Depreciating Intangible Assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Non-Depreciating Assets	2,242.2	2,531.3	3,009.5	1,475.5	2,156.3	5,742.1	5,479.9	5,641.8	12,784.4	14,597.0
Total Non-Depreciating Assets (w/o LT Invest)	2,242.2	2,485.1	2,932.7	1,320.3	1,977.2	5,618.2	4,217.3	4,498.1	11,691.8	8,674.5

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
Net Working Capital	(567.5)	(588.6)	(423.2)	(1,908.7)	(1,323.4)	(518.4)	(1,649.1)	(1,973.3)	4,489.8	34.1
Land	724.7	732.1	670.9	651.0	657.2	679.3	1,329.8	1,333.8	1,642.7	1,645.6
Revaluations of Land	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Land & Improvements	724.7	732.1	670.9	651.0	657.2	679.3	1,329.8	1,333.8	1,642.7	1,645.6
Inflation Adjustment	164.0	158.6	169.0	176.4	187.9	184.8	305.3	266.7	329.0	280.8
Inflation Adjusted Land & Improvements	888.7	890.7	839.9	827.4	845.1	864.0	1,635.1	1,600.5	1,971.6	1,926.4
LT Investments @ Cost	0.0	46.2	76.8	155.2	179.1	123.8	1,262.6	1,143.7	1,092.5	5,922.5
Other Assets	1,921.0	2,183.0	2,515.9	2,401.6	2,455.6	5,272.6	4,231.3	4,870.9	5,230.4	6,713.9
Pension Assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Postretirement Assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pension Deferred Tax Assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Assets Adjusted for Pensions	1,921.0	2,183.0	2,515.9	2,401.6	2,455.6	5,272.6	4,231.3	4,870.9	5,230.4	6,713.9
Non-Depreciating Intangible Assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Non-Depreciating Assets	2,242.2	2,531.3	3,009.5	1,475.5	2,156.3	5,742.1	5,479.9	5,641.8	12,784.4	14,597.0
Total Non-Depreciating Assets (w/o LT Invest)	2,242.2	2,485.1	2,932.7	1,320.3	1,977.2	5,618.2	4,217.3	4,498.1	11,691.8	8,674.5

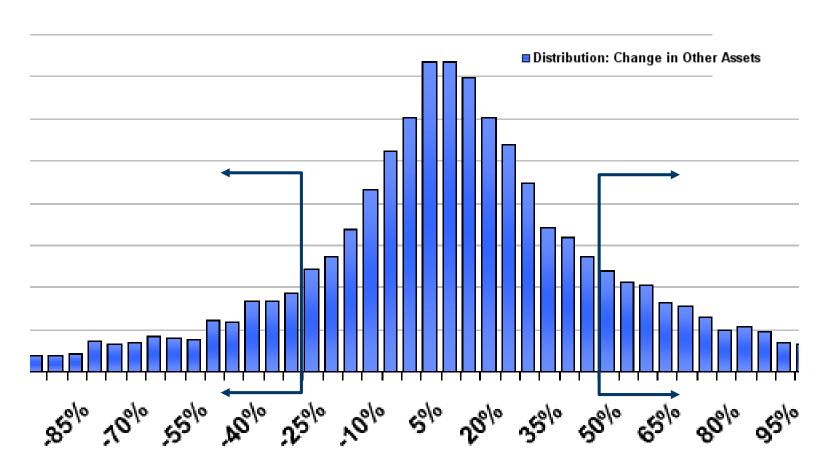
PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
Net Working Capital	(567.5)	(588.6)	(423.2)	(1,908.7)	(1,323.4)	(518.4)	(1,649.1)	(1,973.3)	4,489.8	34.1
Land	724.7	732.1	670.9	651.0	657.2	679.3	1,329.8	1,333.8	1,642.7	1,645.6
Revaluations of Land	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Land & Improvements	724.7	732.1	670.9	651.0	657.2	679.3	1,329.8	1,333.8	1,642.7	1,645.6
Inflation Adjustment	164.0	158.6	169.0	176.4	187.9	184.8	305.3	266.7	329.0	280.8
Inflation Adjusted Land & Improvements	888.7	890.7	839.9	827.4	845.1	864.0	1,635.1	1,600.5	1,971.6	1,926.4
LT Investments @ Cost	0.0	46.2	76.8	155.2	179.1	123.8	1,262.6	1,143.7	1,092.5	5,922.5
Other Assets	1,921.0	2,183.0	2,515.9	2,401.6	2,455.6	5,272.6	4,231.3	4,870.9	5,230.4	6,713.9
Pension Assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Postretirement Assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pension Deferred Tax Assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Assets Adjusted for Pensions	1,921.0	2,183.0	2,515.9	2,401.6	2,455.6	5,272.6	4,231.3	4,870.9	5,230.4	6,713.9
Non-Depreciating Intangible Assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Non-Depreciating Assets	2,242.2	2,531.3	3,009.5	1,475.5	2,156.3	5,742.1	5,479.9	5,641.8	12,784.4	14,597.0
Total Non-Depreciating Assets (w/o LT Invest)	2,242.2	2,485.1	2,932.7	1,320.3	1,977.2	5,618.2	4,217.3	4,498.1	11,691.8	8,674.5

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015	
Net Working Capital	(567.5)	(588.6)	(423.2)	(1,908.7)	(1,323.4)	(518.4)	(1,649.1)	(1,973.3)	4,489.8	34.1	
Land	724.7	732.1	670.9	651.0	657.2	679.3	1,329.8	1,333.8	1,642.7	1,645.6	
Revaluations of Land	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Land & Improvements	724.7	732.1	670.9	651.0	657.2	679.3	1,329.8	1,333.8	1,642.7	1,645.6	
Inflation Adjustment	164.0	158.6	169.0	176.4	187.9	184.8	305.3	266.7	329.0	280.8	
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LT Investments @ Cost	0.0	46.2	76.8	155.2	179.1	123.8	1,262.6	1,143.7	1,092.5	5,922.5	
Other Assets	1,921.0	2,183.0	2,515.9	2,401.6	2,455.6	5,272.6	4,231.3	4,870.9	5,230.4	6,713.9	
Pension Assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Postretirement Assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Pension Deferred Tax Assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Other Assets Adjusted for Pensions	1,921.0	2,183.0	2,515.9	2,401.6	2,455.6	5,272.6	4,231.3	4,870.9	5,230.4	6,713.9	
Non-Depreciating Intangible Assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Non-Depreciating Assets	2,242.2	2,531.3	3,009.5	1,475.5	2,156.3	5,742.1	5,479.9	5,641.8	12,784.4	14,597.0	
Total Non-Depreciating Assets (w/o LT Invest)	2,242.2	2,485.1	2,932.7	1,320.3	1,977.2	5,618.2	4,217.3	4,498.1	11,691.8	8,674.5	

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
Net Working Capital	(567.5)	(588.6)	(423.2)	(1,908.7)	(1,323.4)	(518.4)	(1,649.1)	(1,973.3)	4,489.8	34.1
Land	724.7	732.1	670.9	651.0	657.2	679.3	1,329.8	1,333.8	1,642.7	1,645.6
Revaluations of Land	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Land & Improvements	724.7	732.1	670.9	651.0	657.2	679.3	1,329.8	1,333.8	1,642.7	1,645.6
Inflation Adjustment	164.0	158.6	169.0	176.4	187.9	184.8	305.3	266.7	329.0	280.8
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LT Investments @ Cost	0.0	46.2	76.8	155.2	179.1	123.8	1,262.6	1,143.7	1,092.5	5,922.5
Other Assets	1,921.0	2,183.0	2,515.9	2,401.6	2,455.6	5,272.6	4,231.3	4,870.9	5,230.4	6,713.9
Pension Assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Postretirement Assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pension Deferred Tax Assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Assets Adjusted for Pensions	1,921.0	2,183.0	2,515.9	2,401.6	2,455.6	5,272.6	4,231.3	4,870.9	5,230.4	6,713.9
Non-Depreciating Intangible Assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Non-Depreciating Assets	2,242.2	2,531.3	3,009.5	1,475.5	2,156.3	5,742.1	5,479.9	5,641.8	12,784.4	14,597.0
Total Non-Depreciating Assets (w/o LT Invest)	2,242.2	2,485.1	2,932.7	1,320.3	1,977.2	5,618.2	4,217.3	4,498.1	11,691.8	8,674.5

# **The Outlier Asset Signal**

# Distribution Analysis - Change in Other Assets:



Source: CSFB HOLT *ValueSearch*<sup>TM</sup>. Resulting list of companies is based on a screen of US companies > 0.7bn Market Cap excluding Financials and Utilities, where variables applied (Total: 1479). Companies are ranked by distribution according change in other assets for the period 1995 through 2004. All data is based on last reported fiscal year and is greater than 90 days old.

"Worldcom CFO... noting that Ebbers intimidated him into committing fraud so the company would meet Wall Street's expectations."

"Normal 'earnings management' slid into fraud."

"...using increasingly aggressive accounting
'adjustments' to meet investor expectations.

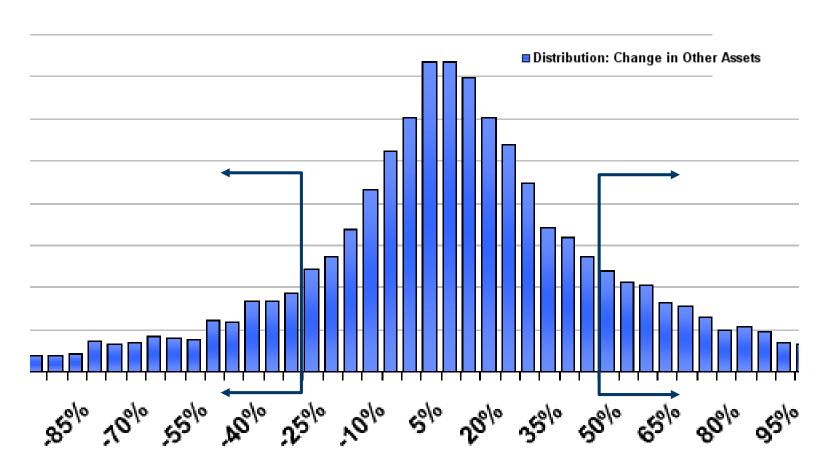
"...with more 'one-time' items"

"...capitalizing 'line costs' treating them as capital expenditures rather than as ongoing expenses."

