

PREPARED BY THE FOLK GROUP. THIS MAY BE REPRINTED WITH ATTRIBUTION.

April, 2012

INTRODUCTION

Three years ago The Folk Group prepared an industry profile based on the tax returns filed by companies reported under NAIC's code 3315, generically known as "Foundries." The most current data available at that time was from tax data for the period July 2005 through June 2006. Since that time the U.S. economy went through a recession that impacted the metal casting industry as severely as any in the past 50 years. This report compares the tax return data for July 2005 – June 2006 to tax data from July 2008 – June 2009, data reported from the American Foundry Society and from data collected by The Folk Group.

The Folk Group is the leading merger and acquisition firm serving the metal casting industry. They maintain the most comprehensive and up-to-date listing of owners of metal casting facilities. In most cases, the metals cast and casting methods are identified along with other key information.

The results were contradictory and surprising. This report focuses on 2006 and 2009 and the differences between the years.

THE DATA SOURCES

"Almanac of Business and Industrial Financial Ratios" both the 2009 and 2012 Editions.

Each year the Department of Treasury, Internal Revenue Service, releases summaries of the tax returns filed by 5.8 million corporations in the United States on the 1120S tax return form. The data is summarized and released by primary NAICS codes and provides a fascinating overview of American industry. The general NAICS code for foundries is 3315 and includes these metal casting categories:

33151 Ferrous Metal Foundries

- 331511 Iron Foundries
- 331512 Steel Investment Foundries
- 331513 Steel Foundries (except Investment)

33152 Nonferrous Metal Foundries

- 331521 Aluminum Die Casting Foundries
- 331522 Nonferrous (except aluminum) Die Casting Foundries
- 331524 Aluminum Foundries (except Die Casting)
- 331525 Copper Foundries (except Die Casting)
- 331528 Other Nonferrous Foundries (except Die Casting)

Unlike the SIC codes, jewelry manufacturing is not included. Jewelry manufacturing is now 339911 and 339914. Art foundries are included.

Unfortunately, there is a lag in the data so the data presented here is for the accounting period July, 2005 through June 2006 and July 2008 through June 2009. The economy went well into the recession during this period but had not yet begun to recover.

The data presented is typical for independent jobbing foundries and OEM's that are foundry dominated. The IRS reports data under the primary NAICS code for each company. Metal casting that is not included in this data include captive foundries and foundries consolidated under other corporations major function, even if the foundry is jobbing. Major captive foundry operators not in this data would include the automobile manufacturers, Caterpillar and similar companies. Also not included are jobbing foundries owned by larger corporations and consolidated in their financial statements. We suspect, for example, that Howmet, owned by Alcoa, would not be included in this data. If the profile presented here were to include all metal casting, we believe it would skew the information even more toward large companies.

Modern Casting Magazine and AFS Metalcasting Forecast and Trends

Modern Casting normally publishes a Census of World Casting Production, usually in the December issue presenting data for the prior year. For example, the December 2009 issue reported data for 2008.

The AFS Metalcasting Forecast and Trends is published annually by the American Foundry Society and contains comprehensive data on the metal casting industry.

The Folk Group maintains a database of foundry owners. All companies are contacted directly by Folk at least one time per year to validate contact information. Additional information is added on types of metal cast, methods of casting, web site, number of employees, sales dollars and similar information. Subsidiary locations and multiple casting locations are also identified and tracked.

MODERN CASTING AND AFS DATA

Based on the World Casting Census and the AFS Metalcasting Forecast over several years, the following was identified:

United States – Metric Tons Production					
<i>Metric Tons</i>	2006	2007	2008	2009	2010*
Gray Iron	4,255,604	3,889,000	3,502,640	2,409,483	2,632,742
Ductile Iron	4,128,598	3,890,000	3,597,894	2,553,725	2,753,305
Malleable Iron		67,000	60,000	35,380	
Steel	1,366,220	1,248,000	1,172,082	686,739	983,388
Copper Base	288,484	283,000	274,877	178,715	264,897
Aluminum	2,003,971	1,847,000	1,739,980	1,191,133	1,233,771
Magnesium	105,233	110,000	109,769	66,224	106,140
Zinc	306,628	298,000	273,970	166,922	204,116
Investment Castings		133,000			
Other Non-Ferrous	-	54,000	52,617	119,748	59,874
Total	12,454,738	11,819,000	10,783,829	7,408,069	8,238,233
Percent of Prior Year		94.9%	91.2%	68.7%	111.2%
Percent of 2006		94.9%	86.6%	59.5%	66.1%

This shows an overall drop in tonnage from 2006 to 2009 of about 40%.

United States – Metal Casting Facilities					
	2006	2007	2008	2009	2010*
Iron	564	554	564	659	658
Steel	239	234	239	416	413
Non-Ferrous	1,367	1,342	1,367	985	989
Total	2,170	2,130	2,170	2,060	2,060

From 2006 to 2009, about 110 facilities were closed. This is consistent both in the total number of facilities and the number closed with data maintained by The Folk Group. There were about 5% fewer foundries operating in 2009 than in 2006. A significant number of these facilities were the very small foundries. However, a few large foundries were closed during that time period as well. The Folk Group agrees with the total but not necessarily the split. It is questionable that 95 iron foundries opened in that time period or that 174 steel foundries opened. Many foundries cast multiple metal types and defining a foundry strictly by metal type can be difficult.

United States - Metric Tons/Facility					
<i>Metric Tons</i>	2006	2007	2008	2009	2010*
Iron	14,866	14,162	12,696	7,585	8,185
Steel	5,716	5,333	4,904	1,651	2,381
Non-Ferrous	1,978	1,931	1,793	1,749	1,890
Average	5,740	5,549	4,970	3,596	3,999

Iron suffered a major decline in the average metric tons per facility but not as severe as steel. The largest market for steel castings is the rail industry. During the 2006 – 2009 time period rail car production declined precipitously and steel foundries that focused on the rail industry sharply curtailed production or were temporarily mothballed. Also, the increase of foundries report does not make intuitive sense so the numbers may not accurately reflect the actual drop in volume.

Non-ferrous casting suffered a much less severe decline per facility but that is a function of few foundries. Aluminum is heavily dominated by automotive casting. Car production dropped by nearly 50% in the 2006 – 2009 time period. It may be that closing of aluminum facilities offset some of the loss of production.

