

Obs	company	sector	Assets	Sales	Mark_Val	Profits	Cash_Fl	Employ	lsales
1	AmericanElectricPower	Energy	13621	4848	4572	485.0	898.9	23.4	8.4863
2	AmericanSavgsBankFSB	Finance	3614	367	90	14.1	24.6	1.1	5.9054
3	AMR	Transportation	6425	6131	2448	345.8	682.5	49.5	8.7211
4	AppleComputer	HiTech	1022	1754	1370	72.0	119.5	4.8	7.4697
5	ArmstrongWorldInd	Manufacturing	1093	1679	1070	100.9	164.5	20.8	7.4260
6	BankSouth	Finance	2788	271	304	23.5	28.9	2.1	5.6021
7	H&RBlock	Finance	327	542	959	54.1	72.5	2.8	6.2953
8	BrooklynUnionGas	Energy	1117	1038	478	59.7	91.7	3.8	6.9451
9	CaliforniaFirstBank	Finance	5401	550	376	25.6	37.5	4.1	6.3099
10	CBIIndustries	Manufacturing	1128	1516	430	-47.0	26.7	13.2	7.3238
11	CentIllPublicServ	Energy	1633	701	679	74.3	135.9	2.8	6.5525
12	Cigna	Finance	44736	16197	4653	-732.5	-651.9	48.5	9.6926
13	ClevelandElecIllum	Energy	5651	1254	2002	310.7	407.9	6.2	7.1341
14	ColumbiaGasSystem	Energy	5835	4053	1601	-93.8	173.8	10.8	8.3072
15	Dayton-Hudson	Retail	4418	8793	4459	283.6	456.5	128.0	9.0817
16	DigitalEquipment	HiTech	6914	7029	7957	400.6	754.7	87.3	8.8578

Obs	lassets	secte	sectf	secth	sectm	sectr	selass	sflass	shlass	smlass	srlass	sect
1	9.5194	1	0	0	0	0	9.51937	0.0000	0.0000	0.00000	0.00000	E
2	8.1926	0	1	0	0	0	0.00000	8.1926	0.0000	0.00000	0.00000	F
3	8.7680	0	0	0	0	0	0.00000	0.0000	0.0000	0.00000	0.00000	T
4	6.9295	0	0	1	0	0	0.00000	0.0000	6.9295	0.00000	0.00000	H
5	6.9967	0	0	0	1	0	0.00000	0.0000	0.0000	6.99668	0.00000	M
6	7.9331	0	1	0	0	0	0.00000	7.9331	0.0000	0.00000	0.00000	F
7	5.7900	0	1	0	0	0	0.00000	5.7900	0.0000	0.00000	0.00000	F
8	7.0184	1	0	0	0	0	7.01840	0.0000	0.0000	0.00000	0.00000	E
9	8.5943	0	1	0	0	0	0.00000	8.5943	0.0000	0.00000	0.00000	F
10	7.0282	0	0	0	1	0	0.00000	0.0000	0.0000	7.02820	0.00000	M
11	7.3982	1	0	0	0	0	7.39817	0.0000	0.0000	0.00000	0.00000	E
12	10.7085	0	1	0	0	0	0.00000	10.7085	0.0000	0.00000	0.00000	F
13	8.6396	1	0	0	0	0	8.63959	0.0000	0.0000	0.00000	0.00000	E
14	8.6716	1	0	0	0	0	8.67163	0.0000	0.0000	0.00000	0.00000	E
15	8.3934	0	0	0	0	1	0.00000	0.0000	0.0000	0.00000	8.39344	R
16	8.8413	0	0	1	0	0	0.00000	0.0000	8.8413	0.00000	0.00000	H

