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Tyco Intl. (NYSE: TYC)

Sell

November 28, 2001 **Industrial Sector** **Conglomerates**

MARKET DATA

Price	$59.40
52 Week Range	$63.21-$39.24
Price Target	$60.00
Book Value	$17.58
Raw Beta	1.33
Shares Outstanding	1.83 billion
Market Capitalization	$108.702 billion
Revenue FY2001	$36.39 billion
Net Income FY2001	$3.97 billion
EPS 5 Yr. CAGR	25.0%
Fiscal Year End	September

COMPANY OVERVIEW

Tyco International Ltd. is a diversified manufacturing and service company. Tyco is the world's largest manufacturer and servicer of electrical and electronic components; the world's largest designer, manufacturer, installer and servicer of undersea telecommunications systems; the world's largest manufacturer, installer and provider of fire protection systems and electronic security services, and the world's largest manufacturer of flow control valves. Tyco also holds strong leadership positions in medical device products, financing and leasing capital, plastics and adhesives. Tyco operates in 100 countries. In FY2001, Electronics represented 36.0% of revenues and 39.8% of total segment profits; Healthcare & Specialty products represented 24.3% of revenues and 24.9% of total segment profits; Fire & Security Services represented 29.0% of revenues and 24.3% of total segment profits; Telecommunications represented 5.1% of revenue and 5.0% of total segment profits; and Tyco Capital represented 5.5% of revenue and 6.1% of total segment profits. Tyco Capital is a relatively new division, having been formed during the third quarter of FY2001. Tyco has acquired over 200 major businesses within the last eight years.

A TRUE ACCOUNTING ADVENTURE

- Tyco follows an acquisition-driven business model, stripping bloated businesses of inefficient operations and excess personnel. While it extracts genuine synergies from these acquisitions, the rapid pace of them obscures its true operating performance and also seems to help it conceal aggressive accounting practices. These factors also complicate attempts to discern a reasonable valuation for its stock. Despite its growth opportunities, a number of financial issues have fueled our concern over its accounting practices and make us uncomfortable with this holding.

SUMMARY

- While management has trumpeted margin improvements, these have been fueled by pooling accounting methods for acquisitions (prior to January 1, 2001), as well as "cookie jar" reserves established during acquisitions. The firm's recent acquisition of CIT Group provides it with a financing arm that could enhance its ability to manage earnings through reserve accounts, similar to the way that G.E. Capital has enabled G.E. to further manage its earnings.
- Though known for having strong cash flow, some issues suggest that Tyco's cash position may be weakening, such as declining dividend payments, a lengthening cash conversion cycle, and a rising inventory levels.
- Even though Tyco aggressively eliminates personnel, writes down assets, and divests of inefficient or unrelated businesses of its acquisitions, its asset turnover continues to decline. At the same time, working capital continues to increase relative to sales and operating expenses, suggesting that Tyco is assimilating acquisitions less and less effectively and growing less efficient as a whole.

Sources: TYCO Int. Financial Reports (10K's and 10Q's), *Behind the Numbers*, *The Wall Street Journal*, Bloomberg, BigCharts.com, AFG View,, Hoovers, *Investment Dealers' Digest*, *Electronic Buyers' News*, *Forbes*, Value Line, Microsoft Money Central

NO SMOKING GUN, BUT SUSPECT NONETHELESS

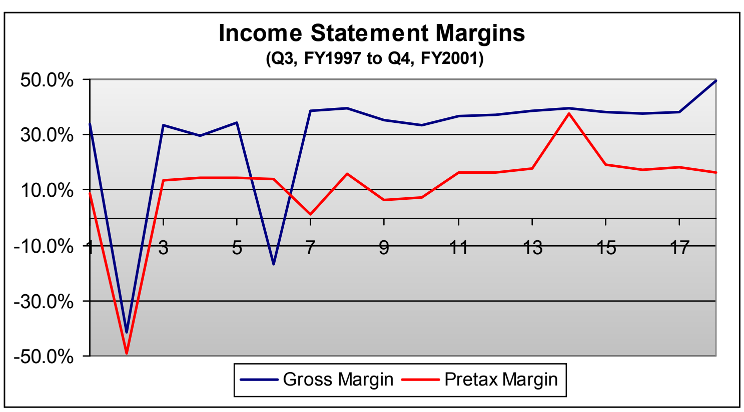
Questionable Improvements

On October 6, 1999, David Tice & Associates released its first report on Tyco Intl., in its *Behind the Numbers* publication. While Tice releases earnings warnings on numerous firms through this publication, this report triggered an exceptional market reaction, precipitating a 55% decline Tyco's stock price. This and Tice's subsequent reports have lead us to question Tyco's sales growth and margin expansion.

When making acquisitions, firms regularly report one-time charges associated with the restructuring costs stemming from the acquisition. These costs are thus recognized all at once on the income statement, but because actual cash payments occur over time, the firm establishes reserves on its balance sheet against which to match actual expenditures made over the course of the restructuring. These expenditures are, of course, estimated, and managers are inclined to overestimate them since excess reserves create a "cookie jar" against which managers can debit other costs instead of treating them as regular COGS or SG&A expenses. This in turn temporarily improves margins, without actually improving operating efficiencies. Consequently, any margin improvements following one-time charges might be the product of such reserves. Such improvements, are unsustainable, unless followed by additional acquisitions which justify additional one-time charges and are a means by which to replenish the "cookie jar." The size of these cookie jars can be estimated by the size of a firm's deferred tax assets. The carrying value of the reserve represents total accrued expenses which have yet to be paid out in actual expenditures. Since these expenses are not tax deductible until actual cash payment occurs, establishing the reserve creates a deferred tax asset which can serve to estimate the remaining size of the reserve. Since other transactions give rise to deferred tax assets, this method can only be used to estimate the size of this reserve.

In 1999, Tice noted the wide disparity between the accruals established upon Tyco's acquisition of new businesses and the actual cash it actually paid for restructuring purposes. One example of this in his first report involved Tyco's 1998 acquisition of Sherwood-Davis & Geck. In this acquisition, Tyco allotted $278.9 million of costs for the shutdown and consolidation of approximately 90 facilities. As of FY 1998's year end, 70 facilities had been closed, but the company reported that approximately $264.7 million remained on the balance sheet for facility related costs. Consequently, only 5.1% of the reserve had been used in closing 77.7% of the specified facilities. In this same acquisition, $159.7 million had been allocated to employee termination benefits for approximately 4,800 employees. By year end, FY 1998, 33.3% of these positions had been eliminated, even though only 20.9% of the reserve had been used. It is possible that the remaining personnel required more severance per employee and this disparity was justified, but this coupled with other similar disparities suggest that Tyco was in fact establishing "cookie jar" reserves or at least shifting expenses from one time period to another.

