Evaluation of the Quality and Sustainability of Earnings

Harbin Electric, Inc.

Prepared by: XXXXXX, PhD, CPA, CFE
July 11, 2011

Overview of findings:

The analysis contained herein highlights a wide range of concerns that, in my opinion, point to a very high risk of material misstatement and the potential for fraud. (Note, however, that as an outsider, I cannot determine with certainty whether or not fraud exists at HRBN.)

1. **Material weaknesses in internal controls and potentially poor audit quality:** HRBN recently disclosed a number of internal control weaknesses that may adversely impact crucial areas of its financial reporting environment. The number and significance of these weaknesses suggests that the quality and sustainability of reported earnings may be very poor.
   The quality of the firm's external audit may also be adversely affected by the existence of material weaknesses, as the auditor's ability to obtain competent evidence may have been compromised. Further evidence that audit quality may be compromised arises from the SEC's recent filing of administrative and cease and desist proceedings against HRBN's current outside accounting firm, Frazer Frost, in connection with its audit of another Chinese reverse merger.

2. **Highly unusual disclosures:** My analysis found a number of unusual disclosures. But two stand out as essentially unprecedented in my experience. In this regard, the company explicitly acknowledges that, due to its internal control weaknesses may not be able to "prevent fraud." Additionally, the company acknowledges that control weaknesses threaten its ability to verify the <u>existence</u> of cash. In my view, these disclosures should not be taken lightly.

3. **Unusually large and persistent divergence between income and cash flows:** HRBN also reports an unusually large and persistent divergence between income and cash flows, with the gap filled by rising accruals. Given the acknowledged weaknesses in internal controls, I believe it is likely that the discrepancy between income and cash flows is likely to be even larger than implied by company reported figures.

4. **Revenues may be materially overstated:** HRBN's reported revenue figures imply a compounded annual growth rate of over 60% for the six-year period ended December 31, 2010. However, sustained revenue growth of this magnitude is very unusual and many forensic accountants consider it a red flag related to quality of revenues. Quality of revenue diagnostics—including a gap of more than $90 million between reported revenues and cash received from customers—further elevate my concern regarding the risk of a misstatement in revenues. Yet even that measure fails to fully capture the magnitude of the risk involved as the firm's controls the cash balance cannot be relied upon at this time. Further, the company's accounting for notes receivable (and related material weaknesses) may have allowed the firm to record sales for which cash was never actually collected (and without the associated accounts ever showing up as past due). I also believe that the above procedure could be used as a means of concealing phony

sales, though as an outsider I have no way to determine with certainty that this has occurred.

5. **Quality of receivables appears likely to be poor:** HRBN's reported AR figures imply potential severe difficulties in collecting on customer accounts, or revenues may have been recorded prematurely. Material weaknesses disclosed by HRBN management and adverse trends in AR diagnostics also serve to elevate the level of concern regarding the quality of receivables reported on the firm's balance sheet. In addition, certain accounting procedures used by the firm allow the company to carry AR on its books, though it may <u>never</u> actually collect any cash from the customer.

6. **Inventory likely to be overstated, perhaps materially so:** Trends in HRBN's inventory and related accounts also display the telltale signs of degradation in asset quality. In this regard, DSI risen consistently over time, with the trend appearing to revert only within the last couple of quarters. But appearances can sometimes be misleading as the increasing balance of prepaid inventory has essentially offset the recent decline in inventory. Material weaknesses disclosed by HRBN management further elevate my level of concern as it appears that it could allow for the recording of fictitious sales and hide them through phony entries to prepaid inventory or inventory on hand (though, as noted throughout this report, as an outsider I cannot determine for certain whether or not this has occurred).

7. **Massive declines in productivity and profitability:** HRBN published financial results imply a severe decline in productivity and profitability (relative to assets and employees) since 2007. In my opinion, these declines are unlikely to be fully explained by changes in economic conditions or business models. Moreover, given the other evidence discussed in this report, it appears likely that the declines in productivity and profitability may be due, at least in part, to a combination of overstatements in revenues, income and assets.

Subject Company

Company Name:

Harbin Electric, Inc.
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Company Business Description:

Harbin Electric, Inc., through its subsidiaries, engages in the design, development, manufacture, supply, and service of electric motors in the People's Republic of China and internationally. The company's product lines include linear motors and integrated systems, automobile specialty micro-motors, and industrial rotary motors. Its linear motors and integrated systems comprise flat linear asynchronous motor series and flat three-phase linear asynchronous motors, which are applied in transmission systems, such as the production transportation line, the crane, postal service sorting machine, baggage sorting machine, printed matter sorting machine, automatic linear door, and revolving door applications. The company's linear motors and integrated systems also consist of products used in the oil, factory automation, packaging, logistic systems, and food industries, as well as in the production transportation conveyor lines, postal service mail sorting machines, baggage sorting machines, printed matter sorting machines, food and meat slicers, oil pump machines of oilfield, and automated power switches. The company's automobile specialty micro-motors are used for car seat automation, back seat folding, electric power steering, automated windows, and automated trunk opening. These products are also used for door locks, gas pedals, ABS, gas pumps, and engine gas jets. Harbin Electric, Inc.'s industrial rotary motors are used in various applications, such as freight train driving motors, power plants, metallurgical and mining industry, chemical and petrochemical industry, construction machinery, agricultural equipment and machinery, transportation machinery, machine tools, medical devices, ventilation equipment, air compressors, and electric pumps. The company is headquartered in Harbin, the People's Republic of China. [*2010 10-K filed with the Securities and Exchange Commission*]

Market for Company Shares:

As of the date of publication, company shares traded on the NASDAQ exchange under the trading symbol HRBN. Other relevant data, as reported by the company and the NASDAQ as of the date of publication (*July 11, 2011*) and/or last day of trading prior to publication (*July 8, 2011*) are summarized below:

Share Price	*$16.91*	TTM EBITDA	*U.S. $99.3 million**
Market Value	*U.S. $528.5 million*	EV/TTM Revenue	*1.2X**
Enterprise Value	*520.4 million**	EV/TTM EBITDA	*5.2X**
TTM Revenue	*U.S. $424.8**	No. of employees	*3,970**

*Relies on company provided data, which may or may not have been disclosed accurately by the firm.

Accounting Conventions:

The company states that its financial results are prepared in accordance with U.S. Generally Accepted Accounting Principles (GAAP) and reported in U.S. Dollars.

Audit and Control Environment

HRBN recently disclosed a number of internal control weaknesses that may adversely impact crucial areas of its financial reporting environment. The number and significance of these weaknesses suggests that the quality and sustainability of reported earnings may be very poor. According to the firm's own disclosures, due to these weaknesses it may not be able to "prevent fraud." The quality of the firm's external audit may also be adversely affected by the existence of material weaknesses, as the auditor's ability to obtain competent evidence may have been compromised. This may be particularly problematic in light of the relatively smaller size and North American domicile of the firm's current and prior auditors and the number of auditor changes that have occurred since the firm gained access to U.S. capital markets by a reverse merger (January 2005). Further evidence that audit quality may be compromised arises from the SEC's recent filing of administrative and cease and desist proceedings against HRBN's current outside accounting firm, Frazer Frost, in connection with its audit of another Chinese reverse merger.

Material Weaknesses in Internal Controls

HRBN disclosed a lengthy description of numerous internal control weaknesses in its 2010 10-K filed with the U.S. Securities and Exchange Commission (SEC). The disclosure is copied in its entirety below, with editorial comments interspersed to add context/clarity:

> If we fail to maintain an effective system of internal control over financial reporting, ***we may be unable to accurately report our financial results or prevent fraud***, and investor confidence and the market price of our common stock may be adversely affected. [Bold/italics added for emphasis.]

In my experience, the above disclosure is unusual in that companies rarely acknowledge, directly, the risk of fraud due to material weaknesses in internal control. (Generally, I have found that companies disclose only the risk of a material misstatement in this context. Why bring up the issue of fraud at this point?)

