

2

Economics of capital punishment

Section 10: Resources

Unit 6: Econometric analysis: The cost of capital punishment in Texas

Regression analysis

Tests were performed to ensure that the data conformed to the assumptions of linear regression. More specifically, P-P plots and scatterplots of residuals were run to assess nonlinearity, variance inflation factors (VIF) scores were run to test for collinearity, and residual diagnostics and Cook's Distance scores were analyzed to assess outliers and their influence (Fox, 1991).

Scatterplots did not indicate any obvious departures from normality. Variance inflation factor scores across all multivariate models ranged from 1.236 to 3.257 thus indicating no issues with collinearity between variables. Finally, there were very few outliers across all 25 models. It was important to assess the impact of each outlier individually as said outliers may represent the counties that are doing the very thing being examined in this study. Put differently, these counties may be performing something abnormally where funding or other government functions are concerned to address the financial impact of a death penalty trial. If that is the case, deleting these cases because they are outliers would be a mistake. Across all 25 multivariate models, there were 36 outliers, all of which had a Cook's Distance of less than one thus suggesting that none were influential. Accordingly, all outliers were left in the dataset.

Multivariate analysis

The following summarizes the multivariate analysis. As in the univariate analysis, these results are presented in the order of the research questions.

Felony trial docket clearance rates

Tables 2.21 through 2.23 depict the impact of death penalty trials on the later processing of murder trials, violent crime trials, and property trials, respectively. Each model also controlled for other available factors such as county spending, unemployment, and crime rates

The "murder trial docket" clearance model depicted in Table 2.21 was statistically significant (p = .005) and explained 38.2% of the variation in 2007 murder trial docket clearance rates (the dependent variable). When individual predictors were concerned, it is first important to note that death penalty trials in 2005 did not have a statistically significant impact on the processing of murder trial dockets in 2007. Two predictors did, however, have a

statistically significant relationship with the dependent variable. Results indicated that murder trial docket clearance rates were higher when murder clearance rates (p = .001) and property crime rates (p = .003) were higher. Of these predictors, property crime rate was the strongest.

TABLE 2.21 Murder trial docket clearance rates in 2007*

	Unstandardized	Standardized	Significance
	coefficients (b)	coefficients (Beta)	(p-value)
Death penalty trial	-2.495	040	.702
Murder	.207	.370	.001
Violent crime	.113	.079	.456
Property crime	.256	.088	.459
Murder rate	.689	.094	.365
Violent crime rate	042	229	.082
Property crime rate	.008	.384	.003
Property tax reliance	.158	.067	.593
Property tax revenue	-7.719	252	.068
Sales tax	-2033.319	164	.125
Other tax	-1.972	020	.846
Unemployment	-629.190	234	.055
Per capita income rate	-25.784	131	.257
2005 % General fund	28.590	.101	.512
2005 % Judicial fund	-10.860	024	.846
2005 % Financial fund	.042	.000	1.000
2005 % Facilities fund	10.605	.019	.868
2005 % Public works fund	9.578	.013	.904
2005 % Public safety fund	33.938	.109	.363
2005 % Transportation fund	-56.747	175	.146
2005 % Health & welfare	-14.907	033	.760
2005 % Capital outlay fund	-36.111	087	.488
2005 % Debt service fund	-9.042	025	.796
2005 % Intragovernmental	-38.019	034	.744

^{*}Murder trial docket clearance rates in 2007 = the dependent variable (p = .005; $R^2 = .382$). All independent variables were measured in 2005. Sample size = 248 counties.







Table 2.22 depicts the results of the "violent crime trial docket" model that were statistically significant (p = .018) and explained 35% of the variation in the dependent variable. Insofar as individual predictors in the model are concerned, it is again noteworthy that the presence of a death penalty trial in 2005 did not impact the processing of violent crime trial dockets in 2007. Conversely, four variables that did impact the dependent variable included property crime clearance rates (p = .022), total property tax revenue as a percent of the overall State average (p = .000), unemployment rate (p = .017), and per capita income rates (p = .039). Property tax revenue was the strongest predictor of violent crime trial docket clearance rates followed by unemployment, per capita income rate, and property crime rates. The signs suggest that violent crime trial docket clearance rates were higher when property crime clearance rates and per capita income rates were higher and when the percentage of property tax revenue and unemployment rates were lower.

TABLE 2.22 Violent murder trial docket clearance rates in 2007*

	Unstandardized	Standardized	Significance
	coefficients (b)	coefficients	(p-value)
		(Beta)	
Death penalty trial	.475	.012	.908
Murder	.028	.082	.472
Violent crime	183	209	.057
Property crime	.501	.283	.022
Murder rate	.880	.196	.067
Violent crime rate	.006	.051	.705
Property crime rate	001	088	.495
Property tax reliance	.179	.124	.335
Property tax revenue	-10.170	542	.000
Sales tax	-68.074	009	.934
Other tax	.736	.012	.908
Unemployment	-493.822	300	.017
Per capita income rate	-29.722	247	.039
2005 % General fund	20.312	.118	.458
2005 % Judicial fund	19.487	.072	.579
2005 % Financial fund	-38.346	091	.437
2005 % Facilities fund	56.506	.166	.159
2005 % Public works fund	59.489	.130	.236
2005 % Public safety fund	25.183	.132	.282
2005 % Transportation fund	3.038	.015	.901
2005 % Health & welfare	.618	.002	.984
2005 % Capital outlay fund	58.680	.231	.074
2005 % Debt service fund	11.453	.051	.601
2005 % Intra-governmental	-44.735	066	.540

^{*}Violent crime trial docket clearance rates in 2007 = the dependent variable (p = .018; $R^2 = .359$). All independent variables were measured in 2005.







4 2.10.5: Econometric analysis

Table 2.23 depicts the results of the "property crime trial docket" model that was only marginally statistically significant (p = .086) which engendered less trust that a real relationship with the dependent variable existed. Although the p-value was less than .100, it was still generally acceptable as statistically significant in social sciences. This was further supported by the model's substantive significance that explained 30.2% of the variation in 2007 property crime trial docket clearance rates.