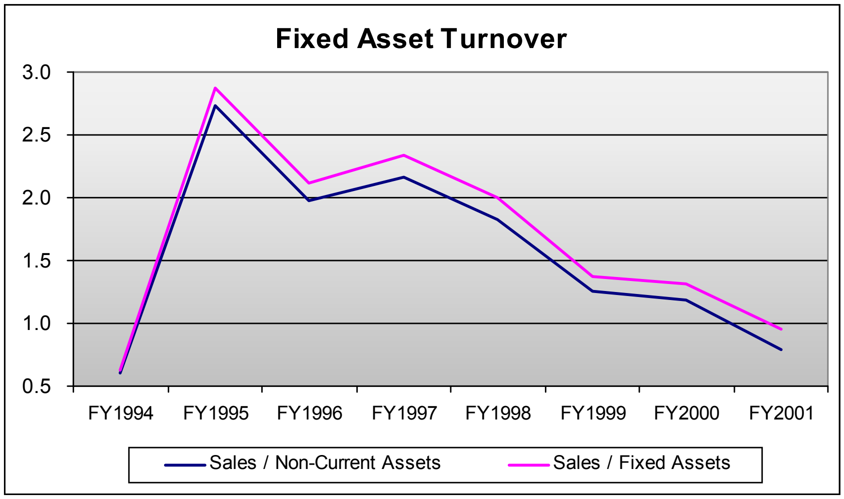
As noted before, margin expansion following acquisitions may come from reserves and not be sustainable. Because Tyco's strategy is acquisition intensive, however, artificial margin improvement could continue for some time until it's true profit margins are clear. (Tyco's Gross and Pretax margins are shown to the right.) Before January 1, 2001, Tyco accounted for many acquisitions through the pooling method. Since pooling allows for some restating of prior year's reported numbers, pooling can create mar-



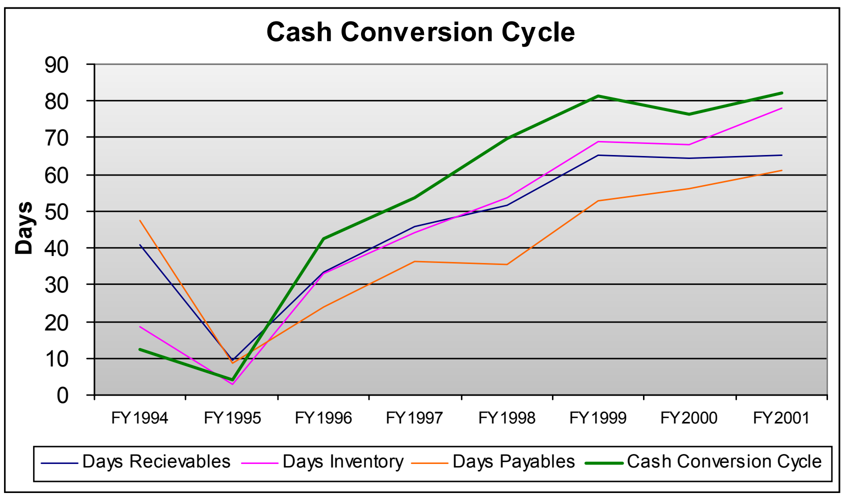
gin improvement that is unrelated to business improvements. As of January 1, 2001, however, the FASB began requiring all firms to account for acquisitions using the purchase method. This may limit Tyco's ability to show margin improvement and will certainly result in larger amounts of goodwill and contribute to lower asset turnover. (Even if goodwill is excluded, fixed asset turnover decreased significantly in FY 2001.) The presence of more goodwill on the balance sheet is significant since as noted by Tice, the firm already has negative tangible net worth (book value of equity minus intangibles). This is shown on page 9, under Tyco's Balance Sheet information.

Operational Effeciency

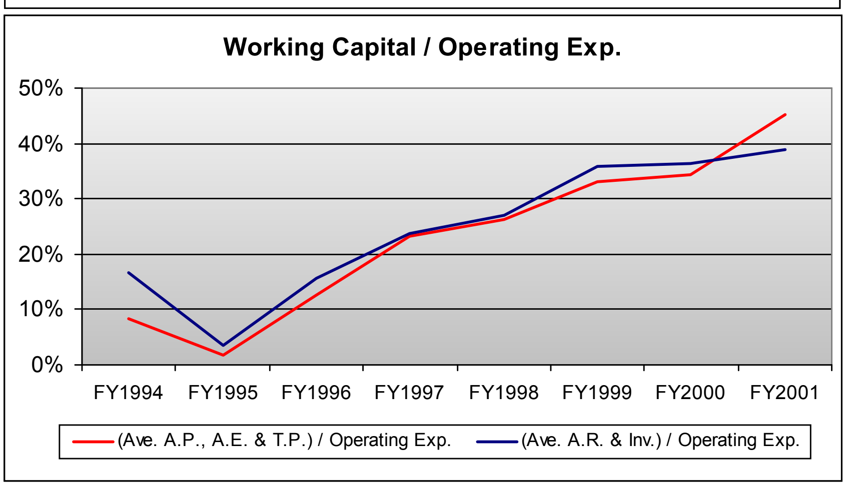
While management continues to announce record earnings and cash flow (excluding one-time charges), Tyco's operating efficiency has steadily deteriorated over the past several years. General asset turnover has dropped from its peak of 2.25 in FY 1995 to 0.48 in FY 2001. This deterioration can also be seen in the company's fixed asset turnover, as shown to the right. Though not shown in this chart, this pattern persists when intangibles are excluded from fixed assets.



Another trend we noticed was that Tyco's cash conversion cycle continues to grow as shown on the adjacent graph. While receivables turnover has remained steady over the past few years, days payables have steadily. increased. In FY 2001, inventory increased dramatically with days inventory jumping from 68.1 days in FY 2000 to 77.9 in FY 2001. As recently as FY 1998, this figure stood at 53.7. This has been reflected on the balance sheet as inventory increased by 35% and 33% in FY 2000 and FY 2001 respectively while sales increased only 29% and 26% in these years (FY 2000 and FY 2001 respectively). While this rise in inventory is significant in and of itself, it also represents the larger issue of a stretching cash cycle and lower operational efficiency.



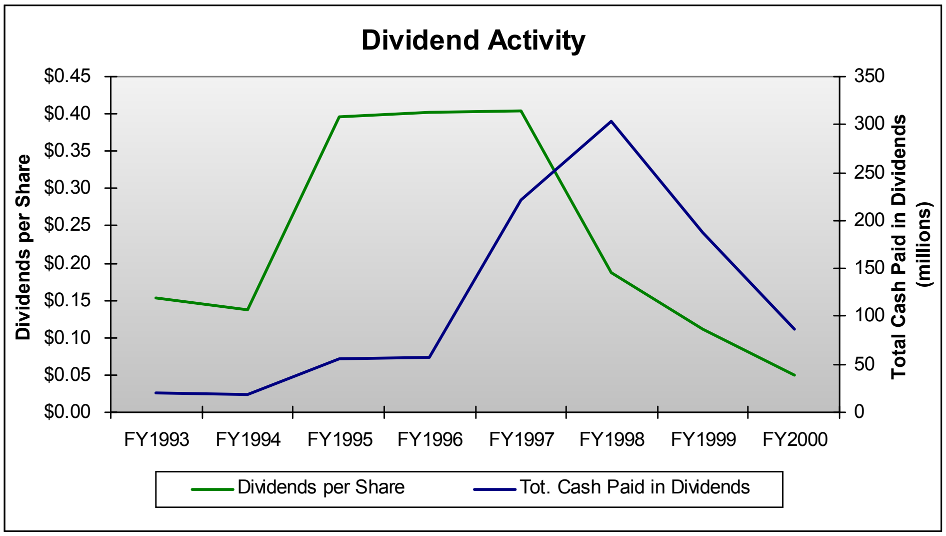
This can also be seen as Current Liabilities and Current Assets continue to grow as a percentage of Operating Expenses. In the chart to the right, we considered average accounts payable, accrued expenses, and current taxes payable as current liabilities and excluded other current liabilities since this item experiences a high level of volatility and could represent a number of changing factors. For current assets, we con-