Obs	company	sector	Assets	Sales	Mark_Val	Profits	Cash_Fl	Employ	lsales
17	DillardDeptStores	Retail	862	1601	1093	66.9	106.8	16.0	7.3784
18	Dreyfus	Finance	401	176	1084	55.6	57.0	0.7	5.1705
19	Eg&G	HiTech	430	1155	1045	55.7	70.8	22.5	7.0519
20	FirstAmerican	Finance	4789	453	367	40.2	51.4	3.0	6.1159
21	FirstEmpireState	Finance	2548	264	181	22.2	26.2	2.1	5.5759
22	FirstTennNational	Finance	5249	527	346	37.8	56.2	4.1	6.2672
23	FloridaProgress	Energy	3494	1653	1442	160.9	320.3	6.4	7.4103
24	Fruehauf	Manufacturing	1804	2564	483	70.5	164.9	26.6	7.8493
25	GeneralElectric	HiTech	26432	28285	33172	2336.0	3562.0	304.0	10.2501
26	GiantFood	Retail	623	2247	797	57.0	93.8	18.6	7.7174
27	GreatA&PTea	Retail	1608	6615	829	56.1	134.0	65.0	8.7971
28	Halliburton	Manufacturing	4662	4781	2988	28.7	371.5	66.2	8.4724
29	Hewlett-Packard	HiTech	5769	6571	9462	482.0	792.0	83.0	8.7904
30	IdahoPower	Energy	1654	451	779	84.8	130.4	1.6	6.1115
31	IBM	HiTech	52634	50056	95697	6555.0	9874.0	400.2	10.8209
32	IUInternational	Transportation	999	1878	393	-173.5	-108.1	23.3	7.5380

Obs	lassets	secte	sectf	secth	sectm	sectr	selass	sflass	shlass	smlass	srlass	sect
17	6.7593	0	0	0	0	1	0.00000	0.0000	0.0000	0.00000	6.75926	R
18	5.9940	0	1	0	0	0	0.00000	5.9940	0.0000	0.00000	0.00000	F
19	6.0638	0	0	1	0	0	0.00000	0.0000	6.0638	0.00000	0.00000	H
20	8.4741	0	1	0	0	0	0.00000	8.4741	0.0000	0.00000	0.00000	F
21	7.8431	0	1	0	0	0	0.00000	7.8431	0.0000	0.00000	0.00000	F
22	8.5658	0	1	0	0	0	0.00000	8.5658	0.0000	0.00000	0.00000	F
23	8.1588	1	0	0	0	0	8.15880	0.0000	0.0000	0.00000	0.00000	E
24	7.4978	0	0	0	1	0	0.00000	0.0000	0.0000	7.49776	0.00000	M
25	10.1823	0	0	1	0	0	0.00000	0.0000	10.1823	0.00000	0.00000	H
26	6.4345	0	0	0	0	1	0.00000	0.0000	0.0000	0.00000	6.43455	R
27	7.3827	0	0	0	0	1	0.00000	0.0000	0.0000	0.00000	7.38275	R
28	8.4472	0	0	0	1	0	0.00000	0.0000	0.0000	8.44720	0.00000	M
29	8.6603	0	0	1	0	0	0.00000	0.0000	8.6603	0.00000	0.00000	H
30	7.4110	1	0	0	0	0	7.41095	0.0000	0.0000	0.00000	0.00000	E
31	10.8711	0	0	1	0	0	0.00000	0.0000	10.8711	0.00000	0.00000	H
32	6.9068	0	0	0	0	0	0.00000	0.0000	0.0000	0.00000	0.00000	T

Obs	company	sector	Assets	Sales	Mark_Val	Profits	Cash_Fl	Employ	lsales
33	KansasPower&Light	Energy	1679	1354	687	93.8	154.6	4.6	7.2108
34	Kroger	Retail	4178	17124	2091	180.8	390.4	164.6	9.7482
35	LTV	Manufacturing	6307	8199	598	-771.5	-524.3	57.5	9.0118
36	MarineCorp	Finance	3720	356	211	26.6	34.8	2.4	5.8749
37	MayDepartmentStores	Retail	3442	5080	2673	235.4	361.5	77.3	8.5331
38	MellonBank	Finance	33406	3222	1413	201.7	246.7	15.8	8.0778
39	MesaPetroleum	Energy	1257	355	181	167.5	304.0	0.6	5.8721
40	MontanaPower	Energy	1743	597	717	121.6	172.4	3.5	6.3919
41	NationalCity	Finance	12505	1302	702	108.4	131.4	9.0	7.1717
42	NCR	HiTech	3940	4317	3940	315.2	566.3	62.0	8.3703
43	NorstarBancorp	Finance	8998	882	988	93.0	119.0	7.4	6.7822
44	Norwest	Finance	21419	2516	930	107.6	164.7	15.6	7.8304
45	Owens-CorningFiberglas	Manufacturing	2366	3305	1117	131.2	256.5	25.2	8.1032
46	PanAm	Transportation	2448	3484	1036	48.8	257.1	25.4	8.1559
47	PeoplesEnergy	Energy	1440	1617	639	81.7	126.4	3.5	7.3883
48	PhillipsPetroleum	Energy	14045	15636	2754	418.0	1462.0	27.3	9.6573