However the numbers are compiled, everyone agrees that the metal casting industry suffered significantly in the recession – that is everyone except the Federal government.

ALMANAC OF BUSINESS AND INDUSTRIAL FINANCIAL RATIOS

Each year the Almanac of Business and Industrial Financial Ratios compiles data from the latest available IRS figures on U.S. and international companies filing U. S. tax returns and tracks 50 operating and financial factors. One of those NAICs codes tracked is 3315, generically known as “Foundries.” It includes die casting even though many die casting managers bristle at being considered a “foundry.”

The report is categorized by 12 breakouts of company size based on total assets. This report only shows 11 categories since there are no foundries reported with total assets of \$2.5 billion or greater. When there are so few companies in a category that reporting data will compromise the confidentiality of the company, no data is reported. There may be one or two companies in that category.

An asterisk (*) indicates the IRS suppressed the underlying data, the sample size is too small, other reasons that invalidate the data or the ratio is not applicable to the industry. No foundries were reported having Total Assets in excess of \$2.5 billion.

Number of Enterprises

Total Assets	Total	Zero Assets	Under 500	500 to 1,000	1,000 to 5,000	5,000 to 10,000	10,000 to 25,000	50,000 to 250,000	50,000 to 100,000	100,000 to 250,000	250,000 to 500,000	500,000 to 2,500,000
Number of Enterprises 2006	1,679	18	1,205	57	231	71	45	23	10	4	8	6
Number of Enterprises 2009	1,515	94	929	26	264	97	49	24	12	7	6	6

The number of foundries submitting tax returns dropped by 164 enterprises from 2006 to 2009. This is a higher number than either AFS or Folk identified. The biggest drop is in the smallest foundries with total assets under \$500,000. This is consistent with data collected by Folk. The other categories showed slight increases. In a recession, companies tend to husband cash and cut back on debt so the growth in asset based categories is not inconsistent.

The foundries with Zero Assets probably include manufacturers’ representatives that are mis-classified and very small foundries operating on a cash basis. Included in NAICs 3315 are home based foundry businesses that produce items such as cast soldiers and trinkets.

Both AFS and Folk agree that the total number of foundries is in the 2,000 to 2,100 number. That is not inconsistent with the tax data. This category does not include captive foundries unless the company is so dominated by the foundry products that it reports under NAICs 3315. Missing are some of the largest casting operations in the U.S. All the automotive companies operate large captive casting operations as do companies including Caterpillar and John Deere. Some Tier 1 suppliers with captive foundries that produce casting heavy components such as transmissions probably do not report in NAIC 3315. Folk classifies 469 casting facilities as being predominately captive. That count combined with the 1,515 reporting under NAIC’s code 3315 is consistent with the AFS and Folk total counts

INCOME CATEGORIES

Operating Income (Net Sales, \$000)

Total Assets	Total	Zero Assets	Under 500	500 to 1,000	1,000 to 5,000	5,000 to 10,000	10,000 to 25,000	50,000 to 250,000	50,000 to 100,000	100,000 to 250,000	250,000 to 500,00	500,000 to 2,500,000
Net Sales 2006	22,391,981	98,990	830,078	143,516	1,826,173	806,672	1,115,472	1,353,545	974,419	720,312	4,491,115	10,031,688
Net Sales 2009	26,236,708	10,549	1,011,823	96,795	2,343,636	1,189,340	1,434,809	1,757,990	1,324,127	1,828,181	2,662,953	12,576,505

This is the IRS item "Business Receipts" less the cost of goods returned and allowances. It is interesting to note the total for the companies reporting in NAICs 3315 is consistent with the value reported by AFS without the captive foundries in this number.

What; does not make sense, and we have no answer for, is why the number of foundries decreased 5% in a recession, the tonnage decreased by 38% and sales dollars increased by 17%. Metal surcharges may provide some of the answer. However, aluminum prices in 2009 were lower than in 2006 and steel scrap appears comparable. Steel scrap did spike in 2008 so that may be part of the answer. Everyone agrees that tons produced in 2009 were lower than in 2006.

In 2006, Net Sales were reported to the IRS at \$22.4 billion dollars. AFS reported 12.4 million tons for an average of \$1,806 per ton. In 2009, Net Sales reported to the IRS were \$26.2 billion dollars. In the same year, AFS reported 7.4 million tons for an average of \$3,540 per ton. One possible explanation is that iron castings dropped disproportionately to aluminum and steel castings. During this time period very high value aircraft aluminum castings remained relatively strong.

Interest Received (\$000)

This is interest received by foundries from U.S. Government obligations, loans, notes, mortgages, arbitrage bonds, private activity bonds, corporate bonds, bank deposits and tax refunds.

Total Assets	Total	Zero Assets	Under 500	500 to 1,000	1,000 to 5,000	5,000 to 10,000	10,000 to 25,000	50,000 to 250,000	50,000 to 100,000	100,000 to 250,000	250,000 to 500,00	500,000 to 2,500,000
Interest 2006	38,610	1,151	-	38	1,383	401	714	172	676	238	11,924	21,913
Interest 2009	26,382	251	-	-	1,943	439	757	855	1,789	1,544	3,193	15,612

While this looks like a big number, it is about .1% of the Operating Net Income.

METAL CASTING INDUSTRY PROFILE - 2012

Rents (\$000)

Total Assets	Total	Zero Assets	Under 500	500 to 1,000	1,000 to 5,000	5,000 to 10,000	10,000 to 25,000	50,000 to 250,000	50,000 to 100,000	100,000 to 250,000	250,000 to 500,00	500,000 to 2,500,000
Rents 2006	2,872	-	-	-	730	209	1,315	14	112	79	210	203
Rents 2009	4,675	-	-	-	575	77	1,303	108	122	-	1,437	1,052

Rental income is an insignificant portion of income to foundries. It is less than .02% of total income.

Royalties (\$000)

Royalties are gross payments received for the use of property rights before taking any deductions.

Total Assets	Total	Zero Assets	Under 500	500 to 1,000	1,000 to 5,000	5,000 to 10,000	10,000 to 25,000	50,000 to 250,000	50,000 to 100,000	100,000 to 250,000	250,000 to 500,00	500,000 to 2,500,000
Royalties 2006	16,331	-	-	-	-	886	-	7	-	-	13,322	2,117
Royalties 2009	35,972	-	-	-	-	10,661	-	2	296	3,554	-	21,459

Royalties are about .13% of Operating Revenues. Since it is primarily concentrated on two to three size categories, the royalties are probably paid to only a few companies.