TABLE 2.23 Property crime trial docket clearance rates in 2007*

	Unstandardized	Standardized	Significance
	coefficients (b)	coefficients	(p-value)
		(Beta)	
Death penalty trial	.475	.012	.908
Murder	.028	.082	.472
Violent crime	183	209	.057
Property crime	.501	.283	.022
Murder rate	.880	.196	.067
Violent crime rate	.006	.051	.705
Property crime rate	001	088	.495
Property tax reliance	.179	.124	.335
Property tax revenue	-10.170	542	.000
Sales tax	-68.074	009	.934
Other tax	.736	.012	.908
Unemployment	-493.822	300	.017
Per capita income rate	-29.722	247	.039
2005 % General fund	20.312	.118	.458
2005 % Judicial fund	19.487	.072	.579
2005 % Financial fund	-38.346	091	.437
2005 % Facilities fund	56.506	.166	.159
2005 % Public works fund	59.489	.130	.236
2005 % Public safety fund	25.183	.132	.282
2005 % Transportation fund	3.038	.015	.901
2005 % Health & welfare	.618	.002	.984
2005 % Capital outlay fund	58.680	.231	.074
2005 % Debt service fund	11.453	.051	.601
2005 % Intra-governmental	-44.735	066	.540

^{*}Property trial docket clearance rates in 2007 = the dependent variable (p = .086; $R^2 = .302$). All independent variables were measured in 2005.







Again, where individual predictors in the model were concerned, the presence of a death penalty trial in 2005 did not impact the processing of property crime trial dockets in 2007. This means that death penalty trials in 2005 did not affect the processing of any felony trials in 2007. The five variables that did impact the dependent variable included violent crime clearance rates (p = .030), property tax reliance rates (p = .039), the percentage of property tax revenue (p = .002), unemployment rates (p = .036), and the percent of county funds dedicated to a financial fund (p = .040). The standardized regression coefficients suggest that property tax revenue was the strongest predictor of property crime trial docket clearance rates while the violent crime clearance rate was the weakest statistically significant predictor. The signs suggest that property crime trial docket clearance rates proved to be higher when property tax reliance rates were higher and when violent crime clearance rates, the percent of property tax revenue, unemployment, and financial fund expenditures were lower.

Police effectiveness

Tables 2.24 and 2.25 depict the results of police effectiveness in the form of murder and property crime clearance rates, respectively. A similar model was run to measure the impact of death penalty trials on violent crime clearance rates; however, the model itself was not statistically significant (p = .449) and none of the individual predictors had a significant impact on the outcome. That being the case, the model was not tabled and presented. In the remaining two models, the impact of death penalty trials on police effectiveness was measured while controlling for other available factors such as county spending, unemployment, and crime rates.

TABLE 2.24 Murder clearance rates in 2007*

	Unstandardized coefficients (b)	Standardized coefficients	Significance (p-value)
	coemcients (b)	(Beta)	(p-value)
Death penalty trial	19.719	.201	.068
Murder	.805	.070	.500
Violent crime	.067	.232	.074
Property crime	.003	.087	.489
Murder rate	.050	.030	.765
Violent crime rate	.185	.075	.523
Property crime rate	.034	.012	.918
Property tax reliance	.010	.003	.984
Property tax revenue	-7.624	158	.243
Sales tax	-2966.624	153	.155
Other tax	21.756	.140	.181
Unemployment	305.136	.072	.556

(Continued)

The Economics of Human Rights (Routledge). © 2019 Elizabeth M. Wheaton.



15034-2048-e-Resouce-2 indd 5



TABLE 2.24 (Continued)

	Unstandardized	Standardized	Significance
	coefficients (b)	coefficients	(p-value)
		(Beta)	
Per capita income rate	-27.954	090	.437
2005 % General fund	-76.278	172	.280
2005 % Judicial fund	-39.853	057	.665
2005 % Financial fund	24.767	.023	.844
2005 % Facilities fund	-12.810	015	.899
2005 % Public works fund	-40.600	035	.756
2005 % Public safety fund	-49.813	102	.403
2005 % Transportation fund	-27.721	054	.676
2005 % Health & welfare	-35.773	050	.644
2005 % Capital outlay fund	41.789	.064	.616
2005 % Debt service fund	44.371	.077	.438
2005 % Intra-governmental	41.727	.024	.822

^{*}Murder clearance rates in 2007 = the dependent variable (p = .016; $R^2 = .353$). All independent variables were measured in 2005.

The murder clearance rate model was statistically significant (p = .016) and explained 35.3% of the variation in murder clearances in 2007. When individual predictors were concerned, none had a statistically significant relationship at the higher standard of p < .05. Still, two predictors were marginally statistically significant (p < .100): the presence of a death penalty trial (p = .068) and violent crime rates (p = .074). The standardized regression coefficients suggest that the violent crime rate was a slightly stronger predictor of the outcome variable. Signs suggest that murder clearance rates in 2007 were higher when there were more death penalty trials and when violent crime rates were higher in 2005.

As shown in Table 2.25, the property crime clearance model was statistically and substantively significant (p = .016). It explained 35.3% of the variation in the dependent variable (property crime clearance). Where individual predictors were concerned, it is important to note that an increase in death penalty trials had no relationship with later property crime clearance rates. Recall that this was also true for violent crime clearance rates. Property crime clearance rates were statistically and significantly related to property crime rates (p = 0.019), the percentage of property tax revenue (p = 0.028), and the percentage of county funds assigned to transportation (p = 0.034). Standardized regression coefficients indicate that the predictors were very close in strength with property tax revenue being slightly stronger than the other two. Directions of the relationships indicate that property crime clearance rates were higher when property crime rates were lower and when the percentage of property tax revenue, as well as transportation fund expenditures, were higher.







TABLE 2.25 Property crime clearance rates in 2007*

	Unstandardized	Standardized	Significance
	coefficients (b)	coefficients	(p-value)
		(Beta)	
Death penalty trial	-1.399	056	.610
Murder	492	167	.109
Violent crime	.006	.076	.556
Property crime	002	297	.019
Murder rate	.027	.064	.526
Violent crime rate	.104	.164	.164
Property crime rate	.000	.000	.997
Property tax reliance	.082	.087	.499
Property tax revenue	3.719	.301	.028
Sales tax	925.833	.186	.084
Other tax	-2.842	071	.494
Unemployment	193.612	.179	.147
Per capita income rate	-6.352	080	.490
2005 % General fund	10.021	.088	.579
2005 % Judicial fund	42.519	.237	.074
2005 % Financial fund	-37.561	136	.245
2005 % Facilities fund	-4.924	022	.849
2005 % Public works fund	-22.033	073	.511
2005 % Public safety fund	10.062	.080.	.510
2005 % Transportation fund	36.686	.281	.034
2005 % Health & welfare	27.933	.153	.162
2005 % Capital outlay fund	25.627	.153	.232
2005 % Debt service fund	7.988	.054	.586
2005 % Intra-governmental	27.300	.061	.567

^{*}Property clearance rates in 2007 = the dependent variable (p = .016; $R^2 = .353$). All independent variables were measured in 2005.