Obs	lassets	secte	sectf	secth	sectm	sectr	selass	sflass	shlass	smlass	srlass	sect
33	7.4260	1	0	0	0	0	7.42595	0.0000	0.0000	0.00000	0.00000	E
34	8.3376	0	0	0	0	1	0.00000	0.0000	0.0000	0.00000	8.33759	R
35	8.7494	0	0	0	1	0	0.00000	0.0000	0.0000	8.74942	0.00000	M
36	8.2215	0	1	0	0	0	0.00000	8.2215	0.0000	0.00000	0.00000	F
37	8.1438	0	0	0	0	1	0.00000	0.0000	0.0000	0.00000	8.14381	R
38	10.4165	0	1	0	0	0	0.00000	10.4165	0.0000	0.00000	0.00000	F
39	7.1365	1	0	0	0	0	7.13648	0.0000	0.0000	0.00000	0.00000	E
40	7.4634	1	0	0	0	0	7.46336	0.0000	0.0000	0.00000	0.00000	E
41	9.4339	0	1	0	0	0	0.00000	9.4339	0.0000	0.00000	0.00000	F
42	8.2789	0	0	1	0	0	0.00000	0.0000	8.2789	0.00000	0.00000	H
43	9.1048	0	1	0	0	0	0.00000	9.1048	0.0000	0.00000	0.00000	F
44	9.9720	0	1	0	0	0	0.00000	9.9720	0.0000	0.00000	0.00000	F
45	7.7690	0	0	0	1	0	0.00000	0.0000	0.0000	7.76896	0.00000	M
46	7.8030	0	0	0	0	0	0.00000	0.0000	0.0000	0.00000	0.00000	T
47	7.2724	1	0	0	0	0	7.27240	0.0000	0.0000	0.00000	0.00000	E
48	9.5500	1	0	0	0	0	9.55002	0.0000	0.0000	0.00000	0.00000	E

Obs	company	sector	Assets	Sales	Mark_Val	Profits	Cash_Fl	Employ	lsales
49	PPGIndustries	Manufacturing	4084	4346	3023	302.7	521.7	37.5	8.3770
50	PublServCoofNMex	Energy	3010	749	1120	146.3	209.2	3.4	6.6187
51	RepublicAirlines	Transportation	1286	1734	361	69.2	145.7	14.3	7.4582
52	SanDiegoGas&Elec	Energy	3086	1739	1507	202.7	335.2	4.9	7.4611
53	SoutheastBanking	Finance	11052	1097	606	64.9	97.6	7.0	7.0003
54	SovranFinancial	Finance	9672	1037	829	92.6	118.2	8.2	6.9441
55	Stop&ShopCos	Retail	1112	3689	542	30.3	96.9	43.5	8.2131
56	SupermarketsGeneral	Retail	1104	5123	910	63.7	133.3	48.5	8.5415
57	Telex	HiTech	478	672	866	67.1	101.6	5.4	6.5103
58	Textron	Manufacturing	10348	5721	1915	223.6	322.5	49.5	8.6519
59	TWA	Transportation	2769	3725	663	-208.4	12.4	29.1	8.2228
60	Turner	Manufacturing	752	2149	101	11.1	15.2	2.6	7.6728
61	UnitedFinancialGroup	Finance	4989	518	53	-3.1	-0.3	0.8	6.2500
62	UnitedTechnologies	Manufacturing	10528	14992	5377	312.7	710.7	184.8	9.6153
63	ValeroEnergy	Energy	1995	2662	341	34.7	100.7	2.3	7.8868
64	WesternAirLines	Transportation	952	1307	309	35.4	92.8	10.3	7.1755

