

A Note on Industry Recommendations in IBES

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Beginning in September 2002 IBES started recording industry recommendations made by analysts along with firm recommendations. The paper entitled “Industry Recommendations: Characteristics, Investment Value, and Relation to Firm Recommendations” (WP, 2009) by Kadan, Madureira, Wang and Zach explains the methodology for extracting this data from the IBES database (KMWZ, henceforth). The purpose of this note is to make WRDS users aware of the existence of industry recommendation in IBES, briefly describe the methodology for building the dataset and also provide some descriptive statistics along with the sample program that can be used by WRDS users to extract industry-level recommendations in IBES.

Specifically, IBES started recording the textual industry-related information for the brokers that include the industry recommendation in their company’s analyst reports. Below is an example of how IBES presents industry recommendations in the detailed stock recommendation file (RECDDDET). The excerpt from this file shows that on Aug 29, 2005 Morgan Stanley’s analyst Wayne Atwell issued a report on Alcoa Inc (record highlighted in red). Estimator text (ETEXT) field contains “EQUALWT/IN-LINE”, and as KMWZ show, the recommendation that comes *before* “/” in ETEXT is the firm-level recommendation, whereas the statement *following* “/” in the EXTEX field is the industry recommendation in question.

Corresponding record in the IBES detail recommendations history:

IBES Ticker Symbol	Company Name	Estimator ID	Analyst Name	Estimator Text	IBES Text	Announce Date, SAS Format
AA	ALCOA INC.	FBOSTON	GAGLIANO D	OUTPERF/MKTWT	BUY	12JUL2005
AA	ALCOA INC.	LAWRENCE	MARTIN D	HOLD	HOLD	19JUL2005
AA	ALCOA INC.	DILLREAD	MACARTHUR B	BUY 2	BUY	10AUG2005
AA	ALCOA INC.	MORGAN	ATWELL W	EQUALWT/IN-LINE	HOLD	29AUG2005
AA	ALCOA INC.	BACHE	TUMAZOS J	NEUTRAL WEIGHT	HOLD	02SEP2005
AA	ALCOA INC.	DILLREAD	MACARTHUR B	BUY 2	BUY	19SEP2005

To more clearly illustrate the point, we went to original source, the complete analyst’s report itself, which was retrieved from the Investext Plus database. An excerpt from the full version of the report is below. The

front page of the report contains a stock rating “Equal-Weight” for Alcoa *as well as* an industry view “In-Line” (the report also shows that that industry view has changed from “Attractive” to “In-Line”).

An excerpt of the original analyst report

Source: Investext Plus

Morgan Stanley

August 29, 2005

Stock Rating
Equal-weight
Industry View
In-Line

Alcoa Inc. Modest Increase to 3Q EPS Estimate as Aluminum Price Strengthens

What's Changed

Industry View Attractive to In-Line

We are increasing our 3Q EPS estimate modestly to \$0.48 from \$0.45 based on a higher aluminum price forecast.

Industry view revised to In-Line from Attractive. We believe many of the shares are approaching fair value on a short-term (6-18 month) basis. We continue to believe, however, that the next ten years will prove kind to metals and mining companies, based on our general sector outlook for higher long-term prices for commodities. On this basis, we believe that exposure to the group will be rewarded over the next 5 to 10 years.

We have an Equal-weight rating on Alcoa. Alcoa is being hurt by cost pressure and a weakening US dollar which is absorbing most of its cost-cutting and stronger pricing. We look for AA shares to perform in line with the market at best until '07 when it is bringing on low cost capacity increases.

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Key Ratios and Statistics

Reuters: AA.N Bloomberg: AA US

United States of America / Nonferrous Metals & Mining

Price target	NA
Shr price, close (Aug 26, 2005)	\$27.29
Mkt cap, curr (mm)	\$23,980
52-Week Range	\$34.98-25.55

	Dec 2004	Dec 2005e	Dec 2006e	Dec 2007e
Year Ending				
ModelWare EPS (\$)*	1.58	1.76	2.04	2.00
Prior ModelWare EPS (\$)	-	1.72	2.04	2.00
P/E	19.9	15.5	13.4	13.6
Cons EPS (\$)	1.56	1.80	2.20	2.13
Div yld (%)	1.9	2.2	2.2	2.2

* = See description of Modelware initiative later in this report
e = Morgan Stanley Research estimates

Quarterly ModelWare EPS

Quarter	2005e		2006e		
	2004	Prior	Current	Prior	Current
Q1	0.36	-	0.39	-	-
Q2	0.47	-	0.43	-	-
Q3	0.34	0.45	0.48	-	-
Q4	(0.04)	0.45	0.45	-	-

Following the KMWZ methodology, we categorize all industry recommendations into 3 groups based on the table below (appendix of KMWZ (2009), page 32) and assign firms into GICS-based industries (see Table 2 of the paper, pp. 34-36).

