THE ECONOMIC INCENTIVES OF CORPORATE RELOCATION

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ABSTRACT

In the pursuit of economic growth, state and local governments are reaching out to the business community. Governments are offering grants, low-interest loans, relocation assistance and tax credits to companies considering expanding or moving their operations. Through survey analysis of 67 relocated organizations, this study examines how U.S. firms integrate tax planning into business location decisions. Specifically, important tax and non tax factors that U.S. firms consider when making relocation decisions and the importance of these factors are examined. The responses to the survey questionnaires indicate that firms relocate to lower both tax rates and certain government restrictions and labor costs.

INTRODUCTION

In the pursuit of economic growth, state and local governments are reaching out to the business community. Governments are offering grants, low-interest loans, relocation assistance and tax abatements to companies considering expanding or moving their operations. This study examines how U.S. firms integrate these incentives into business location decisions. Specifically, it considers how state and local tax, and non tax incentives, influence companies' location and relocation decisions.

Many tax factors (restrictions) and non tax factors (frictions) influence corporate location decisions. Technology, cost of living, geographical access to resources, and cost of transporting goods to market are all factors that may affect corporate location and sourcing decisions. Factors such as population, population characteristics (demographics), zoning, infrastructure, and tax laws are also possible influences on a corporation's decision to relocate its operations to a particular place. Through a survey of 67 relocated manufacturing organizations, this paper investigates corporate relocation decisions and the incentives (both tax and non tax) that are offered to attract various businesses, how relocating businesses view these incentives, and the criteria utilized by these organizations in making relocation decisions.

LITERATURE REVIEW

Previous studies of location decisions are based primarily on geographical and economic theories. These two disciplines address the location issue from separate philosophies and motivations. Both fields, however, fail to adequately examine the role that taxes and tax incentives play in corporate location decisions. Geographers research location decisions as a function of infrastructure and physical location of resources, access to markets, etc. Economists believe that location decisions are a result of factors such as population, demographics and zoning regulations. Economists question the role, if any, that taxes play in corporate location decisions. The role of state and local taxes in a firm's location decision is a somewhat unsettled issue in economics (Newman and Sullivan 1988).

The dominant theme of early location studies is that state and local taxes have statistically insignificant effects on industry location decisions (Due 1961; Hodge 1981; Carlton 1979). Subsequent studies provide no strong evidence to the contrary. Recent evidence, however, examines only a small number of metropolitan areas, preventing any generalizable conclusions (McGuire 1985; Charney 1983; Gyourko 1987). Thus, existing literature offers mixed perspectives and provides no solid indications of a relationship between tax incentives and location decisions.

Many governmental organizations, however, continue to offer tax and other incentives in attempts to attract new businesses into particular areas. Frequently, companies relocate to areas in which the incentives provided to them are the greatest. Thus, despite the lack of previous empirical evidence of the success of such programs, many city and state governments are lowering taxes, offering tax rebates, lowering utility rates, and offering land at little or no cost, etc., to attract more businesses or keep the present businesses in an area.

Among the most noted governmental incentives offered to businesses are the relocation packages offered to professional sports teams. Sports teams, however, are not the only organizations that receive incentives for relocation. Although not widely publicized, manufacturing organizations also receive lucrative offers for relocation. A pipe manufacturing company, for example, received $100,000 in no-interest loans, complete renovation of a railroad site, assistance with job training and reduced power costs for five years (a savings of over $ 100,000.00) to relocate to east Tennessee. Thus, various types of organizations and firms are receiving tax and non tax incentives to relocate. Based upon the responses of the survey this paper suggests that location decisions are a function of a mixture of theories; it demonstrates that geographical infrastructure, economic consequences and various tax and non tax factors all influence a corporation's location decisions.

