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Marketing Promotion of Texas Agricultural Products: The Rural Dimension of the GO TEXAN Program

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The Texas Department of Agriculture launched the GO TEXAN marketing promotion program in 1999 to support Texas agricultural and food production. The underlying assumption is that if successful, the program would support directly or indirectly the demand for Texas agricultural production and the well-being of the state's rural population. This research analyzes responses to an official 2008 survey sent to the GO TEXAN program beneficiaries. Overall, this study suggests that not all activities in the program have a clearly positive impact. Participation in trade shows, retail promotion and media events, and reverse trade missions seem to have a significant effect on sales increase as well as the use of the program logo on promotional items and web sites. The study also suggests that the relative impacts of event participation and uses of the program logo differ according to the group of member's belonging, particularly when comparing the "mostly rural" vs. "mostly urban" categories. Consequently, if a state's agricultural marketing program specifically attempts to reach producers from its "mainly rural" areas, an analysis may be needed to identify what specific types of promotion seem to generate the best results in those areas.

Key Words: marketing promotion, rural development

JEL Classifications: Q13, Q19

Agricultural and food products play an important role in the Texas economy. Agriculture is the second largest industry in the state, generating approximately $80 billion for the economy annually. Texas has the most farms and the largest acreage under agricultural production in the nation: 130 million acres (Texas Farm Bureau, 2010). The state produces and consumes a large quantity of high-quality agricultural products every year and its people are characterized by a strong pride in their state.

Agricultural business activities definitely impact the economic prospects of rural communities. However, current trends in U.S. conventional commodity production are inducing the need to increase acreage size and capital investment on traditional agricultural units. These developments are forcing many small operations to close down or search for alternative production activities. Texas is not immune to the national trend that is forcing the rural population to migrate to large urban areas. More than one third of "nonmetro" counties in the United States have lost at least 10% of their population as a result of outmigration over the 1988–2008 period (McGranahan, Cromartie, and Wolan, 2010; U.S. Department of Agriculture

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[USDA], 2010). Many of those who stay are looking into noncommodity, differentiated production (organic produce, wine grapes, sausage, nontraditional cheese, ethnic foods, floral, specialty horticulture, etc.). Economic viability and success of these noncommodity product operations requires new marketing approaches, skills, and strategies. State-sponsored marketing promotion programs could be very useful in helping small producers with the transition if they are appropriately designed and managed.

In 1999, the Texas Department of Agriculture (TDA) launched the GO TEXAN program to support the demand for Texas agricultural production. The purpose of the GO TEXAN program is to increase the market share of Texas products consumed in the state and to improve the profit level of its producers. It encourages consumers to seek and purchase products "made in Texas." The benefits of the $25 per year membership fee include the use of the GO TEXAN logo in media advertisements, participation in GO TEXAN-sponsored events, links between buyers and sellers, provision of useful information, and establishment of a strong Texas presence in marketing and trade. The program does not specifically seek a direct impact on rural producers but attempts to benefit food and fiber producers that may be located in rural or urban areas. The assumption being made is that the indirect impact may eventually reach the Texas agricultural producer.

Texas has the advantage of a large consumer market compared with other less populated states within the United States. It is the second largest U.S. state in population. As of 2009, the state had an estimated population of 24,782,302, an increase of 1.97% from the previous year and 16.1% since the year 2000 (USDA, 2010). Consumer demand in Texas is high and will continue to grow in the future as a result of the rapid increase in population and income.

The GO TEXAN marketing program involves food, fiber, horticulture, forestry, and livestock production sectors. TDA also provides different marketing promotion tools to different markets. Food is a big industry in Texas, and abundant farm land generates large quantities of food, including fresh fruit and vegetables, nuts, honey, meat, and grains, to meet the needs of the daily consumption of its large population. The TDA food marketing promotion includes links between buyers and sellers, promotion at retail grocery stores, food fairs, and festivals across the state, and the use of the well-known GO TEXAN logo in containers, packing materials, and promotional items.

