

# The Vermont Legislative Research Shop

# The Role of Taxes in Business Location Decisions

This report focuses on the findings of research by economists and policy experts into the role that taxes, including capital gains tax rates, have on business decisions to locate and relocate. For research on state and national policies on capital gains taxes, a history of capital gains tax policy and arguments for and against capital gains taxes see the analysis prepared by Sara Teachout of The Vermont Legislative Joint Fiscal Office (http://www.leg.state.vt.us/JFO/Reports/Taxation%20of%20Capital%20Gains.pdf).

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In general, the extant literature on business decisions suggests that state and local taxes (and, conversely, tax incentive packages, including capital gains exemptions) are but one of a number of factors that businesses consider when deciding where to locate or relocate. Furthermore, while state and local tax burdens are considered when businesses move, they are usually rated by the business decision makers as being of secondary importance in such decisions. According to one published study, "cost factors" in location decisions are not limited to quantitative analysis but also include the measurement of intangible and qualitative factors, such as

risks associated with the costs or demand estimates, business climate of locations, education of the labor force, attitudes of the workforce toward productivity, change, unionization, cultural attributes of the location, local and state government attitudes, commuting distances for workers and managers, and impact of other businesses in the area (Schemenner and Cook 1987).

According to Professors Saiz and Clarke's review of the literature on the subject, many scholars find that, at best, "(tax) incentives work about 10 percent of the time and are simply a waste of money the other 90 percent." This conclusion seems to be consistent with research findings going back to the 1960s. A study by Benjamin Bridges in 1965 found that a surprisingly small number of employers included taxes as primary reasons for choosing to invest. Another study by Bennet Harrison and Sandra Kantor (1978) found that in every case they studied, businesses took actions according to their own plans, and then applied for tax credits after learning of their existence.

There is a lack of consensus among the experts with regard to capital gains taxes, leaving state policymakers with little strategic information or guidance in making policy decisions. An article on the subject by two economics professors concluded:

The debate concerning the responsiveness of capital gains realizations and revenues to tax rates is far from settled; moreover, there appears to be an increased realization that all

of the empirical results in this area are quite tenuous, and that one should be exceedingly careful in attempting to draw policy implications from this literature.

## Studies on the Impact of State and Local Taxes on Business Location Decisions

In a study published in the *New England Economic Review* (1997) Ronald Fisher followed company location decisions made by clients of the Deloitte & Touche/Fantus Consulting firm<sup>1</sup>, a firm that businesses (clients) hire to assist them in siting manufacturing facilities and offices, over the course of five years. The firm's data base, that tracked the step-by-step decision-making process of its clients, shows that site selection for businesses and companies is a dynamic rather than static process. After identifying ideal locations (regions or states) for location or relocation, businesses begin the selection process by comparing macro wage differentials, transportation variations, and those criteria developed by and specific to the business—such as proximity to a university with an engineering school, the availability of buildings, and location of port facilities. Taxes are considered last in this phase. "Taxes will be brought into the analysis, but only on a comparative basis. Usually, no detailed tax evaluation will be made at this level of screening" (Fisher, 1997, p. 78). Those states that are "reasonably competitive" on taxes will remain in consideration (Fisher, 1997, p. 78). This rough comparison of state taxes includes consideration of corporate income tax, personal income tax, unemployment tax, and workers' compensation. Capital gains taxes were not mentioned.

Selection at the next level, according to Fisher's analysis, focuses mostly on the costs of labor, transportation, utilities, and occupancy within the potential communities. Fisher states the Fantus data indicates that taxes represent only a small proportion of "geographically variable operating costs" (costs that vary with geography). Table 1 presents measures of the relative importance of each cost factor, according to the Fantus clients, for both a typical manufacturing operation and a back-office operation. The cost factor of taxes assumed only 4% and 5% of relative importance in manufacturing operations and office operations, respectively, as represented in Table 1.

Cost Factor	Manufacturing (%)	Office (%)
Labor	36	72
Transportation	35	0
Utilities	17	8
Occupancy	8	15
Taxes	4	5
Total	100	100

Table 1: Relative	importance of co	st factors in	making a l	ocation decision
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<sup>&</sup>lt;sup>1</sup> A collection of independent firms that provide audit, consulting, financial advisory, risk management, and tax services to selected clients.