> We and our independent registered public accounting firm, in connection with management's assessment of and the audit of our internal control over financial reporting as of December 31, 2010, identified ***five material weaknesses*** in our internal control over financial reporting. The material weakness identified were **attributable to *Xi an [sic] Simo, a former State-Owned-Enterprise ("SOE") the Company acquired in October 2009***, which rendered our internal control over financial reporting ineffective on the consolidated level. [Bold/italics added for emphasis.]

This is a highly unusual number of weaknesses to disclose at any one time. In this regard, I have only seen two prior periods of time where any significant number of firms disclosed multiple weaknesses at one time: during the period of transition to the internal control requirements imposed by Sarbanes-Oxley and since late 2010 (but this latter phenomenon appears to be limited to U.S.-listed firms that are primarily domiciled in China).

> Despite significant improvements achieved in its internal control systems, due to its very short history of being part of a U.S. public company, large size, many subsidiaries located away from its headquarters, and limited time to integrate it with the Company, ***material weaknesses in its internal control over financial reporting were not***

> ***completely eliminated at Xi an Simo*** [sic] as of December 31, 2010. [Bold/italics added for emphasis.]

The above implies that the firm has not yet remedied the control weaknesses discovered last year. It is also important to note that this same disclosure appeared in the Q1 2011 10-Q—implying that the weaknesses were not corrected as of March 31, 2011. Though not highly unusual, I recommend continued monitoring of the situation. In my experience the longer it takes to rectify control weaknesses, the greater the risk of material misstatement.

> The material weaknesses identified by the management at Xi an [sic] Simo are described below:
>
> > Control activities related to bank reconciliation At Xi an [sic] Simo, the bank reconciliation for various bank accounts were not prepared accurately which ***impacted the valuation and existence of the cash in bank*** as of December 31, 2010. [Bold/italics added for emphasis.]

The above is one of the most disturbing disclosures I have seen in my 20+ year tenure as a forensic accountant. It is very rare for a firm to disclose material weaknesses in controls over cash, and even more unusual for management to admit that the very existence of cash is uncertain. This disclosure alone *should* prevent any *prudent and informed, third-party* investor or creditor from providing funds to the company in an arms-length transaction (except possibly those inclined to lend at usurious rates). Later in the Report I also review unusual trends in certain diagnostic metrics that examine the amount of cash collected from customers and the amount of revenues reported by the firm. The existence of this control deficiency further elevates my level of concern in these areas.

> Control activities related to the reconciliation and classification of notes receivable At Xi an [sic] Simo, ***notes receivables endorsed as payment to third parties were not properly recorded***, resulting in a discrepancy between the physical notes receivables on hand and the general ledger. Additionally, the ***improper classifications of transactions has impacted the completeness, and valuation of accounts payable / advance to suppliers and notes receivable balances*** at the year ended December 31, 2010 at [sic] Xi an Simo. [Bold/italics added for emphasis.]

In the above disclosure, the company is acknowledging that uses notes *receivable* from (unspecified other parties) to pay suppliers and others, in lieu of cash, but that it has not properly recorded these transactions at times. As a result, the true balances of notes receivable, accounts payable, and advances to suppliers may be misstated. I also review other unusual disclosures pertaining to, and abnormal trends in, these accounts later in the Report.

> Control activities related to the calculation of provision of income tax At Xi an [sic] Simo, due to ambiguities in the PRC tax rules, the ***temporary and permanent differences in tax amounts were not properly identified***. [Bold/italics added for emphasis.]

The above disclosure is vague, making it difficult to determine exactly what management is concerned about (re deferred taxes). However, I find it unusual that a firm with such a large discrepancy between cash flows and earnings would report such a large proportion of cash taxes paid to total taxes. I believe that this disclosure may indicate a perceived risk, on the part of management, that deferred taxes (cash taxes paid) were understated in prior periods. This belief is consistent with recent increases in deferred taxes disclosed by the company (in the latest 10-K and 10-Q filings).

> Control activities related to inventory recording At Xi an [sic] Simo, inventory ***movement between manufacturing facilities and sales entities were not timely and properly recorded*** on the general ledger. [Bold/italics added for emphasis.]
>
> Control activities related to valuation of inventory allowance At Xi an [sic] Simo, ***slow moving inventories that had not been used over a year*** were not properly evaluated for inventory allowance. [Bold/italics added for emphasis.]

The control weaknesses related to inventories imply that the firm has, at times, been unable to properly track inventory as it moves through the business and ultimately to customers. This is very troubling as it also cost of goods sold may not be matched properly with sales, leading to a misstatement of profits. Likewise, the failure to properly reserve for impaired inventory will overstate profits. Finally, both inventory-related weaknesses may result in inventory being overstated on the balance sheet. The above deficiencies correlate with the results of my numerical analysis. As discussed later, I find that inventory performance has declined steadily through time, which leads me to believe that gross profit and inventory are likely to have been misstated in one or more periods.

> We have taken measures and plan to continue to take measures to remedy these deficiencies. However, the implementation of these measures ***may not fully address the control deficiencies in our internal control over financial reporting***. Our failure to address any control deficiency could result in inaccuracies in our financial statements and could also impair our ability to comply with applicable financial reporting requirements and related regulatory filings on a timely basis. Moreover, effective ***internal control over financial reporting is important to prevent fraud***. As a result, our business, financial condition, results of operations and prospects, as well as the trading price of our common stock, may be materially and adversely affected. [Bold/italics added for emphasis.

The last portion of the disclosure makes it clear that the company has not been able to remediate the control weaknesses noted above, though it continues to work to address them. This paragraph also reiterates the unusual admission regarding the inability to "prevent fraud" at this time.

Summary of Concern(s): Taken together, the above disclosures indicate serious risks to the integrity of the firm's reported financial results. In particular, the balance sheet values for cash, notes receivable, and inventory may be misstated. To the extent that these assets may be misstated, there will be a corresponding misstatement of income and retained earnings. Based on other findings discussed herein, I believe that the magnitude of misstatement could be highly material. Therefore, I believe that investors should not relay on the firm's representations regarding operational performance and financial position.

Risks to Audit Quality

HRBN and its predecessor companies have reported a total of three different auditors since 2003. All auditors have been smaller, regional firms located in Canada and the U.S. As such, audit quality may not be as robust as expected with larger, multinational audit firms. The latest firm, Frazer Frost, is a relatively small, U.S.-based regional accounting firm located in Orange County, CA.

The SEC recently filed an Administrative and Cease and Desist Proceedings against HRBN's current auditor, Frazer Frost, for alleged violations of "Section 8A of the Securities Act of 1993 and Section 4C of the Securities and Exchange Act of 1934 and Rule 102(3) of the Commission's Rules of Practice." This case involves China Energy Savings Technology, Inc. (China Energy), a Nevada shell company doing business in China following a reverse merger (much like the subject firm, HRBN).[1] The China Energy/Frazer Frost cases were also cited in recent SEC proposals to modify listing requirements for ***reverse mergers***.[2]

Finally, it is also important to consider that HRBN predecessor company, Torch Executive Services, Ltd. (Torch) received a going concern exception from its auditor Hoogendorn Vellmer in both 2003 and 2004. Torch was acquired by Harbin Tech Full Electric Co., Ltd. in a January 2005 ***reverse merger*** transaction.

Summary of Concern(s): Taken together, these observations indicate that audit quality may be poor. Investors are advised not to rely on the opinions of the firm's current auditor, Frazer Frost.

Exhibit 1: Auditors and Auditor Changes Since 2003

2006 – present	Frazer Frost (formerly Moore, Stephens, Wurth, Frazir and Torbet)
2004 – 2005	Kabani & Co. (Los Angeles, CA)
2003 – 2004	Hoogendorn Vellmer (Vancouver, Canada)

[1] See http://www.sec.gov/litigation/admin/2010/33-9166.pdf.
[2] See http://www.sec.gov/rules/sro/nasdaq/2011/34-64633.pdf.

Trends in Income, Cash Flows, and Accruals

As shown in Table 1, below, cash flow performance has been highly volatile (compared to income). But the large and growing divergence between net income and free cash flow is the greater concern, in my opinion. Statistically speaking, such a large and sustained divergence between income and cash flows (and, consequently, a high and sustained level of accruals) is highly unusual. Moreover, given the acknowledged weaknesses in internal controls, I believe it is likely that the discrepancy is likely to be even larger than implied by company reported figures. As such, I believe that the risk of a material misstatement may be extremely high.