Specific Problem Description

To evaluate the effectiveness of the GO TEXAN program, a survey has been developed and sent to the members of the GO TEXAN program and relative data have been collected by TDA. The survey asks program members to self-assess the impact of the overall program on their sales and the specific activities in which they participate. The survey data have been used by TDA to estimate the general return on every dollar spent in the GO TEXAN program. The budget of the program in 2008 was $2.4 million, and it provided roughly $54 in estimated return for each dollar invested in the program (TDA, 2008). However, previous studies have not used the survey data to provide specific analysis by product groups, type of marketing activities, or rural vs. nonrural character of the producer or business. It would be important for TDA to assess the most effective promotion events in the program. It would also be beneficial to evaluate in what type of business is most effective and if the effects are equally affecting the rural areas of the state. A more in-depth analysis of the current survey data might help the TDA make better decisions on what type of promotional activities to enhance and assess how well they promote the marketing of agricultural/food product for nonmetro areas in Texas.

The objectives of this study are 1) to evaluate the effectiveness of member participation at different marketing promotion events and alternative uses of the GO TEXAN logo and 2) to compare the effectiveness of the program events and uses of the logo in metro vs. and nonmetro areas of the state.

Literature Review

Agricultural and food markets in the United States are highly competitive. There has been

a long history of the U.S. government promoting marketing of local agricultural products (Caswell, 1997). Involvement of state governments in the advertising and promotion of agricultural commodities dates back to the 1930s (Halloran and Martin, 1989). In the beginning, government promotion was intended to increase the demand for agricultural products. During the agricultural recession period of the 1980s, many state governments set up marketing strategies to increase the demand for local agricultural production. These state governments view the promotion of local farm products as a vehicle by which increased competitiveness and state market shares can be achieved (Adelaja, Brumfield, and Lininger, 1990).

The early state government promotions only focused on a single product that was most representative of the state. These early state-sponsored or state-authorized advertising programs for products such as Florida citrus, Maine potatoes, Washington apples, or California peaches attempted to expand the demand of these states' products and increase net returns during the depths of the depression (Patterson, 2006). In practice, these efforts made by the government did increase the local agricultural products consumption and raised net returns to producers using marketing promotion. More recently, with the development of promotion programs, the state sponsors have expanded the promotions to include many more local agricultural and food products. Currently, most of the states have marketing promotion programs for several agricultural products.

Jersey Fresh is one of the nation's most successful state marketing promotion examples. The New Jersey tomato is one of the state's famous agricultural products, because it is known for being fresh, mature, and of high quality. Many studies have evaluated the marketing promotions of Jersey tomatoes. A study by Adelaja, Brumfield, and Lininger (1990) tested for product differentiation by estimating demand functions for tomatoes available at the retail level in New Jersey. The unique character of New Jersey tomatoes showed that they have inelastic demand with respect to price, elastic demand with respect to income, and fewer relevant substitute products. The study results suggested that promotion of Jersey tomatoes would increase its market share. According to the analysis, it was helpful for both New Jersey and other states to support marketing promotion programs for other agricultural products.

The promotional campaign in New Jersey also expanded its marketing promotion programs. They attempted to increase the consumer awareness of the entire array of agricultural products available besides tomatoes to increase the demand for local products. Govindasamy, Italia, and Thatch (1998) evaluated the effectiveness of the Jersey Fresh program in terms of consumer awareness. The results of the analysis identified high brand awareness groups among consumers. It helped target specific demographic groups and was conducive to identifying potential consumers. It also further helped the state marketing promotion to develop new promotion programs to increase the consumption of local agricultural products.

