

What Determines Indian Economic Success?

Evidence from Tribal and Individual Indian Enterprises

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Abstract

Prior analysis of American Indian nations' unemployment, poverty, and growth rates indicates that poverty in Indian Country is a problem of institutions—particularly political institutions—not a problem of economics *per se*. Using unique data on Indian-owned enterprises, this paper sheds light on one of the core institutions of enterprise success—corporate governance. Indian enterprises that are subject to undue political influence—especially the influence of elected officials who serve as members of enterprise boards—frequently fail to thrive. Thus, enterprises without politically insulated corporate governance cannot generate ongoing profits for reinvesting in the community or for sustaining employment growth. Nonetheless, institutional means of separating business from politics are readily available—even for Indian nations committed to tribal ownership of significant portions of their economies.

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The subject of economic development in Indian Country is well-plowed territory. Presidential Commissions and Congressional Committees have investigated, tribal policy makers have experimented, bankers have innovated, and Indian entrepreneurs have put their time, talent, and treasure at risk.² As a consequence of this multi-fronted attack on underdevelopment, a number of salient patterns of success are coming into focus. This report applies statistical techniques to new data gathered in a joint effort by the National Congress of American Indians (NCAI), Alliance Management Systems, and the Harvard Project on American Indian Economic Development (hereinafter "the Harvard Project") funded by the Economic Development Administration of the US Department of Commerce (EDA).³ The analysis uses survey responses from scores of tribal and individually owned Indian enterprises, representing nine commercial sectors, to isolate factors that contribute to enterprise success. The findings accord with previous research and reinforce policy approaches that the most successful enterprises in Indian Country already follow. The findings also suggest that new directions in federal policy are warranted.

Previous Research of the Harvard Project

The Harvard Project began in the mid-1980s with the question: What strategies work around Indian Country for reducing chronic Indian poverty? At the time, Indian gaming operations were modest and yet some tribes seemed to be pulling ahead of their peers in terms of reducing unemployment and sustaining tribal economies. Project researchers sought to find out what they were doing and why it worked. Since then, Project professors, fellows, and graduate students have logged hundreds of person-days on the ground in Indian Coun-

² See for example, Kalt, Joseph P. and Stephen E. Cornell, eds., *What Can Tribes Do? Strategies and Institutions in American Indian Economic Development* (Berkeley: University of California, 1992); *Economic Development in Indian Reservations*: Hearing before the Committee on Indian Affairs, United States Senate, One Hundredth Congress, second session, September 17, 1996 (Washington: GPO, 1996); Legters, Lyman H. and Fremont J. Lyden, *American Indian Policy: Self-Governance and Economic Development* (Westport, CT: Greenwood Press, 1994); *Indian Economic Development*: Oversight Hearing before the Subcommittee on Native American Affairs of the Committee on Natural Resources, United States House of Representatives, One Hundred Third Congress, first session, (Washington: GPO, 1993); *Moving Toward Self-Sufficiency for Indian People: Accomplishments 1983-84: An Interdepartmental Report Prepared by the Department of the Interior and the Department of Health and Human Services* (Washington: US Department of the Interior, 1984).

³ See Wright, Victoria, et al., *Building the Future: Stories of Successful Indian Enterprises* (Washington, D.C.: National Congress of American Indians, 2000). This paper is derivative of that work (Appendix D, in particular) and we are grateful to NCAI for their support and cooperation in conducting this research. We refer interested readers to *Building the Future* for nineteen case studies of Indian enterprise success.

try and consistently find that there are three keys to Indian economic development.⁴ These keys are:

1. **Sovereignty Matters** Where tribes make their own decisions about what approaches to take and what resources to develop, they consistently out-perform outside decision-makers. Whether it is timber operations under PL 93-638, Indian Health Service programs under self-governance compacts, or water rights made secure under a treaty settlement, tribes do better when they themselves make the decisions.⁵ Because tribes bear the consequences of their governments' decision-making, whereas the Bureau of Indian Affairs, non-tribal developers, state governments, and other outsiders do not, tribes that make their own development decisions do better.
2. **Culture Matters** Not long ago, the federal government espoused the argument that acculturation was a means to development. Indians, they argued, would develop as soon as they shed their "Indian-ness."⁶ Research by the Harvard Project finds exactly the opposite: Indian culture is a resource that shores up the strength of government and has concrete impacts upon such bottom line results as forest productivity and housing quality.⁷ Not only does

⁴ Currently, there are four basic missions of the Harvard Project and its sister organization, the Udall Center for Studies in Public Policy at the University of Arizona, all of which involve field-based work:

- i) to conduct basic research into the causes and consequences of development success in Indian Country;
- ii) to offer practical research and advice to tribes, pan-tribal organizations, and urban American Indian associations on matters ranging from program design to processes for constitutional reform;
- iii) to educate senior executives in Indian Country in the US and among First Nations in Canada about the findings of the Harvard Project; and
- iv) to identify, honor, and celebrate excellence in tribal government and management through the Honoring Nations awards program.