1. **Gap between net income and free cash flow:** As of March 31, 2011, the cumulative gap between net income and free cash flow stood at $86.6 million. Unfortunately the situation isn't getting any better, as free cash flow has trailed net income in 10 of the last 17 quarters.

2. **Persistent, high level of accruals:** The large discrepancy between income and cash flow has also led to an unusual pattern of persistently high accruals. (See Tables 2a and 2b.) Using the balance sheet method[3], I find that accruals exceeded 10%[4] in 19 of the last 22 quarters. Similarly, by the cash flow statement method, I find that trailing 12-month (TTM) total accruals[5] exceeded 5%[6] in 18 of the last 22 quarter-end points. Operating accruals[7] fared only slightly better, with a measure in excess of 5%[8] for 11 of the last 22 quarter-end dates. ***In my experience, it is quite rare for a firm to report a sustained, high level of accruals over such a long period of time***. Moreover, according to the academic literature, firms experiencing accruals levels of this magnitude are subject to a much greater risk of restatements and share price underperformance.

3. **Impact of material weaknesses:** In fact, the situation may actually be much worse than implied by my analysis, which relies almost exclusively on company-reported data. Given management's recent disclosures relating to material weaknesses in internal controls over cash, notes receivable, and inventory it is important to consider that the company's reported results may actually ***overstate*** its true cash flow performance. As a result, the magnitude of the divergence between income and cash flow (and the growth in accruals) may actually be larger than it appears on the surface. I explain why in the sections that follow.

[3] Under this measure, accruals are computed as the YOY change in net operating assets, excluding cash.
[4] On average, less than 10% of publicly traded firms exceed this level in any given TTM period. The percentage of firms that consistently exceed this level over a five-year span is much smaller.
[5] Under this measure, accruals are computed as difference between TTM free cash flow and TTM net income, divided by average total assets.
[6] Historically, less than 10% of publicly traded firms have exceeded this level of total accruals in any given TTM period. The percentage of firms that exceed this level in a majority of the quarter end measurement periods over a five-year span is much smaller.
[7] Operating accruals are computed as difference between TTM cash from operations, pre tax and interest, less TTM EBITDAS, divided by average current assets.
[8] Historically, less than 10% of publicly traded firms have exceeded this level of operating accruals in any given TTM period. The percentage of firms that exceed this level in a majority of the quarter end measurement periods over a five-year span is much smaller.

Table 1: Comparison of Trends in Cash Flow and Income
(Currency Amounts in $U.S. millions)

For period ended:	Q1 Mar-31-2011	Q4 Dec-31-2010	Q3 Sep-30-2010	Q2 Jun-30-2010	Q1 Mar-31-2010	Q4 Dec-31-2009	Q3 Sep-30-2009	Q2 Jun-30-2009	Q1 Mar-31-2009
Net Income	$10.806	$12.714	$17.873	$25.675	$20.554	$18.320	$(1.900)	$(5.400)	$8.654
YOY pct chg	-30.6%	1040.7%	575.5%	137.5%	203.3%	-124.5%	-186.7%	61.7%	-30.6%
Cash from Ops.	8.729	14.099	30.046	31.793	17.345	25.066	6.413	8.155	22.883
YOY pct chg	-49.7%	-43.8%	368.5%	289.8%	-24.2%	34.8%	-40.1%	-39.9%	3913.8%
Free cash flow, before acquisitions	8.155	13.664	13.294	(7.226)	15.755	22.583	2.513	7.385	18.083
YOY pct chg	-48.2%	-39.5%	429.0%	-197.8%	-12.9%	172.0%	-64.7%	101.8%	294.4%
TTM net income / revenue	15.8%	18.0%	19.3%	17.2%	10.6%	8.8%	4.9%	11.9%	22.2%
QOQ bps chg	(222)	(127)	212	657	178	391	(698)	(1,034)	121
TTM free cash flow / revenue	6.6%	8.3%	10.4%	9.2%	16.2%	22.7%	24.1%	28.5%	28.8%
QOQ bps chg	(176)	(207)	118	(698)	(646)	(142)	(442)	(29)	2,069
Cumulative difference between free cash flow and net income	(86.613)	(83.963)	(84.912)	(80.333)	(47.432)	(42.634)	(46.896)	(51.309)	(64.095)

For period ended:	Q4 Dec-31-2008	Q3 Sep-30-2008	Q2 Jun-30-2008	Q1 Mar-31-2008	Q4 Dec-31-2007	Q3 Sep-30-2007	Q2 Jun-30-2007	Q1 Mar-31-2007
Net Income	$6.041	$7.754	$6.231	$5.353	$4.178	$4.764	$4.556	$3.404
YOY pct chg	44.6%	62.7%	36.8%	57.3%	-37.5%	11.2%	23.9%	-10.3%
Cash from Ops.	18.601	10.704	13.560	(0.600)	(4.800)	7.022	5.227	1.679
YOY pct chg	487.5%	52.4%	159.4%	-135.7%	-149.6%	418.5%	103.6%	-23.4%
Free cash flow, before acquisitions	8.301	7.111	3.660	(9.300)	(19.134)	(2.378)	5.438	(11.321)
YOY pct chg	143.4%	399.0%	-32.7%	17.9%	-509.0%	-349.2%	120.4%	-641.2%
TTM net income / revenue	21.0%	22.3%	24.4%	25.4%	25.8%	33.4%	38.3%	40.0%
QOQ bps chg	(131)	(206)	(102)	(45)	(755)	(489)	(168)	(566)
TTM free cash flow / revenue	8.1%	-16.8%	-32.2%	-34.2%	-41.9%	-6.2%	-0.5%	-7.1%
QOQ bps chg	2,485	1,548	193	771	(3,572)	(566)	663	(3,235)
Cumulative difference between free cash flow and net income	(73.523)	(75.784)	(75.141)	(72.570)	(57.917)	(34.604)	(27.462)	(28.344)

Table 2a: Balance Sheet Method Accruals
(Currency Amounts in $U.S. millions)

For period ended:	Q1 Mar-31-2011	Q4 Dec-31-2010	Q3 Sep-30-2010	Q2 Jun-30-2010	Q1 Mar-31-2010	Q4 Dec-31-2009	Q3 Sep-30-2009	Q2 Jun-30-2009	Q1 Mar-31-2009
Operating assets - ex cash	$ 476.809	$ 474.460	$ 485.911	$ 474.647	$ 443.536	$ 434.524	$ 186.629	$ 181.951	$ 176.610
Operating liabilities	67.166	69.928	89.073	91.166	92.312	119.424	19.558	33.360	29.940
Net operating assets - ex cash	409.644	404.532	396.838	383.481	351.224	315.100	167.071	148.591	146.671
YOY change in NOA - ex cash	16.6%	28.4%	137.5%	158.1%	139.5%	85.0%	4.8%	51.7%	67.4%
QOQ change in NOA - ex cash	1.3%	1.9%	3.5%	9.2%	11.5%	88.6%	12.4%	1.3%	-13.9%

For period ended:	Reclassified Q4 Dec-31-2008	Q3 Sep-30-2008	Q2 Jun-30-2008	Q1 Mar-31-2008	Q4 Dec-31-2007	Q3 Sep-30-2007	Q2 Jun-30-2007	Q1 Mar-31-2007
Operating assets - ex cash	186.573	186.412	112.756	105.733	87.162	59.240	43.398	40.086
Operating liabilities	16.257	26.921	14.825	18.123	4.067	9.651	6.751	1.375
Net operating assets - ex cash	170.315	159.491	97.930	87.610	83.096	49.589	36.646	38.711
YOY change in NOA - ex cash	105.0%	221.6%	167.2%	126.3%	1219.6%	1286.8%	187.0%	235.3%
QOQ change in NOA - ex cash	6.8%	62.9%	11.8%	5.4%	67.6%	35.3%	-5.3%	514.8%