County crime rates

Initially, three models were run to examine the impact of death penalty trials on county crime rates. The model that was used to specifically measure murder rates was neither statistically significant nor did it contain any statistically significant predictors. Accordingly, the murder rate model was not tabled and presented. Hence, Tables 2.26 and 2.27 depict the remaining two models in which the impact of death penalty trials on violent and property







crime rates, respectively, were examined. Again, other factors such as county funding, police action, and unemployment were controlled.

The violent crime rate model (presented in Table 2.26) was statistically significant (p = .000) by explaining 47.1% of the variation in violent crime rates. In examining individual predictors, death penalty trials cleared in 2005 indicated that the model in 2005 did not have a statistically significant relationship with later violent crime rates. Murder clearance rates (p = .020), property crime clearance rates (p = .028), and the percentage of public works funding (p = .000) were statistically and significantly related to the outcome variable. Standardized regression coefficients indicated that the percentage of public works funding was the strongest predictor of violent crime rates, while murder clearance rates were the weakest. Directions of the relationships suggest that violent crime clearance rates were higher when murder clearance rates and the percentage of public works funding were higher. Violent crime clearance rates were also higher when property crime clearance rates were lower.

TABLE 2.26 Violent crime clearance rates in 2007*

	Unstandardized	Standardized	Significance
	coefficients (b)	coefficients	(p-value)
		(Beta)	
Death penalty trial	14.748	.036	.712
Murder	.840	.227	.020
Violent crime	478	051	.616
Property crime	-4.366	229	.028
Murder rate	120	017	.853
Violent crime rate	1.090	.105	.308
Property crime rate	1.776	.150	.167
Property tax reliance	473	030	.798
Property tax revenue	21.200	.105	.449
Sales tax	94418.087	.116	.239
Other tax	-93.630	144	.129
Unemployment	2485.667	.140	.206
Per capita income rate	-152.870	118	.277
2005 % General fund	193.598	.104	.476
2005 % Judicial fund	396.544	.135	.261
2005 % Financial fund	-162.841	036	.732
2005 % Facilities fund	237.796	.065	.534
2005 % Public works fund	1922.973	.390	.000
2005 % Public safety fund	173.261	.084	.453



(

	Unstandardized	Standardized	Significance
	coefficients (b)	coefficients	(p-value)
		(Beta)	
2005 % Transportation fund	-25.231	012	.920
2005 % Health & welfare	13.523	.005	.964
2005 % Capital outlay fund	251.295	.092	.443
2005 % Debt service fund	253.986	.106	.239
2005 % Intra-governmental	-222.456	030	.751

^{*}Violent crime clearance rates in 2007 = the dependent variable (p = .000; $R^2 = .471$). All independent variables were measured in 2005.

As shown in Table 2.27, the property crime model was both statistically and substantively significant (p = .000). It explained 53.4% of the variation in the dependent variable. Consistent with all crime rate models, the increase in death penalty trials did not predict property crime rates. Violent crime clearance rates (p = .029), property crime clearance rates (p = .001), and the percentage of intra-governmental funding (p = .027) were statistically significant predictors of property crime rates. According to the direction of the relationships, property crime rates were higher when all three of these factors were lower. Of these variables, property crime clearance rates proved to be the strongest predictor whereas the percentage of violent crime clearance rates was the weakest.

TABLE 2.27 Property crime clearance rates in 2007*

	Unstandardized coefficients (b)	Standardized coefficients	Significance (p-value)
	coomelens (b)	(Beta)	(p value)
Death penalty trial	93.842	.034	.706
Murder	4.005	.163	.073
Violent crime	-13.102	209	.029
Property crime	-40.723	321	.001
Murder rate	1.883	.041	.642
Violent crime rate	-2.774	040	.676
Property crime rate	1.392	.018	.861
Property tax reliance	-3.568	035	.756
Property tax revenue	-73.625	055	.672
Sales tax	43968.209	.081	.377
Other tax	66.324	.015	.862

(Continued)

The Economics of Human Rights (Routledge). © 2019 Elizabeth M. Wheaton.





15034-2048-e-Resouce-2.indd 9

10 2.10.5: Econometric analysis

TABLE 2.27 (Continued)

	Unstandardized	Standardized	Significance
	coefficients (b)	coefficients	(p-value)
		(Beta)	
Unemployment	21043.565	.178	.087
Per capita income rate	-1408.444	164	.109
2005 % General fund	461.154	.037	.785
2005 % Judicial fund	233.983	.012	.915
2005 % Financial fund	-2125.677	071	.474
2005 % Facilities fund	1416.173	.058	.552
2005 % Public works fund	1241.691	.038	.693
2005 % Public safety fund	1677.041	.123	.245
2005 % Transportation fund	-361.698	026	.818
2005 % Health & welfare	1300.540	.066	.484
2005 % Capital outlay fund	2404.168	.132	.240
2005 % Debt service fund	1997.679	.125	.138
2005 % Intra-governmental	-9814.720	202	.027

^{*}Property crime clearance rates in 2007 = the dependent variable (p = .000; $R^2 = .534$). All independent variables were measured in 2005.

County revenue sources

Initially, four models were run in order to examine the impact of death penalty trials on county revenue sources (property tax reliance, property tax revenue, sales tax and other taxes). The models used to examine the impact of death penalty trials on sales taxes and other taxes were neither statistically significant nor did they contain any statistically significant predictors. Accordingly, these two models were not presented. Tables 2.28 and 2.29 illustrate the remaining two models in which the impact of death penalty trials on property tax reliance and the percent of total property tax revenues were examined, respectively. Again, other factors such as county funding, police action, and unemployment were controlled.