Other Portfolio Income and Other Receipts (\$000)

These categories include income from minor operations, cash discounts received, claims, license rights, judgments and income from joint ventures.

Total Assets	Total	Zero Assets	Under 500	500 to 1,000	1,000 to 5,000	5,000 to 10,000	10,000 to 25,000	50,000 to 250,000	50,000 to 100,000	100,000 to 250,000	250,000 to 500,00	500,000 to 2,500,000
Other Portfolio Income 2006	70,443	-	-	-	1,486	291	365	11,716	2,057	-	27,726	26,805
Other Portfolio Income 2009	98,181	538	-	-	1,798	889	527	28,840	12,425	5,030	5,825	42,309

METAL CASTING INDUSTRY PROFILE - 2012

Total Assets	Total	Zero Assets	Under 500	500 to 1,000	1,000 to 5,000	5,000 to 10,000	10,000 to 25,000	50,000 to 250,000	50,000 to 100,000	100,000 to 250,000	250,000 to 500,00	500,000 to 2,500,000
Other Receipts 2006	279,270	2	86	1	55,570	12,115	1,936	4,734	18,916	951	28,508	156,448
Other Receipts 2009	251,662	9,008	-	-	61,811	7,687	5,241	9,811	9,069	6,685	32,274	110,076

While these numbers appear relatively large, they are only about 1% of the gross sales revenues.

Total Receipts (\$000)

This is the total of all the various income streams shown above.

Total Assets	Total	Zero Assets	Under 500	500 to 1,000	1,000 to 5,000	5,000 to 10,000	10,000 to 25,000	50,000 to 250,000	50,000 to 100,000	100,000 to 250,000	250,000 to 500,00	500,000 to 2,500,000
Total Receipts 2006	22,799,507	100,143	830,164	143,555	1,885,342	820,574	1,119,802	1,370,188	996,180	721,580	4,572,805	10,239,174
Total Receipts 2009	26,653,580	20,346	1,011,823	96,795	2,409,763	1,209,093	1,442,637	1,797,606	1,347,828	1,844,994	2,705,682	12,767,013

Total receipts show a substantial increase from 2006 to 2009. This is inconsistent with the drop in tons produced and the change in the economy. Most size categories showed an increase in the category. We have not been able to determine how to reconcile the apparent discrepancy. Most segments of metal casting decreased with the possible exception of aerospace/aircraft. In the two largest categories, there may have been a shift in a major foundry from the second largest category to the largest category.

Average Total Receipts (\$000)

This is Total Receipts divided by the number of companies reporting to the IRS.

Total Assets	Total	Zero Assets	Under 500	500 to 1,000	1,000 to 5,000	5,000 to 10,000	10,000 to 25,000	50,000 to 250,000	50,000 to 100,000	100,000 to 250,000	250,000 to 500,00	500,000 to 2,500,000
Average Total Receipts 2006	13,579	5,564	689	2,519	8,162	11,557	24,884	59,573	99,618	180,395	571,601	1,706,529
Average Total Receipts 2009	17,593	216	1,089	3,723	9,128	12,465	29,442	74,900	112,319	263,571	450,947	2,127,836

Average Total Receipts increased by 29.6% from 2006 to 2009 according to the IRS. This is a combination effect of higher revenues reported on the tax returns for the industry and fewer foundries. There is probably an anomaly in the Zero Assets category for 2006 to show such a high number per foundry. Nearly every category increased except foundries with assets from \$250 million to \$500 million. According to IRS statistics, average sales per foundry increased from \$13.6 million to \$17.6 million. Since the number of foundries declined in the overall market, this is not unexpected except that tonnage dropped so significantly. Folk Group data shows that a disproportionate number of small foundries closed in the time period 2006 to 2009. Accordingly, the average sales per foundry would increase.

OPERATING COSTS/OPERATING INCOME (%)

This category compares selected costs as a percentage of operating income. In comparing your company to these numbers, remember that your operating criteria may not match the average of the industry. As the description of the categories shows, the ratios are more indicative of tax returns than a typical operating statement.

All numbers in this category are percentages.

Cost of Operations

This is the IRS equivalent of “Cost of Goods Sold” except that it is not consistent with how most foundries define Cost of Operations. It consists of the costs incurred in producing the goods. Review your income statement to insure that all direct and indirect costs are included in this category. Note that costs accounted for in some of the other tax categories would normally be in this category in a typical operating income statement.

Total Assets	Total	Zero Assets	Under 500	500 to 1,000	1,000 to 5,000	5,000 to 10,000	10,000 to 25,000	50,000 to 250,000	50,000 to 100,000	100,000 to 250,000	250,000 to 500,000	500,000 to 2,500,000
Cost of Operations 2006	75.7	71.9	60.9	69.6	68.4	80.0	73.9	75.1	74.8	72.7	80.3	76.5
Cost of Operations 2009	75.2	145.9	64.4	79.5	71.7	80.4	75.9	77.3	74.4	69.6	81.9	75.2

Foundries, overall, are operating slightly more efficiently in 2009 than in 2006. That is not surprising. The first companies to close are the least efficient and many foundries aggressively worked at reducing operating costs. Offsetting the efforts to reduce man hours/ton is the effect of a high fixed cost structure.

While the overall average decreased from 75.7% to 75.2%, several of the size categories showed increases in the Cost of Operations. The Zero Assets category ratio of 145.9% would indicate they operated at a significant loss. It would require access to the detailed data to explain this anomaly.

Salaries & Wages

These are salaries and wages paid to overhead staff. It includes bonuses and directors' fees but not contributions to pension plans or officers' compensation.

Total Assets	Total	Zero Assets	Under 500	500 to 1,000	1,000 to 5,000	5,000 to 10,000	10,000 to 25,000	50,000 to 250,000	50,000 to 100,000	100,000 to 250,000	250,000 to 500,00	500,000 to 2,500,000
Salaries and Wages 2006	5.1	10.5	7.4	*	5.8	5.0	4.5	3.6	4.5	4.0	4.4	5.5
Salaries and Wages 2009	4.6	8.2	6.8	11.9	5.0	4.2	3.9	4.7	5.9	9.5	3.1	3.9

Salaries and wages decreased as a percentage of Operating Income. This indicates that foundries appear to be operating leaner than prior to the recession.