For period ended:	Reclassified Q4 Dec-31-2006	Q3 Sep-30-2006	Q2 Jun-30-2006	Q1 Mar-31-2006	Reclassified Q4 Dec-31-2005	Q3 Sep-30-2005	Q2 Jun-30-2005	Q1 Mar-31-2005
Operating assets - ex cash	25.636	18.475	14.217	12.083	18.099	7.909	4.012	2.423
Operating liabilities	19.339	22.653	1.448	0.539	0.192	0.346	0.628	0.335
Net operating assets - ex cash	6.297	(4.178)	12.769	11.544	17.906	7.563	3.384	2.088
YOY change in NOA - ex cash	-64.8%	-155.2%	277.3%	452.8%	1314.8%			
QOQ change in NOA - ex cash	250.7%	-132.7%	10.6%	-35.5%	136.8%	123.5%	62.1%	65.0%

Table 2b: Cash Flow Statement Method Accruals
(Currency Amounts in $U.S. millions)

For period ended:	Q1 Mar-31-2011	Q4 Dec-31-2010	Q3 Sep-30-2010	Q2 Jun-30-2010	Q1 Mar-31-2010	Q4 Dec-31-2009	Q3 Sep-30-2009	Q2 Jun-30-2009	Q1 Mar-31-2009
TTM EBITDAS	99.8	110.6	127.3	116.7	98.7	75.0	41.7	39.4	36.1
Est. TTM CFOA pre tax & int.	103.0	111.1	123.3	105.3	78.8	83.4	73.7	70.9	76.2
Est. TTM operating accruals	(3.3)	(0.5)	4.1	11.4	19.9	(8.4)	(32.0)	(31.6)	(40.1)
Est. TTM operating accruals / Avg. current assets	-1.2%	-0.2%	1.6%	5.0%	10.0%	-5.1%	-24.5%	-28.0%	-38.6%
TTM NI + SOGE	67.6	77.3	96.8	77.0	48.7	34.1	8.7	18.5	27.8
TTM Free cash flow	27.9	35.5	44.4	33.6	48.2	50.6	36.3	40.9	37.2
Estimated TTM total accruals	39.7	41.8	52.4	43.4	0.5	(16.4)	(27.6)	(22.3)	(9.3)
Estimated TTM total accruals / Avg. total assets	7.1%	7.8%	10.6%	10.0%	0.1%	-5.1%	-10.6%	-9.6%	-4.4%
Est. TTM noncurrent accruals	43.0	42.3	48.3	32.0	(19.4)	(8.1)	4.4	9.2	30.8
Est. TTM noncurrent accruals / Avg. noncurrent assets	6.0%	6.1%	8.0%	6.1%	-4.4%	-2.1%	1.4%	3.1%	11.6%

For period ended:	Reclassified Q4 Dec-31-2008	Q3 Sep-30-2008	Q2 Jun-30-2008	Q1 Mar-31-2008	Q4 Dec-31-2007	Q3 Sep-30-2007	Q2 Jun-30-2007	Q1 Mar-31-2007
TTM EBITDAS	38.8	37.8	33.7	30.4	26.4	24.1	19.5	17.3
Est. TTM CFOA pre tax & int.	52.0	26.4	21.9	11.9	13.9	30.2	21.6	20.3
Est. TTM operating accruals	(13.2)	11.5	11.8	18.5	12.5	(6.1)	(2.1)	(2.9)
Est. TTM operating accruals / Avg. current assets	-13.6%	12.6%	14.0%	25.0%	16.6%	-8.0%	-3.2%	-5.4%
TTM NI + SOGE	27.2	25.8	22.5	20.6	18.5	20.3	20.0	18.9
TTM Free cash flow	9.8	(17.7)	(27.2)	(25.4)	(27.4)	(3.6)	(0.3)	(3.2)
Estimated TTM total accruals	17.4	43.4	49.7	46.0	45.9	23.9	20.3	22.1
Estimated TTM total accruals / Avg. total assets	9.2%	26.2%	35.4%	38.4%	41.8%	23.7%	24.3%	32.5%
Est. TTM noncurrent accruals	30.6	32.0	37.9	27.5	33.4	30.0	22.4	25.0
Est. TTM noncurrent accruals / Avg. noncurrent assets	13.3%	17.1%	27.0%	24.1%	38.4%	48.7%	50.4%	73.5%

Table 2b: Cash Flow Statement Method Accruals (CONTINUED)
(Currency Amounts in $U.S. millions)

For period ended:	Reclassified Q4 Dec-31-2006	Q3 Sep-30-2006	Q2 Jun-30-2006	Q1 Mar-31-2006	Reclassified Q4 Dec-31-2005	Q3 Sep-30-2005
TTM EBITDAS	15.4	13.2	13.1	12.1	10.3	8.9
Est. TTM CFOA pre tax & int.	18.8	7.0	5.1	2.4	0.8	2.9
Est. TTM operating accruals	(3.4)	6.2	8.0	9.7	9.5	6.0
Est. TTM operating accruals / Avg. current assets	-7.7%	20.0%	47.5%	77.0%	105.0%	84.3%
TTM NI + SOGE	19.4	15.2	13.5	12.4	10.0	8.6
TTM Free cash flow	10.2	5.2	1.5	0.1	(1.8)	0.0
Estimated TTM total accruals	9.2	10.0	12.0	12.3	11.8	8.6
Estimated TTM total accruals / Avg. total assets	17.1%	25.0%	46.3%	55.8%	69.2%	56.9%
Est. TTM noncurrent accruals	12.6	3.8	4.0	2.6	2.3	2.6
Est. TTM noncurrent accruals / Avg. noncurrent assets	52.1%	17.0%	17.6%	11.0%	11.4%	16.1%

Quality of Revenues

HRBN's reported revenue figures imply a compounded annual growth rate of over 60% for the six-year period ended December 31, 2010—an extraordinary accomplishment if reported results are accurate. On the other hand, sustained revenue growth of this magnitude is very unusual and many forensic accountants consider it a red flag related to quality of revenues. Material weaknesses disclosed by HRBN management and adverse trends in accruals (discussed above) raise additional concerns about the veracity of the firm's reported results. Quality of revenue diagnostics discussed in this section elevate the level of concern even further:

1. **Large and persistent lag in cash collected from customers:** Cash received from customers[9] has trailed both revenues and accounting bookings since shortly after the firm's emergence as a publicly traded firm.[10] This trend is unusual, in my experience, as the gap between cash receipts and revenues/bookings usually moderates as a firm increases in scale.

2. **$90+ million deficit that never gets resolved:** According to my findings, cash received from customers trailed revenue by more than $90 million over the period July 1, 2004 to March 31, 2011. Given that revenue growth leveled off at the end of 2010, I would have expected the divergence to narrow to less than +/- 2%. The fact that the gap remains so material raises concern about the amount and timing of revenues recognized by the firm.

3. **Material weaknesses over cash may have caused an understatement of the gap between cash collections and revenues/bookings:** Given management's disclosure of material weaknesses involving the existence of cash, I cannot rule out the possibility that the discrepancy between revenues/bookings recorded and the actual amount of cash collections on customer accounts may be significantly greater than my estimate.

4. **Material weaknesses and unusual practices involving use of notes receivable for payments to suppliers may indicate a much bigger risk of misstatement than anticipated to date:** HRBN discloses that it regularly "pays" for inventories and PP&E by delivering notes receivable from the company's customers to its suppliers. In addition, company disclosures imply that notes receivable are often (if not always) related to sales to its customers. While unusual in developed nations, I have found this practice to be somewhat common in China. Unfortunately, given that the company also discloses material weaknesses in its accounting for non-cash exchanges involving notes receivable, I cannot rule out the possibility that inaccurately recorded sales have ultimately been capitalized as part of inventory or PP&E. The hypothetical journal entry depicted below shows how this might occur:

   Debit: Notes Receivable
       Credit: Sales

   To record the initial sale of goods to a customer.

   Debit: Inventory (or PP&E)
       Credit: Notes Receivable

   To record the transfer of notes receivable in lieu of cash payment.

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[9] Cash received from customers is computed as accounting bookings + (-) the decrease (increase) in AR.
[10] Accounting bookings is computed as revenue + (-) the increase (decrease) in deferred revenue.

Unfortunately, ***I also believe that the above procedure could be used as a means of concealing phony sales, though as an outsider I cannot determine for certain whether this has occurred***. Still, given the unusual decline in asset turnover (discussed later), I believe that this risk should not be dismissed lightly.