sidered only average accounts receivable and inventory. We excluded other current assets for the same reason we excluded other current liabilities. Another reason we excluded other current assets is that the introduction of Tyco Capital drove a dramatic increase in this item in FY 2001, making it less comparable to previous years.

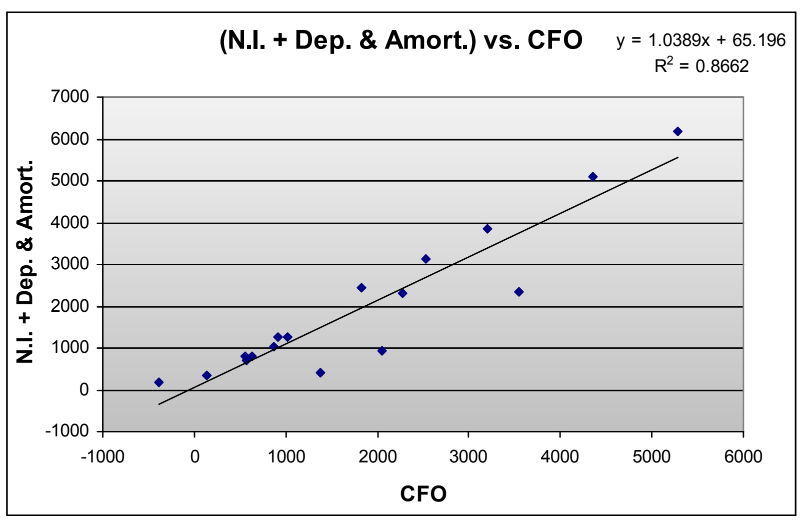
This chart shows that working capital continues to grow in relation to operating expenses. In FY 2001, current liabilities grew relative to operating expenses much more than current assets, driven primarily by a 166.3% increase in accrued expenses and somewhat by a 25.9% increase in accounts payable. Because these current liabilities grew much more quickly than current assets in FY 2001, this could possibly be interpreted as an increase in operating leverage.

A related noteworthy issue is that net working capital rocketed in FY 2001, increasing $10 billion on a sales increase of $7.5 billion (compared to FY 2000). This began in the second quarter when net working capital increased by $1.5 billion, and further increased by another $10.5 billion in the third quarter. It then backed off, by $2.5 billion in the fourth quarter, but still represented a dramatic surge for the year.



Tyco's dividend activity is another source of suspicious, though not condemning information. The chart to the right considers Tyco's historic dividends per share. Because equity offerings and acquisitions have dramatically increased the number of diluted shares outstanding, this chart also considers the total amount of cash paid out in dividends. Both have dropped substantially, with the actual cash paid out in dividends peaking at $303 million in FY 1998 and dropping 71.6% to $86.0 million in FY 2000. For the first three quarters of FY 2001, Tyco had paid out $132 million in dividends. In FY 1999 and FY 2000, dividends represented 18.4% and 1.9% of net income respectively. For the first three quarters of FY 2001, dividends represented 4% of net income. In FY 2000, if the firm had kept the total cash dividend payment at its FY 1999 level, this would have represented only 4.2% of that year's net income. At most firms, managers go to great lengths to avoid reducing their dividend payments. Why Tyco's managers decided to reduce total dividends paid in FY 2000, only to raise them in FY 2001 is difficult to determine. This may be an aberration as Tyco attempts to shift from an industrial conglomerate to a full-fledged growth company. It could also be a sign that the firm's cash flow is not as strong as management suggests.

Cash Flow



As a quick check on the quality of Tyco's earnings, we regressed net income + depreciation and amortization against cash flow from operations for the last 15 available quarters (Q4 of FY 1997 to Q3 of FY 2001). Because Tyco did not publish a cash flow statement in its last earnings release, we are unable to determine numerous items for cash flow from operations for Q4, FY 2001. This regression is shown to the right. Inequality between these variables in a given period arises from changes in net working capital, cash from discontinued operations, and other sources of cash from operations.

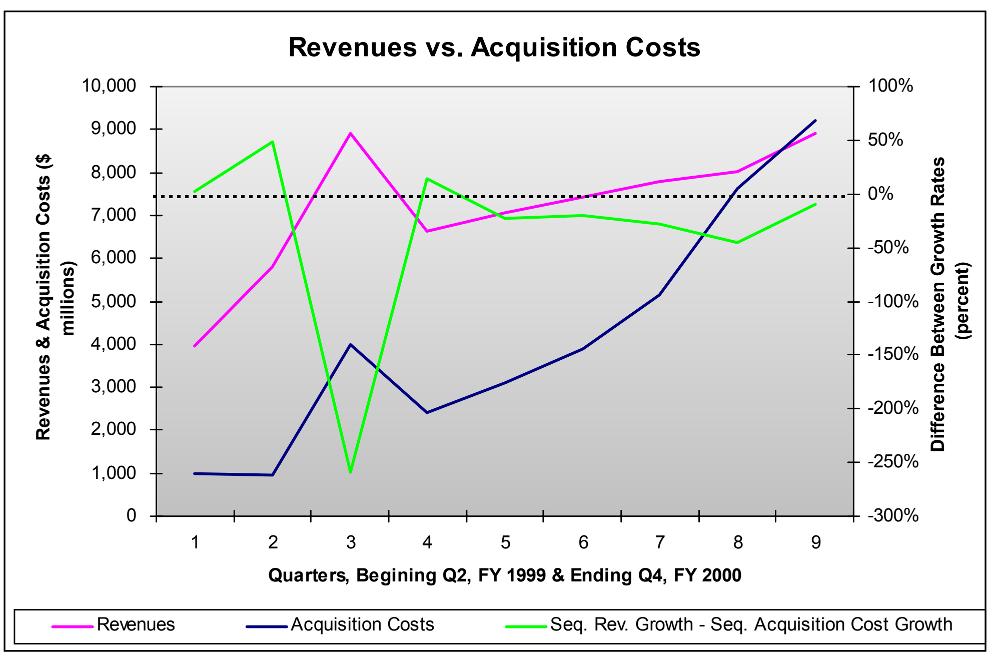
Other sources of cash from operations is by far the largest component of this inequality, followed by changes in net working capital. The R-Squared for this regression is 0.866, which represents a correlation of 0.93. While these figures are very high, especially for a regression with only 15 observations, the sources of variability are likewise very small.