We code optimistic industry recommendations as “1”, neutral industry recommendations as “2”, and pessimistic industry recommendations as “3”.

Optimistic (1)	Neutral (2)	Pessimistic (3)
ACCUMULATE	CORE HOLD	AVOID
ABOVE AVERAGE	IN-LINE	CAUTIOUS
ACC	MARKET PERFORM	NEGATIVE
ACCUM	MARKETPERFORMER	REDUCE
ACCUMULATE	MARKETPERFRM	SELL
ADD	MKTWT	UNDERPERF.
ATTRACTIVE	MP	UNDERPERFORM
BUY	NEUTRAL	UNDERWT
OUTPERFORM		
OVERWT		
POSITIVE		
STRONGBUY		

WRDS analysis reveals that, as of Oct 2009 IBES vintage, there are total of 25,835 industry recommendations for which historical GICS are available (overall 69 industries). The sample program provided at the end of this note was used to produce these descriptive stats

Distribution of Industry Recommendations by Year and Tone over time (2002-Oct 2009)

Oct 2009 IBES vintage, North American firms only

Year	Negative	Neutral	Optimistic	Total
2002	678	2,429	1,853	4,960
2003	633	2,007	1,093	3,733
2004	414	1,565	1,002	2,981
2005	481	1,493	855	2,829
2006	494	2,023	1,019	3,536
2007	452	2,057	866	3,375
2008	343	1,854	804	3,001
2009	162	795	463	1,420

Distribution of Industry Recommendations by Broker and Tone (2002-Oct 2009)

Oct 2009 IBES vintage, North American firms only

Only brokers with most industry recommendations during the sample period are reported

Broker Name	NEGATIVE	NEUTRAL	OPTIMISTIC	# of industries covered (GICS)
BEAR STEARNS	375	1,818	890	59
CREDIT SUISSE - NORTH AMERICA	757	2,592	1,519	63
GOLDMAN SACHS	1,123	3,508	1,838	68
MORGAN STANLEY	898	2,760	1,644	68
CIBC WORLD MARKETS CORP.	206	1,055	664	53
CIBC WORLD MARKETS INC. (CANADA)	138	1,373	468	55
BARCLAYS CAPITAL	55	730	356	62

Average Industry Recommendations by Broker and Industry across 2002-2009

GIC Industry Description	Industry GIC code	Bear Stearns	Credit Suisse First Boston	Barclays Capital	Goldman Sachs	Morgan Stanley	CIBC World Markets Corp.	CIBC World Markets Inc. (Canada)
Aerospace & Defense	201010	2.2	1.61	1.08	2.08	1.69	1.37	2
Air Freight & Logistics	203010	1.74	1.68	2	1.77	1.9		
Airlines	203020	2.24	1.65	1	1.72	1.89		1.71
Auto Components	251010	2.31	2.16	2	2.63	2.25	2.33	1.78
Automobiles	251020	2.7	2.12	2	2.51	2.33	2	
Beverages	302010	2.01	1.77	1	1.93	1.85		1.85
Biotechnology	352010	1.13	1.42	1.58	1.77	1.7	1	1.5
Building Products	201020	2	1.76		1.56	2	2	
Capital Markets	402030	1.8	1.7	1.81	1.97	1.91	1.67	2
Chemicals	151010	1.57	1.41	1.93	1.42	1.4	2.17	1.9
Commercial Banks	401010	1.83	2.29	1.76	2.07	2.14	2.56	2.09
Commercial Services & Supplies	202010	1.62	1.6	2.17	2	1.75	1.24	1.75
Communications Equipment	452010	1.86	2.2	1.92	1.53	2.07	2.15	1.88
Computers & Peripherals	452020	1.98	1.88	2	1.66	2.08	1.89	2
Construction & Engineering	201030	1.13	1.41	1	2.3	2.3	2	2
Construction Materials	151020				1.59	2		
Consumer Finance	402020	1.63	2	2	2.35	2.39	2.18	
Containers & Packaging	151030	2	1.76	1.78	1.97	1.91		1.8