5. **What is the actual revenue run rate?** In light of the above issues, I am concerned that HRBN's actual revenue run rate may be significantly lower than the $100+ per million in quarterly revenues reported in each of the last six quarters. Unfortunately, given the poor state of the firm's internal controls and its unusual policies regarding payments to suppliers, any attempts to estimate the firm's actual revenue run rate based on SEC filings alone would be highly speculative. At a minimum, however, if we assume that ratio of cumulative cash received from customers to cumulative revenues—both computed for the period July 1, 2004 to March 31, 2011—is a reasonable proxy for the magnitude of any potential overstatement, then actual quarterly revenues may be approximately 9% lower than reported revenue on average for the 2004-2011 period. However, if cash on the books has been materially overstated and/or trade receivables have been understated, the discrepancy could be much, much larger.

Table 4: Quality of Revenues
(Currency Amounts in $U.S. millions)

For period ended:	Q1 Mar-31-2011	Q4 Dec-31-2010	Q3 Sep-30-2010	Q2 Jun-30-2010	Q1 Mar-31-2010	Q4 Dec-31-2009	Q3 Sep-30-2009	Q2 Jun-30-2009	Q1 Mar-31-2009
TTM:									
Revenues	424.826	426.481	427.490	365.067	297.995	223.234	150.764	143.491	129.087
YOY pct chg	42.6%	91.0%	183.5%	154.4%	130.8%	84.8%	43.1%	70.4%	73.9%
QOQ pct chg	-0.4%	-0.2%	17.1%	22.5%	33.5%	48.1%	5.1%	11.2%	6.8%
Accounting bookings	427.191	422.681	419.490	358.247	291.274	219.179	150.109	142.257	129.753
YOY pct chg	46.7%	92.8%	179.5%	151.8%	124.5%	83.2%	42.9%	69.0%	74.8%
QOQ pct chg	1.1%	0.8%	17.1%	23.0%	32.9%	46.0%	5.5%	9.6%	8.5%
Cash received from customers	447.459	429.346	359.052	288.730	202.137	156.754	147.630	138.809	138.622
YOY pct chg	121.4%	173.9%	143.2%	108.0%	45.8%	41.0%	77.3%	102.5%	160.9%
QOQ pct chg	4.2%	19.6%	24.4%	42.8%	29.0%	6.2%	6.4%	0.1%	24.7%
Cash received from customers / revenue	105.3%	100.7%	84.0%	79.1%	67.8%	70.2%	97.9%	96.7%	107.4%
YOY bps chg	3,750	3,045	(1,393)	(1,765)	(3,955)	(2,180)	1,888	1,533	3,581
QOQ bps chg	466	1,668	490	1,126	(239)	(2,770)	118	(1,065)	1,537
Cash received from customers / acct bookings	104.7%	101.6%	85.6%	80.6%	69.4%	71.5%	98.3%	97.6%	106.8%
YOY bps chg	3,535	3,006	(1,276)	(1,698)	(3,744)	(2,142)	1,909	1,616	3,525
QOQ bps chg	317	1,598	500	1,120	(212)	(2,683)	77	(926)	1,389
Cumulative:									
Revenues	999.699	895.870	789.664	680.310	574.874	469.389	362.175	315.243	276.879
Accounting bookings	996.380	887.185	781.179	672.625	569.189	464.504	361.690	314.378	277.915
Revenues to accounting bookings	1.003	1.010	1.011	1.011	1.010	1.011	1.001	1.003	0.996
Cash received from customers	906.635	800.420	684.477	574.349	459.176	371.074	325.424	285.619	257.039
Cash received from customers to revenues	90.7%	89.3%	86.7%	84.4%	79.9%	79.1%	89.9%	90.6%	92.8%
Cash received from customers to accounting bookings	91.0%	90.2%	87.6%	85.4%	80.7%	79.9%	90.0%	90.9%	92.5%
Dollar difference between revenues and cash received	$93.065	$95.450	$105.188	$105.961	$115.698	$98.315	$36.750	$29.624	$19.841
YOY pct chg	-19.6%	-2.9%	186.2%	257.7%	483.1%	208.8%	9.3%	18.8%	-32.5%
QOQ pct chg	-2.5%	-9.3%	-0.7%	-8.4%	17.7%	167.5%	24.1%	49.3%	-37.7%

Table 4: Quality of Revenues (CONTINUED)
(Currency Amounts in $U.S. millions)

For period ended:	Reclassified Q4 Dec-31-2008	Q3 Sep-30-2008	Q2 Jun-30-2008	Q1 Mar-31-2008	Q4 Dec-31-2007	Q3 Sep-30-2007	Q2 Jun-30-2007	Q1 Mar-31-2007
TTM:								
Revenues	120.820	105.364	84.204	74.235	65.403	58.125	49.442	45.163
YOY pct chg	84.7%	81.3%	70.3%	64.4%	61.8%	63.3%	50.6%	59.1%
QOQ pct chg	14.7%	25.1%	13.4%	13.5%	12.5%	17.6%	9.5%	11.7%
Accounting bookings	119.620	105.064	84.188	74.225	65.402	58.124	49.157	45.543
YOY pct chg	82.9%	80.8%	71.3%	63.0%	60.4%	61.1%	46.7%	60.4%
QOQ pct chg	13.9%	24.8%	13.4%	13.5%	12.5%	18.2%	7.9%	11.7%
Cash received from customers	111.179	83.277	68.544	53.132	50.880	54.731	46.905	43.855
YOY pct chg	118.5%	52.2%	46.1%	21.2%	35.3%	80.0%	73.5%	104.6%
QOQ pct chg	33.5%	21.5%	29.0%	4.4%	-7.0%	16.7%	7.0%	16.6%
Cash received from customers / revenue	92.0%	79.0%	81.4%	71.6%	77.8%	94.2%	94.9%	97.1%
YOY bps chg	1,423	(1,512)	(1,347)	(2,553)	(1,526)	877	1,253	2,163
QOQ bps chg	1,298	(236)	983	(622)	(1,637)	(71)	(223)	405
Cash received from customers / acct bookings	92.9%	79.3%	81.4%	71.6%	77.8%	94.2%	95.4%	96.3%
YOY bps chg	1,515	(1,490)	(1,400)	(2,471)	(1,441)	989	1,473	2,082
QOQ bps chg	1,368	(215)	984	(621)	(1,637)	(126)	(88)	409
Cumulative:								
Revenues	246.154	211.411	171.751	147.792	125.334	106.047	87.547	73.557
Accounting bookings	245.324	211.581	172.121	148.162	125.704	106.517	87.933	73.937
Revenues to accounting bookings	1.003	0.999	0.998	0.998	0.997	0.996	0.996	0.995
Cash received from customers	214.320	177.794	146.810	118.417	103.141	94.518	78.266	65.285
Cash received from customers to revenues	87.1%	84.1%	85.5%	80.1%	82.3%	89.1%	89.4%	88.8%
Cash received from customers to accounting bookings	87.4%	84.0%	85.3%	79.9%	82.1%	88.7%	89.0%	88.3%
Dollar difference between revenues and cash received	$31.835	$33.617	$24.942	$29.375	$22.193	$11.529	$9.281	$8.273
YOY pct chg	43.4%	191.6%	168.7%	255.1%	189.4%	41.7%	37.6%	18.8%
QOQ pct chg	-5.3%	34.8%	-15.1%	32.4%	92.5%	24.2%	12.2%	7.9%

Quality of Accounts Receivable

Trends in HRBN's reported AR figures imply potentially severe difficulties in (a) collecting on customer accounts and/or (2) problems in the area of revenue recognition. Material weaknesses disclosed by HRBN management and adverse trends in AR diagnostics, discussed below, serve to further elevate the level of concern regarding quality of receivables. Key findings are as follows:

1. **Unusual rise in DSO:** Days sales outstanding (DSO) has generally trended upward over time, indicating a risk of potential overstatements in revenues and assets. Table 5 below provides a summary of AR diagnostic measures, including four measures of DSO and a trend analysis related to the firm's allowance for doubtful accounts.