Taxes Paid

These are all taxes paid except Federal Income Taxes. It includes state, local, social security, payroll, unemployment insurance, excise, import, tariff duties, business license and privilege taxes. Since most companies categorize many of these taxes as a direct cost, restructuring your income statement may be required to compare your company to this category.

Total Assets	Total	Zero Assets	Under 500	500 to 1,000	1,000 to 5,000	5,000 to 10,000	10,000 to 25,000	50,000 to 250,000	50,000 to 100,000	100,000 to 250,000	250,000 to 500,00	500,000 to 2,500,000
Taxes Paid 2006	1.8	2.7	3.3	1.9	3.8	2.1	2.5	2.1	2.5	1.8	1.5	1.1
Taxes Paid 2009	1.0	1.3	2.3	0.1	1.0	1.0	0.9	1.3	1.0	0.8	0.6	1.0

Lower overall taxes are indicative of more efficient operations (fewer people per dollar sales) and lower profit levels that result in lower state and local taxes. Every category paid fewer taxes.

Interest Paid

This is all interest paid on the company's indebtedness.

Total Assets	Total	Zero Assets	Under 500	500 to 1,000	1,000 to 5,000	5,000 to 10,000	10,000 to 25,000	50,000 to 250,000	50,000 to 100,000	100,000 to 250,000	250,000 to 500,00	500,000 to 2,500,000
Interest Paid 2006	1.6	1.2	0.8	0.3	0.7	2.1	1.0	1.1	1.0	2.4	1.4	2.1
Interest Paid 2009	1.2	0.3	0.1	0.2	0.3	1.6	0.9	1.4	2.6	2.2	2.4	0.9

Overall, the interest paid was less in 2009 than in 2006. This is not unexpected. Capital expenditure decreased and were not funded as much by borrowing. Also, companies tend to be more conservative. They reduce debt and increase cash equivalents.

Depreciation

This is depreciation as reported to the IRS as a percentage of sales.

Total Assets	Total	Zero Assets	Under 500	500 to 1,000	1,000 to 5,000	5,000 to 10,000	10,000 to 25,000	50,000 to 250,000	50,000 to 100,000	100,000 to 250,000	250,000 to 500,00	500,000 to 2,500,000
Depreciation 2006	2.5	1.3	1.6	5.3	2.2	3.2	2.5	2.7	2.9	2.9	2.6	2.4
Depreciation 2009	3.1	5.0	1.4	0.3	1.5	3.8	3.5	3.0	5.0	5.5	3.8	2.8

This is another category that raises questions. Depreciation as a percentage of sales increased. However, most reports indicate that capital expenditures decreased in 2009. Also, the IRS reports that sales increased in 2009 compared to 2006. This would indicate significant capital investment in the time period from 2006 to 2009 since depreciation covers a multiple year period. Also, accelerated depreciation is heavily front loaded. Foundries appear to have invested heavily in their operations in the period leading up to 2009. Every size category except those with assets under \$500,000 increased depreciation.

Amortization and Depletion

Foundries would seldom have depletion. Amortization is the write-off of intangible assets over time.

Total Assets	Total	Zero Assets	Under 500	500 to 1,000	1,000 to 5,000	5,000 to 10,000	10,000 to 25,000	50,000 to 250,000	50,000 to 100,000	100,000 to 250,000	250,000 to 500,00	500,000 to 2,500,000
Amortization and Depletion 2006	0.2	0.9	1.0	*	0.0	0.2	0.1	0.0	0.3	0.1	0.4	0.2
Amortization and Depletion 2009	0.4	1.4	0.2	•	0.0	0.1	0.1	0.1	0.5	0.6	0.2	0.6

The pattern for Amortization and Depletion follows the pattern for depreciation but values are insignificant.

Pensions, Profit Sharing, Stock Bonus and Annuity Plans

These are frequently discretionary categories or are tied to profit levels.

Total Assets	Total	Zero Assets	Under 500	500 to 1,000	1,000 to 5,000	5,000 to 10,000	10,000 to 25,000	50,000 to 250,000	50,000 to 100,000	100,000 to 250,000	250,000 to 500,00	500,000 to 2,500,000
Pensions and Other Deferred Comp. 2006	0.6	0.1	0.0	*	0.3	0.6	0.5	0.5	0.5	1.5	0.6	0.7
Pensions and Other Deferred Comp. 2009	1.2	•	0.0	•	0.3	0.5	0.4	0.9	1.2	0.4	0.7	1.8

These increased as a percentage of Operating Revenues. The largest increase tended to come in the larger companies.

Employee Benefits

Employee Benefits are contributions to health plans, accidents, sickness, death and other welfare plans.

Total Assets	Total	Zero Assets	Under 500	500 to 1,000	1,000 to 5,000	5,000 to 10,000	10,000 to 25,000	50,000 to 250,000	50,000 to 100,000	100,000 to 250,000	250,000 to 500,00	500,000 to 2,500,000
Employee Benefits 2006	2.4	1.8	1.1	*	4.9	1.8	1.4	3.0	1.0	1.8	2.2	2.4
Employee Benefits 2009	1.4	5.9	0.6	0.0	2.3	2.4	2.6	1.2	0.9	1.5	1.8	1.1

Overall, Employee Benefits decreased from 2006 to 2009. This is indicative of higher productivity (fewer employees per dollar revenue) and the trend to requiring employees to contribute to health care plans.

Advertising

Total Assets	Total	Zero Assets	Under 500	500 to 1,000	1,000 to 5,000	5,000 to 10,000	10,000 to 25,000	50,000 to 250,000	50,000 to 100,000	100,000 to 250,000	250,000 to 500,00	500,000 to 2,500,000
Advertising 2006	0.1	0.0	0.3	0.4	0.1	0.2	0.1	0.2	0.0	0.0	0.1	0.1
Advertising 2009	0.1	•	0.1	0.0	0.1	0.2	0.1	0.2	0.3	0.0	0.2	0.1

Advertising is a relatively small expense for foundries. We're not so sure it should be this small.

Other Expenses

This includes expenses for repairs, bad debts, rents, contributions, gifts and other expenses not attributed in other categories.