U.S. producers face strong competition from Mexico and Central and South American countries, especially in the fresh fruit and vegetable markets (Jekanowski, Williams, and Schiek, 2000). Texas has a unique location bordering Mexico, which is one of the largest agricultural exporters among the Latin American countries. Most of Mexico's agricultural product exports go to the United States and Canada. The North American Free Trade Agreement (NAFTA) launched in January 1994 eliminated trade barriers among partner countries reducing the cost of Mexican agricultural exports in the United States. As a result of the proximity of Texas and their competitive prices, large quantities of Mexican products (especially fresh fruits and vegetables) are exported to Texas markets every year. However, local Texas agricultural products are considered to be of high quality and an increasing number of consumers seem to be willing to pay more for higher quality food or just for products that are "local." In addition, some Texas agricultural produce can be harvested at the height of ripeness and delivered to local markets in less time than foodstuffs produced in other countries. These conditions create potential to encourage the consumption of local Texas agricultural

products through marketing promotion emphasizing their Texas origin.

It has been more than 10 years since the GO TEXAN program was launched. However, few studies have evaluated the effectiveness of the program. Hanagriff et al. (2004) examined the GO TEXAN members' demographic characteristics, participation level, and members' successfulness resulting from participation in the program. The overall percentage sales changes resulting from the benefits to GO TEXAN members have been reported in the Hanagriff et al. article. The relationship between sales increase and participation in the GO TEXAN program appears to be clear in that study. However, more in-depth analysis might be needed to assist TDA in managing and improving specific marketing promotion events or activities and their potential impact by type of business and particular geographic areas. For example, if it is found that some specific types of promotion events or materials are clearly enhancing the increase in average sales, the TDA may want to emphasize their use. By the same token, it may be possible that some rural or nonmetro areas' businesses may not be taking advantage of the most successful promotional events or tools offered by the TDA's program.

There are 15 questions in the GO TEXAN member survey questionnaire. In this article, four of the questions are used to analyze sales changes and the relevant marketing promotion. The data related to type of business and marketing promotion event participation are analyzed. The type of business includes raw food/fiber production, wholesale, food processing, food retailing, horticulture (production), wine, input products, service providers, and other services. The GO TEXAN marketing promotion includes participation in seven types of events such as trade shows, international events, festivals, retail promotions, etc. as well as the potential use of the popular program logo in different ways. Our objective is to find the events and uses of the GO TEXAN logo that have the most significant impact on sales overall and also assess if those impacts are different in "mostly rural" vs. "mostly urban" types of participating businesses. The results of the analysis may be used as a guide for the TDA to target more specific categories of businesses and to emphasize the most effective marketing promotions according to the type of industry and hopefully the type of area.

Conceptual Framework

Modern economic theory of demand states that individual consumers maximize the "utility" obtained from a bundle of consumer goods under income constraints. This allows them to purchase a particular product based on its price, the prices of substitutes and complements, income, and their particular tastes and preferences. Usually, people change their consumption choices when one or more of these conditions change. The demand for a good would change when prices and income change but also when, independently of prices and income, consumer perceptions are modified. The conditions of demand for a product in a market can be then summarized as $D = f(P1, P2, I, T)$, where D is the quantity demanded in the market, P1 is the price of the good itself, P2 is the price of other goods such as prices of substitutes and complements, I is consumers' income, and T represents consumers' tastes and preferences.

In generic agricultural commodity markets, producer groups have been using generic promotion efforts to increase total demand by influencing consumer preferences (e.g., milk, beef, chicken, and pork promotional campaigns). To avoid the free-rider problem, government-sponsored "check-off" mechanisms have been used to fund some of those marketing promotion programs. In the case of commercial differentiated goods like food products, marketing promotion activities are used by companies in an attempt to expand the demand for their specific product by targeting consumer tastes and preferences rather than changing prices. Because marketing promotion activities have shown to be highly powerful factors that affect demand, some state governments have also used marketing promotion to expand the consumption of domestic or regional food products.

Heers (2009) states that "agricultural marketing is unique, and it is difficult to establish

brand preferences because of the homogeneity of most commodities, a difficulty that leads to commodity-wide marketing programs." Consumers make decisions to buy food, apparel, and other goods relying on experience and market information (Forker, 1993). For agricultural/food products consumed in Texas, assuming no income constraint, if prices of Texas-produced and non-Texas-produced goods are similar, consumer preferences may be influenced by an awareness of the product's origin. As mentioned in the introduction of this study, Texans are characterized by a strong pride in their state. Under similar price and quality conditions, they may prefer buying Texas agricultural products as opposed to products that are not produced in Texas. They may be even willing to pay higher prices for local products. That is the basis for TDA's marketing promotion program. Increasing the awareness of local consumers would raise the demand for Texas products and consequently have an impact on Texas producers all along the marketing channels to reach the local farming sector. The GO TEXAN market information provided by the TDA is intended to play an important role in that goal.