MCI Worldcom	r 1995	1996	1997	1998
	12/1995	12/1996	12/1997	12/1998
	USD	USD	USD	USD
Other Assets	118	542	832	4,170

# **The Outlier Asset Signal**

# Distribution Analysis - Change in Other Assets:



Source: CSFB HOLT *ValueSearch*<sup>TM</sup>. Resulting list of companies is based on a screen of US companies > 0.7bn Market Cap excluding Financials and Utilities, where variables applied (Total: 1479). Companies are ranked by distribution according to the period 1995 through 2004. All data is based on last reported fiscal year and is greater than 90 days old.

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015	
Net Working Capital	(567.5)	(588.6)	(423.2)	(1,908.7)	(1,323.4)	(518.4)	(1,649.1)	(1,973.3)	4,489.8	34.1	
Land Revaluations of Land	724.7 0.0	732.1 0.0	670.9 0.0	651.0 0.0	657.2 0.0	679.3 0.0	1,329.8 0.0	1,333.8 0.0	1,642.7 0.0	1,645.6 0.0	
Land & Improvements	724.7	732.1	670.9	651.0	657.2	679.3	1,329.8	1,333.8	1,642.7	1,645.6	
Inflation Adjustment	164.0	158.6	169.0	176.4	187.9	184.8	305.3	266.7	329.0	280.8	
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LT Investments @ Cost	0.0	46.2	76.8	155.2	179.1	123.8	1,262.6	1,143.7	1,092.5	5,922.5	
Other Assets	1,921.0	2,183.0	2,515.9	2,401.6	2,455.6	5,272.6	4,231.3	4,870.9	5,230.4	6,713.9	
Pension Assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Postretirement Assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Pension Deferred Tax Assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Other Assets Adjusted for Pensions	1,921.0	2,183.0	2,515.9	2,401.6	2,455.6	5,272.6	4,231.3	4,870.9	5,230.4	6,713.9	
Non-Depreciating Intangible Assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Non-Depreciating Assets	2,242.2	2,531.3	3,009.5	1,475.5	2,156.3	5,742.1	5,479.9	5,641.8	12,784.4	14,597.0	
Total Non-Depreciating Assets (w/o LT Invest)	2,242.2	2,485.1	2,932.7	1,320.3	1,977.2	5,618.2	4,217.3	4,498.1	11,691.8	8,674.5	

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
GDP Deflator Adjusted Gross PP&E w/CIP	16,240.8	17,264.6	20,412.9	23,479.6	25,543.5	29,501.4	31,288.5	33,719.6	37,389.8	41.160.0
Capitalized Operating Leases	15,570.6	17,963.9	22,184.3	27,069.4	32,615.7	41,236.8	47,376.7	49,970.0	56,212.2	63,147.9
Capitalized Research & Development Intangibles Included in Depreciating	105.5	126.5	164.9	210.2	255.5	299.0	322.0	348.7	363.0	375.1
Assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Depreciating Assets	31.916.9	35.354.9	42.762.1	50.759.1	58.414.7	71.037.1	78.987.2	84.038.4	93.964.9	104.682.9

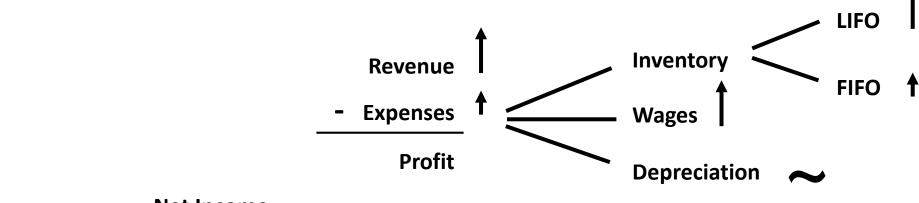
PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
GDP Deflator Adjusted Gross PP&E w/CIP	16,240.8	17,264.6	20,412.9	23,479.6	25,543.5	29,501.4	31,288.5	33,719.6	37,389.8	41,160.0
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Assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Depreciating Assets	31.916.9	35.354.9	42.762.1	50.759.1	58.414.7	71.037.1	78.987.2	84.038.4	93.964.9	104.682.9

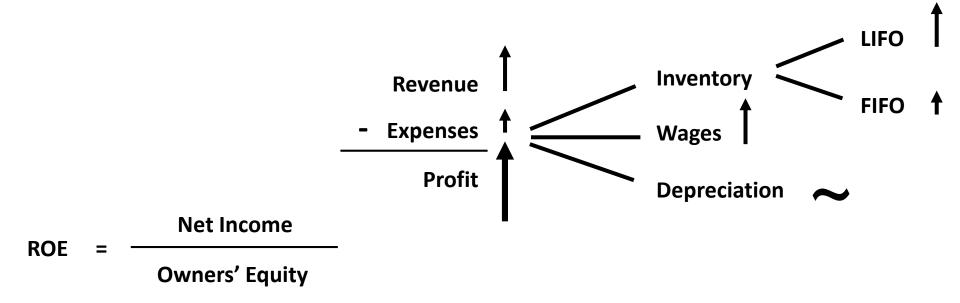
## Inflation

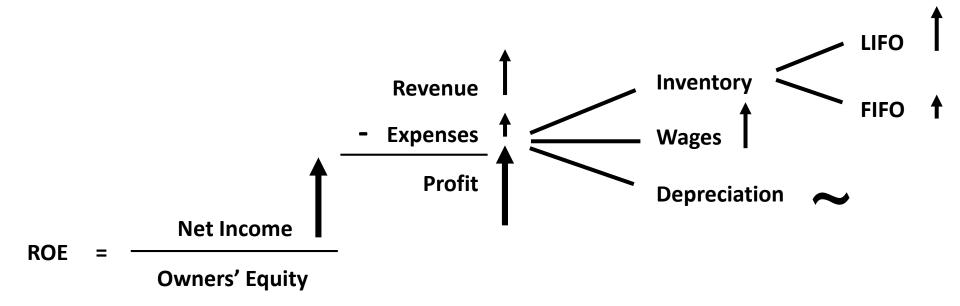
- Define: Inflation
- Rising Prices or Falling trees?
- Replacement costs? Laptops
- We're looking for ICAssets = Liabilities + Shareholders' Equity
- Currency Devaluation Adjustment

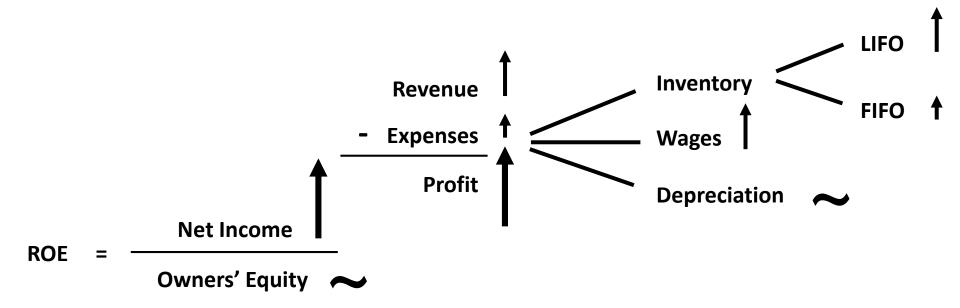
- Expenses

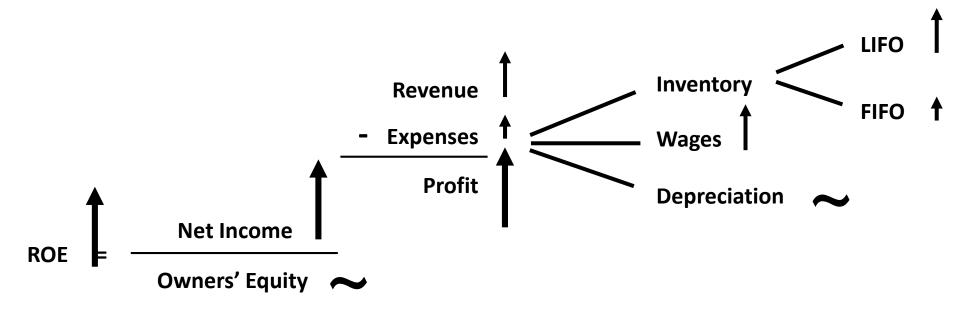
**Profit** 

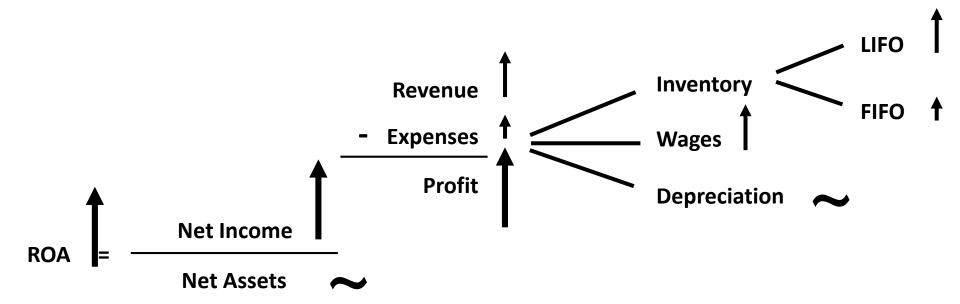






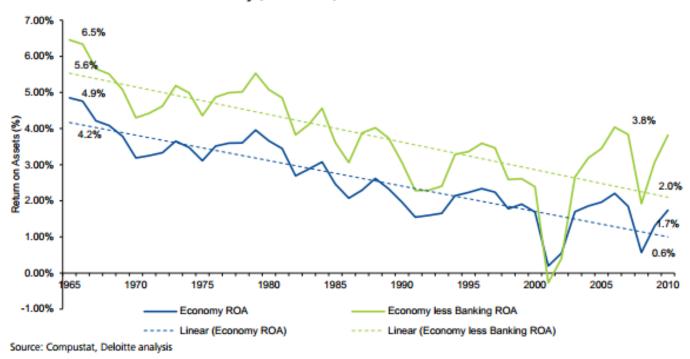






### According to Deloitte EDGE Inst. (incorrectly so)...

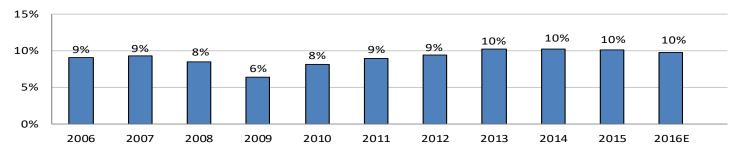
Exhibit 91: ROA for the U.S. Economy (1965-2010)

