

Explaining Economic Growth

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Table 1.
Annual Average Growth Rates of GDP per Capita

	mean	standard deviation
1960-65	3.08	3.02
1965-70	3.36	2.76
1970-75	2.27	3.52
1975-80	1.91	3.57
1980-85	-0.36	3.49
 1960-85	 2.05	 1.77

Table 2.
Correlation Between Growth Rates of GDP per Capita

	60-65	65-70	70-75	75-80	80-85
60-65	1.00				
65-70	0.06	1.00			
70-75	0.19	0.25	1.00		
75-80	0.20	0.20	0.20	1.00	
80-85	0.02	0.24	0.19	0.16	1.00

Table 3
Regression of Growth Rates on Lagged Growth Rates

ZYL80-85=	-0.440 (0.371)	+	0.076 ZYL75-80 (0.089)	R² = 0.006	R² = -0.002 N=115
ZYL75-80=	1.608** (0.405)	+	0.176 ZYL70-75 (0.095)	R² = 0.021	R² = 0.029 N=115
ZYL70-75=	1.389** (0.510)	+	0.272 ZYL65-70* (0.118)	R² = 0.045	R² = 0.036 N=114
ZYL65-70=	3.301** (0.375)	+	0.019 ZYL60-65 (0.087)	R² = 0.000	R² = -0.008 N=112

Standard errors in parenthesis, **(**)** significance at the 5%(1%) level.

Table 4
Dependant Variable: ZYL annual average growth rate of per capita GDP

Regression	1	2
Variable		
C	3.361** (0.259)	Fixed Effects
1970-75	-1.061** (0.418)	-1.028** (0.398)
1975-80	-1.334** (0.427)	-1.360** (0.352)
1980-85	-3.646** (0.414)	-3.677** (0.368)
rho		-0.300** (0.040)
R²	0.136	0.497
R₂ adjusted	0.130	0.317
N	456	456

TABLE 5

DEPENDANT VARIABLE REGRESSION NUMBER ESTIMATION METHOD	ZY		
	3 OLS	4 2SLS	5 2SLS
C	14.065 ** 3.254	16.019 ** 3.704	13.214 ** 2.983
LZYL	-0.236 ** 0.071	-0.127 0.085	-0.109 0.084
ZK	0.514 ** 0.056	0.301 ** 0.109	0.268 * 0.109
ZL	0.387 * 0.176	0.729 ** 0.263	0.673 ** 0.218
ZH	0.135 0.094	0.186 * 0.094	0.181 0.098
ZOIL	0.724 ** 0.168	0.961 ** 0.213	0.983 ** 0.210
YLO	-1.739 ** 0.431	-2.031 ** 0.515	-1.914 ** 0.436
H0	2.023 ** 0.623	2.642 ** 0.693	2.913 ** 0.689
IND	0.031 0.023	0.033 0.025	
TELL0	2.840 ** 0.996	3.500 ** 1.130	3.373 ** 1.181
ZIND(-1)	0.165 0.100	0.212 * 0.107	0.240 * 0.106
AZIND(-1)	0.374 ** 0.118	0.490 ** 0.112	0.505 ** 0.112
SIZE	-0.128 0.108	-0.146 0.113	
HOM	0.009 0.006	0.008 0.006	
1970-75	-1.237 ** 0.359	-1.428 ** 0.408	-1.503 ** 0.416
1975-80	-1.558 ** 0.400	-2.000 ** 0.468	-2.141 ** 0.490
1980-85	-2.496 ** 0.437	-3.225 ** 0.590	-3.495 ** 0.618
R2	0.605	0.580	0.565
R2 ADJ	0.584	0.558	0.546
N	316	312	312