The objective of the GO TEXAN program is to increase the market share of Texas agricultural products and to raise net return to farmers. To evaluate the effectiveness of the marketing promotions based on the current campaign, the TDA has been using an annual survey sent to program members who are primary those producers who pay the annual fee, use the GO TEXAN logo, and participate in specific marketing events. The results of analyzing the survey have shown that most members have been able to increase their sales as a consequence of their participation in the program. Consequently, the return to the investment in the program has been high not only in terms of sales increases for members, but in terms of a positive direct and indirect impact on Texas economy (Hanagriff et al., 2004). However, no evaluation has been performed on the specific impact of each individual marketing promotion event or on the alternative uses of the GO TEXAN logo by program members. An analysis of those factors may help the TDA to increase the effectiveness of the program and to prioritize the most relevant program activities. Another evaluation that has not been performed is the impact on the program by agricultural industries, and more specifically the potential effect on farming communities and rural or nonmetro areas of the state. With the expansion of food marketing businesses in the program, a growing percent of members are located in large metropolitan areas where the needs for marketing support and the efficiency of the program activities might be different from those of the nonmetro or more rural areas of Texas.

Methods and Procedures

Data

A survey has been developed and sent to GO TEXAN members and relevant data have been collected by the TDA to evaluate the effectiveness of the GO TEXAN program. Approximately 2,300 members participated in the 2008 GO TEXAN program. Approximately 1,500 surveys were sent to these members and the collected data includes 345 usable responses. That is a response rate of 23% with most of the questions being categorical. According to the data of the GO TEXAN survey in 2008, the program marketing promotions benefit the participant members. Seventy-five percent of the GO TEXAN members reported that the program activities had helped them in increasing their sales.

The survey includes questions about annual gross sales levels, average number of regular business employees, whether the companies export GO TEXAN products, the type of business, the percentage sales changes that are enhanced through GO TEXAN activities, the type of GO TEXAN events they participate in, and how the company uses the GO TEXAN logo.

In this article, we focus on analyzing the impact on percentage sales change of the participation of the members in alternative marketing promotion events as well as the effect of alternatives uses of the GO TEXAN logo. Our original intention was to analyze the impacts at "mostly rural" (nonmetro) and "mostly urban" (metro) locations of business members. However, the variable location was not fully provided by