Growth Sustainability

The table below, we have incorporated information from one of Tice's reports to consider the relationship between revenue growth and acquisition cost. (This information is represented visually in the accompanying chart.) Though hidden for simplicity, the pace of acquisition growth has been dramatic, increasing 947% in 10 quarters. More importantly, however, the growth in acquisition costs has outpaced the growth in revenue on both a sequential and Yr./Yr. basis. The information below first suggests that the pace of Tyco's acquisitions is unsustainable. The average increase in acquisitions from Q1 FY 2000 to Q2 FY 2001 was 184%! Because acquisition growth is outpacing revenue growth, this also suggests that Tyco is achieving decreasing marginal revenue growth from its acquisitions. Each dollar spent on acquisitions generates less and less revenue growth. Even if the difference between these growth rates is staggered so that the revenue growth in one period is compared to the acquisition growth in the previous period, acquisition growth still outpaces revenue growth considerably.

These along with the issues of operational efficiency discussed before suggest that Tyco may be forced to slow its acquisition strategy sooner than the management has planned. Also, if Tyco has used acquisitions to establish and maintain "cookie jar" reserves, it may be limited in its ability to continue this; simultaneously sustaining false margin improvements and sales growth requires a continuing parade of more and larger acquisitions.

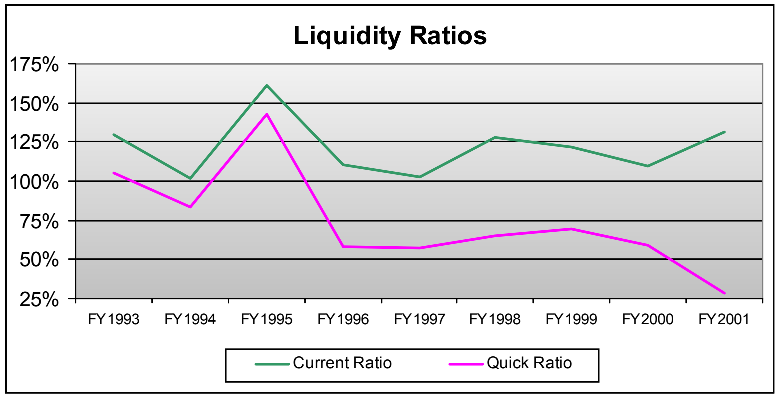
	FY1999				FY2000				FY2001	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Revenue	**$3,820.0**	**$3,957.0**	**$5,820.0**	**$8,900.0**	**$6,639.0**	**$7,070.0**	**$7,418.0**	**$7,805.0**	**$8,020.0**	**$8,898.0**
Acquisition Cost	**972.0**	**988.0**	**970.0**	**3,993.0**	**2,416.0**	**3,118.0**	**3,882.0**	**5,162.0**	**7,621.0**	**9,200.0**
Acquisition Cost (% of Revenue)	25.4%	25.0%	16.7%	44.9%	36.4%	44.1%	52.3%	66.1%	95.0%	103.4%
Sequential. Revenue Growth - Sequential Acquisition Cost Growth		1.9%	48.9%	-258.7%	14.1%	-22.6%	-19.6%	-27.8%	-44.9%	-9.8%
Yr./Yr. Revenue Growth - Yr./Yr. Acquisition Cost Growth					-74.8%	-136.9%	-272.7%	-41.6%	-194.6%	-169.2%

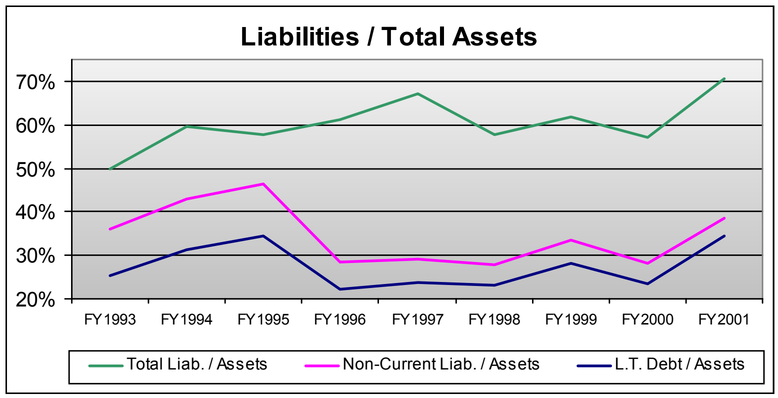


Note: In this chart, observations where the green line is below the dotted black bar represent times where growth in acquisition costs were higher than revenue growth.

Also shown here, acquisition costs exceeded revenues during Q4, FY 2001.

Capital Structure & Liquidity





Another issue we noted was that Tyco's quick ratio declined some in FY2000 and then sharply in FY2001. While we do not expect this to precipitate a liquidity crisis, it might be an example of financial strain created by the firm's aggressive acquisition strategy. The graph to the left shows annual data, and thus does not show quarterly fluctuations. This slide in liquidity actually occurred relatively recently. In the 3rd quarter of FY 2001, Tyco's quick ratio increased from 0.67 to 1.23. In the 4th quarter, it plummeted to the 0.28 level shown on this graph. This represents Tyco's lowest quick ratio in over eight years. Prior to this, this ratio's lowest level was 0.56, at the end of Q3, 1998.

As shown by the graph on the right, Tyco's liabilities have also reached a high point in FY 2001, representing approximately 70% of its total assets (up from 57% in FY 2000). This chart also shows an 11.2 percentage point (I. e. 11,200 basis points) increase in the firm's long-term debt to total assets ratio. These changes certainly haven't compromised the firm's solvency, as shown by a times interest earned ratio of 5.5 in FY 2001. Nonetheless, they do represent a significant incremental change in the firm's capital structure. Going forward, Tyco may be limited in its ability to fund acquisitions through debt.

Recomendation

Tyco's numerous business segments and the pace of its acquisitions makes arriving at a clear understanding of it operating strengths and achievements difficult. This report provides only a brief discussion of the various issues that might be compromising the quality of Tyco's financial reporting. After an initial review by the SEC, Tyco was required to shift 2 cents of EPS from FY 2000 to FY 1999. The SEC required these changes which were related to one-time charges and the subsequent accruals. (This restatement further complicates analysis of Tyco's financial statements.) Tice notes that this was an initial review and does not preclude further investigations.

All of these issues work together to complicate the task of estimating Tyco's long-term financial performance and render valuations somewhat tentative. We considered a simple DCF model (shown on page 14) and estimate Tyco to be worth around $60.00. Based on the CAPM, we arrived at a discount rate of 13.5%, assuming a risk-free rate of 3.5% and a risk premium of 7.5%. As noted, however, Tyco's financial statements may be misleading in numerous ways, weakening the basis for any valuation.