TABLE 6
REGRESSION SET 6
ESTIMATION METHOD: 3SLS

DEPENDENT VARIABLE ZY

Parameter	Estimate	Standard Error	t-statistic
C	13.21**	2.27	5.80
LZYL	-.1061	.067	-1.57
ZK	.2357**	.084	2.78
ZL	.5490**	.158	3.45
ZH	.1678*	.067	2.48
ZOIL	1.013**	.160	6.33
YL0	-1.870**	.326	-5.72
H0	2.896**	.527	5.49
ZIND(-1)	.2884**	.081	3.54
AZIND(-1)	.4212**	.088	4.78
TELL	3.504**	.860	4.07
1970-75	-1.194**	.343	-3.47
1975-80	-1.711**	.415	-4.11
1980-85	-3.547**	.499	-7.10
$R^2 = 0.554$			

DEPENDENT VARIABLE ZL

C	1.186*	.443	2.67
ZY	.0042	.009	.45
ZWA	.3558**	.044	7.98
ZL(-1)	.5815**	.046	12.44
PART0	-.9258**	.201	-4.59
YL0	-.0533	.034	-1.56
$R^2 = 0.792$			

DEPENDENT VARIABLE ZK

C	11.16**	2.18	5.11
ZY	.7476**	.068	10.86
ZY(-1)	.3261**	.049	6.52
ZK(-1)	.1718**	.035	4.89
OILRAT	7.640**	1.59	4.78
GOV	-.0307*	.012	-2.41
YK0	.5942**	.193	3.07
PI0	-1.485**	.221	-6.70
1970-75	.3963	.340	1.16
1975-80	-.0298	.394	-.075
1980-85	.0108	.414	.026
$R^2 = 0.716$			

N=312

Standard Errors are heteroskedastic robust (White).

TABLE 7
REGRESSION 7
ESTIMATION METHOD: 2SLS

DEPENDENT VARIABLE ZY

Variable	Estimated Coefficient	Standard Error	t-statistic
FIXED EFFECTS			
LZYL	-.2587**	.082	-3.13
ZK	.1153	.105	1.09
ZL	.9312*	.456	2.03
ZH	.2139*	.080	2.66
ZOIL	.9707**	.244	3.97
YL0	-5.581**	1.45	-3.82
H0	1.174	1.72	.682
TELL	1.334	2.53	.526
ZIND(-1)	-.1397	.138	-1.01
AZIND(-1)	.5819**	.138	4.19
DATE3	-.5827	.491	-1.18
DATE4	-1.016	.796	-1.27
DATE5	-2.410*	1.05	-2.28