Table 1. Description of the Variables Used in the Analyses

Name	Description
Raw food/fiber production	1 if raw food/fiber production sector could represent the business; 0 otherwise
Horticulture production sector	1 if horticulture production sector could represent the business; 0 otherwise
Food processing sector	1 if food processing sector could represent the business; 0 otherwise
Input products sector	1 if input products sector could represent the business; 0 otherwise
Wholesale products sector	1 if wholesale products sector could represent the business; 0 otherwise
Food/fiber products retail sector	1 if food/fiber products retail sector could represent the business; 0 otherwise
Horticulture retail products sector	1 if horticulture retail products sector could represent the business; 0 otherwise
Service contract provider	1 if service contract provider could represent the business; 0 otherwise
Other	1 if some other agricultural sector could represent the business; 0 otherwise
Trade shows–domestic	1 if the participate GO TEXAN event is trade shows–domestic; 0 otherwise
International events	1 if the participate GO TEXAN event is international events; 0 otherwise
Retail promotions	1 if the participate GO TEXAN event is retail promotions; 0 otherwise
Consumer shows	1 if the participate GO TEXAN event is consumer shows; 0 otherwise
Trade missions	1 if the participate GO TEXAN event is trade missions; 0 otherwise
Reverse trade missions	1 if the participate GO TEXAN event is reverse trade missions; 0 otherwise
Dallas Market Center	1 if the participate GO TEXAN event is Dallas Market Center; 0 otherwise
Festivals	1 if the participate GO TEXAN event is festivals; 0 otherwise
Stock shows	1 if the participate GO TEXAN event is stock shows; 0 otherwise
State fairs	1 if the participate GO TEXAN event is State fairs; 0 otherwise
Media events	1 if the participate GO TEXAN event is Media events; 0 otherwise
TDA educational/training workshops	1 if the participate GO TEXAN event is TDA educational/training workshops; 0 otherwise
Other	1 if the participate GO TEXAN event is some other event; 0 otherwise
Packaging and labeling	1 if have used GO TEXAN logo on packaging and labeling; 0 otherwise
Brochures and literature	1 if have used GO TEXAN logo on brochures and literature; 0 otherwise
Company vehicles	1 if have used GO TEXAN logo on company vehicles; 0 otherwise
Promotional items	1 if have used GO TEXAN logo on promotional items; 0 otherwise
Media advertisements	1 if have used GO TEXAN logo through media advertisements; 0 otherwise
Web site	1 if have used GO TEXAN logo on web site; 0 otherwise
Product sales tags	1 if have used GO TEXAN logo on product sales tags; 0 otherwise
Other	1 if have used GO TEXAN logo by some other way; 0 otherwise

TDA, Texas Department of Agriculture.

Table 2. Effects of GO TEXAN Promotion Events on Member Sales: All Members (Regression 1A)

Variable	Parameter Estimate	Standard Error	T Value	Pr > |t|
Intercept	0.8365	0.0363	2.31*	0.0222
Trade shows	0.1220	0.0370	3.14*	0.0020
International events	0.2254	0.1215	1.86	0.0651
Retail promotions	0.1165	0.0386	3.01*	0.0030
Consumer shows	0.0865	0.0510	1.69	0.0918
Trade missions	–0.0768	0.1245	–0.62	0.5383
Reverse trade missions	0.1792	0.1341	1.34	0.1829
Dallas Market Center	0.0413	0.0852	0.48	0.6289
Festivals	0.0316	0.0385	0.82	0.4124
Stock shows	–0.0535	0.0457	–1.17	0.2438
State fairs	0.0025	0.0446	0.06	0.9550
Media events	0.0900	0.0773	1.16	0.2458
TDA educational	0.0281	0.0541	0.52	0.6035

Note: R^2 is 0.1689.
TDA, Texas Department of Agriculture.
* Significant at the 0.05 level.

TDA files and so we had to use a proxy for location. We did so by grouping members by businesses traditionally located in mostly urban areas and business traditionally located in mostly rural areas. In the first group we included the business categories of: wholesale, food/fiber retail, horticulture retail, and service providers. In the second group we included the categories: raw food/fiber production, horticulture production, food processing, wine/vineyard, and input product sectors. The types of marketing promotion events and uses of the program logo are considered as explanatory variables. However, some potential shortcomings of the study should be recognized and are mainly related to survey constraints. The survey variables used in the analysis are described in Table 1.

Estimation

A linear model is used to estimate the effect on percentage sales change of the members' participation in alternative marketing promotion events.

Table 3. Effects of GO TEXAN Promotion Events on Member Sales: Mostly Rural (Regression 1B)

Variable	Parameter Estimate	Standard Error	T Value	Pr > |t|
Intercept	0.1009	0.0439	2.30*	0.0229
Trade shows	0.1397	0.0469	2.98*	0.0034
International events	0.2518	0.1307	1.93	0.0562
Retail promotions	0.1291	0.0476	2.71*	0.0075
Consumer shows	0.0934	0.0653	1.43	0.1548
Trade missions	–0.1984	0.1492	–1.33	0.1859
Reverse trade missions	0.2243	0.1427	1.57	0.1184
Dallas Market Center	0.1002	0.1146	0.87	0.3835
Festivals	0.0648	0.0491	1.32	0.1894
Stock shows	–0.556	0.0560	–0.99	0.3224
State fairs	–0.0688	0.0547	–1.26	0.2105
Media events	0.0874	0.0897	0.97	0.3316
TDA educational	0.0114	0.0590	0.19	0.8468

Note: R^2 is 0.1851.
TDA, Texas Department of Agriculture.
* Significant at the 0.05 level.