Fisher states this data shows that "to argue a causal relationship at this level of screening between the level of taxation and a decision to locate in any of the communities under consideration would appear most difficult, given the low priority and minimum cost impact associated with taxation. In addition to a determination of 'geographically variable operating costs,' pertinent operating conditions and quality of life factors are also considered during this step, so that at its conclusion only a handful or even fewer locations remain" (Fisher 1997, p. 79).

The final phase in selecting a location compares the greatest advantages and disadvantages of all locations under consideration, utilizing all information and decisions gained from the process detailed above. This comparison includes an evaluation and comparison of all taxes and tax abatements. Other factors, however, are included as well and just as crucial. For example, the services the company will receive for its tax dollars are carefully measured. In this study, education was the single most important service, exceeding the value of all other services combined. Second in importance was highway adequacy, then public safety and then infrastructure. Operating conditions and quality-of-life factors are also gathered in this final selection process (Fisher 1997).

Fisher concludes that the only way taxes alone could sway a location decision is when relocation occurs within an autonomous geographic area, where labor, transportation, and utility costs are consistent.

In summary, site selection data do not suggest any correlation between low taxes and positive economic growth, or between high taxes and slow growth. The location requirements are too many, the process too complicated, and other factors too important to justify a strong relationship (Fisher 1997, p. 80).

In a different study, conducted one year later by Industrial Management & Data Systems and evaluated by professors Karakaya and Canel, 84 of the fastest-growing businesses in New England and New York were surveyed, examining 27 variables associated with location decisions. Results showed that, in part because these were high-technology businesses, the most important element influencing site selection was the availability of skilled labor. "The second most important factor was transportation facilities, followed by state tax rate, state regulatory environment, real estate tax rate, proximity to major highways/seaports, and major US airports" (Karakaya and Canel, 1998, p. 324).

In another study C.S. Galbraith (1985) followed location decisions of high technology firms, and found that a different set of factors take center stage for the siting of high tech firms than for manufacturing companies. The three key components were:

- Availability of professional and technical personnel;
- General ambiance and lifestyle of the area; and
- Desire of the owner/CEO to live in the area.

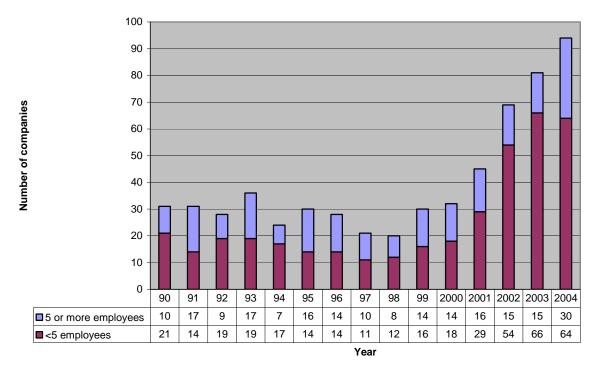
A survey done by the same author in 1987 found, similarly, that "higher technology firms emphasized the importance of ambiance and availability of labor and property in location decisions" (Galbraith and De Noble, 1988).

### **Business Relocation and Employment Change in Vermont**

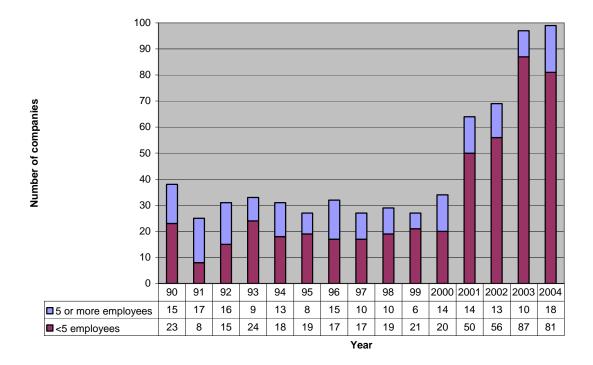
The National Establishment Time Series (NETS) Database, a longitudinal file measuring employment change and growth among intrastate businesses (a long-term project of Walls & Associates in conjunction with Dun & Bradstreet) shows that:

- 1. The number of businesses moving out of Vermont from 1990-2004 was nearly the same as the number moving in;
- 2. Nearly as many companies move into Vermont from low tax states as move to low tax states; and
- 3. Employment change is driven primarily by business contraction and expansion, and by business start-ups and closures.