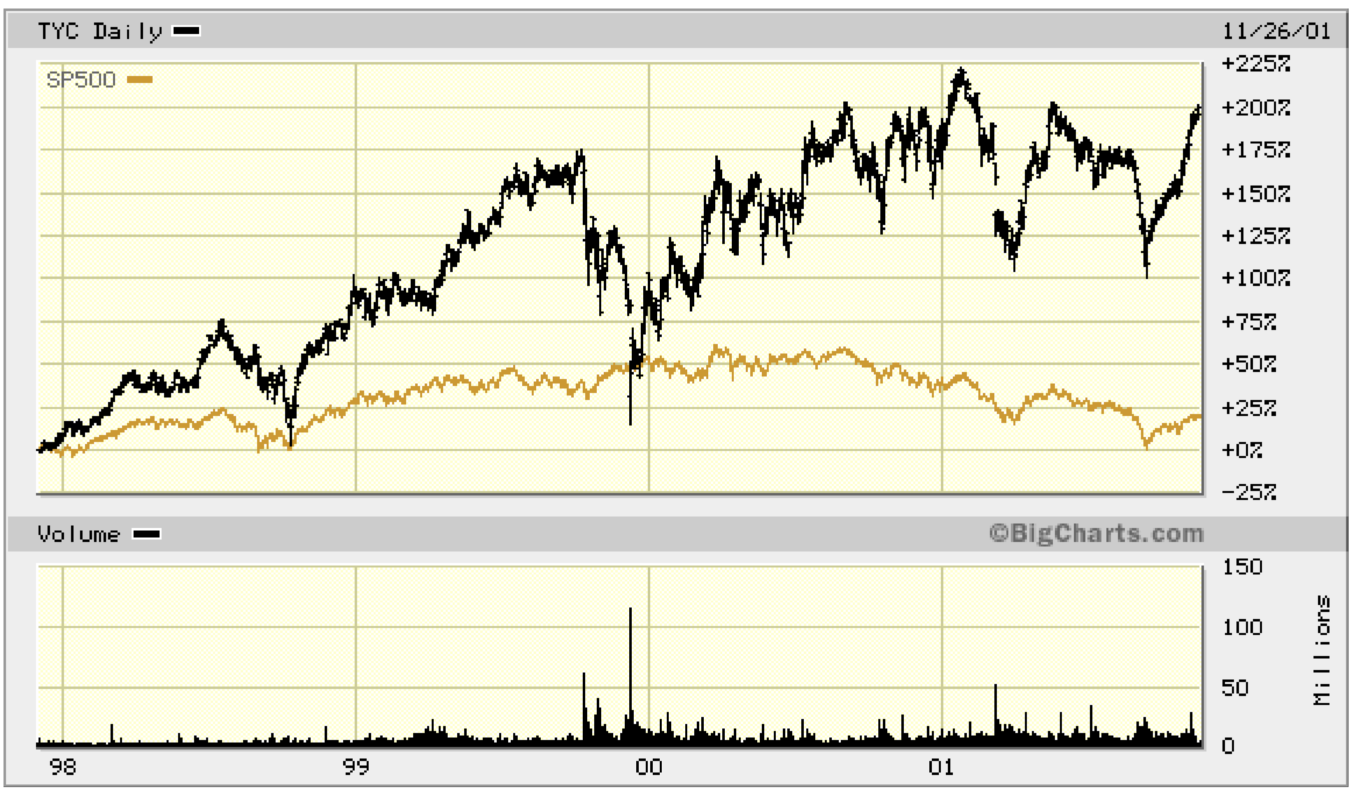
Based on this valuation, deterioration in Tyco's operating efficiencies, and the general distrust of Tyco's management in the financial community, we recommend closing the Wright Fund's position in this issue.

Investment Summary

Decision	Sell
Number of Shares	All Remaining Shares
Selling Price	Market

Two Year Price History

Four Year Price History
vs. S& P 500



Tyco Internaltional Ltd.
Financial Ratios

Fiscal Year: September

	FY1993	FY1994	FY1995	FY1996	FY1997	FY1998	FY1999	FY2000	FY2001
Capital Structure									
C.L. / Tot. Assets	13.9%	16.6%	11.2%	32.6%	38.2%	29.9%	28.2%	28.9%	31.9%
Non-Current Liab. / Tot. Assets	35.9%	43.0%	46.5%	28.6%	29.0%	27.9%	33.5%	28.1%	38.7%
Tot. Liab. / Tot. Assets	49.9%	59.6%	57.7%	61.2%	67.2%	57.8%	61.8%	57.0%	70.6%
Tot. Equity / Tot. Assets	50.1%	40.4%	42.3%	38.8%	32.8%	42.2%	38.2%	43.0%	29.4%
L.T. Debt / Tot. Assets	25.4%	31.3%	34.4%	22.2%	23.7%	23.1%	28.2%	23.4%	34.6%
L.T. Debt / Tot. Equity	50.7%	77.4%	81.3%	57.1%	72.4%	54.8%	73.6%	54.5%	117.6%
L.T. Debt / Fixed Assets	32.9%	38.8%	44.8%	37.3%	42.4%	41.1%	46.8%	38.4%	73.8%
L.T. Debt / Fixed & Other Assets	31.0%	37.6%	42.0%	34.7%	39.1%	37.4%	43.0%	34.3%	59.7%
Liquidity & Solvency									
Current Ratio	1.3	1.0	1.6	1.1	1.0	1.3	1.2	1.1	1.3
Quick Ratio (Cash & AR)	1.0	0.8	1.4	0.6	0.6	0.6	0.7	0.6	0.3
Times Interest Earned	3.3	2.8	3.5	0.7	1.0	6.5	4.1	8.7	5.5
Effective Interest Rate		8.9%	16.9%	10.5%	6.5%	6.9%	6.7%	8.0%	4.0%
DuPont Analysis									
Net Income / Sales		0.08	0.04	(0.04)	(0.03)	0.06	0.05	0.16	0.11
Asset Turnover		0.50	2.25	1.36	1.35	1.13	0.81	0.80	0.48
ROA		**4.1%**	**8.3%**	**-5.1%**	**-4.1%**	**6.9%**	**3.7%**	**12.4%**	**5.3%**
Assets / Equity		2.2	2.4	2.5	2.8	2.5	2.5	2.4	3.0
ROE		**9.0%**	**20.1%**	**-12.9%**	**-11.7%**	**17.5%**	**9.2%**	**30.4%**	**15.9%**
Fixed Asset Turnover									
Sales / Ave. Non-Current Assets		0.60	2.73	1.97	2.17	1.83	1.26	1.19	0.79
Sales / Ave. Fixed Assets		0.63	2.87	2.12	2.34	2.00	1.38	1.31	0.95
Sales / Ave. PP&E		1.07	4.76	3.89	4.62	4.22	3.35	3.70	2.93
Working Capital									
(Ave. A.P.+A.E.+T.P.) / (COGS+SG&A)		0.08	0.02	0.13	0.23	0.26	0.33	0.34	0.45
(Ave. A.R.+Inv.+O.C.A.) / (COGS + SG&A)		0.21	0.04	0.19	0.29	0.34	0.46	0.45	0.98
(Ave. A.R.+Inv.) / (COGS + SG&A)		0.17	0.04	0.16	0.24	0.27	0.36	0.36	0.39
Ave. NWC / (COGS + SG&A)		0.05	0.02	0.03	0.02	0.06	0.11	0.07	0.22
(Ave. A.P.+A.E.+T.P.) / Sales		0.07	0.02	0.12	0.20	0.23	0.28	0.28	0.35
(Ave. A.R.+Inv.+O.C.A.) / Sales		0.18	0.04	0.18	0.25	0.30	0.38	0.36	0.76
(Ave. A.R.+Inv.) / Sales		0.14	0.03	0.15	0.21	0.24	0.30	0.29	0.30
Ave. NWC / Sales		4.4%	1.8%	3.3%	1.6%	5.4%	8.8%	5.5%	16.9%
Ave. NWC (Excluding O.C.A.) / Sales		0.7%	1.2%	0.0%	-3.1%	-1.1%	0.5%	-1.5%	-29.1%
NWC / Sales	8.9%	0.6%	3.4%	3.6%	0.9%	10.2%	9.0%	3.9%	30.7%
Cash Conversion									
Recievables T/O		8.9	38.6	10.9	8.0	7.1	5.6	5.7	5.6
Days Receivables		41.0	9.4	33.4	45.8	51.6	65.4	64.4	65.2
Inventory T/O		19.7	119.6	11.1	8.2	6.8	5.3	5.4	4.7
Days Inventory		18.5	3.1	32.8	44.4	53.7	69.0	68.1	77.9
Payables T/O		7.7	42.8	15.3	10.0	10.3	6.9	6.5	6.0
Days Payables		47.3	8.5	23.8	36.4	35.3	53.0	56.1	61.1
Cash Converstion Cycle		12.2	4.0	42.4	53.8	70.0	81.4	76.4	82.0
# of CCC per Year		29.9	92.0	8.6	6.8	5.2	4.5	4.8	4.5
Miscelaneous									
Intangibles / Tot. Assets	32.5%	31.7%	30.8%	28.8%	28.1%	30.3%	37.6%	40.4%	31.9%
Net Working Capital	114.0	8.0	236.0	293.0	118.0	1,950.0	2,019.0	1,136.0	11,168.2
Change in Net Working Capital		(106.0)	228.0	57.0	(175.0)	1,832.0	69.0	(883.0)	10,032.2
% Change		-93.0%	2850.0%	24.2%	-59.7%	1552.5%	3.5%	-43.7%	883.1%