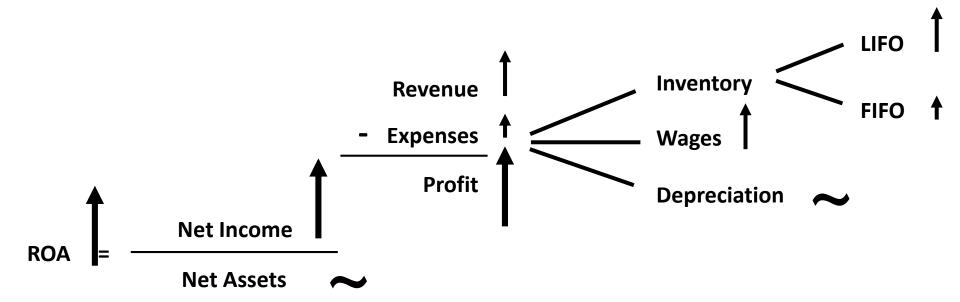


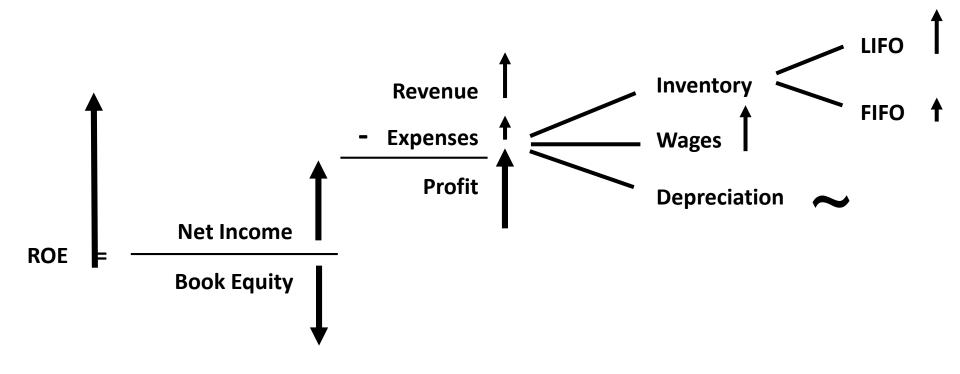
... ROA for the U.S. economy has been in steady decline for the past 45 years. We believe that this decline in ROA has been driven by companies' inability to adapt to the long-term trends behind the Big Shift.

# Performance and Valuation Prime™ Analysis 4,683 U.S. companies (non-financial)









#### CALCULATIONS FOR DEPR ASSETS/LAND

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
Calculation: GDP Deflator Adjusted Gross PP&E										
Gross PP&E	14,020.9	14,950.0	17,013.1	19,168.6	20,565.7	24,015.2	26,830.6	29,525.8	33,006.4	36,990.7
Less: Land	724.7	732.1	670.9	651.0	657.2	679.3	1,329.8	1,333.8	1,642.7	1,645.6
Less: Construction in Progress	283.7	154.2	184.3	203.9	205.5	672.8	292.8	548.0	1,275.2	1,267.9
Plus: Cumulative PP&E recaptured	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gross PP&E Adjusted:	13,012.5	14,063.7	16,157.9	18,313.6	19,703.1	22,663.1	25,208.1	27,644.0	30,088.5	34,077.2
Net PP&E	7,056.8	7,491.0	8,274.9	8,350.6	8,770.5	10,580.4	11,831.9	12,791.4	14,933.5	16,104.5
Less: Land	724.7	732.1	670.9	651.0	657.2	679.3	1,329.8	1,333.8	1,642.7	1,645.6
Less: Construction in Progress	283.7	154.2	184.3	203.9	205.5	672.8	292.8	548.0	1,275.2	1,267.9
Plus: Cumulative PP&E recaptured	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net PP&E Adjusted:	6,048.3	6,604.7	7,419.7	7,495.6	7,907.9	9,228.3	10,209.3	10,909.6	12,015.6	13,191.0
Asset Life (three-yr median of depr.										
Implied)	8.4	8.7	8.9	8.9	9.3	9.4	9.4	9.3	9.3	9.5
NP/GP Ratio	46.5	47.0	45.9	40.9	40.1	40.7	40.5	39.5	39.9	38.7
Implied Average Age of Assets	4.5	4.6	4.8	5.3	5.6	5.6	5.6	5.6	5.6	5.8
Two-year moving average of implied age	4.5	4.6	4.7	5.0	5.4	5.6	5.6	5.6	5.6	5.7
GDP Deflator	4.95%	3.09%	7.55%	2.77%	4.22%	4.02%	1.90%	1.98%	3.56%	3.57%
Average GDP Deflator given life of assets	4.63%	4.33%	4.78%	4.66%	4.60%	4.40%	3.75%	3.28%	3.32%	2.75%
GDP Deflator Adjustment	2,944.6	3,046.6	4,070.7	4,962.0	5,635.0	6,165.4	5,787.6	5,527.6	6,026.0	5,814.9
GDP Deflator Adj'd PP&E w/o CIP	15,957.1	17,110.3	20,228.6	23,275.7	25,338.1	28,828.6	30,995.7	33,171.6	36,114.5	39,892.1
Add back Construction In Progress	283.7	154.2	184.3	203.9	205.5	672.8	292.8	548.0	1,275.2	1,267.9
GDP Deflator Adjusted Gross PP&E	16,240.8	17,264.6	20,412.9	23,479.6	25,543.5	29,501.4	31,288.5	33,719.6	37,389.8	41,160.0
Growth	-	6.3%	18.2%	15.0%	8.8%	15.5%	6.1%	7.8%	10.9%	10.1%
Land GDP Deflator Factor for PP&E (assumed	724.7	732.1	670.9	651.0	657.2	679.3	1,329.8	1,333.8	1,642.7	1,645.6
for land)	1.2	1.2	1.3	1.3	1.3	1.3	1.2	1.2	1.2	1.2
GDP Deflator Adj'd Land	888.7	890.7	839.9	827.4	845.1	864.0	1,635.1	1,600.5	1,971.6	1,926.4

### 14. Goodwill and Other Intangible Assets

This account consists of:

	2015	2014
Goodwill	₽6,822,526,341	₱6,822,526,341
Trademark	2,004,255,942	2,004,255,942
Computer software, net of accumulated amortization	559,241,901	536,291,694
Other intangible assets, net of accumulated		
amortization	26,110,015	22,036,316
	₽9,412,134,199	₱9,385,110,293