The property tax reliance model was statistically significant (p = .006) and explained 36% of the variation in the dependent variable. When individual predictors were concerned, the percentage of funding dedicated to a financial fund (p = .011) as well as to a facilities fund (p = .009) were both statistically significant related to later property tax reliance, with the percentage of financial fund spending being the strongest predictor. The directions of the relationships suggested that property tax reliance was higher when the percentage of county funding dedicated to a financial fund was lower and when the percentage of county funding dedicated to a facilities fund was higher. Notably, death penalty trials did not have a statistically significant impact on property tax reliance.





TABLE 2.28 Property tax reliance in 2007*

	Unstandardized coefficients (b)	Standardized coefficients (Beta)	Significance (p-value)
Death penalty trial	2.346	.097	.352
Murder rate	.212	.074	.479
Violent crime rate	011	149	.243
Property crime rate	.000	.060	.633
Murder arrest rate	.045	.208	.060
Violent crime arrest rate	023	041	.682
Property crime arrest rate	.158	.141	.190
Murder trial clearance rate	017	043	.650
Violent trial clearance rate	.080	.129	.236
Property trial clearance rate	.012	.018	.872
Unemployment	-85.164	081	.488
Per capita income rate	10.444	.135	.236
2005 % General fund	-12.636	114	.458
2005 % Judicial fund	-33.191	189	.132
2005 % Financial fund	-75.901	281	.011
2005 % Facilities fund	60.317	.276	.009
2005 % Public works fund	-15.769	054	.617
2005 % Public safety fund	-25.326	208	.084
2005 % Transportation fund	24.171	.190	.126
2005 % Health & welfare	-13.381	076	.481
2005 % Capital outlay fund	-16.403	102	.424
2005 % Debt service fund	9.703	.067	.482
2005 % Intra-governmental	-21.001	048	.640

^{*}Property tax reliance rates in 2007 = the dependent variable (p = .006; $R^2 = .360$). All independent variables were measured in 2005.

Table 2.29 presents the percentage of property tax revenue model that was statistically significant (p = .000) and explained 55.7% of the variation in the dependent variable. Six independent variables had a statistically significant relationship with the dependent variable: violent crime clearance rate (p = .008), property crime clearance rate (p = .000), murder trial docket clearance rate (p = .012), unemployment rate (p = .016), the percentage of judicial fund expenditures (p = .012), and the percentage of facilities fund expenditures (p = .000). Standardized regression coefficients indicated that the percentage of facilities fund expenditures was the strongest predictor whereas murder trial docket clearance rates





12 2.10.5: Econometric analysis

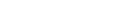
was the weakest predictor. Directions of the relationships suggested that the percentage of property revenue was higher when violent crime clearance rates, murder trial docket clearance rates, unemployment rates, and the percentage of judicial fund expenditures were lower and when property crime clearance rates and the percentage of facilities fund expenditures were higher. Again, death penalty trials did not have a significant impact on the percentage of property tax revenue or any other form of county revenue sources (property tax reliance rates, sales tax, or other taxes).

TABLE 2.29 Property tax revenue in 2007*

	Unstandardized coefficients (b)	Standardized coefficients (Beta)	Significance (p-value)
Death penalty trial	132	063	.467
Murder rate	008	034	.696
Violent crime rate	000	044	.680
Property crime rate	000	003	.976
Murder arrest rate	.000	027	.772
Violent crime arrest rate	011	232	.008
Property crime arrest rate	.034	.361	.000
Murder trial clearance rate	007	205	.012
Violent trial clearance rate	.008	.158	.091
Property trial clearance rate	010	170	.073
Unemployment	-21.517	238	.016
Per capita income rate	666	101	.292
2005 % General fund	235	025	.849
2005 % Judicial fund	-4.034	270	.012
2005 % Financial fund	-2.615	114	.216
2005 % Facilities fund	5.989	.321	.000
2005 % Public works fund	058	002	.980
2005 % Public safety fund	-1.955	187	.063
2005 % Transportation fund	418	039	.712
2005 % Health & welfare	1.130	.074	.407
2005 % Capital outlay fund	.104	.007	.944
2005 % Debt service fund	1.314	.107	.186
2005 % Intra-governmental	.830	.022	.798

^{*}The percentage of property tax revenue (State average) in 2007 = the dependent variable (p = .000; $R^2 = .557$). All independent variables were measured in 2005.





30-08-2018 12:56:34



Unemployment and Per capita income rates

Two models were run in order to examine the impact of death penalty trials on unemployment as well as per capita income rates. The "per capita income rate" model was statistically insignificant and did not contain any statistically significant predictors. Thus, it was not tabled or presented.

Table 2.30 illustrates the results of the unemployment model that was statistically and substantially significant (p=.044). The model R2 indicated that 33.4% of the variation in the dependent variable (unemployment) was explained. As far as the individual predictors were concerned, death penalty trials did not have a significant impact on unemployment. However, the percentage of county spending dedicated to public works funds (p=.041) and intra-governmental funds (p=.025) were positively and significantly related to the dependent variable with intra-governmental fund expenditures being the strongest predictor.

TABLE 2.30 Unemployment rates in 2007*

	Unstandardized	Standardized	Significance
	coefficients (b)	coefficients	(p-value)
		(Beta)	
Death penalty trial	.000	.029	.800
Murder rate	.000	.104	.349
Violent crime rate	.000	.200	.142
Property crime rate	.000	.110	.400
Murder clearance rate	000	027	.817
Violent crime clearance rate	.000	.038	.735
Property crime clearance rate	.000	.232	.061
Murder trial	.000	.037	.730
Violent crime trial docket clearance rate	.000	.038	.748
Property crime trial docket clearance rate	000	081	.512
Property tax reliance	000	063	.630
Property tax revenue	002	276	.071
Sales tax	248	076	.500
Other tax	.002	.061	.568
2005 % General fund	.016	.213	.194
2005 % Judicial fund	.000	001	.993
2005 % Financial fund	.026	.140	.242
2005 % Facilities fund	.014	.092	.426
2005 % Public works fund	.046	.232	.041
2005 % Public safety fund	006	078	.538

(Continued)

The Economics of Human Rights (Routledge). © 2019 Elizabeth M. Wheaton.