Table 4. Effects of GO TEXAN Promotion Events on Member Sales: Mostly Urban (Regression 1C)

Variable	Parameter Estimate	Standard Error	T Value	Pr > |t|
Intercept	0.0515	0.0521	0.99	0.3280
Trade shows	0.0730	0.0552	1.32	0.1911
International events	–0.0397	0.2248	–0.17	0.8640
Retail promotions	0.0449	0.0524	0.86	0.3947
Consumer shows	0.0876	0.0676	1.30	0.2005
Trade missions	0.2407	0.2400	1.00	0.3202
Reverse trade missions	0.4676	0.2211	2.12*	0.0388
Dallas Market Center	0.1538	0.0940	1.64	0.1073
Festivals	0.0195	0.0540	0.36	0.7179
Stock shows	–0.0588	0.0644	–0.91	0.3648
State fairs	0.0460	0.0680	0.68	0.5015
Media events	0.3841	0.0994	3.86*	0.0003
TDA educational	0.1526	0.0987	1.55	0.1270

Note: R^2 is 0.4038.
TDA, Texas Department of Agriculture.
* Significant at the 0.05 level.

$$\begin{aligned} SCH_i = {} & \alpha_0 + \alpha_1\ Tradeshows_i \\ & + \alpha_2 Internationalevents_i \\ & + \alpha_3 Retailpromotions_i \\ & + \alpha_4 Consumershows_i \\ & + \alpha_5 Trademissions_i \\ & + \alpha_6 Reversetrademissions_i \\ & + \alpha_7 Dallasmarketcenter_i \\ & + \alpha_8 Festivals_i + \alpha_9 Stockshows_i \\ & + \alpha_{10} Statefairs_i + \alpha_{11} Mediaevents_i \\ & + \alpha_{12} TDAeducational_i + \varepsilon_i, \end{aligned} \tag{1}$$

where SCH_i is percentage sales change and is used as the dependent variable. The variables at the right side of the equation represent the types of marketing promotion activities as independent variables. This equation was run three times: 1A) for the whole set of members; 1B) for the mostly rural group; and 1C) for the mostly urban group of members.

A second model was used to estimate the impact on members' sales change with the alternative uses of the popular GO TEXAN logo.

$$\begin{aligned} SCH_i = {} & \beta_0 + \beta_1 Pakinglabeling_i \\ & + \beta_2 Brochuresliterature_i \\ & + \beta_3 Companyvehicles_i \\ & + \beta_4 promotionitems_i \\ & + \beta_5 Mediaadvertisements_i \\ & + \beta_6 Website \\ & + \beta_7 Productsalestags_i + \varepsilon_i, \end{aligned} \tag{2}$$

where SCH_i is percentage sales change and is used as a dependent variable. The variables at the right side of the equation represent the

Table 5. Effects of GO TEXAN Alternative Logo Uses on Member Sales: All Members (Regression 2A)

Variable	Parameter Estimate	Standard Error	T Value	Pr > |t|
Intercept	0.8380	0.0424	1.97	0.0496
Packaging and labeling	0.0469	0.0375	1.25	0.2132
Brochures literature	0.0246	0.0376	0.66	0.5130
Company vehicles	0.1205	0.0947	1.28	0.2014
Promotion items	0.0905	0.0431	2.10*	0.0371
Media advertisements	0.1130	0.0490	2.31*	0.0220
Web site	0.0833	0.0368	2.27*	0.0244
Product sales Tags	0.0274	0.0583	0.47	0.6387

Note: R^2 is 0.0879.
* Significant at the 0.05 level.