#### **CALCULATIONS FOR DEPR ASSETS/LAND**

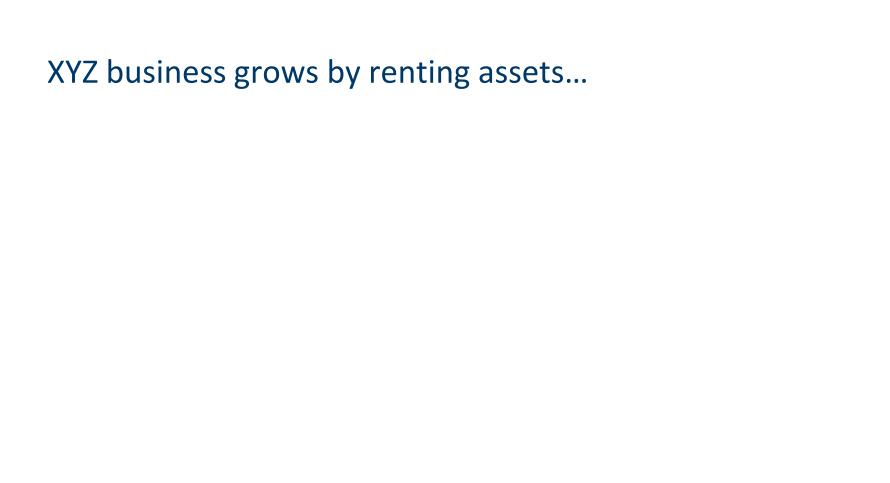
PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
Calculation: GDP Deflator Adjusted Gross										
PP&E										
Gross PP&E	14,020.9	14,950.0	17,013.1	19,168.6	20,565.7	24,015.2	26,830.6	29,525.8	33,006.4	36,990.7
Less: Land	724.7	732.1	670.9	651.0	657.2	679.3	1,329.8	1,333.8	1,642.7	1,645.6
Less: Construction in Progress	283.7	154.2	184.3	203.9	205.5	672.8	292.8	548.0	1,275.2	1,267.9
Plus: Cumulative PP&E recaptured	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gross PP&E Adjusted:	13,012.5	14,063.7	16,157.9	18,313.6	19,703.1	22,663.1	25,208.1	27,644.0	30,088.5	34,077.2
Net PP&E	7,056.8	7,491.0	8,274.9	8,350.6	8,770.5	10,580.4	11,831.9	12,791.4	14,933.5	16,104.5
Less: Land	724.7	732.1	670.9	651.0	657.2	679.3	1,329.8	1,333.8	1,642.7	1,645.6
Less: Construction in Progress	283.7	154.2	184.3	203.9	205.5	672.8	292.8	548.0	1,275.2	1,267.9
Plus: Cumulative PP&E recaptured	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net PP&E Adjusted:	6,048.3	6,604.7	7,419.7	7,495.6	7,907.9	9,228.3	10,209.3	10,909.6	12,015.6	13,191.0
Asset Life (three-yr median of depr.										
Implied)	8.4	8.7	8.9	8.9	9.3	9.4	9.4	9.3	9.3	9.5
NP/GP Ratio	46.5	47.0	45.9	40.9	40.1	40.7	40.5	39.5	39.9	38.7
Implied Average Age of Assets	4.5	4.6	4.8	5.3	5.6	5.6	5.6	5.6	5.6	5.8
Two-year moving average of implied age	4.5	4.6	4.7	5.0	5.4	5.6	5.6	5.6	5.6	5.7
GDP Deflator	4.95%	3.09%	7.55%	2.77%	4.22%	4.02%	1.90%	1.98%	3.56%	3.57%
Average GDP Deflator given life of assets	4.63%	4.33%	4.78%	4.66%	4.60%	4.40%	3.75%	3.28%	3.32%	2.75%
GDP Deflator Adjustment	2,944.6	3,046.6	4,070.7	4,962.0	5,635.0	6,165.4	5,787.6	5,527.6	6,026.0	5,814.9
GDP Deflator Adj'd PP&E w/o CIP	15,957.1	17,110.3	20,228.6	23,275.7	25,338.1	28,828.6	30,995.7	33,171.6	36,114.5	39,892.1
Add back Construction In Progress	283.7	154.2	184.3	203.9	205.5	672.8	292.8	548.0	1,275.2	1,267.9
GDP Deflator Adjusted Gross PP&E	16,240.8	17,264.6	20,412.9	23,479.6	25,543.5	29,501.4	31,288.5	33,719.6	37,389.8	41,160.0
Growth		6.3%	18.2%	15.0%	8.8%	15.5%	6.1%	7.8%	10.9%	10.1%
Land GDP Deflator Factor for PP&E (assumed	724.7	732.1	670.9	651.0	657.2	679.3	1,329.8	1,333.8	1,642.7	1,645.6
for land)	1.2	1.2	1.3	1.3	1.3	1.3	1.2	1.2	1.2	1.2
GDP Deflator Adj'd Land	888.7	890.7	839.9	827.4	845.1	864.0	1,635.1	1,600.5	1,971.6	1,926.4

#### **CALCULATIONS FOR DEPRECIATING ASSETS**

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
GDP Deflator Adjusted Gross PP&E w/CIP	16,240.8	17,264.6	20,412.9	23,479.6	25,543.5	29,501.4	31,288.5	33,719.6	37,389.8	41,160.0
Capitalized Operating Leases	15,570.6	17,963.9	22,184.3	27,069.4	32,615.7	41,236.8	47 <i>,</i> 376.7	49,970.0	56,212.2	63,147.9
Capitalized Research & Development	105.5	126.5	164.9	210.2	255.5	299.0	322.0	348.7	363.0	375.1
Intangibles Included in Depreciating										
Assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Depreciating Assets	31 916 9	35 354 9	42 762 1	50 759 1	58 414 7	71 037 1	78 987 2	84 038 4	93 964 9	104 682 9

#### **CALCULATIONS FOR DEPRECIATING ASSETS**

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015	
GDP Deflator Adjusted Gross PP&E w/CIP	16,240.8	17,264.6	20,412.9	23,479.6	25,543.5	29,501.4	31,288.5	33,719.6	37,389.8	41,160.0	
Capitalized Operating Leases	15,570.6	17,963.9	22,184.3	27,069.4	32,615.7	41,236.8	47,376.7	49,970.0	56,212.2	63,147.9	
Capitalized Research & Development Intangibles Included in Depreciating	105.5	126.5	164.9	210.2	255.5	299.0	322.0	348.7	363.0	375.1	
Assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Depreciating Assets	31 916 9	35 354 9	42 762 1	50 759 1	58 414 7	71 037 1	78 987 2	84 038 4	93 964 9	104 682 9	



- XYZ produces \$10 NOPAT with \$50 of Net Assets
  - Gross profit after tax of \$20, depreciation of \$10
  - Gross assets of \$100, half-way through a ten-year life