Total Assets	Total	Zero Assets	Under 500	500 to 1,000	1,000 to 5,000	5,000 to 10,000	10,000 to 25,000	50,000 to 250,000	50,000 to 100,000	100,000 to 250,000	250,000 to 500,00	500,000 to 2,500,000
Other Expenses 2006	5.3	16.8	11.3	8.8	9.9	3.2	5.5	5.1	5.2	6.0	3.1	4.9
Other Expenses 2009	5.6	303.7	8.3	10.8	12.1	5.5	4.7	5.0	6.9	12.9	4.8	3.1

This category increased from 2006 to 2009. Without access to the underlying data, it is difficult to determine why.

Officers' Compensation

Included in this category is all forms of compensation paid to officers of the company.

Total Assets	Total	Zero Assets	Under 500	500 to 1,000	1,000 to 5,000	5,000 to 10,000	10,000 to 25,000	50,000 to 250,000	50,000 to 100,000	100,000 to 250,000	250,000 to 500,00	500,000 to 2,500,000
Officers' Compensation 2006	1.5	3.8	7.7	12.3	4.5	2.6	2.3	1.3	1.8	0.3	0.3	0.8
Officers' Compensation 2009	1.5	•	3.9	13.2	5.9	2.0	2.3	1.2	0.8	0.3	0.7	0.7

Overall, this stayed flat as percent of Operating Revenue. There were shifts in individual categories. As would be expected, smaller companies that are privately owned shift more of their available income to the owners.

Operating Margin

This is the net income after all tax deductible expenses are taken.

Total Assets	Total	Zero Assets	Under 500	500 to 1,000	1,000 to 5,000	5,000 to 10,000	10,000 to 25,000	50,000 to 250,000	50,000 to 100,000	100,000 to 250,000	250,000 to 500,000	500,000 to 2,500,000
Operating Margin 2006	3.1	*	4.6	1.2	*	*	5.7	5.3	5.5	6.3	3.2	3.2
Operating Margin 2009	4.7	•	11.8	•	•	•	4.8	3.9	0.5	•	•	8.9

Operating margins increased from 2006 to 2009. This is not surprising since foundries that closed were probably almost exclusively unprofitable. We are disappointed that so many categories do not have values. Without access to the raw data, we are not able to provide explanations as to why there are no values. The Recalculated Operating Margin below leads us to believe that negative data for the category (losses) are suppressed.

Recalculated Operating Margin

In an effort to minimize the number of categories with no data reported, we recalculated the operating margins by adding each of the expense categories reported and subtracting it from 100%.

Total Assets	Total	Zero Assets	Under 500	500 to 1,000	1,000 to 5,000	5,000 to 10,000	10,000 to 25,000	50,000 to 250,000	50,000 to 100,000	100,000 to 250,000	250,000 to 500,000	500,000 to 2,500,000
Revised Operating Margin 2006	3.2	(11.0)	4.6	*	(0.6)	(1.0)	5.7	5.3	5.5	6.5	3.1	3.3
Revised Operating Margin 2009	4.7	*	11.9	*	(0.2)	(1.7)	4.7	3.7	0.5	(3.3)	(0.2)	8.8

The categories with reported data in Operating Margin are close to our recalculated operating margins. Where new data has been provided, the total Operating Margin shows a loss for the size category. It is interesting to note that most categories showed a decline in profit when comparing 2006 to 2009 (a not unexpected result) except the very largest category. The size of this category biases the total to show that overall the industry increased profit. In reality, most were less profitable or lost money.

Operating Margin before Officers' Compensation

Since most foundries are privately held, this may be a better indication of foundry profitability than the Operating Margin.

Total Assets	Total	Zero Assets	Under 500	500 to 1,000	1,000 to 5,000	5,000 to 10,000	10,000 to 25,000	50,000 to 250,000	50,000 to 100,000	100,000 to 250,000	250,000 to 500,00	500,000 to 2,500,000
Operating Margin Before Officers' Comp. 2006	4.7	*	12.3	13.7	3.9	1.7	7.9	6.6	7.3	6.6	3.5	4.0
Operating Margin Before Officers' Comp. 2009	6.2	•	15.7	•	5.7	0.4	7.1	5.1	1.4	•	0.5	9.6

It is interesting to compare the differential between Operating Margins before and after Officers' Compensation. A larger differential exists in smaller companies as would be expected of privately held companies. Larger companies show a smaller differential as would be expected since they are more likely to be managed by professional managers rather than owners.

METAL CASTING INDUSTRY PROFILE - 2012

Page 17 of 27

SELECTED AVERAGE BALANCE SHEET VALUES (US\$ 000)

Average values in this section were determined by taking the Balance Sheet item and dividing it by the number of companies reporting.

Average Accounts Receivable and Days Receivable

This is the average level of accounts receivable defined as including all notes and trade receivables less any allowance for bad debt. It also includes intercompany receivables, property investment loans receivable and trade acceptances.

Total Assets	Total	Zero Assets	Under 500	500 to 1,000	1,000 to 5,000	5,000 to 10,000	10,000 to 25,000	50,000 to 250,000	50,000 to 100,000	100,000 to 250,000	250,000 to 500,00	500,000 to 2,500,000
Net Receivables 2006	1,884	-	68	165	1,225	1,697	3,438	8,122	14,333	24,886	90,394	226,827
Net Receivables 2009	2,054	-	107	105	1,084	1,914	3,822	7,378	11,848	40,463	54,703	236,548
Days Receivable 2006	51	-	36	24	55	54	50	50	53	50	58	49
Days Receivable 2009	43	-	36	10	43	56	47	36	39	56	44	41

Overall and in most foundry size ranges, the industry is doing a better job of collecting Accounts Receivable.

Average Inventories and Inventory Turnover

Average inventories include finished goods, work-in-process, raw materials and supplies acquired for sale or use in production operations.

Total Assets	Total	Zero Assets	Under 500	500 to 1,000	1,000 to 5,000	5,000 to 10,000	10,000 to 25,000	50,000 to 250,000	50,000 to 100,000	100,000 to 250,000	250,000 to 500,00	500,000 to 2,500,000
Inventories 2006	1,386	-	44	106	538	1,312	2,981	5,104	13,076	14,822	49,938	207,126
Inventories 2009	2,046	-	32	403	776	1,541	2,862	6,734	11,281	28,213	49,953	296,009
Inventory Turnover 2006	7.3	*	9.6	16.5	10.1	6.9	6.1	8.7	5.6	8.8	9.0	6.2
Inventory Turnover 2009	6.4	*	21.9	7.4	8.2	6.4	7.8	8.4	7.3	6.4	7.3	5.3

On average, inventory increased about 13%.