Terry Ledbetter
M.A. Wright Fund, Rice University
November 28, 2001

Tyco International Ltd.
Consolidated Balance Sheet

Fiscal Year: September

In Millions (Except per Share Amounts & Percentages)

	FY1993	FY1994	FY1995	FY1996	FY1997	FY1998	FY1999	FY2000	FY2001
Cash	$261.0	$216.0	$351.0	$324.0	$370.0	$1,073.0	$1,762.0	$1,265.0	$2,587.2
Accounts Receivables	147.0	162.0	196.0	1,288.0	1,912.0	3,478.0	4,582.0	5,630.0	7,372.5
Inventories	36.0	40.0	38.0	947.0	1,125.0	2,610.0	2,849.0	3,845.0	5,101.3
Other Current Assets (inc. I.T.L.)	59.0	43.0	35.0	494.0	702.0	1,794.0	1,952.0	2,075.0	31,386.5
Total Current Assets	**503.0**	**461.0**	**620.0**	**3,053.0**	**4,109.0**	**8,955.0**	**11,145.0**	**12,815.0**	**46,447.5**
Net, PP&E	1,249.0	1,332.0	1,571.0	2,591.0	2,924.0	6,104.0	7,322.0	8,330.0	16,473.8
Goodwill & Other Intangibles	907.0	863.0	1,054.0	2,439.0	2,933.0	7,106.0	12,159.0	16,333.0	35,304.0
Invest & Adv. to Subs.	58.0		91.0	101.0		228.0	270.0	1,654.0	2,342.4
Deferred Charges (inc. I.T.L.)				67.0	144.0	321.0	669.0	533.0	1,751.8
Other	74.0	70.0	84.0	221.0	337.0	727.0	779.0	740.0	8,190.4
Total Assets	**2,791.0**	**2,726.0**	**3,420.0**	**8,472.0**	**10,447.0**	**23,441.0**	**32,344.0**	**40,405.0**	**110,509.9**
% Change		-2.3%	25.5%	147.7%	23.3%	124.4%	38.0%	24.9%	173.5%
Short Debt	95.0	149.0	45.0	588.0	250.0	815.0	1,013.0	1,537.0	18,895.1
Accounts Payable	89.0	106.0	112.0	722.0	1,012.0	1,733.0	2,531.0	3,292.0	4,145.9
Accrued Expenses				1,017.0	1,853.0	3,069.0	3,546.0	4,038.0	10,753.4
Income Taxes				134.0	430.0	789.0	799.0	1,711.0	1,484.9
Other	205.0	198.0	227.0	299.0	446.0	599.0	1,237.0	1,101.0	
Total Current Liablilities	**389.0**	**453.0**	**384.0**	**2,760.0**	**3,991.0**	**7,005.0**	**9,126.0**	**11,679.0**	**35,279.3**
Long-Term Debt	709.0	852.0	1,175.0	1,878.0	2,481.0	5,425.0	9,109.0	9,462.0	38,221.5
Other Long-Term Liabilities	137.0	130.0	135.0	420.0	498.0	977.0	1,236.0	1,095.0	3,069.5
Deferred Charges / Income (inc. I.T.L	157.0	190.0	280.0	124.0	48.0	131.0	504.0	792.0	1,439.5
Total Liabilities	**1,392.0**	**1,625.0**	**1,974.0**	**5,182.0**	**7,018.0**	**13,538.0**	**19,975.0**	**23,028.0**	**78,009.8**
Minority Interest			16.0					344.0	301.4
Shareholder's Equity	1,399.0	1,101.0	1,430.0	3,290.0	3,429.0	9,903.0	12,369.0	17,033.0	32,198.7
Total Liabilities & Equity	**2,791.0**	**2,726.0**	**3,420.0**	**8,472.0**	**10,447.0**	**23,441.0**	**32,344.0**	**40,405.0**	**110,509.9**
Misc:									
Book Value per Share	$10.73	$8.40	$10.30	$23.27	$6.24	$6.10	$7.39	$9.94	$17.58
Tangible Net Worth	492.0	238.0	392.0	851.0	496.0	2,797.0	210.0	1,044.0	(2,803.9)
Change in Net Working Capital		(106.0)	228.0	57.0	(175.0)	1,832.0	69.0	(883.0)	10,032.2
% Change		-93.0%	2850.0%	24.2%	-59.7%	1552.5%	3.5%	-43.7%	883.1%

Terry Ledbetter
M.A. Wright Fund, Rice University
November 28, 2001

Tyco International Ltd.
Annual Earnings Model

Fiscal Year: September

In Millions (Except per Share Amounts & Percentages)