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```
100 PP&E

/10 life of asset
$ 10 per year
+ 1 lessor CoCap
$ 11 annual rent
```

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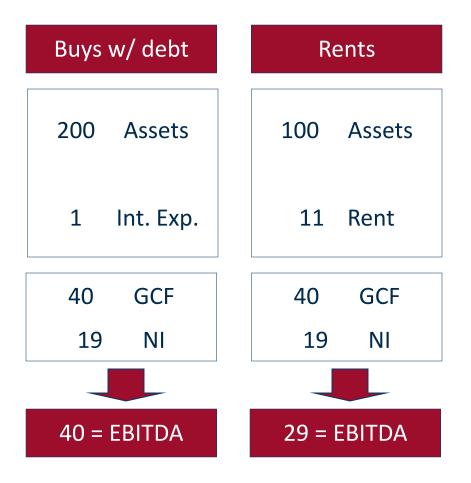
100	PP&E		\$20	Add'l gross profit
/10	life of asset		-11	Rent (not depr)
\$ 10	per year		\$ 9	Add'l NOPAT
+ 1	lessor CoCap	_		
\$ 11	annual rent		5 0	Add'l assets

- XYZ produces \$10 NOPAT with \$50 of Net Assets
  - Gross profit after tax of \$20, depreciation of \$10
  - Gross assets of \$100, half-way through a ten-year life
- What is the traditional, as-reported ROA of XYZ? 10 / 50 = 20%
- XYZ chooses to double the size of the firm, by renting new assets
  - What would the annual rental cost be of the \$100 of new PP&E?
  - Rented assets are equally as productive as the owned assets
- What is the traditional, as-reported ROA of XYZ afterward?

100	PP&E	\$20	Add'l gross profit		
/10	life of asset	-11	Rent (not depr)		
\$ 10	per year	\$ 9	Add'l NOPAT		
+ 1	lessor CoCap				
\$ 11	annual rent	\$ 0	Add'l assets	19 / 50 =	38%??

### 10 year life Assets – Doubling in machines

A \$100 machine can generate \$ 20 in cash flows (Sales – COGS – SGA)



#### **CALCULATIONS FOR CAPITALIZED OPERATING LEASES**

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
Op Lease expense Estimated life of assets being leased (NOT the life of the lease but of the asset	2,137.2	2,391.0	2,902.8	3,542.0	4,092.8	5,131.8	5,895.9	6,287.3	7,072.7	7,841.9
leased)	8.4	8.7	8.9	8.9	9.3	9.4	9.4	9.3	9.3	9.5
Estim. REAL secured debt rate (e.g. Arated bond rate after before inflation)	3.2%	3.2%	3.2%	3.2%	3.2%	3.2%	3.2%	3.2%	3.2%	3.2%
Captialized Operating Leases (estimate if current gross value of leased assets had they been purchased)	15,570.6	17,963.9	22,184.3	27,069.4	32,615.7	41,236.8	47,376.7	49,970.0	56,212.2	63,147.9
Debt value of capitalized operating leases Op Lease expense taken out of ROa and free cash flows Economic depreciation recaptured through life of capitalized operating	2,137.2	2,391.0	2,902.8	3,542.0	4,092.8	5,131.8	5,895.9	6,287.3	7,072.7	7,841.9
leases	1,847.7	2,057.7	2,491.6	3,040.3	3,489.8	4,369.8	5,020.5	5,363.4	6,033.3	6,675.2
Annual claim lessors have on the EV of the firm	289.5	333.3	411.2	501.7	603.0	762.0	875.4	923.9	1,039.4	1,166.7
Cap. Lease Debt: Present value of all future claims	9,048.3	10,416.5	12,849.2	15,678.6	18,842.6	23,811.8	27,357.2	28,872.9	32,479.7	36,459.8
Percent of Capitalized Operating Leases	58.1%	58.0%	57.9%	57.9%	57.8%	57.7%	57.7%	57.8%	57.8%	57.7%

#### **CALCULATIONS FOR DEPRECIATING ASSETS**

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015	
GDP Deflator Adjusted Gross PP&E w/CIP	16,240.8	17,264.6	20,412.9	23,479.6	25,543.5	29,501.4	31,288.5	33,719.6	37,389.8	41,160.0	
Capitalized Operating Leases	15,570.6	17,963.9	22,184.3	27,069.4	32,615.7	41,236.8	47,376.7	49,970.0	56,212.2	63,147.9	
Capitalized Research & Development Intangibles Included in Depreciating	105.5	126.5	164.9	210.2	255.5	299.0	322.0	348.7	363.0	375.1	
Assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Depreciating Assets	31 916 9	35 354 9	42 762 1	50 759 1	58 414 7	71 037 1	78 987 2	84 038 4	93 964 9	104 682 9	

#### **CALCULATIONS FOR DEPRECIATING ASSETS**

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015	
GDP Deflator Adjusted Gross PP&E w/CIP Capitalized Operating Leases Capitalized Research & Development	16,240.8 15,570.6 105.5	17,264.6 17,963.9 126.5	20,412.9 22,184.3 164.9	23,479.6 27,069.4 210.2	25,543.5 32,615.7 255.5	29,501.4 41,236.8 299.0	31,288.5 47,376.7 322.0	33,719.6 49,970.0 348.7	37,389.8 56,212.2 363.0	41,160.0 63,147.9 375.1	
Intangibles Included in Depreciating Assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Depreciating Assets	31.916.9	35.354.9	42.762.1	50.759.1	58.414.7	71.037.1	78.987.2	84.038.4	93.964.9	104.682.9	



	<u>St</u>	Startup Period			<u>Maturity</u>							
	<u> </u>	<u>Yr 1</u>	<u>Yr 2</u>	<u>Yr 3</u>	<u>Yr 4</u>	<u>Yr 5</u>	<u>Yr 6</u>	<u>Yr 7</u>	<u>Yr 8</u>	<u>Yr 9</u>	<u>Yr 10</u>	<u>Yr 11</u>
efore R&	D	-50	0	50	150	200	200	200	200	200	200	200
		100	100	100	100	100	50	150	40	160	75	125
		-150	-100	-50	50	100	150	50	160	40	125	75
		500	500	500	500	500	500	500	500	500	500	500
	pefore R&	_	Yr 1 Defore R&D -50 100 -150	Yr 1         Yr 2           pefore R&D         -50         0           100         100           -150         -100	Yr 1         Yr 2         Yr 3           pefore R&D         -50         0         50           100         100         100           -150         -100         -50	Yr 1         Yr 2         Yr 3         Yr 4           pefore R&D         -50         0         50         150           100         100         100         100           -150         -100         -50         50	Yr 1         Yr 2         Yr 3         Yr 4         Yr 5           Defore R&D         -50         0         50         150         200           100         100         100         100         100           -150         -100         -50         50         100	Yr 1         Yr 2         Yr 3         Yr 4         Yr 5         Yr 6           Defore R&D         -50         0         50         150         200         200           100         100         100         100         100         50           -150         -100         -50         50         100         150	Yr 1         Yr 2         Yr 3         Yr 4         Yr 5         Yr 6         Yr 7           Defore R&D         -50         0         50         150         200         200         200           100         100         100         100         100         50         150           -150         -100         -50         50         100         150         50	Yr 1         Yr 2         Yr 3         Yr 4         Yr 5         Yr 6         Yr 7         Yr 8           Defore R&D         -50         0         50         150         200         200         200         200           100         100         100         100         50         150         40           -150         -100         -50         50         100         150         50         160	Yr 1         Yr 2         Yr 3         Yr 4         Yr 5         Yr 6         Yr 7         Yr 8         Yr 9           Defore R&D         -50         0         50         150         200         200         200         200         200         200           100         100         100         100         50         150         40         160           -150         -100         -50         50         100         150         50         160         40	Yr 1         Yr 2         Yr 3         Yr 4         Yr 5         Yr 6         Yr 7         Yr 8         Yr 9         Yr 10           Defore R&D         -50         0         50         150         200