Obs	lassets	secte	sectf	secth	sectm	sectr	selass	sflass	shlass	smlass	srlass	sect
49	8.3148	0	0	0	1	0	0.00000	0.0000	0.0000	8.31483	0.00000	M
50	8.0097	1	0	0	0	0	8.00970	0.0000	0.0000	0.00000	0.00000	E
51	7.1593	0	0	0	0	0	0.00000	0.0000	0.0000	0.00000	0.00000	T
52	8.0346	1	0	0	0	0	8.03463	0.0000	0.0000	0.00000	0.00000	E
53	9.3104	0	1	0	0	0	0.00000	9.3104	0.0000	0.00000	0.00000	F
54	9.1770	0	1	0	0	0	0.00000	9.1770	0.0000	0.00000	0.00000	F
55	7.0139	0	0	0	0	1	0.00000	0.0000	0.0000	0.00000	7.01392	R
56	7.0067	0	0	0	0	1	0.00000	0.0000	0.0000	0.00000	7.00670	R
57	6.1696	0	0	1	0	0	0.00000	0.0000	6.1696	0.00000	0.00000	H
58	9.2445	0	0	0	1	0	0.00000	0.0000	0.0000	9.24455	0.00000	M
59	7.9262	0	0	0	0	0	0.00000	0.0000	0.0000	0.00000	0.00000	T
60	6.6227	0	0	0	1	0	0.00000	0.0000	0.0000	6.62274	0.00000	M
61	8.5150	0	1	0	0	0	0.00000	8.5150	0.0000	0.00000	0.00000	F
62	9.2618	0	0	0	1	0	0.00000	0.0000	0.0000	9.26179	0.00000	M
63	7.5984	1	0	0	0	0	7.59840	0.0000	0.0000	0.00000	0.00000	E
64	6.8586	0	0	0	0	0	0.00000	0.0000	0.0000	0.00000	0.00000	T

Obs	company	sector	Assets	Sales	Mark_Val	Profits	Cash_Fl	Employ	lsales
65	WickesCos	Retail	2957	2806	457	40.6	93.5	50.0	7.9395
66	FWWoolworth	Retail	2535	5958	1921	177.0	288.0	118.1	8.6925

Obs	lassets	secte	sectf	secth	sectm	sectr	selass	sflass	shlass	smlass	srlass	sect
65	7.9919	0	0	0	0	1	0.00000	0.0000	0.0000	0.00000	7.99193	R
66	7.8379	0	0	0	0	1	0.00000	0.0000	0.0000	0.00000	7.83795	R

*The FREQ Procedure*

sector	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Energy	15	22.73	15	22.73
Finance	17	25.76	32	48.48
HiTech	8	12.12	40	60.61
Manufacturing	10	15.15	50	75.76
Retail	10	15.15	60	90.91
Transportation	6	9.09	66	100.00

sect	Frequency	Percent	Cumulative Frequency	Cumulative Percent
E	15	22.73	15	22.73
F	17	25.76	32	48.48
H	8	12.12	40	60.61
M	10	15.15	50	75.76
R	10	15.15	60	90.91
T	6	9.09	66	100.00

*The MEANS Procedure*

<b>Variable</b>	<b>N</b>	<b>Mean</b>	<b>Std Dev</b>	<b>Minimum</b>	<b>Maximum</b>
lsales	66	7.6490750	1.2135316	5.1704840	10.8208977
lassets	66	8.0637413	1.1354371	5.7899602	10.8711176

**The MEANS Procedure**

sector=Energy

Variable	N	Mean	Std Dev	Minimum	Maximum
lsales	15	7.2956101	0.9938831	5.8721178	9.6573312
lassets	15	7.9538574	0.8147017	7.0184018	9.5500217

sector=Finance

Variable	N	Mean	Std Dev	Minimum	Maximum
lsales	17	6.6391842	1.1072256	5.1704840	9.6925813
lassets	17	8.6027277	1.3099295	5.7899602	10.7085338

sector=HiTech

Variable	N	Mean	Std Dev	Minimum	Maximum
lsales	8	8.5151612	1.5021185	6.5102583	10.8208977
lassets	8	8.2496068	1.7717697	6.0637852	10.8711176

sector=Manufacturing

Variable	N	Mean	Std Dev	Minimum	Maximum
lsales	10	8.2503412	0.7244553	7.3238306	9.6152720
lassets	10	7.9932127	0.9518879	6.6227363	9.2617937