	FY1993	FY1994	FY1995	FY1996	FY1997	FY1998	FY1999	FY2000	FY2001
Revenue	$1,287.0	$1,376.0	$6,916.0	$8,104.0	$12,743.0	$19,062.0	$22,497.0	$28,932.0	$36,388.5
% Change		6.9%	402.6%	17.2%	57.2%	49.6%	18.0%	28.6%	25.8%
Cost of Goods Sold	706.0	748.0	4,665.0	5,475.0	8,524.0	12,695.0	14,433.0	17,931.0	20,950.3
Gross Profit	**581.0**	**628.0**	**2,251.0**	**2,629.0**	**4,219.0**	**6,367.0**	**8,064.0**	**11,001.0**	**15,438.2**
% Sales	45.1%	45.6%	32.5%	32.4%	33.1%	33.4%	35.8%	38.0%	42.4%
SG&A	359.0	409.0	1,503.0	2,402.0	2,636.0	4,162.0	4,436.0	5,252.0	7,208.4
% sales	27.9%	29.7%	21.7%	29.6%	20.7%	21.8%	19.7%	18.2%	19.8%
Operating Income	**222.0**	**219.0**	**748.0**	**227.0**	**1,583.0**	**2,205.0**	**3,628.0**	**5,749.0**	**8,229.8**
% Sales	17.2%	15.9%	10.8%	2.8%	12.4%	11.6%	16.1%	19.9%	22.6%
Non Operating Income (Loss)	(32.0)	8.0	(83.0)	(95.0)	(1,414.0)	(194.0)	(1,375.0)	1,561.0	(654.1)
Interest Expense	58.0	80.0	188.0	193.0	170.0	308.0	547.0	845.0	1,373.6
Pretax Income	**132.0**	**147.0**	**477.0**	**(61.0)**	**(1.0)**	**1,703.0**	**1,706.0**	**6,465.0**	**6,202.1**
% Sales	10.3%	10.7%	6.9%	-0.8%	0.0%	8.9%	7.6%	22.3%	17.0%
Taxes	21.0	32.0	209.0	236.0	348.0	534.0	638.0	1,926.0	1,479.9
Rate	15.9%	21.8%	43.8%	-386.9%	-34800.0%	31.4%	37.4%	29.8%	23.9%
Minority Interest								18.7	51.1
Extrordinary Items, Net of Taxes		3.0	12.0	8.0	43.0	2.0	46.0		700.5
Net Income	**111.0**	**112.0**	**256.0**	**(305.0)**	**(392.0)**	**1,167.0**	**1,022.0**	**4,520.3**	**3,970.6**
EPS	$0.85	$0.85	$1.84	($2.16)	($0.71)	$0.72	$0.61	$2.64	$2.17
Shares, Diluted	130.3	131.1	138.9	141.4	549.9	1,624.7	1,674.8	1,713.2	1,831.6

Terry Ledbetter
M.A. Wright Fund, Rice University
November 28, 2001

Tyco International Ltd.
Quarterly Earnings Model

Fiscal Year: September

In Millions (Except per Share Amounts & Percentages)

	FY1999				FY2000				FY2001			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Revenue	$3,820.0	$3,957.0	$5,820.0	$8,900.0	$6,639.0	$7,070.0	$7,418.0	$7,805.0	$8,020.0	$8,898.0	$8,777.0	$10,014.8
% Change Yr. / Yr.	42.1%	38.7%	79.9%	151.6%	73.8%	78.7%	27.5%	-12.3%	20.8%	25.9%	18.3%	28.3%
% Change Sequential	8.0%	3.6%	47.1%	52.9%	-25.4%	6.5%	4.9%	5.2%	2.8%	10.9%	-1.4%	14.1%
Cost of Goods Sold	2,350.0	2,386.0	3,773.0	5,924.0	4,192.0	4,455.0	4,550.0	4,734.0	4,949.0	5,540.0	5,413.0	5,073.3
Gross Profit	**1,470.0**	**1,571.0**	**2,047.0**	**2,976.0**	**2,447.0**	**2,615.0**	**2,868.0**	**3,071.0**	**3,071.0**	**3,358.0**	**3,364.0**	**4,941.5**
% Sales	38.5%	39.7%	35.2%	33.4%	36.9%	37.0%	38.7%	39.3%	38.3%	37.7%	38.3%	49.3%
SG&A	821.0	832.0	1,035.0	1,749.0	1,243.0	1,265.0	1,350.0	1,395.0	1,553.0	1,617.0	1,811.0	2,266.7
% sales	21.5%	21.0%	17.8%	19.7%	18.7%	17.9%	18.2%	17.9%	19.4%	18.2%	20.6%	22.6%
Operating Income	**649.0**	**739.0**	**1,012.0**	**1,227.0**	**1,204.0**	**1,350.0**	**1,518.0**	**1,676.0**	**1,518.0**	**1,741.0**	**1,553.0**	**2,674.8**
% Sales	17.0%	18.7%	17.4%	13.8%	18.1%	19.1%	20.5%	21.5%	18.9%	19.6%	17.7%	26.7%
Non Operating Income (Loss)	(511.0)		(533.0)	(331.0)	31.0	(3.0)	7.0	1,527.0	201.0	31.0	402.0	(415.2)
Interest Expense	96.0	112.0	108.0	231.0	165.0	206.0	196.0	278.0	168.0	227.0	341.0	637.5
Pretax Income	**42.0**	**627.0**	**371.0**	**665.0**	**1,070.0**	**1,141.0**	**1,329.0**	**2,925.0**	**1,551.0**	**1,545.0**	**1,614.0**	**1,622.1**
% Sales	1.1%	15.8%	6.4%	7.5%	16.1%	16.1%	17.9%	37.5%	19.3%	17.4%	18.4%	16.2%
Taxes	68.0	168.0	177.0	224.0	279.0	285.0	332.0	1,031.0	530.0	386.0	379.0	231.5
Rate	161.9%	26.8%	47.7%	33.7%	26.1%	25.0%	25.0%	35.2%	34.2%	25.0%	23.5%	14.3%
Minority Interest								19.0	13.0	12.0	16.0	11.1
Extrordinary Items, Net of Taxes	(2.0)	43.0	(1.0)						30.0	10.0	3.0	3.4
Net Income	**(24.0)**	**416.0**	**195.0**	**441.0**	**791.0**	**856.0**	**997.0**	**1,875.0**	**978.0**	**1,137.0**	**1,216.0**	**1,376.1**
% Sales	-0.6%	10.5%	3.4%	5.0%	11.9%	12.1%	13.4%	24.0%	12.2%	12.8%	13.9%	13.7%
EPS	($0.04)	$0.64	$0.24	$0.26	$0.47	$0.51	$0.59	$1.11	$0.56	$0.65	$0.69	$0.70
Shares, Diluted	648.7	653.5	824.7	1,690.2	1,693.2	1,688.0	1,687.3	1,684.5	1,748.0	1,752.8	1,752.8	1,956.4

Terry Ledbetter
M.A. Wright Fund, Rice University
November 28, 2001

Tyco International Ltd.
Cash Flow Statement

Fiscal Year: September

In Millions (Except per Share Amounts & Percentages)