VARIABLE IDENTIFICATION

According to Scholes and Wolfson (1992) and Wilson (1993), firms analyze certain *restrictions* (tax rules) and *frictions* (non tax impediments) in making location decisions. Governments may increase or decrease the severity of these restrictions and frictions by offering incentive packages to business. Businesses respond to these incentives by selecting the most favorable overall site package for location decisions. According to Wilson (1993), *frictions* may be divided into three categories: coupling, country and coordination. Wilson defines coupling frictions as technology, transportation costs, company culture and proximity to customers. Wilson defines country frictions (state frictions in this study) as labor force, infrastructure, political stability, proximity to markets and financial systems. The final frictional category discussed by Wilson is coordination frictions. These are principally company specific and include factors such as corporate income levels and internal coordination costs.

Restrictions are import duties, import restrictions, price regulations and taxes. Accordingly, tax incentives are being offered to businesses to attract or encourage location and development choices. These types of incentives are used to reduce restrictions on business. However, because each relocating unit negotiates the incentive package for their unit, and because many of these variables are company specific, no aggregate models are possible for examining these packages or plans. Thus, survey analysis of the relocated organizations is required to examine relocation decisions.

SURVEY

This analysis of corporate relocation is based upon a survey of 67 manufacturing firms that have relocated. The survey (addressed to presidents and chief executive officers) incorporates Wilson's theories into the questionnaire and examines both the reasons for leaving the previous locations and the incentives for selecting the new locations. Thus, the survey provides insight into both the generalities of the areas and the specific incentives or specific company goals achieved through the relocation. This survey is utilized to confirm and explain the conclusions generated by Wilson (1993) and provide additional company specific information not available in aggregate studies.

Those surveyed were asked to rate the importance of specific variables (identified from Wilson's 1993 study) on a 1 - 7 Likert-type scale [a rating of 7 indicated of highest importance, a 1 indicated no importance], for both the decision to leave an area and the decision to locate to a new area. Respondents were also asked to select the five most critical costs and benefits from their relocation decision and rank these variables in order of importance.

Additionally, specific information was gathered through the survey instrument regarding costs and benefits of the relocation and specific state and local incentives negotiated by the companies with the individual cities/counties and states. Thus, through the various information gathered, this survey allows analysis of company specific relocation decisions.

SURVEY RESPONDENTS

Survey questionnaires were addressed to the chief executive officers of 397 companies that relocated manufacturing operations between 1980 and 1990. The firms were identified by searching the Lexis/Nexus and Wall Street Journal data bases for news announcements or annual reports announcing a relocation during the time period from 1980 to 1990. Surveys were specifically addressed to the chief executive officers of each organization.[1]

Chief executives were asked to rate specific variables in their relocation decision and return the completed surveys in the postage paid envelope provided. Three follow up/reminder notices, with additional copies of the survey, were also sent to these executives. Fifty-one requests were returned marked undeliverable or forwarding order expired, and the companies were removed from the mailing list (thus, the number of requests decreased to 346). One hundred twenty seven company responses were received, 60 respondents either refused to answer the survey questions or were unable to answer because no one involved with the relocation decision was still employed with the firm. Sixty Five completed surveys and two partially completed surveys were returned. Thus, through four requests, a response rate of 19.36 percent is generated.

Responses were received from 67 companies representing 11 different SIC codes. Confidence intervals constructed on each SIC group of responses or surveys returned indicate that the number of responses received from particular SIC groups are representative of, or proportional to, the number of SIC codes in the entire population sampled. These tests indicate, at a 95 percent confidence level, that the mix of SIC codes in the surveys returned is not significantly different from the mix of SIC codes to which surveys were mailed. (These confidence intervals were constructed to compare the actual number of surveys received with the number anticipated or expected, based upon the population of relocated firms surveyed).[2]

Characteristics of the survey respondents are given in Table 1.