Average Net Plant, Property and Equipment

Average net plant, property and equipment is depreciable assets net of depreciation and land. The value used is the year ending net value.

Total Assets	Total	Zero Assets	Under 500	500 to 1,000	1,000 to 5,000	5,000 to 10,000	10,000 to 25,000	50,000 to 250,000	50,000 to 100,000	100,000 to 250,000	250,000 to 500,00	500,000 to 2,500,000
Net Property, Plant and Equipment 2006	2,953	-	22	255	880	3,216	4,776	12,610	25,993	52,300	125,246	418,295
Net Property, Plant and Equipment 2009	3,122	-	15	82	708	2,363	5,327	12,929	24,241	63,591	132,684	365,652

This shows that the foundry industry continued to invest in their operations. Remember, also, that the foundries that closed would have been expected to have not invested, contributing to their decline. Thus, the average Net Plant, Property and Equipment would be expected to increase.

Average Total Assets

Total assets are all assets net of accumulated depreciation, accumulated amortization, accumulated depletion and reserve for bad debts.

Total Assets	Total	Zero Assets	Under 500	500 to 1,000	1,000 to 5,000	5,000 to 10,000	10,000 to 25,000	50,000 to 250,000	50,000 to 100,000	100,000 to 250,000	250,000 to 500,00	500,000 to 2,500,000
Total Assets 2006	10,850	-	188	573	3,403	7,269	12,600	32,662	75,179	140,617	368,221	1,846,266
Total Assets 2009	13,067	-	231	618	3,296	6,709	15,506	35,947	73,568	205,644	405,718	1,944,301

Typically, foundries tend to be conservative in their operation. It is not surprising that Total Assets increased over the three years. Also, foundries that closed would typically have fewer assets.

Average Notes and Loans Payable

These are all notes and loans payable that have a maturity date. Short term and long term are not specified.

Total Assets	Total	Zero Assets	Under 500	500 to 1,000	1,000 to 5,000	5,000 to 10,000	10,000 to 25,000	50,000 to 250,000	50,000 to 100,000	100,000 to 250,000	250,000 to 500,00	500,000 to 2,500,000
Notes and Loans Payable 2006	2,929	-	175	184	656	2,593	3,867	8,025	20,606	65,430	109,434	443,152
Notes and Loans Payable 2009	2,846	-	138	-	496	3,301	4,200	15,866	25,041	83,482	124,440	252,446

As would be expected of a conservative industry, foundries reduced their debt levels.

Average of All Other Liabilities

These are all liabilities except Notes and Loans Payable. It includes trade payables, accrued liabilities and any other current liabilities.

Total Assets	Total	Zero Assets	Under 500	500 to 1,000	1,000 to 5,000	5,000 to 10,000	10,000 to 25,000	50,000 to 250,000	50,000 to 100,000	100,000 to 250,000	250,000 to 500,00	500,000 to 2,500,000
All Other Liabilities 2006	2,683	-	51	158	818	2,206	3,155	9,725	19,824	39,272	99,631	428,495
All Other Liabilities 2009	3,778	-	48	279	1,342	1,944	3,086	10,760	22,965	79,064	130,352	518,078

In most categories, liabilities increased. The largest increases were in the larger companies that tend to be more conscious of cash management.

Average Net Worth

The average net worth is the Stockholders' Equity. It includes Capital Stock, Paid-in Capital, Retained Earnings minus the cost of Treasury Stock.

Total Assets	Total	Zero Assets	Under 500	500 to 1,000	1,000 to 5,000	5,000 to 10,000	10,000 to 25,000	50,000 to 250,000	50,000 to 100,000	100,000 to 250,000	250,000 to 500,000	500,000 to 2,500,000
Net Worth 2006	5,238	-	(38)	231	1,928	2,469	5,578	14,911	34,750	35,916	159,158	974,619
Net Worth 2009	6,443	-	45	340	1,458	144	8,220	9,321	25,561	43,098	150,927	1,173,778

Through conservative operation, foundries tended to increase their net worth.

SELECTED FINANCIAL RATIOS

The values in this section are presented as a multiple of 1.

Current Ratio

The Current Ratio is Current Assets divided by Current Liabilities. This is a highly regarded as measuring the ability of a company to meet its short term obligations should it be necessary to liquidate the company. A ratio of 2:1 is generally regarded as the minimum acceptable ratio.

Total Assets	Total	Zero Assets	Under 500	500 to 1,000	1,000 to 5,000	5,000 to 10,000	10,000 to 25,000	50,000 to 250,000	50,000 to 100,000	100,000 to 250,000	250,000 to 500,00	500,000 to 2,500,000
Current Ratio 2006	1.6	*	2.7	1.6	1.7	1.4	1.5	1.4	1.5	1.1	1.9	1.6
Current Ratio 2009	2.0	*	4.1	1.9	1.7	1.8	2.1	1.4	2.4	1.5	1.9	2.3

Every category of foundry either maintained or improved their current ratio. Also, the impact of removing closed facilities which are more likely to have a poor current ratio will raise the average of the remaining foundries.

Quick Ratio

This is a more stringent ratio often referred to as the “Acid Test Ratio.” These numbers primarily exclude the value of inventory in the assets. It is a measure of the company’s ability to liquidate their liabilities since the full value of inventory is seldom realized.

Total Assets	Total	Zero Assets	Under 500	500 to 1,000	1,000 to 5,000	5,000 to 10,000	10,000 to 25,000	50,000 to 250,000	50,000 to 100,000	100,000 to 250,000	250,000 to 500,00	500,000 to 2,500,000
Quick Ratio 2006	0.9	*	1.8	1.0	1.2	0.8	0.9	0.9	0.9	0.6	1.2	0.8
Quick Ratio 2009	1.1	-	3.5	0.5	1.1	1.1	1.2	0.7	1.6	0.8	1.0	1.2

Net Sales to Net Working Capital

Working Capital is Current Assets minus Current Liabilities. This ratio measures how well working capital is used in making sales. A high value indicates that the company is effective in using other sources of funds (liabilities) in the company operation. A low value indicates a low tolerance for risk. This is frequently seen in companies that accumulated cash in excess of current operating requirements.