   Definitions:
   DSO, 3M EOP, net AR = quarterly revenue / ending net AR * 91.25
   DSO, 3M EOP, gross AR = quarterly revenue / ending gross AR * 91.25
   DSO, TTM average, net AR = TTM revenue / trailing 5-quarter average net AR * 365
   DSO, TTM average, gross AR = TTM revenue / trailing 5-quarter average gross AR * 365

2. **Cash collection difficulties or revenue recognition problems?** The unusual increase in DSO seen over time may signal difficulties in cash collection and/or premature revenue recognition. Unfortunately, as an outsider, it is difficult to differentiate between these two explanations using data from published financial statements. Regardless of the cause, however, the rise in DSO suggests that revenue trends may be overstated relative to trends in underlying demand.

3. **DSO trends appear to be negatively correlated with large acquisitions:** As shown in Table 5 (below), DSO rose consistently to a peak of just over 120 days in Q2 2008 (based on 3M, gross EOP DSO), dropped sharply following the Weihai acquisition, resumed an upward trend again until reaching another local peak of 95 days in Q1 2009 (also based on 3M, gross EOP DSO), fell briefly following the Simo Motor acquisition, and then resumed its upward path again. This pattern raises concern that the company may have made journal entries to reduce AR in connection with certain acquisitions. This would be permissible, for example, in the event that it were necessary to eliminate intercompany AR arising out of valid sales made to one of the acquired firms prior to the acquisition. However, it would not be permissible if the entries were made to (a) create a profit reserve (i.e., understate AR) in connection with the acquisition or (b) eliminate prior sales (to the acquired firm) that did not meet revenue recognition criterion.[11]

4. **Sudden and large increase in AFDA:** For most of its history as a public company, HRBN set aside only minimal amounts in its allowance for doubtful accounts (AFDA). However, the company suddenly ramped up the AFDA beginning in 2010. Since that time, the account has grown from less than 1% of gross AR to more than 10% as of March 31, 2011. While the increase in HRBN's AFDA reflects greater "conservatism" on the part of management, given the other analyses presented in my report, I cannot ignore the fact that the evidence

[11] If AR was understated in connection with an acquisition, the understatement must somehow be offset by another entry (or multiple entries) for the books to balance. As a result, other acquired assets, such as inventory, PP&E, intangibles or goodwill, might be overstated. Likewise, certain acquired liabilities might be overstated.

suggests that the AFDA may have been severely under-accrued in prior periods. Moreover, I cannot rule out the possibility that the recent jump in the AFDA may be too little, too late.

5. **Impact of material weaknesses over cash:** Given the firm's disclosure of material weaknesses involving the *existence* of cash, ***I cannot rule out the possibility that DSO may be understated***. Specifically, if cash cannot be relied upon, then I believe it would be a mistake to rely on the company's accounts receivable balance (since a majority of the firm's cash inflows should come from collections on customer accounts).

6. **Impact of material weaknesses and unusual practices involving use of notes receivable for payments to suppliers:** As noted above, company disclosures imply that notes receivable are often (if not always) related to sales to its customers. In addition, HRBN regularly "pays" for inventories and PP&E by delivering notes receivable from the company's customers to its suppliers. Therefore, ***I cannot rule out the possibility that some receivables have been removed from the books without any cash being collected subsequently*** *(though as an outsider, I cannot determine for certain whether or not this has occurred)*. While the removal of such an account from the ledger would indirectly improve perceived quality of AR (at the expense of other accounts, see example journal entries in prior section), it also implies that at any given time the firm's AR balance may consist of receivables that are not collectible. As noted in the prior section, *I also believe that such a procedure could be used as a means of concealing phony sales (though as an outsider, I cannot determine for certain whether or not this has occurred)*. And, given the unusual growth in AR over time, it is my view that this risk should not be dismissed lightly.

Table 5: Quality of Accounts Receivable
(Currency Amounts in $U.S. millions)

For period ended:	Q1 Mar-31-2011	Q4 Dec-31-2010	Q3 Sep-30-2010	Q2 Jun-30-2010	Q1 Mar-31-2010	Q4 Dec-31-2009	Q3 Sep-30-2009	Q2 Jun-30-2009	Q1 Mar-31-2009
DSO, 3M EOP, net AR	78.3	75.4	78.6	82.9	91.9	80.4	72.0	70.2	60.1
YOY pct chg	-14.8%	-6.2%	9.3%	18.1%	52.9%	-3.6%	-9.2%	-29.5%	-50.0%
QOQ pct chg	3.8%	-4.1%	-5.2%	-9.8%	14.3%	11.7%	2.5%	16.9%	-27.9%
DSO, 3M EOP, Gross AR	86.4	81.5	83.6	86.3	95.4	80.4	73.3	72.1	60.5
YOY pct chg	-9.4%	1.3%	14.0%	19.7%	57.5%	-3.9%	-9.8%	-27.9%	-49.8%
QOQ pct chg	6.1%	-2.5%	-3.2%	-9.5%	18.5%	9.7%	1.7%	19.1%	-27.7%
DSO, TTM avg, net AR	81.3	81.9	73.0	72.6	70.4	69.6	74.1	72.3	80.4
YOY pct chg	15.5%	17.6%	-1.4%	0.4%	-12.4%	-20.6%	-15.1%	-18.3%	-4.1%
QOQ pct chg	-0.7%	12.1%	0.6%	3.1%	1.1%	-6.0%	2.5%	-10.1%	-8.3%
DSO, TTM avg, Gross AR	86.5	85.5	75.5	74.5	71.8	70.2	75.4	73.4	81.2
YOY pct chg	20.4%	21.7%	0.3%	1.6%	-11.5%	-20.6%	-14.5%	-17.4%	-3.6%
QOQ pct chg	1.2%	13.2%	1.4%	3.7%	2.2%	-6.8%	2.7%	-9.7%	-8.3%
AFDA / Gross AR	10.3%	7.6%	6.3%	4.0%	3.7%	0.1%	1.9%	3.1%	0.8%
YOY bps chg	664	751	438	85	294	(38)	(57)	266	35
QOQ bps chg	271	137	228	28	357	(176)	(125)	237	25

Table 5: Quality of Accounts Receivable (CONTINUED)
(Currency Amounts in $U.S. millions)

For period ended:	Reclassified Q4 Dec-31-2008	Q3 Sep-30-2008	Q2 Jun-30-2008	Q1 Mar-31-2008	Q4 Dec-31-2007	Q3 Sep-30-2007	Q2 Jun-30-2007	Q1 Mar-31-2007
DSO, 3M EOP, net AR	83.4	79.3	99.6	120.2	109.8	61.8	68.8	62.9
YOY pct chg	-24.1%	28.4%	44.8%	91.1%	63.7%	-30.7%	-12.8%	-23.0%
QOQ pct chg	5.1%	-20.4%	-17.1%	9.4%	77.8%	-10.2%	9.4%	-6.3%
DSO, 3M EOP, Gross AR	83.8	81.3	100.1	120.7	110.4	62.0	69.1	63.2
YOY pct chg	-24.1%	31.1%	44.8%	91.0%	63.7%	-30.6%	-12.7%	-22.9%
QOQ pct chg	3.0%	-18.8%	-17.1%	9.3%	78.1%	-10.3%	9.4%	-6.3%
DSO, TTM avg, net AR	87.7	87.2	88.4	83.8	72.0	63.9	69.0	71.4
YOY pct chg	21.8%	36.6%	28.1%	17.5%	-1.8%	-12.7%	10.8%	34.7%
QOQ pct chg	0.5%	-1.3%	5.5%	16.4%	12.7%	-7.4%	-3.3%	-2.7%
DSO, TTM avg, Gross AR	88.5	88.1	88.8	84.2	72.3	64.2	69.3	71.6
YOY pct chg	22.4%	37.4%	28.2%	17.5%	-1.8%	-12.7%	10.8%	34.7%
QOQ pct chg	0.5%	-0.8%	5.5%	16.4%	12.7%	-7.4%	-3.3%	-2.7%
AFDA / Gross AR	0.5%	2.5%	0.5%	0.4%	0.5%	0.4%	0.4%	0.5%
YOY bps chg	1	208	4	(7)	(0)	6	8	10
QOQ bps chg	(195)	198	6	(9)	13	(6)	(5)	(3)

Quality of Inventory

Trends in HRBN's inventory and related accounts also display the telltale signs of degradation in asset quality (see Table 6, next page). In this regard, DSI risen consistently over time, with the trend appearing to revert only within the last couple of quarters. But appearances can sometimes be misleading. Material weaknesses disclosed by HRBN management and adverse trends in inventory diagnostics further elevate my level of concern regarding inventory quality. Key findings with regard to inventory quality are as follows:

1. **Unusual rise in DSI:** Days sales in inventory (DSI) has grown consistently over time, rising to approximately 100 days by the most stringent metric (DSI based on total inventory, including prepaid inventory) from approximately 35 days at the end of 2007. Table 6 below provides a summary of inventory diagnostic measures, including six measures of DSI.