Figures 1 through 5 illustrate these findings.



**Figure 1: Number of companies leaving VT by year and size of firm, 1990-2004** Source: National Establishment Times Series (NETS) Database. April, 2006. Addendum to Phase 9 of the Job Gap Study.



**Figure 2: Number of companies entering VT by year and size of firm, 1990-2004** Source: National Establishment Times Series (NETS) Database. April, 2006. Addendum to Phase 9 of the Job Gap Study.

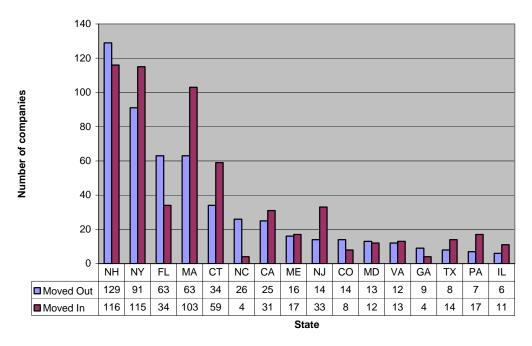
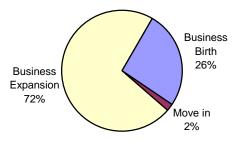


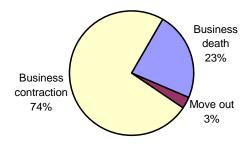
Figure 3: Business relocation by state of origin and state of destination, 1990-2004 (top 16 by state of destination).

Source: National Establishment Times Series (NETS) Database. April, 2006. Addendum to Phase 9 of the Job Gap Study.



#### Figure 4: Sources of VT job creation, 2000-2004

Sources: VT Department of Labor; National Establishment Times Series (NETS) Database. April, 2006. Addendum to Phase 9 of the Job Gap Study.



## Figure 5: Sources of VT job loss, 2000-2004

Sources: VT Department of Labor; National Establishment Times Series (NETS) Database. April, 2006. Addendum to Phase 9 of the Job Gap Study.

#### References

- Bridges, Benjamin. 1965. "State and Local Inducements for Industry, Part II." *National Tax Journal* 18: 1-14.
- Fisher, Ronald C. March/April 1997. "The Effects of State and Local Public Services on Economic Development." *New England Economic Review*. pp. 54-82.
- Galbraith, C., De Noble, A.F. 1988. "Location decisions by high technology firms: a comparison of firm size, industry type and institutional form." *Entrepreneurship Theory and Practice*, Vol. 13 pp.31-48.
- Galbraith, C.S. 1990. "Transferring core manufacturing technologies in high technology firms," *California Management Review*, pp.56-70.
- Karakaya, Fahri, and Canel, Cem. 1998. "Underlying dimensions of business location decisions." *Industrial Management & Data Systems*, Vol. 98, Number 7, pp. 321-329.
- Harrison, Bennet, and Sandra Kantor. 1978. "The Political Economy of State Job-Creation Business Incentives." In *Revitalizing the Northeast*, ed. Richard Sternlieb and Roger Hughes. New Brunswick, N.J.: Rutgers University Center for Urban Policy.
- Mintz, Jack M., and Stephen R. Richardson. November 1995. "The Lifetime Capital Gains Exemption: An Evaluation". *Canadian Public Policy* Vol. 21, Supplement 1, pp. 1-12.
- National Establishment Times Series (NETS). Addendum to Phase 9 of the Job Gap Study, April 2006.
- Saiz, Martin, and Clarke, Susan E. 2008. In Gray, Virginia, and Russell L. Hanson (editors). Politics in the American States: A Comparative Analysis. Ninth Edition. Washington, D.C.: CQ Press.
- Schemmenner, R.W., Huber, J., Cook, R. 1987. "Geographic differences and the location of new manufacturing facilities". *Journal of Urban Economics*. Vol. 21 pp. 83-104.

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Disclaimer: This report has been prepared by the undergraduate students at the University of Vermont under the supervision of Professor Anthony Gierzynski. The material contained in the reports does not reflect official policy of the University of Vermont.