sector=Retail

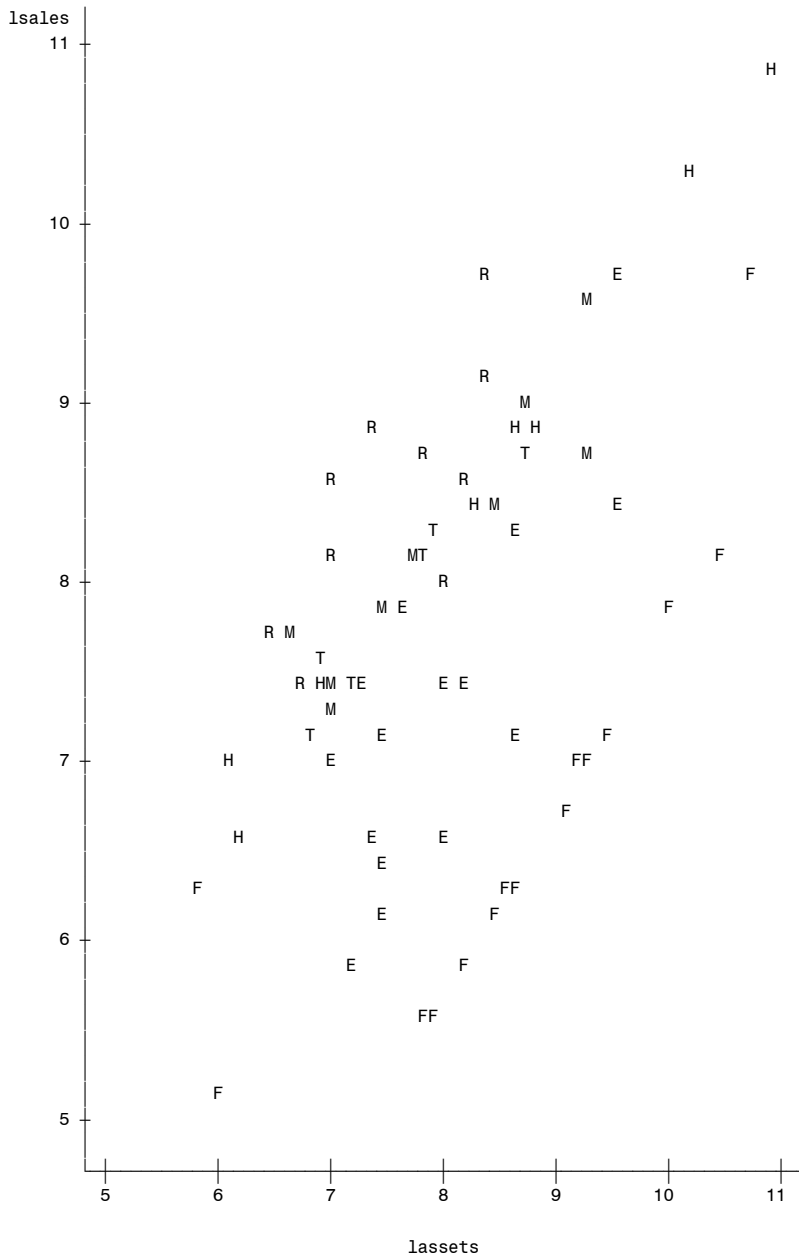
Variable	N	Mean	Std Dev	Minimum	Maximum
lsales	10	8.4642456	0.6895121	7.3783837	9.7482363
lassets	10	7.5301877	0.7022696	6.4345465	8.3934424

sector=Transportation

Variable	N	Mean	Std Dev	Minimum	Maximum
lsales	6	7.8785850	0.5817866	7.1754897	8.7211131
lassets	6	7.5703053	0.7390552	6.8585650	8.7679519



Plot of lsales\*lassets. Symbol is value of sect.



NOTE: 3 obs hidden.

**The REG Procedure**  
**Model: MODEL1**  
**Dependent Variable: lsales**

Number of Observations Read	66
Number of Observations Used	66

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	23.29226	23.29226	20.58	<.0001
Error	64	72.43057	1.13173		
Corrected Total	65	95.72283			

Root MSE	1.06383	R-Square	0.2433
Dependent Mean	7.64908	Adj R-Sq	0.2315
Coeff Var	13.90792		

Parameter Estimates					
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr >  t
Intercept	1	3.39777	0.94621	3.59	0.0006
lassets	1	0.52721	0.11621	4.54	<.0001

**The REG Procedure**  
**Model: MODEL1**  
**Dependent Variable: Isales**

Number of Observations Read	66
Number of Observations Used	66

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	6	79.69199	13.28200	48.88	<.0001
Error	59	16.03084	0.27171		
Corrected Total	65	95.72283			

Root MSE	0.52126	R-Square	0.8325
Dependent Mean	7.64908	Adj R-Sq	0.8155
Coeff Var	6.81465		

Parameter Estimates					
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr >  t
Intercept	1	2.04937	0.50555	4.05	0.0001
lassets	1	0.77001	0.06058	12.71	<.0001
secte	1	-0.87831	0.25286	-3.47	0.0010
sectf	1	-2.03438	0.25530	-7.97	<.0001
secth	1	0.11351	0.28450	0.40	0.6914
sectm	1	0.04611	0.27039	0.17	0.8652
sectr	1	0.61655	0.26919	2.29	0.0256