R² = 0.741

R² ADJ = 0.563

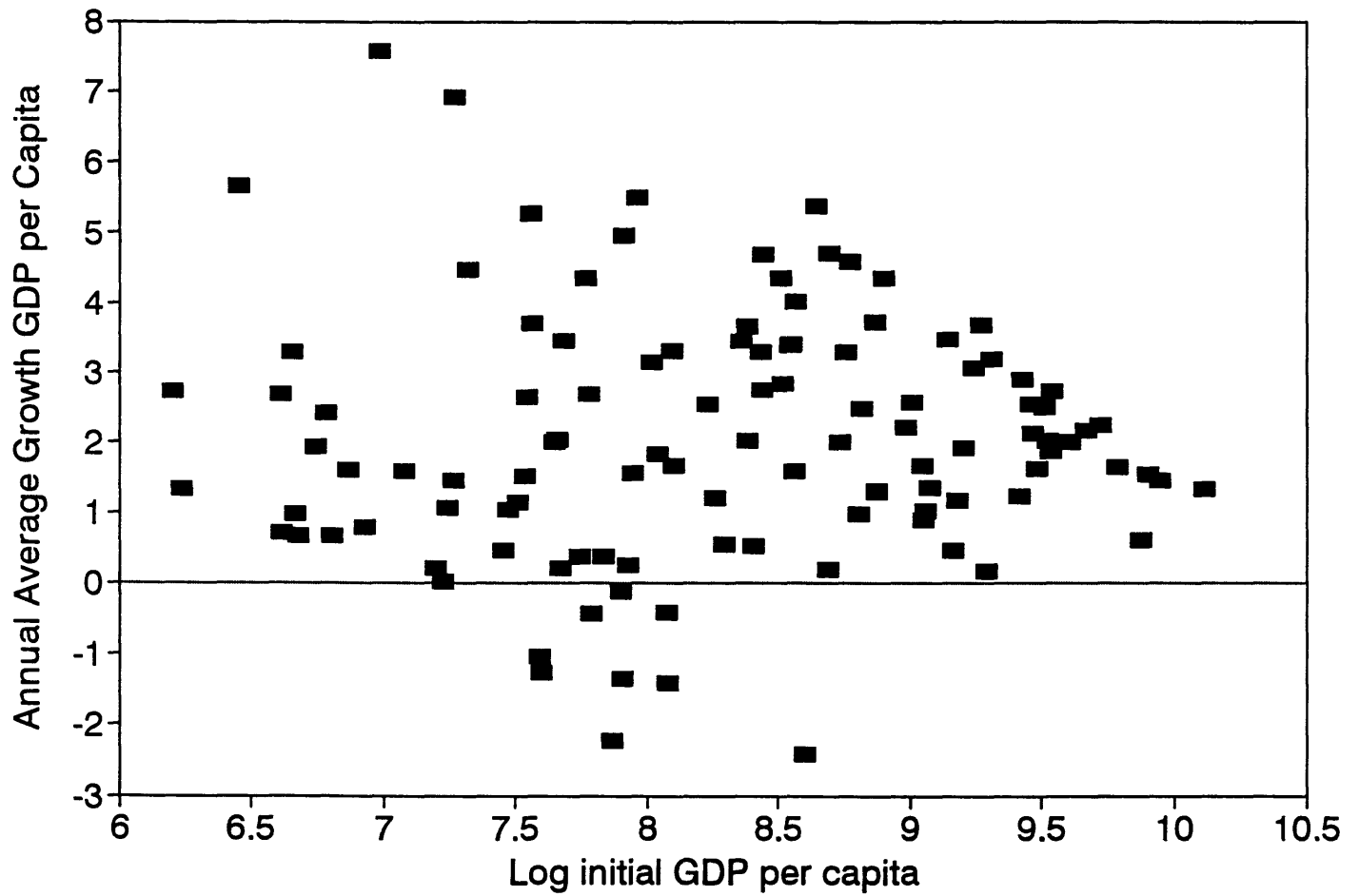
N = 323

The model has a fixed effect for each country (not reported).
S.E.s are heteroskedastic-consistent estimates.