   Definitions:
   DSI, 3M EOP, inventory on hand = quarterly COGS / ending inventory on hand * 91.25
   DSI, 3M EOP, prepaid inventory = quarterly COGS / ending prepaid inventory * 91.25
   DSI, 3M EOP, total inventory = quarterly COGS / ending total inventory * 91.25
   DSI, TTM EOP, inventory on hand = TTM COGS / trailing 5-qtr average inventory on hand * 365
   DSI, TTM EOP, prepaid inventory = TTM COGS / trailing 5-qtr average prepaid inventory * 365
   DSI, TTM EOP, total inventory = TTM COGS / trailing 5-qtr average total inventory * 365

2. **Obsolete inventory or excessive cost capitalization?** The unusual increase in DSI may signal a build up of obsolete inventory on hand. In fact, this is consistent with management disclosures regarding a material weakness in internal controls related to the valuation of inventory and a failure to write down inventory to lower of cost or market. However, the material weakness related to notes receivable also creates the opportunity for management or employees to record fictitious sales and hide them through phony entries to prepaid inventory or inventory on hand.

3. **Impact of material weaknesses and unusual practices involving use of notes receivable for payments to suppliers:** As noted above, company disclosures imply that notes receivable are often (if not always) related to sales to its customers. In addition, HRBN regularly "pays" for inventories and PP&E by delivering Notes Receivable from the company's customers to its suppliers. As noted in the two prior sections, such a procedure could allow the firm to record the sale of goods without every collecting any cash. *I also believe that such a procedure <u>could</u> be used as a means of concealing phony sales (though as an outsider, I cannot determine for certain whether or not this has occurred)*. The hypothetical journal entry depicted below shows how this might occur:

   Debit: Notes Receivable
      Credit: Sales
   To record the initial sale of goods to a customer.

   Debit: Inventory (or Prepaid Inventory)
      Credit: Notes Receivable
   To record the transfer of notes receivable in lieu of cash payment.

Given the unusual growth in inventory and DSI over time, it is my view that this risk should not be dismissed lightly.

4. **DSI trends appear to moderate, except when prepaid inventory is included in the computation:** On the surface, the company appears to have been effective in reducing its inventory and DSI over the past several quarters. However, I find that the apparent improvement disappears when prepaid inventory is included in the DSI computation. This is important because, if phony sales were recorded, they could just as easily be concealed by an entry to prepaid inventory (vis-à-vis inventory on hand).

Table 6: Quality of Inventory
(Currency Amounts in $U.S. millions)

For period ended:	Q1 Mar-31-2011	Q4 Dec-31-2010	Q3 Sep-30-2010	Q2 Jun-30-2010	Q1 Mar-31-2010	Q4 Dec-31-2009	Q3 Sep-30-2009	Q2 Jun-30-2009	Q1 Mar-31-2009
DSI, 3M EOP	69.3	76.3	89.0	105.3	98.9	96.1	38.2	54.2	86.1
YOY pct chg	-30.0%	-20.6%	132.8%	94.1%	14.9%	11.5%	-63.6%	237.5%	332.1%
QOQ pct chg	-9.2%	-14.2%	-15.5%	6.4%	2.9%	151.4%	-29.5%	-37.0%	-0.1%
DSI, TTM avg	86.5	92.4	80.9	78.4	73.2	71.4	72.6	67.9	67.4
YOY pct chg	18.2%	29.5%	11.4%	15.6%	8.5%	21.3%	53.2%	282.9%	277.0%
QOQ pct chg	-6.4%	14.2%	3.2%	7.2%	2.5%	-1.8%	7.0%	0.7%	14.6%
Days of prepaid inventory, 3M EOP	28.1	19.3	16.4	17.3	14.4	15.0	8.6	13.6	15.8
YOY pct chg	95.2%	28.4%	89.1%	27.2%	-8.8%	8.5%	103.4%	-49.2%	-26.1%
QOQ pct chg	45.6%	18.0%	-5.2%	19.8%	-4.2%	73.8%	-36.2%	-14.1%	14.0%
Days of prepaid inventory, TTM avg	18.9	16.4	13.3	12.9	12.2	12.6	11.0	12.1	13.1
YOY pct chg	55.4%	30.3%	21.8%	6.9%	-6.7%	-1.9%	-19.2%	-42.2%	-34.6%
QOQ pct chg	15.2%	23.2%	3.4%	5.9%	-3.4%	15.1%	-9.3%	-7.5%	1.6%
Total days in inventory, 3M EOP	97.4	95.6	105.3	122.5	113.3	111.1	46.9	67.8	101.9
YOY pct chg	-14.1%	-13.9%	124.7%	80.7%	11.2%	11.1%	-57.1%	58.5%	146.8%
QOQ pct chg	1.8%	-9.2%	-14.0%	8.1%	2.0%	137.1%	-30.9%	-33.5%	1.8%
Total days in inventory, TTM avg	105.4	108.8	94.3	91.3	85.3	84.0	83.6	79.9	80.5
YOY pct chg	23.5%	29.6%	12.8%	14.3%	6.1%	17.2%	37.1%	107.1%	112.7%
QOQ pct chg	-3.2%	15.5%	3.2%	7.0%	1.6%	0.5%	4.6%	-0.6%	12.3%

Table 6: Quality of Accounts Receivable (CONTINUED)
(Currency Amounts in $U.S. millions)

For period ended:	Reclassified Q4 Dec-31-2008	Q3 Sep-30-2008	Q2 Jun-30-2008	Q1 Mar-31-2008	Q4 Dec-31-2007	Q3 Sep-30-2007	Q2 Jun-30-2007	Q1 Mar-31-2007
DSI, 3M EOP	86.2	105.1	16.1	19.9	23.5	18.1	18.8	12.0
YOY pct chg	267.0%	479.0%	-14.3%	66.5%	174.7%	114.8%	11.1%	-0.5%
QOQ pct chg	-18.0%	553.9%	-19.3%	-15.1%	29.4%	-3.3%	56.8%	40.0%
DSI, TTM avg	58.8	47.4	17.7	17.9	16.2	13.0	12.5	11.0
YOY pct chg	263.4%	264.4%	42.1%	62.7%	17.8%	-20.0%	-25.3%	-28.2%
QOQ pct chg	24.1%	167.4%	-0.8%	10.4%	24.4%	4.2%	13.5%	-20.0%
Days of prepaid inventory, 3M EOP	13.9	4.3	26.7	21.4	16.2	17.2	34.1	20.7
YOY pct chg	-14.4%	-75.3%	-21.6%	3.0%	32.3%			
QOQ pct chg	225.9%	-84.1%	25.1%	32.0%	-6.0%	-49.5%	64.4%	69.5%
Days of prepaid inventory, TTM avg	12.8	13.6	20.9	20.0	18.7	NA	NA	NA
YOY pct chg	-31.4%							
QOQ pct chg	-5.2%	-35.1%	4.7%	6.6%	NA	NA	NA	NA
Total days in inventory, 3M EOP	100.0	109.3	42.8	41.3	39.7	35.4	52.8	32.7
YOY pct chg	152.2%	209.1%	-19.0%	26.3%	90.9%			
QOQ pct chg	-8.5%	155.5%	3.6%	4.1%	12.1%	-33.1%	61.6%	57.3%
Total days in inventory, TTM avg	71.7	61.0	38.6	37.8	34.9	NA	NA	NA
YOY pct chg	105.3%					NA	NA	NA
QOQ pct chg	17.6%	57.9%	2.1%	8.4%		NA	NA	NA