Total Assets	Total	Zero Assets	Under 500	500 to 1,000	1,000 to 5,000	5,000 to 10,000	10,000 to 25,000	50,000 to 250,000	50,000 to 100,000	100,000 to 250,000	250,000 to 500,000	500,000 to 2,500,000
Net Sales to Working Capital 2006	8.8	*	8.0	23.1	9.0	11.4	9.9	11.5	7.9	32.3	6.8	8.9
Net Sales to Working Capital 2009	6.0	*	7.4	14.6	9.8	6.9	6.4	13.0	4.5	9.1	6.4	4.9

Coverage Ratio

This ratio is the number of times interest paid is covered by earnings before interest and taxes (EBIT). This is an indication of the ability of the company to service its debt.

Total Assets	Total	Zero Assets	Under 500	500 to 1,000	1,000 to 5,000	5,000 to 10,000	10,000 to 25,000	50,000 to 250,000	50,000 to 100,000	100,000 to 250,000	250,000 to 500,000	500,000 to 2,500,000
Coverage Ratio 2006	4.1	*	7.0	5.8	4.8	1.4	6.8	7.0	8.7	3.7	4.5	3.6
Coverage Ratio 2009	6.5	*	111.7	*	8.5	1.0	7.2	5.9	1.8	*	1.6	13.6

This is an indication of how leveraged a company is.

Total Asset Turnover

Net Sales divided by Total Assets. This ratio is a measure of how well the company uses its assets in generating sales. In foundries, this tends to be lower than most industries because of the high level of capital investment. For this value to have meaning if there is cash in excess to normal operating requirements, the level of cash in the Total Assets needs to be adjusted to a normal level.

Total Assets	Total	Zero Assets	Under 500	500 to 1,000	1,000 to 5,000	5,000 to 10,000	10,000 to 25,000	50,000 to 250,000	50,000 to 100,000	100,000 to 250,000	250,000 to 500,00	500,000 to 2,500,000
Total Asset Turnover 2006	1.2	*	3.7	4.4	2.3	1.6	2.0	1.8	1.3	1.3	1.5	0.9
Total Asset Turnover 2009	1.3	*	4.7	6.0	2.7	1.8	1.9	2.0	1.5	1.3	1.1	1.1

Total Liabilities to Net Worth

Total Liabilities divided by Net Worth. This is a measure of how well the company uses OPM (Other People’s Money) in running the company. A higher value indicates that the company is more leveraged. A lower number indicates a more risk averse or a more stable company.

Total Assets	Total	Zero Assets	Under 500	500 to 1,000	1,000 to 5,000	5,000 to 10,000	10,000 to 25,000	50,000 to 250,000	50,000 to 100,000	100,000 to 250,000	250,000 to 500,00	500,000 to 2,500,000
Total Liabilities to Net Worth 2006	1.1	*	*	1.5	0.8	1.9	1.3	1.2	1.2	2.9	1.3	0.9
Total Liabilities to Net Worth 2009	1.0	*	4.1	0.8	1.3	3.6	0.9	2.9	1.9	3.8	1.7	0.7

Current Assets to Working Capital

Current Assets divided by Working Capital. This is a measure of the portion of Current Assets that contributes to Working Capital (Current Assets minus Current Liabilities). A low number is indicative of a more stable company.

Total Assets	Total	Zero Assets	Under 500	500 to 1,000	1,000 to 5,000	5,000 to 10,000	10,000 to 25,000	50,000 to 250,000	50,000 to 100,000	100,000 to 250,000	250,000 to 500,00	500,000 to 2,500,000
Current Assets to Working Capital 2006	2.7	*	1.6	2.6	2.4	3.6	2.8	3.2	3.1	8.4	2.2	2.8
Current Assets to Working Capital 2009	2.0	*	1.3	2.1	2.5	2.2	1.9	3.7	1.7	3.0	2.1	1.8

Current Liabilities to Working Capital

Current Liabilities divided by Working Capital. A high ratio indicates that the company is more at risk to its creditors.

Total Assets	Total	Zero Assets	Under 500	500 to 1,000	1,000 to 5,000	5,000 to 10,000	10,000 to 25,000	50,000 to 250,000	50,000 to 100,000	100,000 to 250,000	250,000 to 500,000	500,000 to 2,500,000
Current Liabilities to Working Capital 2006	1.7	*	0.6	1.6	1.4	2.6	1.8	2.2	2.1	7.4	1.2	1.8
Current Liabilities to Working Capital 2009	1.0	*	0.3	1.1	1.5	1.2	0.9	2.7	0.7	2.0	1.1	0.8

Working Capital to Net Sales

Working Capital divided by Net Sales. Working Capital is required to support sales growth.

Total Assets	Total	Zero Assets	Under 500	500 to 1,000	1,000 to 5,000	5,000 to 10,000	10,000 to 25,000	50,000 to 250,000	50,000 to 100,000	100,000 to 250,000	250,000 to 500,000	500,000 to 2,500,000
Working Capital to Net Sales 2006	0.1	*	0.1	-	0.1	0.1	0.1	0.1	0.1	-	0.1	0.1
Working Capital to Net Sales 2009	0.2	*	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.2	0.2

Inventory to Working Capital

Inventory divided by Working Capital. This is a measure of how liquid the Working Capital is since inventory is frequently the least liquid of the Current Assets.

Total Assets	Total	Zero Assets	Under 500	500 to 1,000	1,000 to 5,000	5,000 to 10,000	10,000 to 25,000	50,000 to 250,000	50,000 to 100,000	100,000 to 250,000	250,000 to 500,000	500,000 to 2,500,000
Inventory to Working Capital 2006	1.0	*	0.5	1.0	0.7	1.4	0.8	1.1	1.0	2.7	0.7	1.2
Inventory to Working Capital 2009	0.8	*	0.2	1.6	0.8	0.8	0.7	1.5	0.4	1.2	0.8	0.7

Total Receipts to Cash Flow

Total Receipts divided by Cash Flow. Cash Flow is defined as the difference between Cash Receipts and Cash Disbursements.