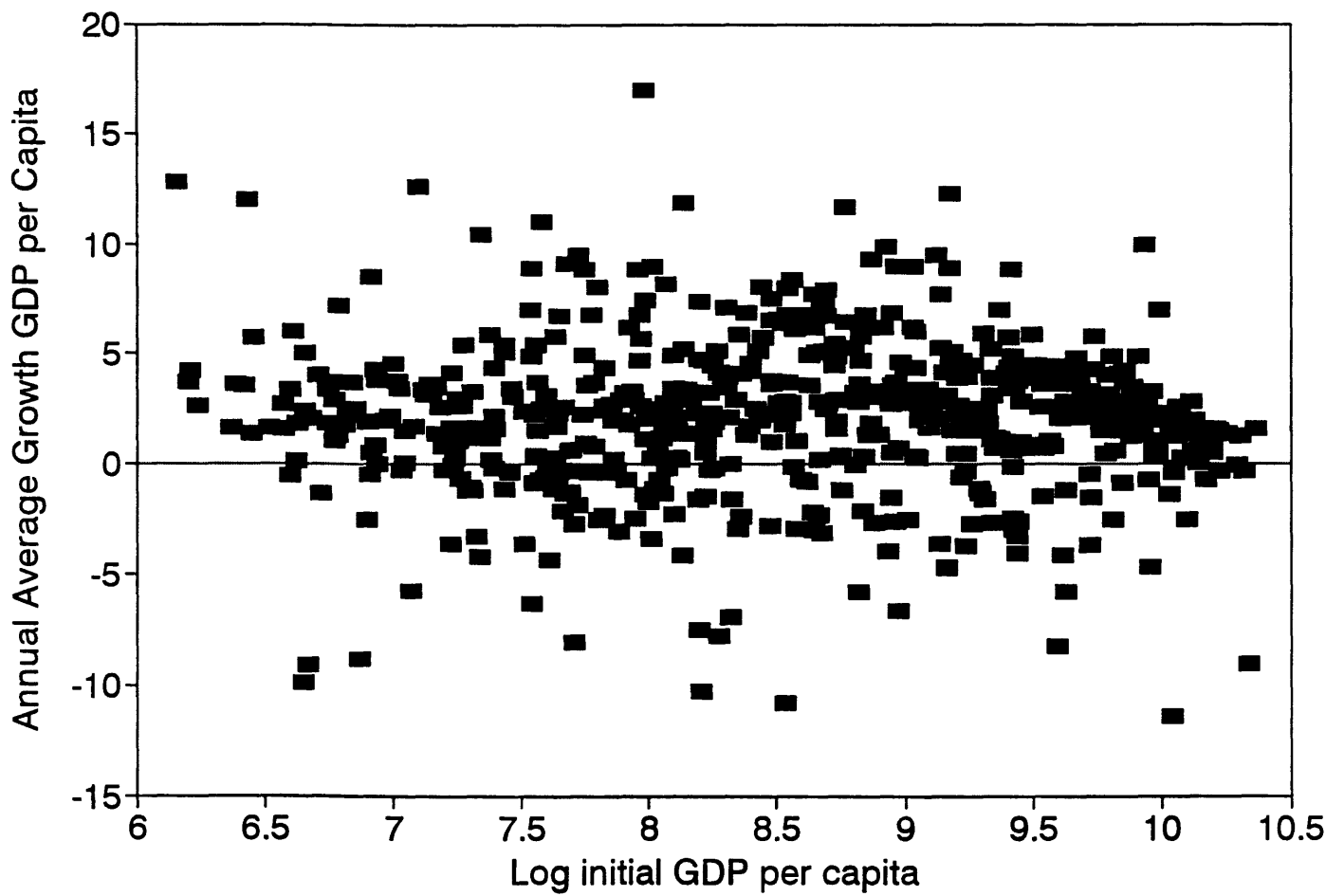
TABLE 8
 SPLIT SAMPLE
 ESTIMATION METHOD: 2SLS
 DEPENDENT VARIABLE ZY

REGRESSION	8 LOW INCOME	9 MID INCOME	10 HIGH INCOME
C	13.298 8.159	10.975 ** 4.024	33.219 * 13.550
LZYL	-0.120 0.151	-0.207 0.107	-0.185 0.162
ZK	0.323 * 0.125	0.365 ** 0.168	0.315 0.305
ZL	0.788 0.779	0.727 0.484	0.442 0.282
ZH	0.270 0.197	0.168 0.143	0.126 0.161
ZOIL	0.882 1.177	0.870 ** 0.303	1.396 * 0.540
YLO	-1.971 1.043	-1.754 ** 0.600	-3.445 * 1.573
H0	2.360 * 1.062	3.433 ** 0.996	0.197 1.574
TELL	12.615 68.334	5.764 * 2.692	5.255 ** 1.815
ZIND(-1)	-1.308 * 0.574	0.293 0.236	0.194 0.207
AZIND(-1)	2.632 ** 0.724	0.217 0.265	0.332 * 0.146
1970-75	-2.229 * 1.078	-1.427 0.753	-1.455 * 0.557
1975-80	-3.637 * 1.457	-2.740 ** 0.795	-0.965 0.591
1980-85	-2.909 * 1.264	-4.350 ** 1.114	-2.887 ** 0.977
N	64	166	82
R2	0.528	0.651	0.670
R2 ADJ	0.426	0.621	0.607