⁵ See for example, Krepps, Matthew B. and Richard E. Caves, "Bureaucrats and Indians: Principal-Agent Relations and Efficient Management of Tribal Forest Resources," *Journal of Economic Behavior and Organization* 24(2)(1994): 133-151; Dixon, Mim, Yvette Roubideaux, Brett Shelton, Cynthia Mala, and David Mather, *Tribal Perspectives on Indian Self-Determination and Self-Governance in Health Care Management* (Denver: National Indian Health Board, 1998).

⁶ "Indian economic development can proceed only as the process of acculturation allows," from US Department of the Interior, Bureau of Indian Affairs, "Economic Development of Indian Communities," in United States Congress, Joint Economic Committee, *Toward Economic Development for Native American Communities* (Washington: GPO, 1969).

⁷ Jorgensen, Miriam R., "Governing Government," manuscript, January 1998; Jorgensen, Miriam R., "History's Lesson for HUD and Tribes," manuscript, April 2000.

the consent of the governed matter (as high school civics texts teach), but a congruence between the institutions of government and the views of the governed about what is *appropriate* government matters to success.⁸ In short, good institutions of governance match cultural norms of political propriety.

3. ***Institutions Matter*** In addition to defending their sovereignty and having institutions that match their cultures, successful tribal governments share a few core institutional attributes. They settle disputes fairly, they separate the functions of elected representation and business management, and they successfully implement tribal policies that advance tribal strategic goals. Fair dispute resolution is essential to the accumulation of human, financial, and infrastructural capital because it sends a signal to investors of all kinds that their contributions will not be expropriated unfairly (see below). Separating business and government is critical because many Indian businesses are government-owned (occasionally by law and frequently by design). This feature invites the conflation of two contradicting institutional virtues—good constituent service to voters and fiduciary duty to shareholders—and thereby creates tremendous risk to profitability as elected leaders are pressured to interfere in business on behalf of voters (see below). Finally, effective administration is a feature of successful tribes because, without it, legitimacy deteriorates and sovereignty is eroded as opportunities go untapped or other powers fill the vacuum left by weak tribal government.

Essentially, the research of the Harvard Project finds that poverty in Indian Country is a political problem—not an economic one. There has been a substantial supply of labor in Indian Country for decades, yet scores of economic development plans have been unable to tap that supply on a sustained basis and thereby improve the fortunes of Indian households. Likewise, tribes possessing natural or capital resources have not led the vanguard of development. While a lack of resources can hamper tribes, and certain systemic features of Indian Country confound investment (for example, the difficulty of collateralizing trust lands), the Harvard Project finds that the real deficiency in Indian Country is a shortage of safe havens for capital. The ability to create

⁸ Cornell, Stephen E., “Where's the Glue: Institutional Bases of American Indian Economic Development,” National Bureau of Economic Research, Conference on Political Economy, December 1990, revised February 1991; Cornell, Stephen E. and Joseph P. Kalt, “Where Does Economic Development Really Come From? Constitutional Rule Among the Contemporary Sioux and Apache,” *Economic Inquiry* 33(3)(1995):402-26; and Cornell, Stephen E., and Joseph P. Kalt, “Successful Economic Development and Heterogeneity of Governmental Form on American Indian Reservations,” in Merilee S. Grindle, ed., *Getting Good Government: Capacity Building in the Public Sectors of Developing Countries* (Cambridge, MA: Harvard Institute for International Development, 1997), pp. 257-296.

these safe havens is largely a matter of tribal political and institutional effectiveness.

Table 1 provides concrete evidence of the value of stable and effective governing institutions. The data demonstrate the payoff to reservation employment levels when a tribe has an independent means of resolving disputes. The estimates are based on information from 67 tribes with more than 1000 members and show the results of a statistical analysis that controls for development-relevant factors such as natural resources, educational attainment, and local market conditions. Thus, all else equal, tribes that implement a separation of powers that leaves their dispute resolution mechanisms outside political influence enjoy a 5 percent lower level of unemployment than tribes that do not.

Table 1
Contributions of Alternate Forms of Government
to Reservation Employment Levels

	<u>General Council</u>	<u>Parliamentary</u>	<u>Strong Chief Exec</u>
No Neutral Dispute Resolution	–	10.8%	14.9%
Neutral Dispute Resolution	5.0%	15.8%	19.9%

Note: Contributions are reported at mean sample values and are measured relative to a reservation with a general council (i.e., Athenian democracy) form of government, with no independent judiciary. All effects shown are statistically significant at the 90 percent level and higher.

Source: Cornell, Stephen and Joseph P. Kalt, "Where's the Glue: Institutional Bases of American Indian Economic Development", National Bureau of Economic Research, Conference on Political Economy, December 1990, revised February 1991.