Total Assets	Total	Zero Assets	Under 500	5 00 to 1,000	1,000 to 5,000	5,000 to 10,000	10,000 to 25,000	50,000 to 250,000	50,000 to 100,000	100,000 to 250,000	250,000 to 500,00	500,000 to 2,500,000
Total Receipts to Cash Flow 2006	11.4	18.6	8.8	13.7	10.9	28.3	10.3	9.7	8.7	9.8	15.5	10.8
Total Receipts to Cash Flow 2009	9.8	*	5.8	*	9.2	21.6	11.7	10.5	13.9	12.6	21.0	8.1

Cost of Goods to Cash Flow

Cost of Goods divided by Cash Flow.

Total Assets	Total	Zero Assets	Under 500	500 to 1,000	1,000 to 5,000	5,000 to 10,000	10,000 to 25,000	50,000 to 250,000	50,000 to 100,000	100,000 to 250,000	250,000 to 500,00	500,000 to 2,500,000
Cost of Goods to Cash Flow 2006	8.7	13.3	5.3	9.6	7.5	22.7	7.6	7.3	6.5	7.1	12.4	8.3
Cost of Goods to Cash Flow 2009	7.4	*	3.8	*	6.6	17.3	8.9	8.1	10.3	8.8	17.2	6.1

Cash Flow to Total Debt

Cash Flow divided by Total Debt. This ratio indicates the ability of the company to service its total debt.

Total Assets	Total	Zero Assets	Under 500	500 to 1,000	1,000 to 5,000	5,000 to 10,000	10,000 to 25,000	50,000 to 250,000	50,000 to 100,000	100,000 to 250,000	250,000 to 500,00	500,000 to 2,500,000
Cash Flow to Total Debt 2006	0.2	*	0.3	0.5	0.5	0.1	0.3	0.3	0.3	0.2	0.2	0.2
Cash Flow to Total Debt 2009	3.0	*	1.0	*	0.5	0.1	0.3	0.3	0.2	0.1	0.1	0.3

SELECTED FINANCIAL FACTORS (in Percentages)

Debt Ratio

Total Liabilities divided by Total Assets. This is a measure of the ability to pay all its debts. A low ratio is indicative of a more conservative management approach.

Total Assets	Total	Zero Assets	Under 500	500 to 1,000	1,000 to 5,000	5,000 to 10,000	10,000 to 25,000	50,000 to 250,000	50,000 to 100,000	100,000 to 250,000	250,000 to 500,00	500,000 to 2,500,000
Debt Ratio 2006	51.2	*	120.3	59.8	43.3	66.0	55.7	54.3	53.8	74.5	56.8	47.2
Debt Ratio 2009	50.7	*	80.6	45.1	55.8	78.2	47.0	74.1	65.3	79.0	62.8	39.6

Return on Total Assets

This is the profitability of the Assets. It is a measure of how effectively assets are put to use. Before computing this ratio, any excess cash to the normal operating requirements should be deducted.

Total Assets	Total	Zero Assets	Under 500	500 to 1,000	1,000 to 5,000	5,000 to 10,000	10,000 to 25,000	50,000 to 250,000	50,000 to 100,000	100,000 to 250,000	250,000 to 500,00	500,000 to 2,500,000
Return on Total Assets 2006	8.2	*	19.8	7.3	7.5	4.5	14.0	13.7	11.0	11.4	9.7	6.8
Return on Total Assets 2009	10.2	*	56.3	*	7.9	3.0	11.7	16.6	7.0	*	4.2	12.5

Return on Equity before Income Taxes

This is profitability of the company divided by the Shareholders' Equity. It is a measure of how effectively the equity of the company is being put to work.

Total Assets	Total	Zero Assets	Under 500	500 to 1,000	1,000 to 5,000	5,000 to 10,000	10,000 to 25,000	50,000 to 250,000	50,000 to 100,000	100,000 to 250,000	250,000 to 500,00	500,000 to 2,500,000
Return on Equity Before Income Taxes 2006	12.8	*	*	15.0	10.5	3.5	26.9	25.6	21.0	32.5	17.6	9.3
Return on Equity Before Income Taxes 2009	17.4	*	286.7	*	15.8	0.4	18.9	53.2	9.1	*	4.1	19.2

Return on Equity after Income Taxes

After tax profit divided by Shareholders' Equity.

Total Assets	Total	Zero Assets	Under 500	500 to 1,000	1,000 to 5,000	5,000 to 10,000	10,000 to 25,000	50,000 to 250,000	50,000 to 100,000	100,000 to 250,000	250,000 to 500,000	500,000 to 2,500,000
Return on Equity After Income Taxes 2006	10.4	*	*	12.7	10.3	1.7	22.4	25.4	17.5	23.1	13.5	7.3
Return on Equity After Income Taxes 2009	12.7	*	286.7	*	14.6	*	16.1	40.9	7.2	*	2.2	13.7

Profit Margin (Before Income Tax)

This is the Net Income divided by Total Income. The ratio on Page 15 is Net Income divided by Operating Income.

Total Assets	Total	Zero Assets	Under 500	500 to 1,000	1,000 to 5,000	5,000 to 10,000	10,000 to 25,000	50,000 to 250,000	50,000 to 100,000	100,000 to 250,000	250,000 to 500,000	500,000 to 2,500,000
Profit Margin (Before Income Tax) 2006	5.0	*	4.6	1.4	2.6	0.8	6.1	6.5	7.5	6.5	5.0	5.4
Profit Margin (Before Income Tax) 2009	6.5	*	11.8	*	2.6	-	5.3	6.8	2.1	*	1.4	10.7

Profitability improved according to the IRS.

Profit Margin (After Income Tax)

This is the Net Income after Taxes divided by Total Income.

Total Assets	Total	Zero Assets	Under 500	500 to 1,000	1,000 to 5,000	5,000 to 10,000	10,000 to 25,000	50,000 to 250,000	50,000 to 100,000	100,000 to 250,000	250,000 to 500,000	500,000 to 2,500,000
Profit Margin (After Income Tax) 2006	4.1	*	4.6	1.2	2.5	0.4	5.0	6.4	6.2	4.6	3.8	4.2
Profit Margin (After Income Tax) 2009	4.7	*	11.8	*	2.4	*	4.5	5.2	1.7	*	0.8	7.7