Table 1
Characteristics of Survey Respondents

Number Responding	
Industries Represented:	
1	Food/Beverage
3	Textile/Apparel
2	Paper and Allied Products
6	Chemicals
2	Rubber and Plastic
1	Glass Products
5	Metal Industries
11	Fabricated Metal Products
4	Industrial Machinery
13	Electronic and Electronic Equipment
19	Miscellaneous Manufacturing
67	Total Firms
Organization Form:	
39	Public
28	Private
67	Total Firms
Revenue:	
4	Less than 1 million
10	1 million to less than 5 million
12	5 million to less than 10 million
7	10 million to less than 15 million
4	15 million to less than 20 million
27	Greater than 20 million
3	No response
67	Total Firms
Mean response: 10 to less than 20 million	
Size of Organization by Number of Employees:	
18	Less than 50
12	50 to less than 100
19	100 to less than 250
7	250 to less than 400
6	400 to less than 750
1	750 to less than 1000
2	1000 to less than 2000
1	Greater than 2000
1	Non response
67	Total Firms
Mean Response: 50 to less than 250	

Miles between Previous and New location:

15	Less than 50 miles
5	51 miles to 150 miles
2	151 miles to 300 miles
3	301 miles to 500 miles
12	501 miles to 1000 miles
25	Greater than 1000 miles
5	Non response
67	Total Firms

Mean Response: 301 miles to 1000 miles

Responses are received from 39 publicly held and 28 privately held corporations. These companies range in size from less than 50 employees to greater than 2,000 employees. The average size of these companies is between 50 and 250 employees. The relocations are, on average, between 301 and 1,000 miles, with a range of less than 50 miles to greater than 1,000 miles. These same organizations reported revenues from less than $1 million to greater than $20 million, with the mean revenue between $10 and $20 million. Organizations represented include: food/beverage, textile/apparel, paper and allied products, chemicals, plastic/rubber, glass, and various metal and electronic/instrument manufacturers.

SURVEY RESULTS

Wilson indicates that organizations are willing to increase certain frictions and restrictions in order to decrease other frictions or restrictions. The survey results confirm Wilson's theories. Mean scores of the level of importance relocating firms place upon all these variables are given in Table 2.

Table 2
Mean Ratings of Survey Responses

Importance of Variables in Decision to Leave Previous Location		Importance of Variables in Selection of New Location	
Variable	**Mean**	**Variable**	**Mean**
frwage	3.82	tooccupan	4.47
frtax	3.79	towage	4.35
froccupan	3.69	toutility	4.22
frprop	3.59	toskill	4.15
frwkcomp	3.52	totax	4.08
frutility	3.50	tohigh	3.98
frmkt	3.48	tomkt	3.97
frcorp	3.48	toroad	3.95
frstreg	3.47	tolocregs	3.91
frlocregs	3.43	tounempl	3.83
frunempl	3.39	toprop	3.83
frpers	3.36	tostreg	3.83
frsupply	3.34	toeducat	3.79
frhigh	3.33	towkcomp	3.77

frliabins	3.33	tocorp	3.74
frstatetx	3.30	tosupply	3.70
frumempltx	3.28	tostatetx	3.69
frskill	3.20	topers	3.66
frsales	3.15	toraw	3.64
frlocaltx	3.11	topop	3.63
frcrime	3.05	totaxabat	3.60
frmet	3.05	tounion	3.53
frpop	2.92	tolocaltx	3.52
frraw	2.91	tosales	3.52
frroad	2.90	toumempltx	3.49
frwelfare	2.89	toliabins	3.49
freducat	2.84	tohosp	3.47
frweather	2.83	tocrime	3.47
frunion	2.81	toweather	3.45
fraid	2.75	topolice	3.42

Importance of Variables in Decision to Leave Previous Location

Importance of Variables in Selection of New Location

Variable	Mean	Variable	Mean
frtaxabate	2.73	tomet	3.42
frlocat\bld	2.65	tootherin	3.39
frhosp	2.61	tofinasst	3.38
frpolice	2.57	toair	3.37
frair	2.54	tolocat\bld	3.33
frfinasst	2.49	torenov\bld	3.11
frrenov\bld	2.45	toloans	2.98
frloans	2.37	toaid	2.89
frotherin	2.35	towelfare	2.85
frinterra	2.17	tointerra	2.84
frport	1.71	torail	2.16
frrail	1.71	toport	1.89