			<u>Startur</u>	Startup Period		<u>Maturity</u>							
			<u>Yr 1</u>	<u>Yr 2</u>	<u>Yr 3</u>	<u>Yr 4</u>	<u>Yr 5</u>	<u>Yr 6</u>	<u>Yr 7</u>	<u>Yr 8</u>	<u>Yr 9</u>	<u>Yr 10</u>	<u>Yr 11</u>
NOPAT I	pefore R&D	)	-50	0	50	150	200	200	200	200	200	200	200
R&D			100	100	100	100	100	50	150	40	160	75	125
NOPAT			-150	-100	-50	50	100	150	50	160	40	125	75
Assets			500	500	500	500	500	500	500	500	500	500	500
RONA (N	NOPAT/Ass	ets)					20%	30%	10%	<b>32</b> %	8%	25%	15%

		<u>Startur</u>	<u>Perio</u>	<u>t</u>	<u>Maturity</u>							
		<u>Yr 1</u>	<u>Yr 2</u>	<u>Yr 3</u>	<u>Yr 4</u>	<u>Yr 5</u>	<u>Yr 6</u>	<u>Yr 7</u>	<u>Yr 8</u>	<u>Yr 9</u>	<u>Yr 10</u>	<u>Yr 11</u>
<b>NOPAT before R&amp;D</b>		-50	0	50	150	200	200	200	200	200	200	200
R&D		100	100	100	100	100	50	150	40	160	75	125
NOPAT		-150	-100	-50	50	100	150	50	160	40	125	75
Assets		500	500	500	500	500	500	500	500	500	500	500
RONA (NOPAT/Assets)						20%	30%	10%	32%	8%	25%	15%
		Startur	o Perio	<u>k</u>		<u>Maturi</u>	<u>tv</u>					
		<u>Yr 1</u>	<u>Yr 2</u>	<u>Yr 3</u>	<u>Yr 4</u>	<u>Yr 5</u>	<u>Yr 6</u>	<u>Yr 7</u>	<u>Yr 8</u>	<u>Yr 9</u>	<u>Yr 10</u>	<u>Yr 11</u>
NOPAT before R&D		-50	0	50	150	200	200	200	200	200	200	200

			Startup Period				<u>Maturi</u>	<u>ty</u>					
			<u>Yr 1</u>	<u>Yr 2</u>	<u>Yr 3</u>	<u>Yr 4</u>	<u>Yr 5</u>	<u>Yr 6</u>	<u>Yr 7</u>	<u>Yr 8</u>	<u>Yr 9</u>	<u>Yr 10</u>	<u>Yr 11</u>
<b>NOPAT before R&amp;D</b>		-50	0	50	150	200	200	200	200	200	200	200	
R&D			100	100	100	100	100	50	150	40	160	75	125
NOPAT			-150	-100	-50	50	100	150	50	160	40	125	75
Assets			500	500	500	500	500	500	500	500	500	500	500
RONA (NOPAT/Assets)						20%	30%	10%	32%	8%	25%	15%	
			<u>Startu</u> p	<u>Perio</u>	<u>d</u>		Maturity						
			<u>Yr 1</u>	<u>Yr 2</u>	<u>Yr 3</u>	<u>Yr 4</u>	<u>Yr 5</u>	<u>Yr 6</u>	<u>Yr 7</u>	<u>Yr 8</u>	<u>Yr 9</u>	<u>Yr 10</u>	<u>Yr 11</u>
NOPAT before R&D		-50	0	50	150	200	200	200	200	200	200	200	
Assets			500	500	500	500	500	500	500	500	500	500	500

		Startup Period				<b>Maturity</b>						
		<u>Yr 1</u>	<u>Yr 2</u>	<u>Yr 3</u>	<u>Yr 4</u>	<u>Yr 5</u>	<u>Yr 6</u>	<u>Yr 7</u>	<u>Yr 8</u>	<u>Yr 9</u>	<u>Yr 10</u>	<u>Yr 11</u>
NOPAT before R&D		-50	0	50	150	200	200	200	200	200	200	200
R&D		100	100	100	100	100	50	150	40	160	75	125
NOPAT		-150	-100	-50	50	100	150	50	160	40	125	75
Assets		500	500	500	500	500	500	500	500	500	500	500
RONA (NO	OPAT/Assets)					20%	30%	10%	32%	8%	25%	15%
		Startup Period			<b>Maturity</b>							
		<u>Yr 1</u>	<u>Yr 2</u>	<u>Yr 3</u>	<u>Yr 4</u>	<u>Yr 5</u>	<u>Yr 6</u>	<u>Yr 7</u>	<u>Yr 8</u>	<u>Yr 9</u>	<u>Yr 10</u>	<u>Yr 11</u>
NOPAT be	efore R&D	-50	0	50	150	200	200	200	200	200	200	200
Assets		500	500	500	500	500	500	500	500	500	500	500
R&D capitalization						500	450	500	440	500	475	550
Assets wit	Assets with Cap. R&D					1000	950	1000	940	1000	975	1050

	<b>Startup Period</b>				<u>Maturi</u>	<u>ty</u>					
	<u>Yr 1</u>	<u>Yr 2</u>	<u>Yr 3</u>	<u>Yr 4</u>	<u>Yr 5</u>	<u>Yr 6</u>	<u>Yr 7</u>	<u>Yr 8</u>	<u>Yr 9</u>	<u>Yr 10</u>	<u>Yr 11</u>
<b>NOPAT before R&amp;D</b>	-50	0	50	150	200	200	200	200	200	200	200
R&D	100	100	100	100	100	50	150	40	160	75	125
NOPAT	-150	-100	-50	50	100	150	50	160	40	125	75
Assets	500	500	500	500	500	500	500	500	500	500	500
RONA (NOPAT/Assets)					20%	30%	10%	32%	8%	25%	15%
	Startur	) Period	1		<u>Maturi</u>	tv					
	<u>Yr 1</u>	Yr 2	<u>Yr 3</u>	<u>Yr 4</u>	<u>Yr 5</u>	<u>Yr 6</u>	<u>Yr 7</u>	<u>Yr 8</u>	<u>Yr 9</u>	Yr 10	Yr 11
NOPAT before R&D	-50	0	50	150	200	200	200	200	200	200	200
Assets	500	500	500	500	500	500	500	500	500	500	500
<b>R&amp;D</b> capitalization					500	450	500	440	500	475	550
Assets with Cap. R&D					1000	950	1000	940	1000	975	1050
"Scrubbed" ROA					20%	21%	20%	21%	20%	21%	19%

It's not about valuing the innovation as that would appear in the ROA', Growth, or V'

The R&D capitalization is to smooth the ability to see if those ROA', Growth', of V' trends are actually increasing or decreasing

<b>Boeing (BA)</b>	2006 2007		2008	2009	2010	2011	
R&D	3,300	3,900	3,800	6,500	4,100	3,900	

<b>Boeing (BA)</b>	2006	2007	2008	2009	2010	2011	
R&D	3,300	3,300 3,900		6,500	4,100 3,900		
		18%	-3%	71%	-37%	-5%	

Boeing (BA)	2006	2007	2008	2009	2010	2011
R&D	3,300	3,900	3,800	3,800 6,500		3,900
		18%	-3%	<b>71</b> %	-37%	-5%

### **Boeing net income \$2BB to \$3BB 2009 - 2011**

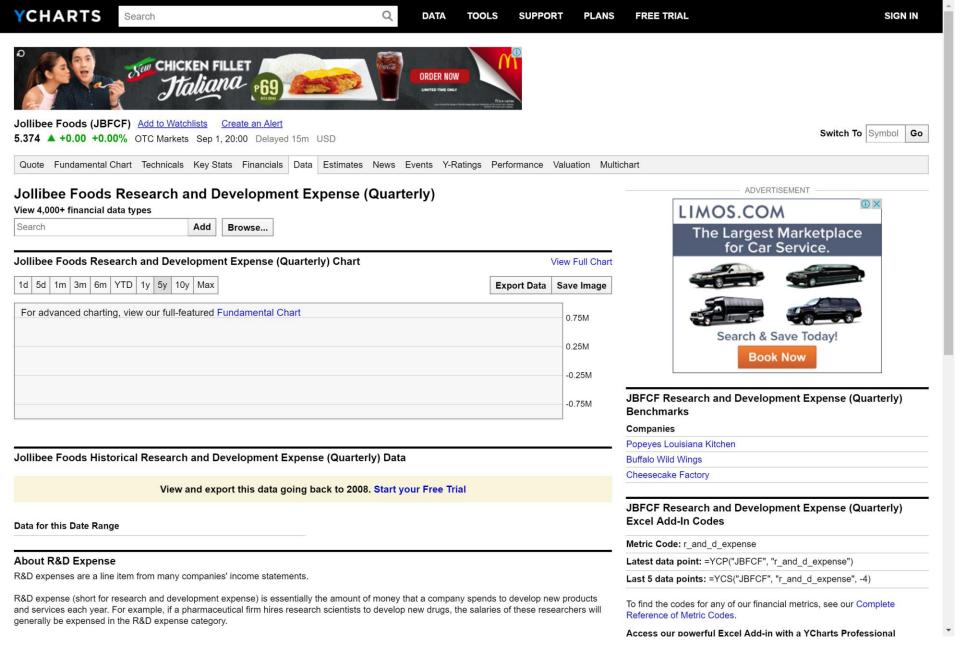
2006	2007	2008	2009	2010	2011	
3,300	3,900	3,800	6,500	4,100	3,900	
	18%	-3%	71%	-37%	-5%	
2006	2007	2008	2009	2010	2011	
1,200	2,100	2,800	2,800	3,800	5,200	
	<b>75%</b>	33%	0%	36%	37%	
	2006	3,300 3,900 18% 2006 2007 1,200 2,100	3,300 3,900 3,800 18% -3% 2006 2007 2008 1,200 2,100 2,800	3,300     3,900     3,800     6,500       18%     -3%     71%       2006     2007     2008     2009       1,200     2,100     2,800     2,800	3,300       3,900       3,800       6,500       4,100         18%       -3%       71%       -37%         2006       2007       2008       2009       2010         1,200       2,100       2,800       2,800       3,800	

Boeing (BA)	2006	2007	2008	2009	2010	2011	
R&D	3,300	3,900	3,800	6,500	4,100	3,900	
		18%	-3%	71%	-37%	-5%	
Google (GOOG)	2006	2007	2008	2009	2010	2011	
R&D	1,200	2,100	2,800	2,800	3,800	5,200	
		75%	33%	0%	36%	37%	
Amylin (AMLN)	2006	2007	2008	2009	2010	2011	
R&D	222	277	293	198	183	161	
		25%	6%	-32%	-8%	-12%	

Boeing (BA)	2006	2007	2008	2009	2010	2011	
R&D	3,300	3,900	3,800	6,500	4,100	3,900	
		18%	-3%	71%	-37%	-5%	
Google (GOOG)	2006	2007	2008	2009	2010	2011	
R&D	1,200	2,100	2,800	2,800	3,800	5,200	
		75%	33%	0%	36%	37%	
Amylin (AMLN)	2006	2007	2008	2009	2010	2011	