Distributors	255010				2	3	2	
Diversified Consumer Services	253020	2	1.19	1	2.33	2	1	2
Diversified Financial Services	402010	1.74	1.74	1.86	2.15	2.07	2.1	2.04
Diversified Telecommunication Services	501010	1.94	1.84	1.15	2.17	2.27	2.01	2
Electric Utilities	551010	2.83	2.31	2	1.7	2.43	1.55	1.91
Electrical Equipment	201040	2.21	1.74	1.5	1.68	1.95	1.76	2
Electronic Equipment, Instruments & Components	452030	1.89	1.81	1.5	1.84	1.99	1.53	1.86
Energy Equipment & Services	101010	1.34	1.22	1.43	1.36	1.01	1.07	1.94
Food & Staples Retailing	301010	2	2.47	2	1.93	1.8	2	1.98
Food Products	302020	1.84	2.44	1.39	2.44	2.33		1.83
Gas Utilities	551020	.	1.92	2	1.98	2.25	1.81	1.88
Health Care Equipment & Supplies	351010	1.62	1.67	1.22	1.63	1.46	1.67	1
Health Care Providers & Services	351020	1.39	1.76	1.66	1.84	1.83	1.39	1.58
Health Care Technology	351030	1.67	2	2	2	1.5	1	
Hotels, Restaurants & Leisure	253010	1.9	1.57	2	1.89	1.86	1.69	1.71
Household Durables	252010	2.5	2	1.08	2.53	1.95	2.5	1.5
Household Products	303010	2.58	2	1	1.78	2	2.29	
IT Services	451020	1.4	1.87	2.1	1.51	1.95	1.38	2.4
Independent Power Producers & Energy Traders	551050	.	2.16	2	2.83	2.22		1.88
Industrial Conglomerates	201050	2	1.79	1.67	1.68	1.72	1.57	
Insurance	403010	1.79	1.64	2.05	2.07	1.75	2	1.94
Internet & Catalog Retail	255020	2	1.5	1.5	1.91	1.83	1.67	
Internet Software & Services	451010	1.76	1.47	1.33	1.67	1.63	1.86	2.17
Leisure Equipment & Products	252020	2	1.89	2	1.78	2.13		2
Life Sciences Tools & Services	352030	1.75		1.59	1.65	1.25		2
Machinery	201060	1.95	1.53	1.68	1.74	1.91	2.24	1.73
Marine	203030				2.14	2.29		1.8
Media	254010	1.72	1.62	2.51	2.25	1.84	1.68	1.68
Metals & Mining	151040	1.8	1.75	1.06	1.56	1.79	2.13	1.51
Multi-Utilities	551030	3	2.18	2	1.81	2.47	1.43	2.03
Multiline Retail	255030	2	2.41	2	2.36	1.89	2	2
Office Electronics	452040	2.29	2	2	1.43	2		
Oil, Gas & Consumable Fuels	101020	2.17	1.91	1.75	1.48	1.61	2.46	1.79
Paper & Forest Products	151050		1.87	1	1.95	1.65	2	2.56
Personal Products	303020	2	2	1.43	1.71	2	2.2	
Pharmaceuticals	352020	1.54	1.34	2	1.73	1.53	1.31	1.5
Professional Services	202020			2.25	3	2		2
Real Estate	404010	2.14	2.24		2.45	2.63	1.86	1.86
Real Estate Investment Trusts (REITs)	404020	2.17	2.6	1.49	2.32	1.96	2	1.55

Real Estate Management & Development	404030		2.13	1.5	2.4	2		1.75
Road & Rail	203040	1.91	1.69	2	1.92	1.98		2
Semiconductor Equipment & Products	452050	1.63	2.44		1.84	1.41	1.99	
Semiconductors & Semiconductor Equipment	453010	1.74	1.75	1.95	1.93	1.65	1.67	2
Software	451030	2.21	1.56	1.28	1.65	1.73	1.75	2.18
Specialty Retail	255040	1.93	2.19	2	2.42	2.21	1.97	2
Textiles, Apparel & Luxury Goods	252030	2	1.42	2	2.43	2.47	2	1.75
Thrifty & Mortgage Finance	401020	1.96	1.93	2.41	2.32	1.64	2	
Tobacco	302030		1.95	1	1.53	1.48		2
Trading Companies & Distributors	201070	2	1.75	2	1.71	2.29	1.5	2.04
Transportation Infrastructure	203050							2
Wireless Telecommunication Services	501020	1.96	1.8	1	2.28	2.17	2.05	2

Sample code to extract industry recommendations from IBES

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/* ***** */
/*          Sample code to extract IBES Industry Recommendations          */
/*          */
/*          The program extracts industry recommendations and categorizes them into 3          */
/*          (three) groups (neutral, optimistic and negative) following Kadan et al.(2009)          */
/*          It further groups firms into several industries based on 6-digit GICS codes          */
/*          available in Compustat          */
/*          */
/*          Author       : Denys Glushkov, WRDS          */
/*          Date Created  : Feb 03, 2010          */
/*          Note         : User must have subscriptions to CRSP, Compustat, CRSP-Compustat          */
/*          Merged and IBES databases to run this script          */
/*          */
/* ***** */