Hindsight Ratings of Success Factors:

Success Rating	5.62
Achievement of Goals	5.58
Same Decision Again	5.15

Variable Definitions:

Decision to Leave Previous Location **Selection of New Area** **Friction/Restriction**

Coupling Frictions:

frair	toair	Airport Access
frhigh	tohigh	Highway Access
frrail	torail	Rail Access
frport	toport	Port Access

Decision to Leave Previous Location	Selection of New Area	Friction/Restriction
Coupling Frictions:		
frmkt	tomkt	Proximity to Markets
frsupply	tosupply	Proximity to Suppliers
frmet	tomet	Proximity to Metropolitian Areas
frpop	topop	Population of Local Area
State Frictions:		
frwage	towage	Wage Costs
frunempl	tounempl	Unemployment Rates
frunion	tounion	Union Membership
frskill	toskill	Employee Skills
frroad	toroad	Quality of Roads
freducat	toeducat	Quality of Education
frhosp	tohosp	Hospital/Medical Care
frpolice	topolice	Police/Fire Protection
Government Restrictions:		
frtax	totax	Overall Tax Structure
frcorp	tocorp	Corporate Tax Rates
frpers	topers	Personal Tax Rates
frprop	toprop	Property Tax Rates
frsales	tosales	Sales Tax Rates
frunempltx	tounempltx	Unemployment Tax Rates
frstatetx	tostatetx	Other State Tax
frlocaltx	tolocaltx	Other Local Tax
Other Frictions:		
frliabins	toliabins	Liability Insurance
frwkcomp	towkcomp	Workmen's Compensation Ins
frstreg	tostreg	State Regulations
frlocregs	tolocregs	Local Regulations
frwelfare	towelfare	Welfare
fraid	toaid	Other State Aid

Decision to Leave Previous Location	Selection of New Area	Friction/Restriction
Other Incentives:		
frtaxabat	toabat	Tax Abatements
frfinasst	tofinasst	Financial Assistance
frlocat\bld	tolocat\bld	Locating Buildings
frrenov\bld	torenov\bld	Renovating Buildings
frloans	toloans	Loans
frinterra	tointerra	Interest Rates
frotherin	tootherin	Other Incentives
Other Costs:		
froccupan	tooccupan	Occupancy Costs
frutility	toutility	Utility Costs

frraw	toraw	Raw Materials Cost
frcrime	tocrime	Crime Rate
frweather	toweather	Weather Conditions
Success Ratings:		
success		Move considered successful
goals		Move achieved its goals
again		Make same decision again

These scores confirm the theory that certain frictions (coupling) are viewed as less important (and can be increased) by the organizations than other (state) frictions (which should be lowered).

The responding CEOs rated access to major airports and metropolitan areas as relatively unimportant in the relocation decision. Access to markets is ranked as 7th in the decision to relocate to an area, and 7th in importance of leaving the previous area. These results indicate that in the decision to leave an area, transportation costs and access to markets are relatively unimportant. Similarly, in selecting new areas, access to transportation routes (a coupling friction) is less important than other issues. The responding firms give wage and labor costs the highest rating or identified these costs as the most important issue in the decision to leave an area; these same firms also give wage and labor costs and occupancy costs the highest ratings in the decision to relocate to a new area.

Unemployment and workmen's compensation receive ratings of 3.83 and 3.77 in the decision to relocate **into** an area, and ratings of 3.39 and 3.50 for importance in the decision to **leave** an area. Combined, these results indicate that organizations place importance upon unemployment and workmen's compensation costs, but less importance than the actual wage cost. Employee skills are rated as 4.15 (4th highest rating). This mean score indicates that employee skills are almost as important to these firms as labor costs. Thus, firms are seeking to relocate into areas that offer highly trained or skilled employees at a lower cost. Overall, these results indicate that the most important reason for relocation is cost and availability of labor, and a skilled or trained workforce. Firms are also seeking areas that offer quality or skilled labor, in addition to lower cost of labor. Thus, the mean ratings given these variables indicates that firms place the highest importance on wages and other labor costs and issues (state frictions), and the least importance upon certain transportation costs or coupling frictions.