**The REG Procedure**  
**Model: MODEL1**  
**Dependent Variable: lsales**

Number of Observations Read	66
Number of Observations Used	66

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	11	80.46056	7.31460	25.88	<.0001
Error	54	15.26228	0.28263		
Corrected Total	65	95.72283			

Root MSE	0.53163	R-Square	0.8406
Dependent Mean	7.64908	Adj R-Sq	0.8081
Coeff Var	6.95030		

Parameter Estimates					
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr >  t
Intercept	1	2.07031	2.44502	0.85	0.4009
lassets	1	0.76724	0.32170	2.38	0.0206
secte	1	-2.48700	2.81446	-0.88	0.3808
sectf	1	-1.26766	2.59935	-0.49	0.6277
secth	1	-0.48472	2.62465	-0.18	0.8542
sectm	1	0.60257	2.86719	0.21	0.8343
sectr	1	1.07454	3.10114	0.35	0.7303
selass	1	0.20239	0.36593	0.55	0.5825
sflass	1	-0.08879	0.33732	-0.26	0.7934
shlass	1	0.07274	0.34111	0.21	0.8319
smlass	1	-0.06947	0.37168	-0.19	0.8524
srlass	1	-0.06083	0.40886	-0.15	0.8823

*The GLM Procedure*

Class Level Information		
Class	Levels	Values
sector	6	Energy Finance HiTech Manufacturing Retail Transportation

Number of Observations Read	66
Number of Observations Used	66

The GLM Procedure

Dependent Variable: Isales

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	35.78914436	7.15782887	7.17	<.0001
Error	60	59.93368675	0.99889478		
Corrected Total	65	95.72283112			

R-Square	Coeff Var	Root MSE	Isales Mean
0.373883	13.06625	0.999447	7.649075

Source	DF	Type I SS	Mean Square	F Value	Pr > F
sector	5	35.78914436	7.15782887	7.17	<.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
sector	5	35.78914436	7.15782887	7.17	<.0001

*The GLM Procedure*

Class Level Information		
Class	Levels	Values
sector	6	Energy Finance HiTech Manufacturing Retail Transportation

Number of Observations Read	66
Number of Observations Used	66

The GLM Procedure

Dependent Variable: Isales

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	11	80.46055509	7.31459592	25.88	<.0001
Error	54	15.26227603	0.28263474		
Corrected Total	65	95.72283112			

R-Square	Coeff Var	Root MSE	Isales Mean
0.840558	6.950305	0.531634	7.649075

Source	DF	Type I SS	Mean Square	F Value	Pr > F
lassets	1	23.29226107	23.29226107	82.41	<.0001
sector	5	56.39972506	11.27994501	39.91	<.0001
lassets*sector	5	0.76856896	0.15371379	0.54	0.7422

Source	DF	Type III SS	Mean Square	F Value	Pr > F
lassets	1	24.02627885	24.02627885	85.01	<.0001
sector	5	1.07360514	0.21472103	0.76	0.5828
lassets*sector	5	0.76856896	0.15371379	0.54	0.7422



*The GLM Procedure*

Class Level Information		
Class	Levels	Values
sector	6	Energy Finance HiTech Manufacturing Retail Transportation

Number of Observations Read	66
Number of Observations Used	66

The GLM Procedure

Dependent Variable: Isales

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	6	79.69198613	13.28199769	48.88	<.0001
Error	59	16.03084499	0.27170924		
Corrected Total	65	95.72283112			

R-Square	Coeff Var	Root MSE	Isales Mean
0.832529	6.814646	0.521257	7.649075

Source	DF	Type I SS	Mean Square	F Value	Pr > F
lassets	1	23.29226107	23.29226107	85.72	<.0001
sector	5	56.39972506	11.27994501	41.51	<.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
lassets	1	43.90284176	43.90284176	161.58	<.0001
sector	5	56.39972506	11.27994501	41.51	<.0001

*The GLM Procedure  
Least Squares Means*

<b>sector</b>	<b>lsales LSMEAN</b>
<b>Energy</b>	7.38022177
<b>Finance</b>	6.22415902
<b>HiTech</b>	8.37204279
<b>Manufacturing</b>	8.30464897
<b>Retail</b>	8.87508738
<b>Transportation</b>	8.25853584

Plot of res\*pred. Legend: A = 1 obs, B = 2 obs, etc.