Other Diagnostic Measures

To enhance the interpretation of quality of earnings diagnostics, Table 7 (next page) summarizes key trends in several metrics more commonly used in traditional fundamental analysis. For brevity, I focus only on their quality of earnings related implications. In short, these metrics indicate that, as the company grows in scale, productivity and profitability have both declined. Clearly this runs contrary to economic theory and is only likely to occur under a fairly limited set of conditions, such as a period of heavy competition that drives selling prices down and/or a period of unusually large increases in input costs. Even in these scenarios, however, economies of scale are generally expected to moderate the impact on the firm's financial results. Another potential explanation involves a significant change in the firm's business model. In my view, however, none of these scenarios appears likely to explain the massive slide in productivity and profitability. Key findings presented in this section include:

1. **Sales productivity has declined by approximately 50-60% since 2007:** As shown in Table 7, sales per employee in Q1 2011 was down nearly 50% from its peak of $49,550 (per quarter) in Q1 2007. Similarly, total asset turnover was down over 60% during the same period. Such a massive decline in productivity is hard to fathom for a company that has grown its scale by more than 1,000% during this time frame.

2. **Inventory productivity has declined by over 30% since 2007:** Inventory productivity has seen a similar decline since 2007, though some improvement was noted in Q4 2010 and Q1 2011. Inventory produced per employee was just $16,900 in Q1 2011 ($13,900 in Q3 2010) compared to $25,400 in Q1 2007.

3. **Profitability plummets by 70 – 90%, depending on the measure, since 2007:** Perhaps the most startling trend noted below is the decline in profitability since 2007. Specifically, gross profit per employee has fallen approximately 70% since 2007, while the decline in gross margin return on inventory (GM ROI) and net income per employee is down approximately 90%.

In my opinion, the declines in sales productivity, inventory productivity, and profitability are unlikely to be fully explained by changes in economic conditions or business models. Moreover, given the other evidence discussed in this report, it appears likely that the declines in productivity and profitability may be due, at least in part, to a combination of overstatements in revenues, income and assets.

Table 7: Other Diagnostic Measures
(Currency Amounts in $U.S. millions)

For period ended:	Q1 Mar-31-2011	Q4 Dec-31-2010	Q3 Sep-30-2010	Q2 Jun-30-2010	Q1 Mar-31-2010	Q4 Dec-31-2009	Q3 Sep-30-2009	Q2 Jun-30-2009	Q1 Mar-31-2009
Revenue per employee (absolute $)	$26,153.51	$23,974.17	$20,750.39	$20,837.15	$24,249.46	$21,880.41	$26,073.35	$21,313.05	$15,362.45
YOY pct chg	7.9%	9.6%	-20.4%	-2.2%	57.8%	26.0%	NA	NA	NA
QOQ pct chg	9.1%	15.5%	-0.4%	-14.1%	10.8%	-16.1%	22.3%	38.7%	-11.6%
Change since peak	-47.2%	-51.6%	-58.1%	-57.9%	-51.1%	-55.8%	-47.4%	-57.0%	-69.0%
Revenue / average total assets	0.76	0.79	0.87	0.84	0.79	0.70	0.58	0.62	0.61
YOY pct chg	-3.1%	13.5%	50.0%	36.2%	28.6%	9.1%	-8.9%	3.1%	-1.1%
QOQ pct chg	-3.4%	-8.8%	3.1%	6.7%	13.1%	20.6%	-6.4%	0.8%	-4.1%
Change since peak	-61.9%	-60.6%	-56.8%	-58.1%	-60.7%	-65.2%	-71.2%	-69.2%	-69.5%
Gross profit per employee	$7,608.01	$7,012.16	$6,370.93	$6,982.65	$8,216.57	$7,359.98	$9,311.80	$7,146.26	$5,461.89
YOY pct chg	-7.4%	-4.7%	-31.6%	-2.3%	50.4%	28.1%	NA	NA	NA
QOQ pct chg	8.5%	10.1%	-8.8%	-15.0%	11.6%	-21.0%	30.3%	30.8%	-4.9%
Change since peak	-69.5%	-71.9%	-74.5%	-72.0%	-67.1%	-70.5%	-62.7%	-71.3%	-78.1%
TTM GM ROI	186.4%	184.3%	221.3%	239.0%	257.5%	267.2%	264.8%	279.3%	316.7%
YOY pct chg	-27.6%	-31.0%	-16.4%	-14.4%	-18.7%	-33.5%	NA	NA	NA
QOQ pct chg	1.1%	-16.7%	-7.4%	-7.2%	-3.7%	0.9%	-5.2%	-11.8%	-21.1%
Change since peak	-91.2%	-91.3%	-89.5%	-88.7%	-87.8%	-87.3%	-87.5%	-86.8%	-85.0%
Net income per employee (abs. $)	$2,721.83	$2,869.96	$3,391.45	$5,074.07	$4,724.99	$3,738.73	$(1,055.56)	$(3,000.00)	$4,327.17
YOY pct chg	-42.4%	-23.2%	-421.3%	-269.1%	9.2%	23.8%	NA	NA	NA
QOQ pct chg	-5.2%	-15.4%	-33.2%	7.4%	26.4%	-454.2%	-64.8%	-169.3%	43.3%
Change since peak	-89.0%	-88.4%	-86.3%	-79.5%	-80.9%	-84.9%	-104.3%	-112.1%	-82.5%

Table 7: Other Diagnostic Measures (CONTINUED)
(Currency Amounts in $U.S. millions)

For period ended:	3 months Q4 Dec-31-2008	3 months Q3 Sep-30-2008	3 months Q2 Jun-30-2008	3 months Q1 Mar-31-2008	3 months Q4 Dec-31-2007	3 months Q3 Sep-30-2007	3 months Q2 Jun-30-2007	3 months Q1 Mar-31-2007
Revenue per employee (absolute $)	$17,371.69	NA	NA	NA	$39,361.06	NA	NA	$49,549.87
YOY pct chg	-55.9%	NA	NA	NA	-11.5%	NA	NA	0.5%
QOQ pct chg	NA	NA	NA	NA	NA	NA	NA	11.4%
Change since peak	-64.9%	NA	NA	NA	-20.6%	NA	NA	0.0%
Revenue / average total assets	0.64	0.63	0.60	0.62	0.60	0.58	0.59	0.66
YOY pct chg	7.3%	10.0%	1.1%	-6.7%	-21.1%	-35.3%	-53.3%	-48.5%
QOQ pct chg	0.7%	5.9%	-3.3%	4.1%	3.2%	-2.7%	-10.8%	-12.0%
Change since peak	-68.2%	-68.4%	-70.1%	-69.1%	-70.3%	-71.3%	-70.5%	-66.9%
Gross profit per employee	$5,744.60	NA	NA	NA	$18,969.36	NA	NA	$24,937.92
YOY pct chg	-69.7%	NA	NA	NA	-11.4%	NA	NA	5.0%
QOQ pct chg	NA	NA	NA	NA	NA	NA	NA	16.4%
Change since peak	-77.0%	NA	NA	NA	-23.9%	NA	NA	0.0%
						1.670311		
TTM GM ROI	401.7%	580.3%	1914.6%	1957.5%	2218.4%	2779.1%	2912.0%	3223.4%
YOY pct chg	-81.9%	NA	NA	NA	-11.9%	NA	NA	43.3%
QOQ pct chg	NA	NA	NA	NA	NA	NA	NA	28.1%
Change since peak	-81.0%	-72.5%	-9.3%	-7.3%	5.1%	31.7%	38.0%	52.7%
Net income per employee (abs. $)	$3,020.43	NA	NA	NA	$8,527.03	NA	NA	$12,378.41
YOY pct chg	-64.6%	NA	NA	NA	-65.6%	NA	NA	-41.3%
QOQ pct chg	NA	NA	NA	NA	NA	NA	NA	-50.0%
Change since peak	-87.8%	NA	NA	NA	-65.6%	NA	NA	-50.0%