Further results of the survey indicate the most important reasons for leaving an area are wage rates, overall taxes, property tax rates, personal and corporate tax rates, workmen's compensation rates, state regulations, and occupancy costs. Reasons for selecting the particular new areas include these issues, but also include reducing utility costs and increasing the quality of roads. Thus, organizations place greater importance upon lowering state frictions (wage and labor costs) and government restrictions (regulations and taxes) and are willing to increase coupling frictions in order to decrease these state frictions and government restrictions.

A mean score, of 3.97 (out of possible 7) for importance of access to markets, indicates that firms do consider, although not rated as important as other issues, the proximity of the new location to major markets. Combined, these results indicate that firms do consider certain coupling frictions, such as access to markets and highways, but based upon the lower ratings, these frictions are less important than other considerations. The results also indicate that transportation costs are much less important in the considerations and that firms are willing to increase these costs to decrease other costs. These results

confirm the idea that relocating firms consider or evaluate coupling frictions, but are willing to increase these frictions to lower other frictions.

Wilson hypothesized that indicates that organizations seek to increase access to infrastructure and government services. The survey responses do not support this theory. The infrastructure and service variables, (availability of hospitals, police and fire protection), are given medium to low ratings in level of importance by these relocating organizations, for both moving From and To a specific area. Quality of roads, however, has a mean of 3.95, and ranks 8th in order of importance of locating to an area. This indicates that quality of roads is important in the final decision of the new location, but is not as important in the decision to leave the previous area. These ratings indicate that organizations place little importance upon infrastructure and government services in the decision to leave an area; however, companies are placing importance on availability and quality of roads in the final relocation decision of selecting a new area.

Combined, the above analyses indicate that state frictions are the most important variables in the relocation decision making process. From both perspectives--the decision to leave an area and the selection of new areas, the cost and quality of labor force are prevailing factors. Also important are unemployment rates and workmen's compensation rates, as well as quality of roads of the "To" areas. These results indicate that companies are seeking to lower labor costs and may sacrifice access to services such as police and fire protection as well as hospitals and other government services to achieve these goals.

Wilson also theorized that organizations seek to lower taxes by making relocation decisions. This theory is supported by the survey results. Key executives rate overall tax structure as the second highest reason for leaving their previous locations. Property tax rates are rated 4th highest and personal and corporate income taxes are both rated in the top 12 mean scores for level of importance to the decision to **leave** an area. These means ratings indicate that companies are fleeing areas that overly tax organizations and individuals.

Property, personal and corporate income taxes receive moderate ratings of importance from these executives in the decision to select a new area. Thus, taxes are somewhat important in the decision of locating into **new** areas. Overall tax structure has a mean rating of 4.08 and ranks 5th in the reasons for selecting a new location. These results indicate that taxes are a major driving force encouraging companies to **vacate** areas, and are moderately to highly important in the decision of where to **locate**.

According to the survey, state and local regulations ranked as top reasons for fleeing an area and for selecting new site locations. These results support the claims that harsh regulatory environments are resulting in an exodus of corporations from these areas.

Combined, these results indicate that government restrictions are very important in the relocation decision making process. Taxes and regulations are both considered to be very important reasons for leaving an area, and are also considered in the selection process for new cities. Specific relocation incentives such as aid in renovating buildings, low-interest rate loans, etc. ranked lower in the relocation decisions. These results indicate that although governments are offering abatements and loans etc., the most important factors considered by these organizations are labor and overall tax costs rather than the specific non-tax incentives offered by local and state governments.

These results support Wilson's hypotheses that organizations are willing to sacrifice certain frictions and restrictions in order to lower other restrictions and frictions. Specifically, coupling frictions are viewed as less important in the relocation decisions and can be increased to decrease other frictions such as labor costs and taxes. The level of importance placed upon taxes and labor costs indicate that these items may be the most

critical variables in the relocation decision making process.

