

DATE: 6/06/90

TABLE 0

TABLE 0

CORRECTED DPR DATA INCLUDING CONRAIL

FRID	YEAR	TRANSOH	TRK	TMI
5	1979	307.0890	287.6900	492.2020
5	1980	281.7000	283.9000	429.0760
5	1981	244.7900	277.5300	391.0370
5	1982	193.4490	260.8900	337.4230
5	1983	185.9120	248.6400	335.0240
5	1984	201.3010	238.7300	350.4460
5	1985	192.4910	218.4500	329.8450
5	1986	191.7890	213.8800	328.6090
5	1987	216.5040	203.0700	349.3170
8	1979	20.0319	19.4800	40.2248
8	1980	19.7290	19.3700	33.1691
8	1981	19.5804	20.6200	35.5661
8	1982	21.0678	19.7200	31.0798
8	1983	20.6146	19.3100	28.9958
8	1984	22.0821	17.7400	32.6510
8	1985	24.9777	17.5800	34.5323
8	1986	29.4718	17.5500	31.2496
8	1987	23.1450	13.5000	29.6346
10	1979	193.9090	205.0600	485.3030
10	1980	183.3890	204.7400	464.3230
10	1981	194.9840	207.0800	426.8880
10	1982	181.2780	209.3200	347.7510
10	1983	165.0410	209.5600	303.8820
10	1984	187.0040	207.2300	332.0190
10	1985	192.5730	220.5700	341.8610
10	1986	192.9600	219.2800	336.0200
10	1987	184.1220	215.3900	343.8090
18	1979	67.7818	107.7700	156.5340
18	1980	62.1174	104.1200	151.8330
18	1981	62.2154	99.7100	142.8200
18	1982	57.1140	94.9800	115.6800
18	1983	48.0426	90.3100	109.1760
18	1984	50.7485	85.9200	116.2090
18	1985	53.1288	64.3900	102.8910
18	1986	44.0327	52.9100	75.9706
18	1987	32.8150	45.0500	62.2035
20	1979	308.6320	334.4800	604.0170
20	1980	316.7630	337.6500	600.2720
20	1981	290.0610	336.2300	579.6410
20	1982	273.9220	332.7500	501.7830
20	1983	238.5360	315.2900	504.9750
20	1984	249.6500	304.7300	540.4340
20	1985	269.6330	300.5700	526.2400
20	1986	290.3200	288.6300	531.3300
20	1987	295.2860	274.3200	524.8030
21	1979	130.4420	157.9100	434.0820
21	1980	129.7070	157.5500	448.7970
21	1981	142.9260	160.1500	447.0130
21	1982	124.8760	159.6600	370.6290
21	1983	112.3600	157.2000	374.3950