R&D	222	277	293	198	183	161	
		25%	6%	-32%	-8%	-12%	
Electronic Arts(EA)	2006	2007	2008	2009	2010	2011	
R&D	1,041	1,145	1,360	1,229	1,150	1,200	
		10%	19%	-10%	-6%	4%	

Boeing (BA)	2006	2007	2008	2009	2010	2011
R&D	3,300	3,900	3,800	6,500	4,100	3,900
		18%	-3%	71%	-37%	-5%
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R&D	1,200	2,100	2,800	2,800	3,800	5,200
		75%	33%	0%	36%	37%
Amylin (AMLN)	2006	2007	2008	2009	2010	2011
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Electronic Arts(EA)	2006	2007	2008	2009	2010	2011
R&D	1,041	1,145	1,360	1,229	1,150	1,200
		10%	19%	-10%	-6%	4%
Eastman Kodak (EK)	2006	2007	2008	2009	2010	2011
R&D	596	549	501	351	318	274
		-8%	-9%	-30%	-9%	-14%

Boeing (BA)	2006	2007	2008	2009	2010	2011
R&D	3,300	3,900	3,800	6,500	4,100	3,900
		18%	-3%	71%	-37%	-5%
Google (GOOG)	2006	2007	2008	2009	2010	2011
R&D	1,200	2,100	2,800	2,800	3,800	5,200
		75%	33%	0%	36%	37%
Amylin (AMLN)	2006	2007	2008	2009	2010	2011
R&D	222	277	293	198	183	161
		25%	6%	-32%	-8%	-12%
Electronic Arts(EA)	2006	2007	2008	2009	2010	2011
R&D	1,041	1,145	1,360	1,229	1,150	1,200
		10%	19%	-10%	-6%	4%
Eastman Kodak (EK)	2006	2007	2008	2009	2010	2011
R&D	596	549	501	351	318	274
		-8%	-9%	-30%	-9%	-14%
Pfizer (PFE)	2006	2007	2008	2009	2010	2011
R&D	7,600	8,100	7,900	7,800	9,400	9,100
		<b>7%</b>	-2%	-1%	21%	-3%





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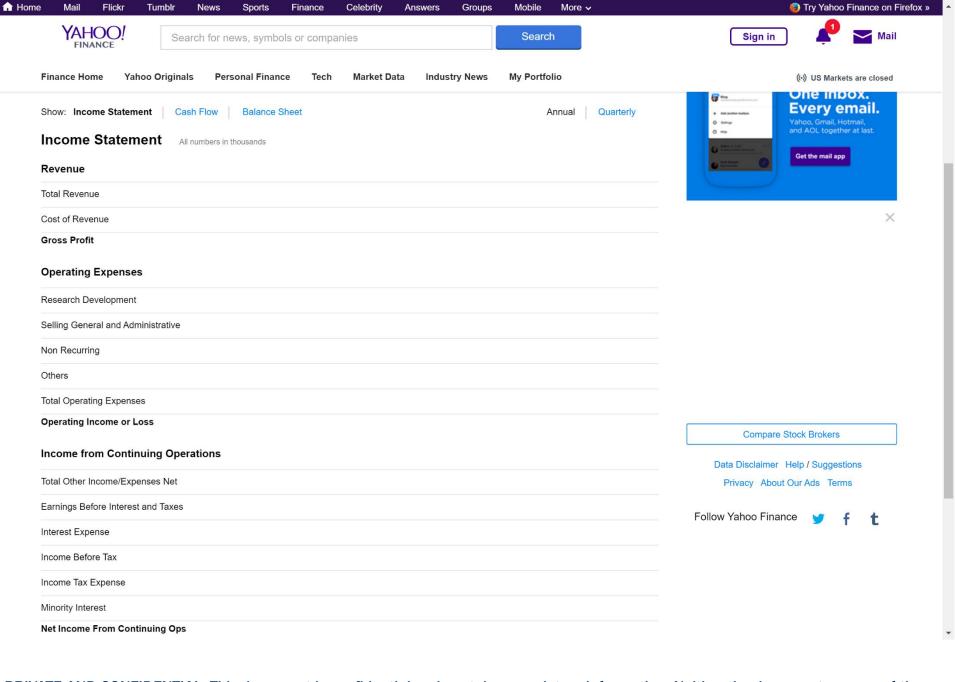
Income Statements:

#### Jollibee Foods Corp (JFC.PS)



Annual Income Statement	View: ●Annual Interim	
In Millions ofPhilippine Pesos (except for per share items)	2015-12-31 Period Length 12 Months	
Revenue	100,780.0	
Other Revenue, Total	=	
Total Revenue	100,780.0	
Cost of Revenue, Total	82,891.7	
Gross Profit	17,888.0	Master o
Selling/General/Admin. Expenses, Total	12,191.5	An onli
Research & Development	-	classro
Depreciation/Amortization	341.5	
Interest Expense, Net - Operating	-	oth
Interest/Investment Income - Operating	-	Live and     Top curr
Interest Expense(Income) - Net Operating	-	Engaged     All from
Unusual Expense (Income)	-	universit WATCH A





#### PERMITS AND APPROVALS

Other than the reportorial requirements of the Securities and Exchange Commission ("SEC"), The Philippine Stock Exchange ("PSE"), the Bureau of Internal Revenue ("BIR"), and the local permits for the opening and continued operations of stores, there are no other permits, licenses or approvals required from the Company for its operations. The Company is in compliance with the requirements of the SEC, PSE, BIR and local governments.

#### RESEARCH AND DEVELOPMENT

Research and development is an integral part of the Company's operations. New products, concepts and ideas are critical to the continued success of the Company and its subsidiaries. For this reason, the Company allocates a Research and Development budget as indicated below for the Jollibee Philippines brand:

Year	<b>Amount</b>	Percentage to Systemwide Sales of Jollibee Brand
2014	PhP77,609,619.44	0.14%
2015	PhP72,994,618.94	0.12%

#### CALCULATIONS FOR CAPITALIZED RESEARCH AND DEVELOPMENT

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
R&D expense	26.6	32.9	49.9	63.0	61.8	70.9	56.8	79.6	77.6	73.0
Estimated life of R&D	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Multiple-based capitalization of R&D	133.0	164.3	249.5	314.9	309.2	354.6	283.8	398.0	388.0	365.0
MANUAL FORMULA changes after X yrs. GDP Deflator adjustment factor	94.9 1.1	115.9 1.1	149.9 1.1	194.3 1.1	234.2 1.1	278.5 1.1	302.4 1.1	332.1 1.1	346.7 1.0	357.9 1.0
GDP Deflator Adjusted Capitalized R&D	105.5	126.5	164.9	210.2	255.5	299.0	322.0	348.7	363.0	375.1

#### **CALCULATIONS FOR DEPRECIATING ASSETS**

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015	
GDP Deflator Adjusted Gross PP&E w/CIP Capitalized Operating Leases Capitalized Research & Development	16,240.8 15,570.6 105.5	17,264.6 17,963.9 126.5	20,412.9 22,184.3 164.9	23,479.6 27,069.4 210.2	25,543.5 32,615.7 255.5	29,501.4 41,236.8 299.0	31,288.5 47,376.7 322.0	33,719.6 49,970.0 348.7	37,389.8 56,212.2 363.0	41,160.0 63,147.9 375.1	
Intangibles Included in Depreciating Assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Depreciating Assets	31 916 9	35 354 9	42 762 1	50 759 1	58 414 7	71 037 1	78 987 2	84 038 4	93 964 9	104 682 9	

#### **CALCULATIONS FOR DEPRECIATING ASSETS**

PSE:JFC	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
	12/31/2006	12/31/2007	12/31/2008	12/31/2009	12/31/2010	1/1/2012	12/31/2012	12/31/2013	12/31/2014	12/31/2015
GDP Deflator Adjusted Gross PP&E w/CIP	16,240.8	17,264.6	20,412.9	23,479.6	25,543.5	29,501.4	31,288.5	33,719.6	37,389.8	41,160.0
Capitalized Operating Leases	15,570.6	17,963.9	22,184.3	27,069.4	32,615.7	41,236.8	47,376.7	49,970.0	56,212.2	63,147.9
Capitalized Research & Development	105.5	126.5	164.9	210.2	255.5	299.0	322.0	348.7	363.0	375.1
Intangibles Included in Depreciating Assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Depreciating Assets	31.916.9	35.354.9	42.762.1	50.759.1	58 414.7	71.037.1	78 987.2	84.038.4	93.964.9	104 682.9

#### CALCULATIONS FOR DEPRECIATING ASSETS

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015	
GDP Deflator Adjusted Gross PP&E w/CIP Capitalized Operating Leases Capitalized Research & Development Intangibles Included in Depreciating Assets	16,240.8 15,570.6 105.5	17,264.6 17,963.9 126.5	20,412.9 22,184.3 164.9	23,479.6 27,069.4 210.2	25,543.5 32,615.7 255.5	29,501.4 41,236.8 299.0	31,288.5 47,376.7 322.0	33,719.6 49,970.0 348.7	37,389.8 56,212.2 363.0	41,160.0 63,147.9 375.1	
Total Depreciating Assets	31,916.9	35,354.9	42,762.1	50,759.1	58,414.7	71,037.1	78,987.2	84,038.4	93,964.9	104,682.9	

#### **CALCULATIONS FOR NET ASSETS' (ADJUSTED TOTAL ASSETS)**

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
Total Non-Depreciating Assets (w/o LT										
Invest)	2,242.2	2,485.1	2,932.7	1,320.3	1,977.2	5,618.2	4,217.3	4,498.1	11,691.8	8,674.5
Total Depreciating Assets	31,916.9	35,354.9	42,762.1	50,759.1	58,414.7	71,037.1	78,987.2	84,038.4	93,964.9	104,682.9
Total Assets'	34,159.1	37,840.0	45,694.8	52,079.4	60,391.9	76,655.4	83,204.5	88,536.5	105,656.8	113,357.4