SUCCESS OR FAILURE OF MOVE

The survey also asked respondents to rate on the 1 - 7 Likert-type scale whether the move was considered a success, if the relocation accomplished company goals, and if the executives would make the same decision again. Mean scores on the success variable is 5.62. (A score of 5 indicates that the respondent moderately agrees that the move was a success. A mean of 6 indicates that the respondent highly agrees that the move was a success.) Thus, overall, the respondents indicated a "little more" than moderate agreement that the move was successful. A similar rating of 5.58 is the mean for accomplishing company goals. These ratings indicate that organizations are somewhat disappointed or that the moves are successful but could have been better or better accomplished company goals.

When asked to rate on the same scale if they would make the same relocation decision again, those surveyed responded with a mean of 5.15. This again indicates a moderate level of satisfaction, but leaves room for questioning why these relocations are not viewed as overwhelming successes.

An explanation of this lack of success may be found in the sacrifices or costs of the relocation. Often a move can be more costly than estimated or generate unanticipated costs to the organization. Respondents were also asked to list five of these costs. The most frequently cited costs or sacrifices by relocating operations are weather conditions of the new area, workmen's compensation rates in the new area and loss of access to major airports. These and other costs listed in Table 3, may explain why the firms do not view these relocations as highly successful.

Table 3
Costs of Relocation Identified by Respondents

Variable	Number of Responses
Coupling Frictions:	
Loss of Access to Major Airport	8
Loss of Access to Major Highway	1
Loss of Access to Port	4
Loss of Access to Rail Road	1
Proximity to Customers/Markets	6
Access to Markets	3
Access to Suppliers	6
Promitity to Metropolitian Area	5
Population of Local Area	0
State Frictions:	
Employee Wages in Local Area	4
Unemployment Rate in local Area	3
Unionization of local Area	4
Availability/quality of Roads/highways	0
Availability/quality of Education	7
Availability/quality of Health Care/Hospitals	1
Availability/quality of Police/Fire Protection	1

Government Restrictions:	
Overall Tax Structure	5
Corporate Income Tax	6
Personal Income Tax	4
Property Tax Rates	4
Sales Tax Rates	2
Unemployment Tax Rates	0
Other State Tax Rates	1
Other Local Tax Rates	4
Liability Insurance Rates	0
Workmen's Compensation Rates	9
Government Regulations	4
Welfare Expenditures	2
Other State and Local Social Aid	0
Other Costs:	
Occupancy Costs	6
Utility Costs	7
Supply/Raw Materials Costs	4
Quality/Skill of Work Force	2
Crime Rate in New Area	5
Weather Conditions of New Area	11
Production Levels	4
Other	9

These costs or sacrifices indicate that organizational relocation is very complicated and that issues other than the specific tax or labor issue etc that prompted the move are involved. Organizations must consider all of these issues in making a relocation decision.

Because respondents rate how important specific factors are to the relocation decision, correlation analysis can be performed to determine the correlation between the importance of these factors and whether the company achieved its goals and make the same decision again. The correlation results are presented in Table 4.

Table 4
Correlation Analysis of Success Ratings and Survey Responses

Coupling Frictions:	toair	tohigh	torail	toport
	0.2081	0.3368	-0.2043	-0.0283
Goals	0.0962	0.0065	0.1112	0.8266
	-0.0648	0.1556	-0.1476	-0.1122
Again	0.6107	0.2232	0.2561	0.3890
	0.1000	0.2059	0.2020	0.0772
Goals	0.4277	0.1025	0.1066	0.5409