15034-2048-e-Resouce-2.indd 13





14 2.10.5: Econometric analysis

TABLE 2.30 (Continued)

	Unstandardized coefficients (b)	Standardized coefficients (Beta)	Significance (p-value)
2005 % Transportation fund	.002	.024	.856
2005 % Health & welfare	.019	.157	.164
2005 % Capital outlay fund	.005	.048	.717
2005 % Debt service fund	.003	.027	.759
2005 % Intra-governmental	.071	.241	.025

^{*}The unemployment rate in 2007 = the dependent variable (p = .044; $R^2 = .334$). All independent variables were measured in 2005.

Government funding

Eleven models were initially run to examine the effect of death penalty trials on county government spending. However, one model (used to examine the impact of death penalty trials on debt service fund expenditures) was neither statistically significant nor had any statistically significant predictors. Therefore, only the remaining 10 models are tabled (Tables 2.31–2.40) and presented here. Clearly, the predominant predictors of financial distribution to each type of fund were previous funding decisions. Models were run without these rather large predictors in order to better see any significance from other independent variables. Unfortunately, all but four models did not reach statistical significance without these predictors thus indicating that the models did not explain the dependent variable well. Therefore, the models that are presented here contain previous funding decisions as predictors of the later funding decisions.

Insofar as the percent of general fund expenditures is concerned, Table 2.31, the model was statistically (p=.000) and substantively significant (R2=.829) that explained 82.9% of the variation in the dependent variable (the percentage of county funds dedicated to a general fund). Notably, however, the model was largely driven by one predictor. Specifically, the 2007 percentage of county funds being concentrated into a general fund was statistically and significantly predicted by the percentage of 2005 county funds that were concentrated into the general fund (p=.000) when all counties in Texas were combined. Hence, if funding was high in 2005, it was also more likely to be high in 2007.

TABLE 2.31 General fund expenses in 2007*

	Unstandardized	Standardized	Significance
	coefficients (b)	coefficients	(p-value)
		(Beta)	
Death penalty trial	.011	.050	.391
Murder rate	000	002	.974
Violent crime rate	000	024	.737
Property crime rate	.000	.014	.837





	Unstandardized	Standardized	Significance
	coefficients (b)	coefficients	(p-value)
Murder clearance rate	000	083	.173
Violent crime clearance rate	.000	.017	.772
Property crime clearance rate	001	102	.114
Murder trial docket clearance rate	000	022	.693
Violent crime trial docket clearance rate	.000	.019	.753
Property trial docket clearance rate	.000	.072	.260
Property tax reliance	000	025	.717
Property tax revenue	.012	.115	.154
Sales tax	1.744	.040	.487
Other tax	.007	.020	.716
Per capita income rate	.133	.014	.829
Unemployment	017	024	.705
2005 % General fund	.813	.821	.000
2005 % Judicial fund	084	054	.449
2005 % Financial fund	.007	.003	.964
2005 % Facilities fund	013	007	.913
2005 % Public works fund	039	015	.802
2005 % Public safety fund	084	077	.243
2005 % Transportation fund	.011	.009	.892
2005 % Health & welfare	135	085	.146
2005 % Capital outlay fund	.057	.039	.576
2005 % Debt service fund	.003	.002	.963
2005 % Intra-governmental	242	062	.275

^{*}The percent of General funds in 2007 = the dependent variable (p = .000; $R^2 = .829$). All independent variables were measured in 2005.

Table 2.32 illustrates the judicial fund expenditure model that was statistically significant (p = .000) and substantively significant (R2 = .818). As shown, 81.8% of the variation in the percentage of county funds dedicated to a judicial fund was explained in the model. As far as individual predictors were concerned, the percentage of spending dedicated to the judicial fund was statistically but marginally significant when related to property tax reliance (p = .068) and to previous judicial fund spending (p = .000). Of these two variables, previous spending on a judicial fund was the strongest predictor. Directions of the relationships





suggest that the percentage of county monies that went towards a judicial fund in 2007 would have been higher if more had been dedicated to a judicial fund in 2005 and if the property tax reliance rate had been lower in 2005. As in the previous model, death penalty trials were not statistically significant when related to this type of county spending.

TABLE 2.32 Judicial fund expenses in 2007*

	Unstandardized	Standardized	Significance
	coefficients (b)	coefficients	(p-value)
		(Beta)	
Death penalty trial	005	036	.545
Murder rate	.001	.092	.121
Violent crime rate	.000	.017	.816
Property crime rate	000	098	.165
Murder clearance rate	000	047	.457
Violent crime clearance rate	000	077	.208
Property crime clearance rate	.000	.055	.942
Murder trial docket clearance rate	.000	.070	.214
Violent crime trial docket clearance rate	000	066	.305
Property trial docket clearance rate	000	013	.841
Property tax reliance	001	132	.068
Property tax revenue	000	002	.983
Sales tax	714	028	.641
Other tax	.004	.021	.720
Per capita income rate	577	103	.127
Unemployment	.007	.017	.791
2005 % General fund	030	050	.570
2005 % Judicial fund	.799	.865	.000
2005 % Financial fund	038	026	.678
2005 % Facilities fund	033	029	.651
2005 % Public works fund	095	061	.320
2005 % Public safety fund	020	031	.642
2005 % Transportation fund	037	055	.439
2005 % Health & welfare	.040	.043	.479
2005 % Capital outlay fund	003	004	.958
2005 % Debt service fund	004	006	.913
2005 % Intra-governmental	001	001	.992

^{*}The percent of judicial funds in 2007 = the dependent variable (p = .000; $R^2 = .818$). All independent variables were measured in 2005.





The Economics of Human Rights (Routledge). © 2019 Elizabeth M. Wheaton.



Table 2.33 illustrates the financial fund expenditure model that was statistically (p = .000) and substantively significant (R2 = .658). Almost 66% of the variation in the percentage of county funds dedicated to a financial fund was explained by the model. Inasmuch as individual predictors were concerned, the percentage of 2007 spending dedicated to the financial fund was statistically and significantly related to death penalty trials (p = .043) as well as previous spending on financial (p = .000) and facilities funds (p = .032). Of these variables, previous financial fund expenditures were the strongest predictors whereas death penalty trials were the weakest. Directions of the relationships suggest that the percentage of county monies that went towards a financial fund in 2007 would have been greater if additional expenditures had been dedicated to a financial or facilities fund in 2005, as well as if there had been fewer death penalty trials in 2005.