Table 6. Effects of GO TEXAN Alternative Logo Uses on Member Sales: Mostly Rural Members (Regression 2B)

Variable	Parameter Estimate	Standard Error	T Value	Pr > |t|
Intercept	0.0766	0.0503	1.52	0.1298
Packaging and labeling	0.0496	0.0444	1.12	0.2652
Brochures literature	0.0664	0.0433	1.53	0.1271
Company vehicles	0.1967	0.1038	1.03	0.3052
Promotion items	0.1140	0.0519	2.19*	0.0295
Media advertisements	0.1310	0.0571	2.29*	0.0231
Web site	0.0918	0.0429	2.14*	0.0339
Product sales tags	–0.0130	0.0686	–0.19	0.8502

Note: R^2 is 0.1196.
* Significant at the 0.05 level.

alternative uses of the GO TEXAN logo for marketing purposes. This equation was also run three times: 2A) for the whole set of members; 2B) for the mostly rural group; and 2C) for the mostly urban group of members.

Results and Conclusions

A regression estimation of Equation (1A) was performed using the whole set of members and the results are presented in Table 2. The parameter estimations corresponding to the variables "trade shows" and "retail promotions" were found positive and significant at 0.05 levels. Positive signs indicate that member participation in the respective promotional events significantly contribute to an increase in the percentage sales under the GO TEXAN marketing program. Similarly, the same parameter estimates were found significant and positive (Table 3) when the regression was performed using "mostly rural" member classification (1B). However, when the "mostly urban" member group was used (Regression 1C in Table 4), the results changed. In this case, only the events related to "reverse trade missions" and "media events" showed parameter estimations positive and significant at the 0.05 level. These findings may in fact indicate that the effectiveness of the promotional events might depend on the "type" of business location. They will also suggest the events to promote if the main objective of the program would be to increase sales of businesses mostly associated with "nonmetro" or rural areas of Texas.

A regression estimation of Equation (2A), including the uses of the GO TEXAN logo, was also performed for all members and the results are presented in Table 5. In this case, the parameter estimates associated with the use of the logo in "promotion items," media advertisement," and "web sites" were found positive significant at the 0.05 level. Similar results were found when the regression was performed

Table 7. Effects of GO TEXAN Alternative Logo Uses on Member Sales: Mostly Urban Members (Regression 2C)

Variable	Parameter Estimate	Standard Error	T Value	Pr > |t|
Intercept	0.1059	0.0743	1,42	0.1587
Packaging and labeling	0.0066	0.0631	0.10	0.9174
Brochures literature	−0.0568	0.0639	−0.89	0.3768
Company vehicles	0.2953	0.1963	1.50	0.1366
Promotion items	0.0545	0.0696	0.78	0.4364
Media advertisements	0.1655	0.0836	1.98	0.0514
Web site	0.0587	0.0634	0.93	0.3572
Product sales tags	0.0971	0.0875	1.11	0.2710

Note: R^2 is 0.1047.

using only the "mostly rural" member category (2B, Table 6). Nevertheless, when the regression used only the "mostly urban" members (2C, Table 7), only the parameter estimate associated with the "media advertisement" was found significant and positive. These findings seem to confirm that the effectiveness of the GO TEXAN marketing promotion activities may differ according to the particular "type" of program member.

Overall, this study allows us to conclude that although, overall, GO TEXAN is considered a highly successful program in terms of helping Texas agricultural/food/fiber producers to increase their sales, not all activities in the program have a clearly positive impact. Participation in trade shows, retail promotion and media events, and reverse trade missions seem to have a significant effect on sales increases as well as the use of the program logo on promotional items and web sites. The study also suggests that the relative impact of event participation and use of the program logo differs according to the group of member's belonging, particularly when comparing the "mostly rural" vs. "mostly urban" categories. Consequently, if the state's agricultural marketing program would specifically attempt to reach nonmetro or mainly rural areas, our analysis may provide some guidelines on what promotional events to emphasize. However, a more explicit analysis by county classification may be required to identify what specific types of promotion seem to generate the best results in those counties.

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