	-0.1082	0.0093	0.0589	-0.0816
Again	0.3944	0.9423	0.6437	0.5211

State Frictions:

	towage	tounempl	tounion	toskill
	0.0850	0.0471	-0.1265	0.0716
Goals	0.4969	0.7091	0.3190	0.5705
	-0.2171	-0.0827	0.1988	0.0436
Again	0.0824	0.5158	0.1183	0.7318
	toroad	toeducat	tohosp	topolice
Goals	0.1632	0.1456	0.1976	0.1628
	0.1904	0.2434	0.1118	0.1950
	-0.0471	-0.0201	-0.0259	-0.1497
Again	0.7090	0.8735	0.8377	0.2377

Government Restrictions:

	totax	tocorp	topers	toprop
	0.1876	0.0412	-0.0206	0.0754
Goals	0.1345	0.7445	0.8702	0.5504
	0.0269	0.1595	0.0418	0.1027
Again	0.8326	0.2080	0.7427	0.4193
	tosales	tounempltx	tostatetx	tolocaltx
	-0.0368	0.2169	-0.0871	0.1973
Goals	0.7709	0.0825	0.4899	0.1151
	0.0200	0.0179	-0.0081	-0.0121
Again	0.8749	0.8881	0.9491	0.9240

Other Frictions:

	toliabins	towkcomp	tostreg	tolocreg
	0.2342	-0.0004	-0.0588	0.0358
Goals	0.0604	0.9970	0.6439	0.7784
	0.0736	0.1047	0.0203	0.0777
Again	0.5632	0.4099	0.8741	0.5449
	towelfare	toaid		
	-0.1035	-0.1270		
Goals	0.4116	0.3131		
	-0.0130	-0.0606		
Again	0.9187	0.6340		

Other Incentives:

	totaxabat	tofinasst	tolocat\bld	torenov\bld
	-0.0550	0.1159	0.0865	0.0779
Goals	0.6686	0.3656	0.4964	0.5402
	-0.0578	-0.0853	-0.1606	-0.2109
Again	0.6552	0.5098	0.2084	0.0971

	toloans	tointerra	tootherin
	0.1379	0.1391	0.0729
Goals	0.2769	0.2727	0.5666
	0.0329	-0.0175	-0.1061
Again	0.7978	0.8917	0.4075

Other Costs:

	tooccupan	toutility	toraw	tocrime
	0.2337	0.3022	0.2158	0.2783
Goals	0.0630	0.0152	0.0868	0.0259
	-0.0198	0.1022	0.0890	-0.0449
Again	0.8770	0.4254	0.4877	0.7265

	toweather	Success	Goals	Again
	0.2052	0.7936	1.0000	0.4520
Goals	0.1095	0.0001	0.0	.0001
	-.2327	0.4570	0.4520	1.0000
Again	.0711	0.0001	0.0001	0.0000

Analysis indicates that the variables with the highest correlation with the achievement of corporate goals include aspects of coupling frictions, state frictions, and government restrictions, as well as other costs. Access to highways, utility costs, and crime rates of local areas offer the highest correlations with achievement of company goals. These results indicate that company goals extend beyond the restrictions and frictions identified by Wilson; factors such as utility costs, crime rates, and occupancy costs affect a company's goals.

Correlation analysis of the relationship between whether the company would make the same relocation decision again and the various friction and restriction variables indicates that the most significant correlations or relationships are with labor costs of the local area and incentives offered for the relocation such as aid in locating a building and aid in renovating a building. The results indicate that the most significant friction of making the same decision again is found in the labor costs of the new area, and in the aid from the local government in recruiting these companies. This information indicates that communities wishing to attract new business should consider the benefit from offering incentive programs such as those identified. The results also indicate that wages play a very important role for all manufacturing organizations, not just those that are labor intensive.

These results indicate that many factors influence a company's relocation decision and, subsequently, how successful that decision is viewed. These results indicate that

corporations place less importance on certain frictions and restrictions or are willing to incur increases in these factors in favor of reducing other costs or frictions. The importance of these other costs and frictions is evident from the rankings the organizations give these costs, as well as the correlations between the achievement of company goals and whether the company would make the same decision again. These results provide insight to cities, communities and states that are seeking to recruit new business into their areas. Factors such as aid in renovating buildings, and aid in locating buildings are very important to these relocating organizations.