21	1984	116.1780	155.5200	386.4720
21	1985	119.4600	154.7200	347.5130
21	1986	116.3070	152.4400	328.5140
21	1987	115.9020	153.1300	367.5880
22	1979	207.9900	343.4900	616.7450
22	1980	207.8450	343.6900	659.2210
22	1981	219.7820	344.5600	629.3330
22	1982	194.2990	341.8000	537.6940
22	1983	210.2100	332.2100	561.0730
22	1984	240.4520	326.0300	632.2080
22	1985	223.4410	317.0100	610.3440
22	1986	231.4660	303.1600	637.0920
22	1987	286.8020	280.2100	691.7200
23	1979	57.7709	106.1800	122.5700
23	1980	57.9514	94.0300	138.2680
23	1981	60.5281	98.8300	133.9740
23	1982	50.4450	95.5900	106.4830
23	1983	43.6191	95.1500	109.9990
23	1984	51.4009	90.5400	110.8650
23	1985	50.1211	89.1300	103.3270
23	1986	51.0567	78.5900	104.0030
23	1987	40.0950	77.5200	96.1378
27	1979	16.6346	23.1700	54.2444
27	1980	15.1756	23.1800	50.6270
27	1981	16.3802	22.7200	52.9381
27	1982	15.7967	22.7200	45.4655
27	1983	25.0949	28.9200	56.0216
27	1984	31.8271	28.8200	60.3193
27	1985	30.8135	27.4100	50.1681
27	1986	27.7907	27.4100	48.2964
27	1987	27.1070	27.4700	46.7764
30	1979	15.5749	19.1900	33.8461
30	1980	15.6855	19.2400	34.6423
30	1981	14.6245	19.2400	36.0260
30	1982	14.6196	19.2600	36.2410
30	1983	15.6923	19.0800	36.8204
30	1984	18.3271	19.0700	38.8657
30	1985	16.9587	19.1000	41.4980
30	1986	16.7610	19.1300	38.5737
30	1987	16.7260	19.1200	38.1852
31	1979	9.6872	24.3300	29.7796
31	1980	11.5312	24.5800	32.4309
31	1981	11.7337	24.5600	33.4218
31	1982	12.2605	24.0300	28.3026
31	1983	11.7729	35.9400	33.5236
31	1984	13.5123	35.8900	36.7457
31	1985	14.6507	36.3900	36.2603
31	1986	12.5546	39.9600	33.7112
31	1987	10.7560	37.3300	33.6467
34	1979	27.2417	17.4100	57.8856
34	1980	32.0104	30.5800	52.4077
34	1981	17.9412	29.4800	58.5167
34	1982	12.5090	31.2000	48.4592
34	1983	17.4760	33.6400	55.4867
34	1984	29.0956	33.6400	63.4580
34	1985	24.4390	34.3100	54.7247
34	1986	29.6235	34.3100	58.8237
34	1987	30.3780	33.9600	65.5279
35	1979	66.3157	162.9400	131.6300
35	1980	49.0041	99.7400	109.4020

35	1981	46.7752	99.7200	99.1002
35	1982	37.1529	92.2900	84.9708
35	1983	34.3552	90.2500	80.9490
35	1984	38.0262	91.0800	87.5582
35	1985	32.9536	94.2000	71.8622
35	1986	34.6440	91.2600	79.6100
35	1987	32.7410	69.7700	84.9600
36	1979	128.3890	134.9100	336.2760
36	1980	103.9380	133.1400	290.7180
36	1981	110.9610	133.0900	284.8420
36	1982	94.1362	131.0500	251.9710
36	1983	94.1305	129.7100	255.4040
36	1984	161.0780	130.2500	263.0290
36	1985	154.1070	128.0000	221.9480
36	1986	151.1350	123.6500	251.9880
36	1987	135.9950	121.1200	258.0430
37	1979	251.8760	278.4400	678.3070
37	1980	249.7830	278.0100	685.4510
37	1981	251.2950	274.0600	623.6470
37	1982	234.6050	273.2200	518.6550
37	1983	226.4620	272.6400	526.0570
37	1984	289.8180	270.7600	549.7440
37	1985	248.1350	268.6600	531.3700
37	1986	279.4480	271.4500	540.4620
37	1987	304.1280	266.1800	569.0790

TABLE 1

CONRAIL INCLUDED

TRANSONH ACCOUNT

THE DATA ARE GIVEN IN THE FOLLOWING UNITS:

TRANSONH MILLIONS OF DOLLARS PER YEAR
 TRK HUNDREDS OF MILES OF RUNNING TRACK
 TMI HUNDREDS OF THOUSANDS OF TRAIN MILES RUNNING

RAILROAD SPECIFIC MEANS OF THE DATA

RAILROAD	TRANSONH	TRK	TMI
5	223.8917	248.0867	371.4421
8	22.3000	18.3189	33.0115
10	186.1400	210.9144	375.7618
18	53.1107	82.7956	114.8130
20	281.4234	313.8500	545.9449
21	123.1287	156.4756	389.4459
22	224.6986	325.7956	619.4922
23	52.4431	91.7289	113.9585
27	22.9578	25.7578	51.6508
30	16.1077	19.1589	37.1887
31	12.0510	31.4456	33.0914
34	24.5238	30.9478	57.2545
35	41.3298	99.0278	92.2269
36	125.9855	129.4356	268.2466
37	259.5056	272.6022	500.3080

OVERALL MEANS OF THE DATA

111.3065	137.0894	245.5891
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TABLE 2