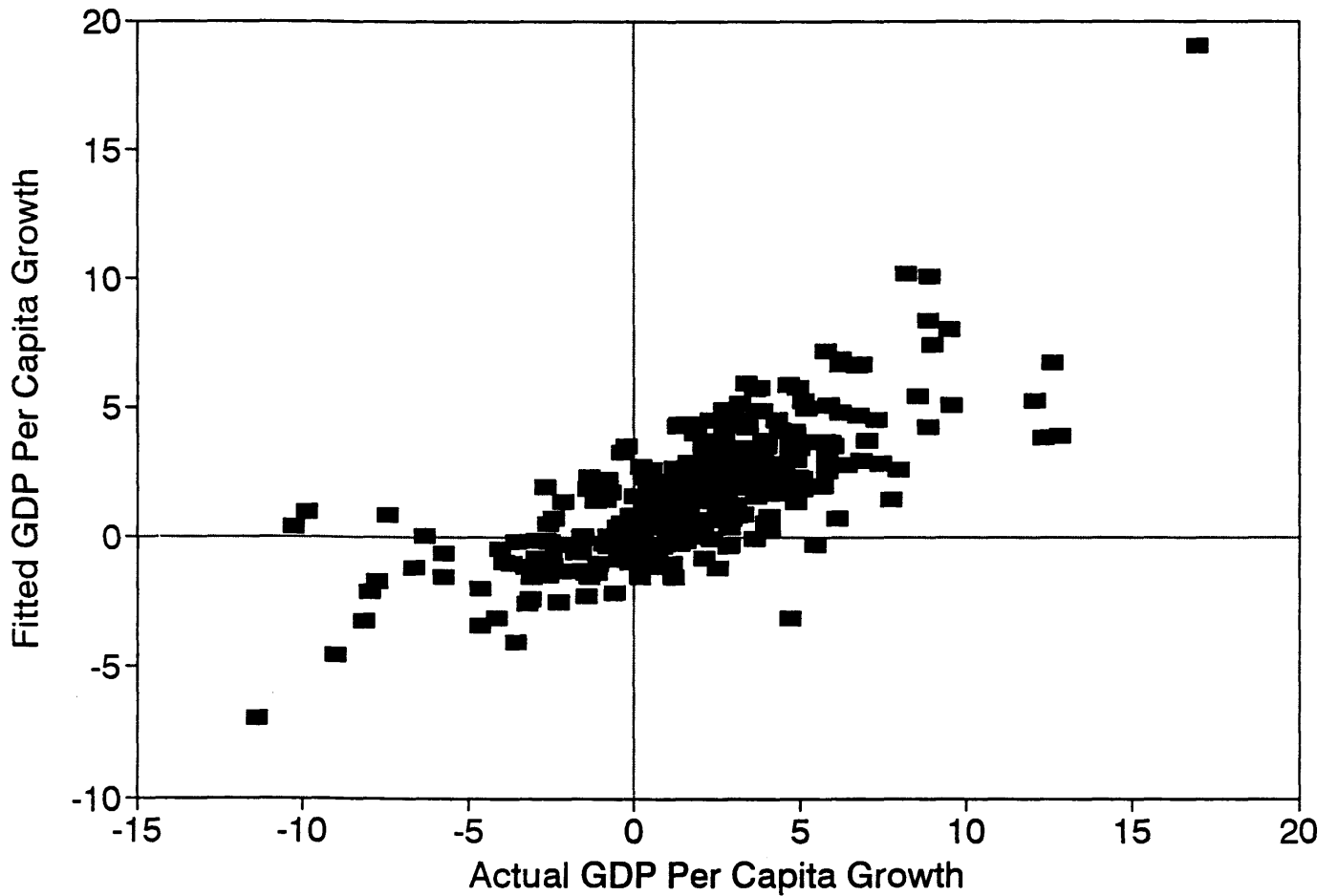
Growth Rates: 1960 - 1985



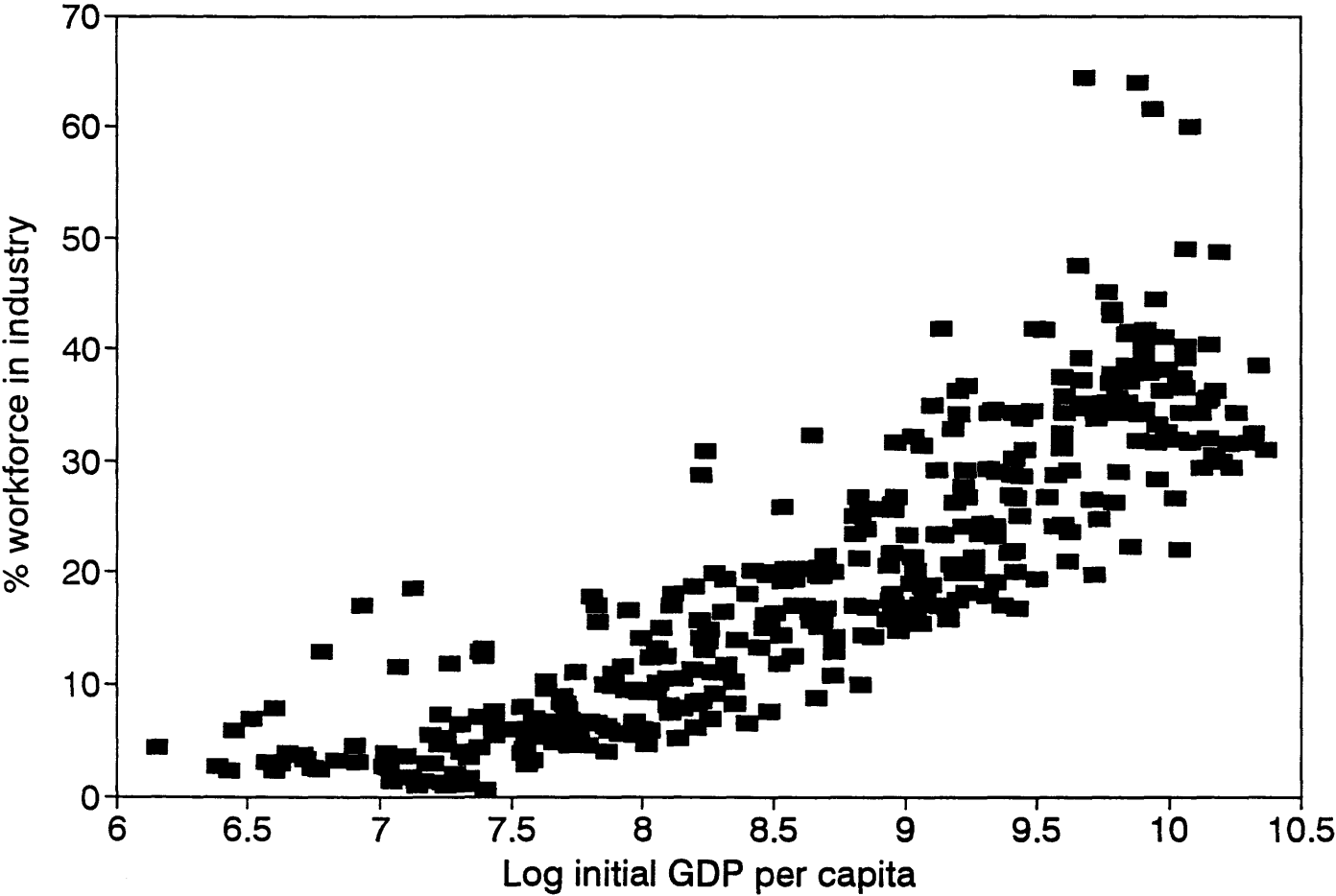