/*Remote Connect to WRDS*/
%let wrds = wrds.wharton.upenn.edu 4016;
options comamid=TCP remote=WRDS;
signon username=_prompt_;

RSUBMIT;
/* Parse out Industry Recommendations and assign the tone according to          */
/* "Industry Recommendations: Characteristics, Investment Value, and          */
/* "Relation to Firm Recommendations" by Kadan, Madureira, Wang and Zach (2009)          */
%let optimist='ACCUMULATE','ABOVE AVERAGE','OVERWEIGHT','ACC','ACCUM','ADD',
              'ATTRACTIVE','BUY','OUTPERFORM','OVERWT','POSITIVE',
              'STRONGBUY','SPECULATIVE BUY','TOP PICK';
%let neutral='CORE HOLD','IN-LINE','MARKETPERFORM','MARKET PERFORM','MARKETPERFORMER',
             'MARKETPERFRM','MKTWT','MKT','MP','HOLD','MAINT','NEUTRAL';
%let negative='AVOID','CAUTIOUS','LIGHTEN','NEGATIVE','REDUCE','SELL',
             'UNDERPERFORM','UNDERPRFRM +','UNDERWT','UNDERW','REDUCE';

```

```

DATA IndRecs; SET IBES.Recdet;
length firm_rec $20 ind_rec $20;
firm_rec=upcase(scan(etext,1,'/'));
If index(etext, '/') then ind_rec=upcase(scan(etext,2,'/'));
*US firms only;
If missing(ind_rec)=0 and index(ticker,'@')=0 and anndats>='01jan2002'd;
If index(catx(",",&optimist),strip(ind_rec))
then do; indrec_rank='OPTIMISTIC';recrank=1;end;
If index(catx(",",&neutral),strip(ind_rec))
then do;indrec_rank='NEUTRAL';recrank=2;end;
If index(catx(",",&negative),strip(ind_rec))
then do;indrec_rank='NEGATIVE';recrank=3;end;
Label
firm_rec='Firm-level Recommendation'
ind_rec='Industry-level Recommendation'
indrec_rank='Tone of Industry Recommendation'
recrank='Tone Category (1-Optimistic, 2-Neutral, 3-Negative)';
Keep ticker anndats cname estimid indrec_rank etext ind_rec firm_rec recrank;
RUN;
/*Create Permno-IBES ticker link*/
%include '/wrds/ibes/samples/iclink.sas';

/*Merge Permno identifiers from ICLINK*/
proc sql;
create table IndRecs
as select a.*, b.permno
from IndRecs a left join HOME.iclink (keep=permno ticker score where=(score in
(0,1))) b
on a.ticker=b.ticker;

/*Link in historical gvkeys based on CRSP-Compustat Merged linking table*/
create table IndRecs
as select a.*, b.gvkey as gvkey_ccm
from IndRecs a left join CRSP.ccmxpf_linktable b
on a.permno=b.lpermno and usedflag=1 and
((anndats between linkdt and linkenddt) or
(anndats>=linkdt and linkenddt=.E) or (linkdt=.B and anndats<=linkenddt));

/*For missing IBES Ticker-Gvkey links, use header link from Compustat, variable IBTIC*/
create table IndRecs (drop=gvkey_comp gvkey_ccm)
as select a.*, b.gvkey as gvkey_comp,
case when missing(gvkey_ccm)=1 then gvkey_comp else gvkey_ccm
end as gvkey_new label="Standard and Poor's Identifier"
from IndRecs a left join COMP.security (keep=gvkey ibtic) b
on a.ticker=b.ibtic;

/*Merge in GICS historical codes from the security dataset, use 6-digit GICS*/
create table IndRecs (where=(missing(gic)=0))
as select a.*, substr(b.spgim,1,6) as gic label='Industry GIC code'
from IndRecs a left join COMP.sec_mth (keep=gvkey datadate spgim
where=(missing(spgim)=0)) b
on a.gvkey_new=b.gvkey and
year(a.anndats)*100+month(a.anndats)=year(b.datadate)*100+month(b.datadate);

```

```
/*Names of industries*/  
create table IndRecs  
  as select a.*, b.gicdesc  
  from indrecs a left join COMP.r_giccd b  
  on a.gic=b.giccd;  
quit;  
  
proc sort data=IndRecs noduprec; by _all_;run;  
ENDRSUBMIT;
```

References

Kadan, O., Madureira, L., Wang, R., Zach, T. (2009) "Industry Recommendations: Characteristics, Investment Value, and Relation to Firm Recommendations", Working Paper, Ohio State University
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1361620