TRANSON ACCOUNT

OLS REGRESSION RESULTS FOR POOLED MODEL

COEFFICIENT	ESTIMATE	T-RATIO
CONST	-4.3800	-1.2044
TRK	0.5165	7.3152
IMI	0.1828	5.0812
TIME	2.4489	2.8178

ERROR VARIANCE	674.5919
RSQ	0.9304
MODIFIED DW	0.3708
MODIFIED RHO	0.8146

F-STATISTIC FOR POOLING RAILROADS: $F(56 \ 75) = 15.17$ F-STATISTIC FOR POOLING YEARS: $F(24 \ 108) = 0.79$

OLS REGRESSION ON MODEL WITH RAILROAD EFFECTS AND TIME TREND

F-STATISTIC FOR INCREMENTAL POWER OF FIXED EFFECTS: $F(14 \ 117) = 18.72$

F-STATISTIC FOR POOLING RAILROADS
IN THE FIXED EFFECTS MODEL: $F(42, 75) = 5.01$

OLS REGRESSION MODEL WITH RAILROAD EFFECTS AND TIME TREND

COEFFICIENT	ESTIMATE	T-RATIO
TRK	0.3273	3.0476
TMI	0.3157	7.1503
TIME	2.7944	4.2710
F5	25.4224	0.8292
F8	5.8819	1.0485
F10	-1.5276	-0.0555
F18	-10.2365	-0.3194
F20	6.3351	0.1573
F21	-51.0430	-2.1548
F22	-77.5207	-1.7992
F23	-13.5580	-1.1422
F27	-1.7799	-0.2894
F30	-1.9042	-0.3349
F31	-8.6884	-1.3965
F34	-3.6818	-0.5675
F35	-20.1987	-1.6539
F36	-1.0699	-0.0585
F37	-17.9331	-0.3422
ERROR VARIANCE		233.0958
RSQ		0.9785
MODIFIED DW		0.9168
MODIFIED RHO		0.5416
BREUSCH-PAGAN		110.0352
RESET		7.8229
		CHI-SQ(17)
		F(3,114)

OLS REGRESSION ON MODEL WITH RAILROAD EFFECTS AND NO TIME TREND

F-STATISTIC FOR TIME TREND: $F(1, 117) = 18.24$

F-STATISTIC FOR TIME TREND: $F(1, 117) = 18.24$

OLS REGRESSION ON MODEL WITH RAILROAD EFFECTS AND TIME EFFECTS

F-STATISTIC FOR TIME EFFECTS: $F(8, 110) = 3.34$

F-STATISTIC FOR TIME EFFECTS: $F(8, 110) = 3.34$

OLS REGRESSION MODEL WITH RAILROAD EFFECTS AND TIME EFFECTS
STEP ONE IN GLS ESTIMATION

COEFFICIENT	ESTIMATE	T-RATIO
TRK	0.3585	3.3079
TMI	0.2586	5.0810
F5	34.0606	1.0240
F8	2.3724	0.3067
F10	8.5174	0.2798
F18	-11.0889	-0.8203
F20	22.8821	0.5273
F21	-38.5176	-1.4178
F22	-57.1480	-1.2281
F23	-14.7379	-1.0402
F27	-4.4576	-0.5266
F30	-5.2015	-0.6620
F31	-12.6031	-1.5116
F34	-6.2016	0.7016
F35	-22.8470	-1.5962
F36	5.3807	0.2532
F37	6.8631	0.1656
T79	BASE YEAR	
T80	-1.6179	-0.2903
T81	-0.0428	-0.0076
T82	-1.0123	-0.1610
T83	-4.9962	-0.7866
T84	8.7977	1.4474
T85	9.7667	1.5267
T86	14.2161	2.1992
T87	18.2986	2.8062
ERROR VARIANCE		230.6347
RSQ		0.9800
MODIFIED DW		0.8596
MODIFIED RHO		0.5702