TABLE 2.33 Financial fund expenses in 2007*

	Unstandardized	Standardized	Significance
	coefficients (b)	coefficients	(p-value)
		(Beta)	
Death penalty trial	010	168	.043
Murder rate	.001	.083	.306
Violent crime rate	000	002	.987
Property crime rate	000	004	.964
Murder clearance rate	.000	.064	.458
Violent crime clearance rate	000	050	.549
Property crime clearance rate	.000	.126	.167
Murder trial docket clearance rate	000	090	.248
Violent crime trial docket clearance rate	.000	.069	.430
Property trial docket clearance rate	000	158	.081
Property tax reliance	.000	.176	.077
Property tax revenue	005	176	.124
Sales tax	-1.648	137	.097
Other tax	.009	.095	.230
Per capita income rate	449	171	.065
Unemployment	008	043	.637
2005 % General fund	008	031	.799
2005 % Judicial fund	.008	.019	.847
2005 % Financial fund	.402	.600	.000
2005 % Facilities fund	.104	.191	.032
2005 % Public works fund	068	093	.272

(Continued)





TABLE 2.33 (Continued)

	Unstandardized coefficients (b)	Standardized coefficients (Beta)	Significance (p-value)
2005 % Public safety fund	.032	.104	.264
2005 % Transportation fund	.001	.003	.974
2005 % Health & welfare	049	112	.178
2005 % Capital outlay fund	018	043	.660
2005 % Debt service fund	018	050	.497
2005 % Intra-governmental	.167	.154	.058

^{*}The percent of Financial funds in 2007 = the dependent variable (p = .000; $R^2 = .570$). All independent variables were measured in 2005.

Table 2.34 illustrates that the facilities fund expenditure model was statistically (p = .000) and substantively significant (R2 = .570) by explaining 57% of variation in the dependent variable. When individual predictors were considered, the percentage of spending dedicated to a facilities fund was statistically and significantly related to the previous concentration of capital in a facilities fund (p = .000). In addition, the variable was marginally, yet significantly, related to the violent crime rate (p = .071). Thus, the relational directions suggest that the percentage of county monies spent in 2007 would have been greater if more funds been dedicated to a facilities fund in 2005 and if, perhaps, the 2005 violent crime rate had been lower. As in many of the previous models, death penalty trials were not statistically or significantly related to these types of county spending.

Table 2.34 Facilities fund expenses in 2007*

	Unstandardized coefficients (b)	Standardized coefficients (Beta)	Significance (p-value)
Death penalty trial	.002	.014	.880
Murder rate	.001	.053	.561
Violent crime rate	000	203	.071
Property crime rate	.000	.148	.170
Murder clearance rate	.000	.083	.391
Violent crime clearance rate	.000	.018	.845
Property crime clearance rate	.000	.083	.418
Murder trial docket clearance rate	000	090	.248
Violent crime trial docket clearance rate	.000	.033	.734





Unstandardized coefficients (b)	Standardized coefficients (Beta)	Significance (p-value)
.000	.103	.308
000	078	.478
.004	.073	.569
.661	.030	.744
005	027	.760
.311	.065	.531
.054	.153	.132
013	025	.851
024	030	.788
.022	.018	.852
.715	.718	.000
077	058	.541
.030	.053	.609
024	042	.703
017	021	.821
046	062	.575
024	037	.658
001	001	.996
	coefficients (b) .000000 .004 .661005 .311 .054013024 .022 .715077 .030024017046024	Unstandardized coefficients (b) coefficients (Beta) .000 .103 .000 078 .004 .073 .661 .030 005 027 .311 .065 .054 .153 013 025 024 030 .022 .018 .715 .718 077 058 .030 .053 024 042 017 021 046 062 024 037

^{*}The percent of Facilities funds in 2007 = the dependent variable (p = .000; $R^2 = .570$). All independent variables were measured in 2005.

Table 2.35 illustrates the public works fund expenditure model that was statistically significant (p = .000) and again, substantively significant (R2 = .870) by explaining 87% of the dependent variable's variation. Insofar as individual predictors were concerned, the percentage of spending dedicated to a public works fund was statistically significant when related to the previous percentages of spending dedicated monies to facilities funds (p = .027), public works funds (p = .000) and transportation funds (p = .035). Of these predictors, previous dedication of monies to public works funds was the strongest predictor, whereas the previous dedication of monies to facilities funds was the weakest. Directions of the relationships suggest that the percentage of county monies spent towards a public works fund in 2007 would have been higher if additional funds had been dedicated to a public works fund and if fewer expenditures had been dedicated to facilities and transportation funds in 2005. Once more, death penalty trials were not statistically or significantly related to these types of county spending.





TABLE 2.35 Public works fund expenses in 2007*

	Unstandardized coefficients (b)	Standardized coefficients	Significance (p-value)
		(Beta)	
Death penalty trial	001	012	.808
Murder rate	.000	.011	.819
Violent crime rate	000	019	.760
Property crime rate	.000	.012	.833
Murder clearance rate	000	025	.636
Violent crime clearance rate	000	.000	.998
Property crime clearance rate	000	037	.508
Murder trial docket clearance rate	000	044	.358
Violent crime trial docket clearance rate	.000	.086	.111
Property trial docket clearance rate	000	020	.713
Property tax reliance	.000	.072	.240
Property tax revenue	001	027	.699
Sales tax	.003	.000	.997
Other tax	006	056	.250
Per capita income rate	.133	.042	.461
Unemployment	.018	.077	.169
2005 % General fund	015	046	.544
2005 % Judicial fund	.007	.013	.838
2005 % Financial fund	.018	.022	.680
2005 % Facilities fund	079	121	.027
2005 % Public works fund	.785	.893	.000
2005 % Public safety fund	032	086	.135
2005 % Transportation fund	049	128	.035
2005 % Health & welfare	009	016	.753
2005 % Capital outlay fund	032	065	.289
2005 % Debt service fund	004	010	.833
2005 % Intra-governmental	003	002	.963

^{*}The percent of public works funds in 2007 = the dependent variable (p = .000; $R^2 = .870$). All independent variables were measured in 2005.