Growth Rates: 5 year intervals



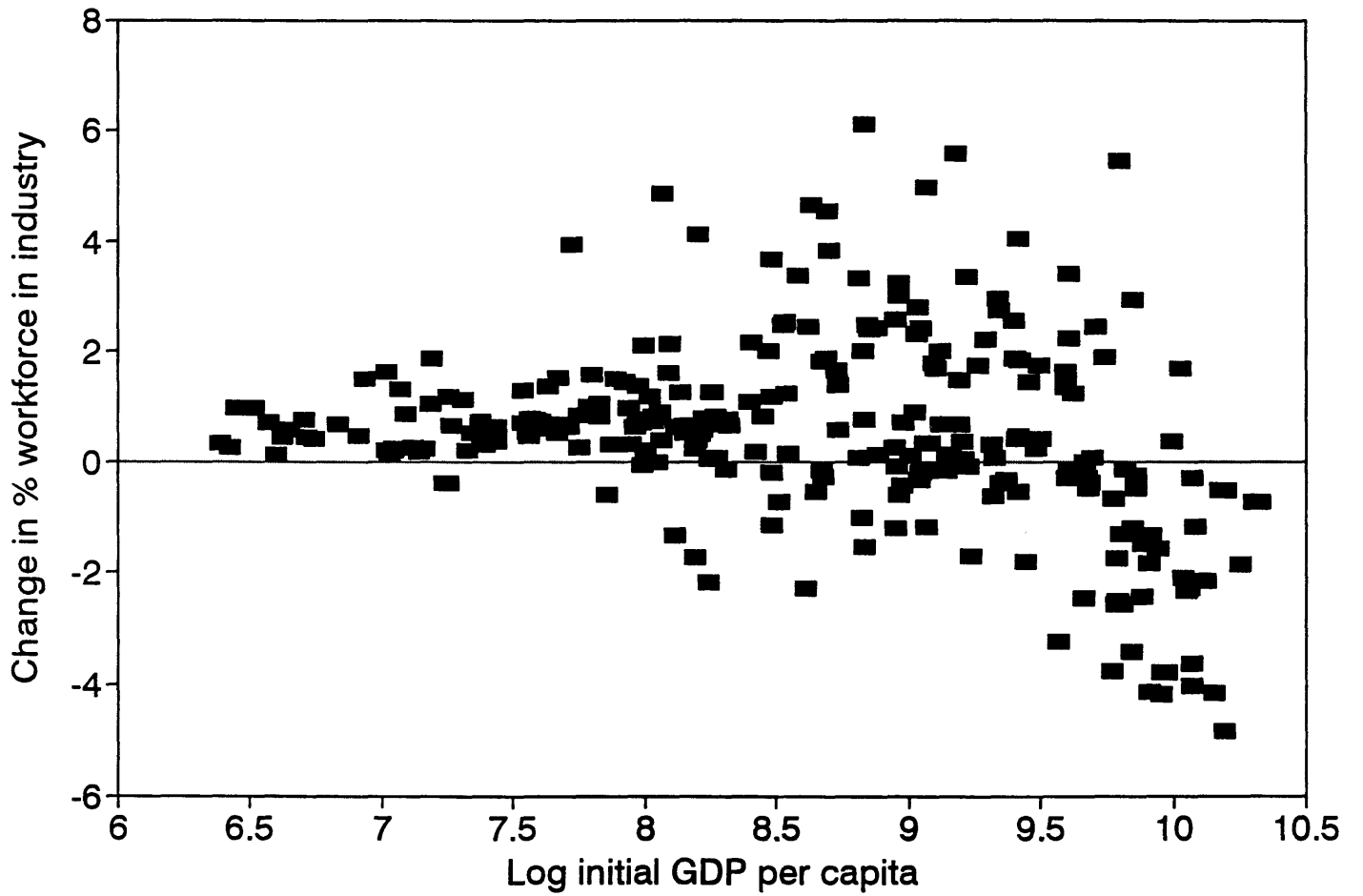
Actual and Fitted GDP Per Capita Growth



Industrialization Level



Industrialization Change



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