FIXED-EFFECTS MODEL CORRECTED FOR AUTOCORRELATION:
STEP TWO OF GLS ESTIMATION

COEFFICIENT	ESTIMATE	ASY Z-RATIO
TRK	0.2512	2.9687
TMI	0.2870	7.3178
F5	23.3486	2.0543
F8	1.6290	0.2524
F10	10.2498	0.9512
F18	-2.5091	-0.3333
F20	20.9527	1.5801
F21	-15.6740	-1.5647
F22	-15.3453	-1.1085
F23	-3.7605	-0.4842
F27	-1.3085	-0.1976
F30	-2.2395	-0.3451
F31	-5.2708	-0.7925
F34	-2.3426	-0.3487
F35	-7.1889	-0.9208
F36	6.5696	0.7357
F37	12.9003	1.0099
BASE YEAR		
T79		
T80	-2.5709	-0.4427
T81	0.4544	0.0780
T82	-0.7425	-0.1182
T83	-4.8953	-0.8180
T84	10.5661	1.7905
T85	4.1350	0.6761
T86	7.5609	1.2418
T87	8.4104	1.3614
ERROR VARIANCE		
		144.5254
RSQ		0.9474
MODIFIED DW		1.7479
MODIFIED RHO		0.1260

TABLE 9

TRANSH ACCOUNT

WEIGHTED LEAST-SQUARES ESTIMATES OF FIXED-EFFECTS MODEL:
STEP THREE OF GLS ESTIMATION

COEFFICIENT	ESTIMATE	ASY Z-RATIO
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TRK	0.2152	5.4245
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TMI	0.2459	9.1509
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F5	1.9496	3.3885
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F8	1.3128	2.7221
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F10	3.4110	3.8331
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F18	0.9197	1.4782
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F20	2.6517	3.6664
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F21	-0.0726	-0.0915
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F22	0.5200	0.7213
-----	--------	--------

F23	1.2804	1.3705
-----	--------	--------

F27	0.8905	1.6974
-----	--------	--------

F30	0.5436	1.1080
-----	--------	--------

F31	-0.0200	-0.0408
-----	---------	---------

F34	0.5628	1.1153
-----	--------	--------

F35	0.0087	0.0140
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F36	1.1881	2.1701
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F37	1.7678	2.6774
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T79	BASE YEAR	
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T80	-0.7052	-1.7331
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T81	-0.4111	-1.0047
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T82	-0.6222	-1.3535
-----	---------	---------

T83	-1.0795	-2.5408
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T84	0.4358	1.0583
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T85	-0.0480	-0.1094
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T86	0.1738	0.3994
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T87	-0.0661	-0.1527
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ERROR VARIANCE	0.6770
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RSQ	0.9517
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MODIFIED DW	1.9430
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MODIFIED RHO	0.0285
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BREUSCH-PAGAN	29.5461	CHI-SQ(24)
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RESET	1.7061	F(3 107)
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COEFFICIENT	ESTIMATE	ASY Z-RATIO
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TRK	0.2152	5.4245
TMI	0.2459	9.1509
5	1.9496	3.3885
8	1.3128	2.7221
10	3.4110	3.8031
18	0.9197	1.4782
20	2.6517	3.6664
21	-0.0726	-0.0915
22	0.5200	0.7213
23	1.2804	1.3705
27	0.8905	1.6974
30	0.5436	1.1080
31	0.0200	-0.0408
34	0.5628	1.1153
35	0.0087	0.0140
36	1.1881	2.1701
37	1.7678	2.6774

1979	-0.7052	-1.7331
1980	-0.4111	-1.0047
1981	-0.6222	-1.3535
1982	-1.0795	-2.5408
1983	0.4358	1.0583
1984	-0.0480	-0.1094
1985	0.1738	0.3994
1986	-0.0661	-0.1527

ERROR VARIANCE	0.6770
RSQ	0.9517
MODIFIED DW	1.9430
MODIFIED RHO	0.0285

DFR4.PFG

[illegible]

TABLE 11

CONF:AIL INCLUDED

TRANSDH ACCOUNT

RAILROAD	RATIO	SE
5	0.63	0.0608
8	0.67	0.0574
10	0.67	0.0577
18	0.61	0.0619
20	0.67	0.0581
21	0.74	0.0502
22	0.68	0.0563
23	0.59	0.0633
27	0.70	0.0552
30	0.69	0.0559
31	0.55	0.0647
34	0.68	0.0569
35	0.52	0.0652
36	0.70	0.0545
37	0.71	0.0539

MEAN OF RATIOS: 0.6535

RATIO AT OVERALL MEAN: 0.6718 SE: 0.0576