	FY1993	FY1994	FY1995	FY1996	FY1997	FY1998	FY1999	FY2000
Net Income	112.0	111.0	255.0	(305.0)	(391.0)	1,166.0	1,022.0	4,520.0
Depreciation & Amortization	152.0	179.0	364.0	228.0	790.0	1,149.0	1,322.0	1,651.0
% of PP&E & Intangibles	7.1%	8.2%	13.9%	4.5%	13.5%	8.7%	6.8%	6.7%
Decrease (Increase) in NWC	1.0	4.0	12.0	8.0	394.0	(465.0)	(219.0)	(92.0)
Cash from Discontinued Operations		4.0			58.0	2.0	45.0	
Other	7.0	(13.0)	148.0	887.0	528.0	429.0	1,380.0	(805.0)
Cash From Operations	**272.0**	**285.0**	**779.0**	**818.0**	**1,379.0**	**2,281.0**	**3,550.0**	**5,274.0**
Capital Expenditures	(202.0)	(205.0)	(470.0)	(533.0)	(867.0)	(1,318.0)	(1,867.0)	(1,815.0)
(Acquisitions) Divestitures of Sub.	(18.0)	(15.0)	(219.0)	(823.0)	(1,415.0)	(4,252.0)	(3,974.0)	(4,716.0)
(Increase) in Securities Investment	67.0		8.0	63.0	(29.0)	6.0	11.0	(353.0)
Other	14.0	119.0	260.0	3.0	(10.0)	(83.0)	(14.0)	(53.0)
Cash From Investing	**(139.0)**	**(101.0)**	**(421.0)**	**(1,290.0)**	**(2,321.0)**	**(5,647.0)**	**(5,844.0)**	**(6,937.0)**
Issue of Equity	148.0	(413.0)	39.0	18.0	1,000.0	1,310.0	235.0	601.0
Issue of Debt			(12.0)			2,745.0	1,174.0	
Increase in Borrowing	(128.0)	204.0	(217.0)	326.0	218.0	15.0	1,770.0	680.0
Dividends	(20.0)	(18.0)	(55.0)	(57.0)	(222.0)	(303.0)	(188.0)	(86.0)
Other	(33.0)	(5.0)	0.0		(2.0)	(37.0)	(7.0)	(30.0)
Cash From Financing	**(33.0)**	**(232.0)**	**(245.0)**	**287.0**	**994.0**	**3,730.0**	**2,984.0**	**1,165.0**
Cash, Beginning		261.0	216.0	351.0	324.0	370.0	1,073.0	1,762.0
Exchange Rate Effect on Cash		2.0						
Net Change in Cash		(48.0)	113.0	(185.0)	52.0	364.0	690.0	(498.0)
Cash, Ending		**215.0**	**329.0**	**166.0**	**376.0**	**734.0**	**1,763.0**	**1,264.0**

Note: Cash Flow information for FY2001 had not been released at the time of this report.

Terry Ledbetter
M.A. Wright Fund, Rice University
November 28, 2001

Tyco International Ltd.
Simplified Cash Flow Model

Fiscal Year: September

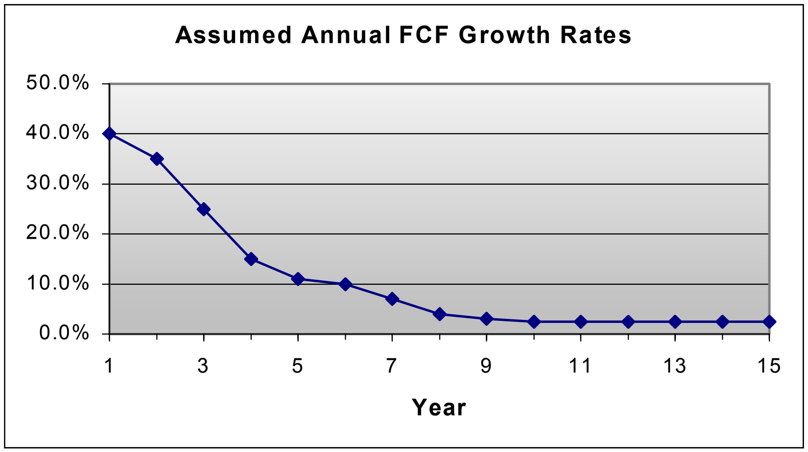
In Millions (Except per Share Amounts & Percentages)

	FY1993	FY1994	FY1995	FY1996	FY1997	FY1998	FY1999	FY2000
Net Income	$112.0	$111.0	$255.0	($305.0)	($391.0)	$1,166.0	$1,022.0	$4,520.0
Depreciation & Amortization	152.0	179.0	364.0	228.0	790.0	1,149.0	1,322.0	1,651.0
Minority Interests								18.7
Cash Flow	**264.0**	**290.0**	**619.0**	**(77.0)**	**399.0**	**2,315.0**	**2,344.0**	**6,152.3**
Capital Expenditures	202.0	205.0	470.0	533.0	867.0	1,318.0	1,867.0	1,815.0
Free Cash Flow	**62.0**	**85.0**	**149.0**	**(610.0)**	**(468.0)**	**997.0**	**477.0**	**4,337.3**
Interest Expense	58.0	80.0	188.0	193.0	170.0	308.0	547.0	845.0
Taxes	21.0	32.0	209.0	236.0	348.0	534.0	638.0	1,926.0
EBITDA	**343.0**	**402.0**	**1,016.0**	**352.0**	**917.0**	**3,157.0**	**3,529.0**	**8,923.3**
CF / Share	$2.03	$2.21	$4.46	($0.54)	$0.73	$1.42	$1.40	$3.59
FCF / Share	$0.48	$0.65	$1.07	($4.31)	($0.85)	$0.61	$0.28	$2.53
EBITDA / Share	$2.63	$3.07	$7.32	$2.49	$1.67	$1.94	$2.11	$5.21

Terry Ledbetter
M.A. Wright Fund, Rice University
November 28, 2001

Tyco International
Discounted Cash Flow Model[1]
Fiscal Year Ended: September

Discount Rate	13.5%															**Terminal Year**
Year	0	1	2	3	4	**5**	6	7	8	9	**10**	11	12	13	14	**15**
Growth Rate	n.a.	40.0%	35.0%	25.0%	15.0%	**11.0%**	10.0%	7.0%	4.0%	3.0%	**2.5%**	2.5%	2.5%	2.5%	2.5%	2.5%
FCF per Share	$2.53	3.54	4.78	5.98	6.87	**7.63**	8.39	8.98	9.34	9.62	**9.86**	10.11	10.36	10.62	10.88	**11.16**
PV of FCF	n.a.	$3.12	3.71	4.09	4.15	**4.06**	3.93	3.71	3.40	3.08	**2.79**	2.52	2.27	2.05	1.85	17.32
															Sum of PV's of FCF's:	$62.04
Est. Fair Share Value	$62.04															



[1]Note: Yellow cells contain assumptions (inputs), green cells contian outputs.

Terry Ledbetter
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November 28, 2001