Table 2.36 illustrates the public safety fund expenditure model that was statistically (p = .000) and substantively significant (R2 = .707) in explaining 70.7% of the variation in the dependent variable. To the extent that individual predictors were concerned, the percentage of spending committed monies to a public safety fund was statistically and







significantly related to previous percentages of spending dedicated monies to general funds (p=.001), judicial funds (p=.001), public safety funds (p=.000), transportation funds (p=.009), health and welfare funds (p=.008), and capital outlay funds (p=.019). Of these predictors, previous dedication of monies to public safety funds was the strongest predictor whereas the previous dedication of monies to health and welfare funds was the weakest. Directions of the relationships suggest that the percentage of county monies that were spent towards a public safety fund in 2007 would have been greater if more had been dedicated to public safety funds in 2005 and if less money had been dedicated to general funds, judicial funds, transportation funds, health and wellness funds, and capital outlay funds in 2005. Yet again, death penalty trials were not statistically or significantly related to this type of county spending.

TABLE 2.36 Public safety fund expenses in 2007*

	Unstandardized coefficients (b)	Standardized	Significance (p-value)
		coefficients	
		(Beta)	
Death penalty trial	005	030	.689
Murder rate	001	037	.623
Violent crime rate	000	043	.643
Property crime rate	000	010	.907
Murder clearance rate	.000	.124	.121
Violent crime clearance rate	.000	.081	.291
Property crime clearance rate	.001	.074	.380
Murder trial docket clearance rate	.000	.039	.585
Violent crime trial docket clearance rate	001	132	.105
Property trial docket clearance rate	.000	.079	.341
Property tax reliance	.000	021	.819
Property tax revenue	005	060	.571
Sales tax	1.661	.048	.524
Other tax	009	032	.663
Per capita income rate	1.018	.136	.113
Unemployment	002	003	.967
2005 % General fund	311	395	.001
2005 % Judicial fund	379	306	.001
2005 % Financial fund	232	121	.135
2005 % Facilities fund	147	095	.245
2005 % Public works fund	.050	.024	.760
2005 % Public safety fund	.497	.572	.000

(Continued)





TABLE 2.36 (Continued)

	Unstandardized coefficients (b)	Standardized coefficients (Beta)	Significance (p-value)
2005 % Transportation fund	215	239	.009
2005 % Health & welfare	260	206	.008
2005 % Capital outlay fund	252	218	.019
2005 % Debt service fund	.037	.036	.599
2005 % Intra-governmental	369	119	.112

^{*}The percent of public safety funds in 2007 = the dependent variable (p = .000; $R^2 = .707$). All independent variable ables were measured in 2005.

Table 2.37 illustrates that the transportation fund expenditure model was statistically (p = .000) and substantively (R2 = .919) significant by explaining 91.9% of the variation in the dependent variable. Concerning individual predictors, the percentage of spending dedicated monies to a transportation fund was statistically and significantly related to previous percentages of spending dedicated monies to general funds (p = .001), judicial funds (p = .000), public safety funds (p= .000), transportation funds (p = .000), health and welfare funds (p = .014), and capital outlay funds (p = .024). Of these predictors, previous dedication of monies to transportation funds was the strongest predictor; whereas the previous dedication of monies to health and wellness funds was the weakest. Directions of the relationships suggest that the percentage of county monies spent in 2007 towards a transportation fund would have been greater if more had been dedicated to transportation funds in 2005 and if less had been devoted to general funds, judicial funds, public safety funds, health and welfare funds, and capital outlay funds. Once again, death penalty trials were not statistically or significantly related to this type of county spending.

TABLE 2.37 Transportation fund expenses in 2007*

	Unstandardized coefficients (b)	Standardized coefficients (Beta)	Significance (p-value)
Death penalty trial	003	016	.688
Murder rate	000	016	.689
Violent crime rate	.000	.062	.202
Property crime rate	000	071	.127
Murder clearance rate	000	019	.648
Violent crime clearance rate	000	040	.329
Property crime clearance rate	.000	.052	.240
Murder trial docket clearance rate	000	054	.155





(

	Unstandardized coefficients (b)	Standardized coefficients (Beta)	Significance (p-value)
Violent crime trial docket clearance rate	.000	.012	.775
Property trial docket clearance rate	.000	.055	.207
Property tax reliance	000	011	.815
Property tax revenue	005	055	.319
Sales tax	1.987	.053	.183
Other tax	015	051	.183
Per capita income rate	093	011	.798
Unemployment	.021	.035	.422
2005 % General fund	167	196	.001
2005 % Judicial fund	304	226	.000
2005 % Financial fund	071	034	.420
2005 % Facilities fund	136	080	.061
2005 % Public works fund	070	031	.453
2005 % Public safety fund	225	238	.000
2005 % Transportation fund	.783	.799	.000
2005 % Health & welfare	138	100	.014
2005 % Capital outlay fund	138	110	.024
2005 % Debt service fund	022	020	.580
2005 % Intra-governmental	151	045	.251

^{*}The percent of transportation funds in 2007 = the dependent variable (p = .000; $R^2 = .919$). All independent variables were measured in 2005.

Table 2.38 illustrates the health and welfare fund expenditure model that was statistically (p = .000) and substantively significant (R2 = .701) by explaining 70.1% of the variation in the dependent variable. Where individual predictors were concerned, the percentage of spending dedicated monies to a health and welfare fund was statistically and significantly related to death penalty trials (only marginally; p = .076), property crime rates (p = .016), violent crime clearance rates (p = .017), property tax revenue (p = .012), and the percentage of monies dedicated to general funds (p = .010), judicial funds (p = .009), public safety funds (p = .000), health and welfare funds (p = .000), capital outlay funds (p = .012), and intragovernmental funds (p = .009).

Of the significant predictors, previous dedication of monies to health and welfare funds were found to be the strongest predictor, whereas the increased presence of a death penalty trial proved to be the weakest. Directions of the relationships suggest that the percentage of county monies spent in 2007 towards a health and welfare fund would have been higher if there were more death penalty trials, property crime were higher, violent clearance rates





24 2.10.5: Econometric analysis

were higher, property tax revenues were higher, and the percentage of monies dedicated to health and welfare funds were higher in 2005. It was also higher if the percentage of monies dedicated to general funds, judicial funds, public safety funds, capital outlay funds, and intra-governmental funds were lower in 2005.