SUMMARY

The survey results indicate that firms relocate to lower both tax rates and certain government restrictions and labor costs or state frictions, and may sacrifice access to transportation or increase coupling frictions in order to achieve these goals. The survey results further indicate that a tradeoff may exist between coupling frictions and state and government frictions and restrictions, and that an organization may identify a specific friction or restriction as the most important for that individual company, and may continue striving to lower or eliminate that friction.

The survey responses indicate that organizations place higher importance on wage costs and taxes than on various transportation mechanisms. These ratings explain why organizations are willing to relocate to areas that offer significantly less access to transportation mechanisms or increase coupling frictions in order to lower other frictions, such as labor and taxes. The survey responses also indicate that state and local incentives offered by governmental organizations are important to these organizations, but less important than wage costs.

The results of this paper indicate that contrary to geographical and economic viewpoints of relocation, taxes are important factors in relocation decisions. However, the most prevailing theme of the survey is that organizations are willing to incur increases in certain frictions to reduce other frictions. In this study, sample firms are willing to incur increased coupling frictions (transportation costs and access to markets/suppliers) in order to lower or decrease state frictions and government restrictions. The most important frictions or restrictions identified to influence corporate relocation decisions are state frictions or labor and wage costs. State and local incentive programs also appear to be of importance to these organizations, but not as important as overall taxes and wage and labor costs. These results indicate that communities/states involved in recruiting programs must tailor their incentive programs to meet particular organizational needs, rather than establish a standard incentive package. Individual preferences to lower specific frictions outweigh the incentives offered by local and state agencies. Overall these conclusions indicate that cities and communities that are reaching out to business must also find a way to lower labor costs and state taxes in order to compete on a long-term basis.

REFERENCES

Carlton, D.W. 1979. Why Do New Firms Locate Where They Do: an Econometrics Model. In *Interregional Movements and Regional Growth*, edited by W.C. Wheaton. Washington, DC: The Urban Institute.

Charney, A.H. 1983. Intraurban Manufacturing Location Decisions and Local tax Differentials. *Journal of Urban Economics* 14 (September): 184-205.

Due, J.F. 1961. Studies of State-Local Tax Influences on Location of Industry. *National Tax Journal* XIV (June): 163-173.

Gyourko, J. 1987. Effects of Local Tax Structures of the Factor Intensity Composition of Manufacturing Activities Across Cities. *Journal of Urban Economics* 22 (September): 151-164.

Hodge, J.H. 1981. A Study of Regional Investment Decisions. In *Research in Urban Economics*, edited by J.V. Henderson, Greenwich, CT: JAI Press.

Newman, R.J. and D. Sullivan. 1988. Econometric Analysis of Business Tax Impacts on Industrial Location: What Do We Know, and How Do We Know It? *Journal of Urban Economics* 23 (March): 215-234.

McGuire, T. 1985. Are Local Property Taxes Important in the Intrametropolitan Location Decisions of Firms? An Empirical Analysis of the Minneapolis-St. Paul Area. *Journal of Urban Economics* 18 (July): 226-234.

Scholes, M., and M. Wolfson. 1992. *Taxes and Business Strategy: A Global Planning Approach.* Englewood Cliffs, NJ: Prentice-Hall.

Wilson, G. P. 1993. The Role of Taxes in Location and Sourcing Decisions. In *Studies in International Taxation*, edited by Alberto Giovannini, R. Glenn Hubbard, and Joel Slemrod. Chicago, IL: The University of Chicago Press.

ENDNOTES

1.Names and mailing addresses of the chief executive officers of each company were identified through the American Business Disk, Compact Disclosure, and Dunn & Bradstreet indexes.

2.The expected probability of survey responses for each SIC code is compared with the actual responses received. The difference between actual responses and expected responses follow approximately a normal distribution. Therefore, the inference can be made that the returned responses represent the population of relocated firms.