Accumulated Depreciation'	12,766.8	14,142.0	17,104.8	20,303.6	23,365.9	28,414.9	31,594.9	33,615.4	37,586.0	41,873.2
Net Assets'	21.392.4	23.698.1	28,590.0	31,775.7	37,026.0	48.240.5	51,609.6	54.921.1	68,070.8	71.484.2

#### **CALCULATIONS FOR NET ASSETS' (ADJUSTED TOTAL ASSETS)**

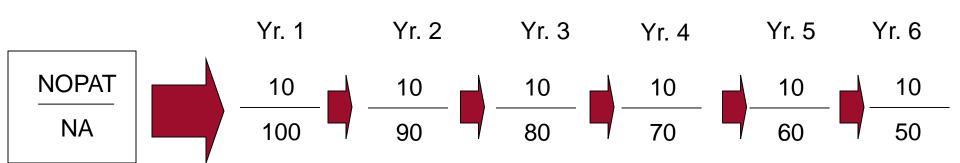
PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
Total Non-Depreciating Assets (w/o LT										
Invest)	2,242.2	2,485.1	2,932.7	1,320.3	1,977.2	5,618.2	4,217.3	4,498.1	11,691.8	8,674.5
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Net Assets'	21 392 /	23 698 1	28 590 N	31 775 7	37 026 0	48 240 5	51 609 6	5/1 921 1	68 070 8	71 /18/1 2

Gross Profit, After Tax = 20 Gross Assets = 100 Life of Assets = 10 years Depreciation = 10

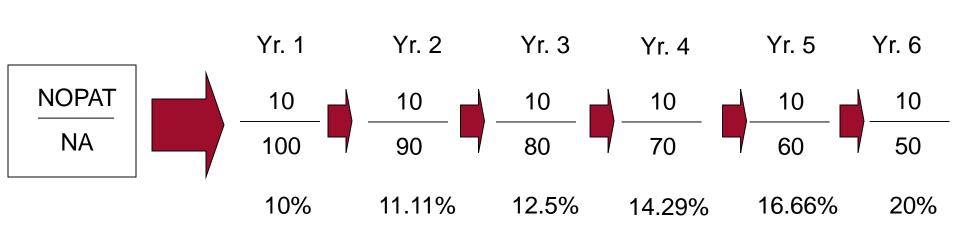
Gross Profit, After Tax = 20 Gross Assets = 100 Life of Assets = 10 years Depreciation = 10

NOPAT NA

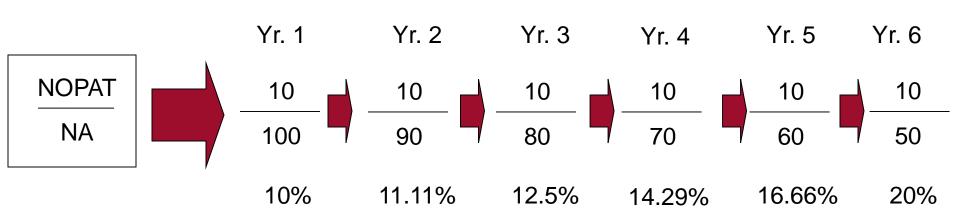
Gross Profit, After Tax = 20 Gross Assets = 100 Life of Assets = 10 years Depreciation = 10



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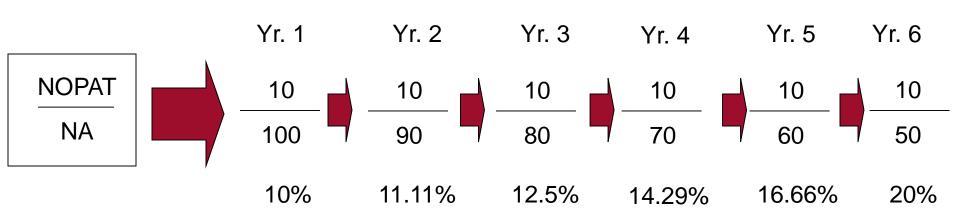


Gross Profit, After Tax = 20 Gross Assets = 100 Life of Assets = 10 years Depreciation = 10



Half way through asset life, Gross PP&E = 100A/D = 50 so Net PP&E = 50

Gross Profit, After Tax = 20 Gross Assets = 100 Life of Assets = 10 years Depreciation = 10



Half way through asset life, Gross PP&E = 100

A/D = 50 so Net PP&E = 50

As-reported ROA has doubled from 10% to 20%

???

$$\frac{\text{NCF}}{----} = \frac{10}{----} = 20\% \text{ ROI}$$
NA 50

$$\frac{\text{NCF}}{----} = \frac{10}{20\% \text{ ROI}}$$
NA 50

- Company doubles in size, same economics of new organic growth
- 100 incremental gross PP&E

$$\frac{\text{NCF}}{----} = \frac{10}{----} = 20\% \text{ ROI}$$
NA 50

- Company doubles in size, same economics of new organic growth
- 100 incremental gross PP&E

$$\frac{\text{NCF}}{----} = \frac{10}{----} = 20\% \text{ ROI}$$
NA 50

- Company doubles in size, same economics of new organic growth
- 100 incremental gross PP&E

$$\frac{\text{NCF}}{----} = \frac{20}{----} = 13\% \text{ ROI}$$
NA 150

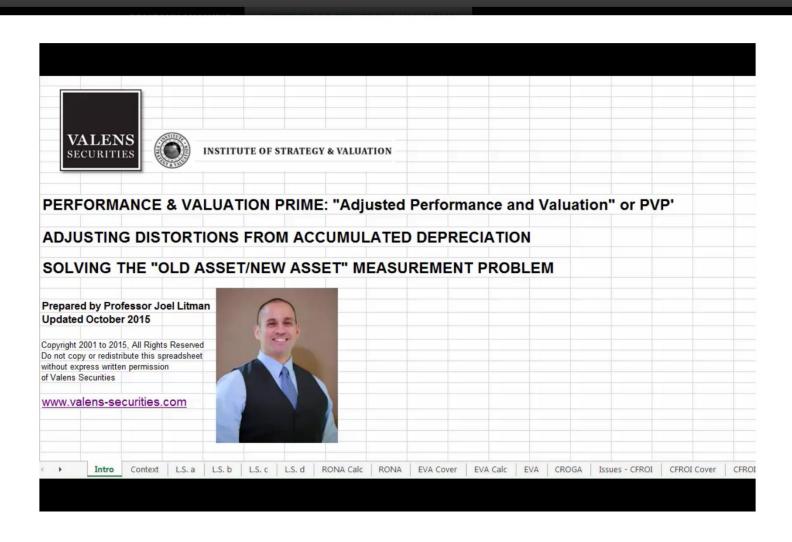
$$\frac{\text{NCF}}{----} = \frac{10}{20\% \text{ ROI}}$$
NA 50

- Company doubles in size, same economics of new organic growth
- 100 incremental gross PP&E

$$\frac{NCF}{M} = \frac{20}{150} = 13\% \text{ ROI}$$

Did the business's performance really fall by 35%?

ARTICLES



#### **CALCULATIONS FOR NET ASSETS' (ADJUSTED TOTAL ASSETS)**

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
Total Non-Depreciating Assets (w/o LT										
Invest)	2,242.2	2,485.1	2,932.7	1,320.3	1,977.2	5,618.2	4,217.3	4,498.1	11,691.8	8,674.5
Total Depreciating Assets	31,916.9	35,354.9	42,762.1	50,759.1	58,414.7	71,037.1	78,987.2	84,038.4	93,964.9	104,682.9
Total Assets'	34,159.1	37,840.0	45,694.8	52,079.4	60,391.9	76,655.4	83,204.5	88,536.5	105,656.8	113,357.4
Accumulated Depreciation'	12,766.8	14,142.0	17,104.8	20,303.6	23,365.9	28,414.9	31,594.9	33,615.4	37,586.0	41,873.2
Net Assets'	21 392 /	23 698 1	28 590 N	31 775 7	37 026 0	48 240 5	51 609 6	5/1 921 1	68 070 8	71 /18/1 2

#### **CALCULATIONS FOR NET ASSETS' (ADJUSTED TOTAL ASSETS)**

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015	
Total Non-Depreciating Assets (w/o LT											
Invest)	2,242.2	2,485.1	2,932.7	1,320.3	1,977.2	5,618.2	4,217.3	4,498.1	11,691.8	8,674.5	
Total Depreciating Assets	31,916.9	35,354.9	42,762.1	50,759.1	58,414.7	71,037.1	78,987.2	84,038.4	93,964.9	104,682.9	
Total Assets'	34,159.1	37,840.0	45,694.8	52,079.4	60,391.9	76,655.4	83,204.5	88,536.5	105,656.8	113,357.4	
Accumulated Depreciation'	12,766.8	14,142.0	17,104.8	20,303.6	23,365.9	28,414.9	31,594.9	33,615.4	37 <i>,</i> 586.0	41,873.2	
Net Assets'	21,392.4	23,698.1	28,590.0	31,775.7	37,026.0	48,240.5	51,609.6	54,921.1	68,070.8	71,484.2	

- Earnings or CFFO → E' = "Enterprise Earnings"
- Book Assets  $\rightarrow$  A' = "Assets of the Enterprise"
- ROE, RONA, ROA → ROA'
- CAPX → Enterprise Asset Growth
- Price → Enterprise value, V'
- Price-to-Book → V/A'
- Price-to-earnings → V/E'

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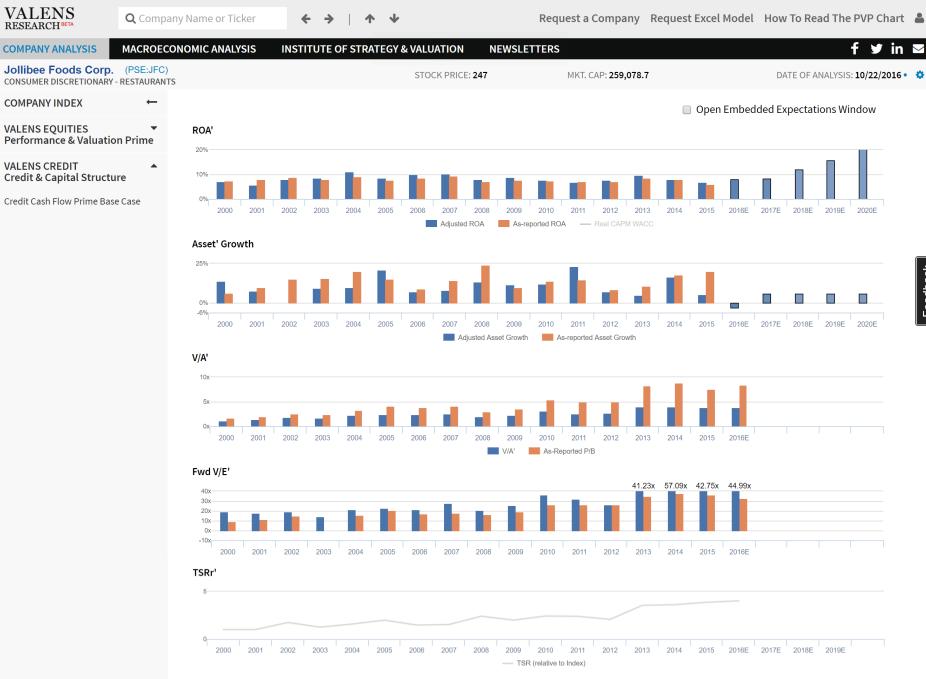
#### **CALCULATIONS FOR EV' (ADJUSTED ENTERPRISE VALUE)**

PSE:JFC	2006 12/31/2006	2007 12/31/2007	2008 12/31/2008	2009 12/31/2009	2010 12/31/2010	2011 1/1/2012	2012 12/31/2012	2013 12/31/2013	2014 12/31/2014	2015 12/31/2015
Book Value of Debt	228.1	300.9	2,929.4	2,796.7	4,234.7	5,620.0	5,450.2	5,173.8	7,010.1	10,035.9
+ Operating Lease Debt	9,048.3	10,416.5	12,849.2	15,678.6	18,842.6	23,811.8	27,357.2	28,872.9	32,479.7	36,459.8
+ Other Long Term Liabilities	1,262.2	1,069.0	1,079.4	1,040.7	1,338.7	1,552.7	1,641.9	1,728.6	1,676.4	1,646.1
+ Preferred Stock	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
+ Pension Obligations	778.2	463.6	453.8	240.7	163.7	0.0	521.6	932.8	832.4	1,466.5
+ Stock Option Claims	296.7	0.0	478.3	1,031.3	2,445.3	2,269.4	1,452.2	4,879.8	5,233.7	5,156.8
Total Debt'	11,613.5	12,250.0	17,790.1	20,788.0	27,025.0	33,254.0	36,423.1	41,587.9	47,232.3	54,765.1
Add: Minority Interest	21.5	5.4	3.3	3.2	561.9	703.7	733.1	812.1	887.7	1,133.4
Add: Market Cap	41,931.1	52,778.6	42,394.3	56,845.1	92,010.2	93,730.7	106,440.5	182,162.5	229,359.9	234,256.3
Subtract: Non-Operating EV (excess cash)	2,756.9	3,687.4	4,761.0	6,671.2	5,564.4	3,651.4	6,486.5	6,988.9	4,113.8	13,199.8
Enterprise Value Prime	50,809.2	61,346.5	55,426.7	70,965.2	114,032.7	124,036.9	137,110.3	217,573.6	273,366.1	276,955.0

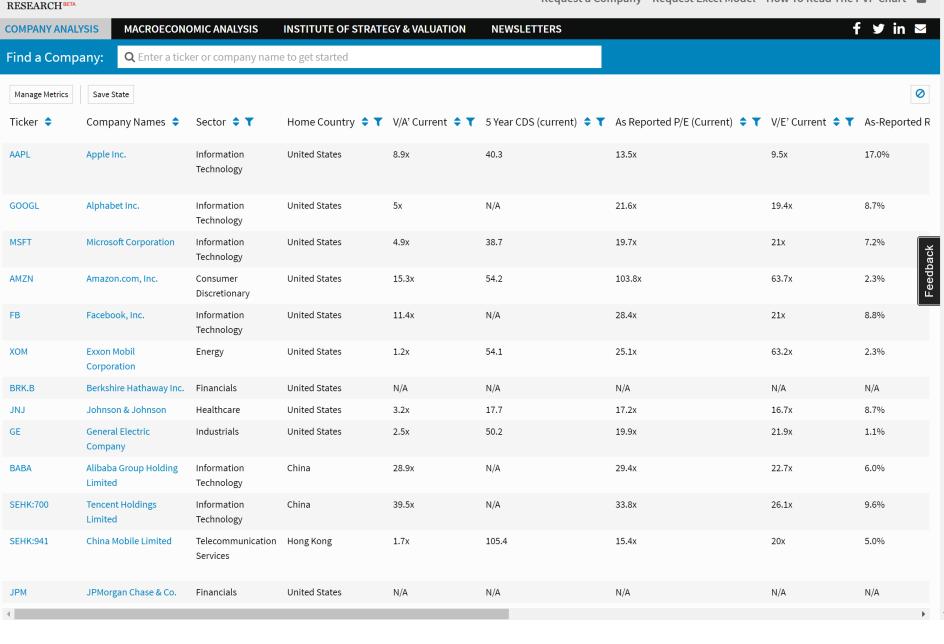
- Earnings or CFFO  $\rightarrow$  E' = "Enterprise Earnings"
- Book Assets  $\rightarrow$  A' = "Assets of the Enterprise"
- ROE, RONA, ROA → ROA'
- CAPX → Enterprise Asset Growth
- Price → Enterprise value, V'
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### VALENS RESEARCH

# Performance and Valuation Prime Adjusting From As-Reported to Economic Reality

Professor Joel Litman October 2016

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## INSTITUTE OF STRATEGY & VALUATION

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