TABLE 2.38 Health and welfare fund expenses in 2007*

	Unstandardized coefficients (b)	Standardized coefficients (Beta)	Significance (p-value)
Death penalty trial	.016	.138	.076
Murder rate	001	078	.305
Violent crime rate	000	140	.133
Property crime rate	.000	.220	.016
Murder clearance rate	.000	.116	.150
Violent crime clearance rate	.001	.188	.017
Property crime clearance rate	001	139	.103
Murder trial docket clearance rate	.000	.020	.783
Violent crime trial docket clearance rate	.000	.006	.941
Property trial docket clearance rate	.000	.110	.191
Property tax reliance	001	174	.061
Property tax revenue	.016	.271	.012
Sales tax	1.484	.063	.411
Other tax	.011	.056	.445
Per capita income rate	.448	.087	.311
Unemployment	031	083	.327
2005 % General fund	160	296	.010
2005 % Judicial fund	212	249	.009
2005 % Financial fund	.122	.093	.254
2005 % Facilities fund	162	152	.066
2005 % Public works fund	.032	.022	.776
2005 % Public safety fund	188	315	.000
2005 % Transportation fund	080	129	.159
2005 % Health & welfare	.408	.472	.000
2005 % Capital outlay fund	188	237	.012
2005 % Debt service fund	.008	.012	.865
2005 % Intra-governmental	424	200	.009

^{*}The percent of health and welfare funds in 2007 = the dependent variable (p = .000; $R^2 = .701$). All independent variables were measured in 2005.







Table 2.39 illustrates the capital outlay fund expenditure model that was statistically (p = .000) and substantively significant (R2 = .607) by explaining 60.7% of the dependent variable's variation. In relation to individual predictors, the percentage of spending dedicated monies to a capital outlay fund in 2005 was statistically and significantly related to violent crime rates (p = .006), sales tax (p = .046), transportation funds (p = .015), health and welfare funds (p = .035), capital outlay funds (p = .000), and intra-governmental funds (p = .009).

Standardized regression coefficients illustrate that the strongest predictor was previous dedication of monies to capital outlay funds, with sales tax being the weakest. Directions of the relationships suggest that the percentage of county monies spent towards a capital outlay fund in 2007 would have been greater if the violent crime rate and dedication of monies towards health and welfare funds, capital outlay funds, and intra-governmental funds had been higher in 2005. In addition, the percentage of county monies would have also been higher if sales taxes and the percentage of monies dedicated to transportation funds had been lower in 2005. Finally, death penalty trials were not statistically or significantly related to this type of county spending.

TABLE 2.39 Capital outlay fund expenses in 2007*

	Unstandardized coefficients (b)	Standardized coefficients (Beta)	Significance (p-value)
Death penalty trial	017	102	.250
Murder rate	.000	.023	.787
Violent crime rate	.000	.297	.006
Property crime rate	000	128	.213
Murder clearance rate	.000	.024	.791
Violent crime clearance rate	000	122	.174
Property crime clearance rate	.001	.183	.063
Murder trial docket clearance rate	.000	.011	.894
Violent crime trial docket clearance rate	000	025	.788
Property trial docket clearance rate	001	132	.171
Property tax reliance	000	001	.992
Property tax revenue	004	053	.665
Sales tax	-5.732	177	.046
Other tax	.007	.026	.754
Per capita income rate	307	044	.658
Unemployment	.028	.054	.580
2005 % General fund	008	011	.933
2005 % Judicial fund	.123	.106	.326
2005 % Financial fund	120	067	.475

(Continued)



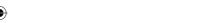


TABLE 2.39 (Continued)

	Unstandardized	Standardized	Significance
	coefficients (b)	coefficients	(p-value)
		(Beta)	
2005 % Facilities fund	112	077	.415
2005 % Public works fund	089	046	.614
2005 % Public safety fund	.000	.000	.999
2005 % Transportation fund	219	259	.015
2005 % Health & welfare	.224	.189	.035
2005 % Capital outlay fund	.592	.544	.000
2005 % Debt service fund	056	059	.457
2005 % Intra-governmental	.673	.231	.009

^{*}The percent of capital outlay fund in 2007 = the dependent variable (p = .000; $R^2 = .607$). All independent variables were measured in 2005.

Table 2.40 illustrates the intra-governmental fund model that was both statistically (p = .042) and substantively significant (R2 = .357) by explaining 35.7% of the dependent variable's variation (the percentage of county funds dedicated to an intra-governmental fund). Notably, however, the model was largely driven by one predictor. The percentage of county funds being concentrated into an intra-governmental fund in 2007 are statistically significantly predicted by the percentage of county funds that were concentrated into the intra-governmental fund in 2005 (p=.000), when all counties in Texas were combined. If funding was high in 2005, it is more likely to be high in 2007.

TABLE 2.40 Intra-governmental fund expenses in 2007*

	Unstandardized coefficients (b)	Standardized coefficients (Beta)	Significance (p-value)
Death penalty trial	.004	.071	.529
Murder rate	.000	.001	.990
Violent crime rate	000	172	.210
Property crime rate	.000	.073	.577
Murder clearance rate	000	062	.597
Violent crime clearance rate	.000	.052	.645
Property crime clearance rate	000	155	.216
Murder trial docket clearance rate	.000	.078	.463
Violent crime trial docket clearance rate	000	018	.881







	Unstandardized	Standardized	Significance
	coefficients (b)	coefficients	(p-value)
		(Beta)	
Property trial docket clearance rate	.000	.049	.693
Property tax reliance	.000	.131	.334
Property tax revenue	002	066	.670
Sales tax	.207	.021	.854
Other tax	006	068	.524
Per capita income rate	282	128	.310
Unemployment	.005	.033	.792
2005 % General fund	012	054	.744
2005 % Judicial fund	.034	.095	.491
2005 % Financial fund	.023	.042	.728
2005 % Facilities fund	.021	.045	.706
2005 % Public works fund	.002	.004	.974
2005 % Public safety fund	.017	.067	.599
2005 % Transportation fund	002	009	.947
2005 % Health & welfare	034	092	.418
2005 % Capital outlay fund	026	078	.566
2005 % Debt service fund	.010	.035	.731
2005 % Intra-governmental	.494	.546	.000

^{*}The percent of intra-governmental fund in 2007 = the dependent variable (p = .042; $R^2 = .357$). All independent variables were measured in 2005.