Just as neutral dispute resolution has a concrete effect on employment, creating a separation between business and government has a material impact on the profitability of enterprises. Table 2 summarizes the results of an informal survey in which tribal leaders reported on the separation in their tribes between elected leadership and enterprise management. Enterprises whose management is insulated from elected bodies face odds of profitability of nearly seven-to-one, whereas enterprises where elected leaders participate in management face odds of profitability little better than one-to-one.

Table 2
Profitability of Tribal Enterprises
 Independent vs. Council-Controlled Management

	Profitable	Not Profitable	Odds of Profitability
Independent	34	5	6.8 to 1
Council Controlled	20	14	1.4 to 1

Source: Survey of 18 tribal chairs participating in the National Executive Education Program for Native American Leadership. See also Kalt, Joseph P., "Before the United States Senate Committee on Indian Affairs: Statement of Prof. Joseph P. Kalt", Harvard Project on American Economic Development, John F. Kennedy School of Government, Harvard University, September 17, 1996.

Though compiled through informal means, Table 2 underscores a phenomenon reported in NCAI's nineteen case studies⁹ and supported by the systematic data analysis presented later in this paper: Enterprise success hinges on freedom from political interference.

Statistical Analysis of Enterprise Survey Data

The data analyzed in this paper are unique in that they cover conditions affecting economic development success in Indian Country at the individual firm level. The richness of the contribution made by the surveyed enterprises lies in the depth of the information provided. The survey respondents—both tribal enterprises and privately held Indian enterprises—shared information regarding employment sustainability, profitability, industry sector, location, governance structure, comparative advantages, and use of technical assistance. In the context of policy threats to tax Indian revenues and the usual risk that a competitor may glean proprietary information, the enterprises contributing to this study are remarkable for their sheer number—more than 70 contributed survey responses.¹⁰ Together, this depth and breadth of information enable us to revisit the original question of the Harvard Project (What works and why?) in a systematic manner and to ask a number of additional questions, including:

- Does using technical assistance help firms? In particular, does EDA technical assistance make a difference in enterprise success?
- Does employing tribal or other Indian workers increase firms' success?
- Does advertising more help?

⁹ Wright, *et al.*, *Building the Future*, p. 5 *et passim*.

¹⁰ See Appendix C of Wright, *et al.*, *Building the Future*, for a list of the contributing enterprises and Appendix B for a copy of the survey designed by NCAI and the authors. Without the contributions of so many companies, this analysis would not be possible, as no other systematic data on Indian firms are available in Indian Country.

- Does exploitation of Indian resources or tribes' other comparative advantages (like special economic niches) increase firms' success?
- Does creating boards of directors contribute to success?
- Does board structure matter, particularly separation from political leadership?
- Does tribal ownership matter to success?
- Does turnover in enterprise management affect success?

We approach this task with the statistical tool of multiple regression. Essentially, multiple regression is a way of isolating relationships in data that derive from observations of the world as it is (rather than from controlled scientific experiments). The technique allows us to ask: What is the influence of factors A, B, and C on outcome Y? To take an example from the newspapers, we can ask: What are the influences of age, weight, gender, family history, and cholesterol intake on the incidence of heart disease? Multiple regression can isolate environmental variables over which no one has much control (age, family history, and gender) from treatment (or policy) variables over which some control can be exercised (weight and cholesterol intake), and test the impact of other explanations (for example, smoking) on the outcome.

Here, our discussion will break down the variables to be analyzed into three main categories:

- i) the **dependent variable** is what we hope to be able to predict (firm success);
- ii) the **environmental variables** are independent measures that affect Indian enterprise success, but do not lend themselves to easy policy influence (for example, geographic market access), or they are variables that need to be accounted for so that the results are robust (industry sector); and
- iii) the **policy variables** are factors that may contribute to success and over which tribal and federal governments have some control (for example, how enterprises are structured).

The Dependent Variable – How to Define Success

The research of the Harvard Project repeatedly uncovers the long-term importance of profitability as a goal for tribal enterprises. While tribal governments often view employment as the immediate problem to solve, Project research shows that managing tribal enterprises primarily as jobs engines is a recipe for on-going subsidization or for failure. Long-term enterprise health depends on profitability: if an enterprise is minding its profitability, then employment will take care of itself. Competitive pressures in labor-intensive industries will tend to allow tribal enterprises to employ more workers per dollar

invested. Conversely, competition in capital-intensive industries will allow less. Indian enterprises have to take employment intensity as a given fact of their competitive environment. It is a recipe for continuing losses if political pressures for jobs translate into mandates to enterprise management to operate against the grain of these competitive forces. For these reasons, we focus on profitability as the core measure of interest.

Having downplayed the importance of employment as a measure of success, we acknowledge that employment is nonetheless one of the ultimate goals of both federal policy and tribal economic development activity. Indeed, consultation with tribal leaders and Indian entrepreneurs confirmed to NCAI researchers that employment ought to be a key ingredient in any evaluation of Indian enterprise success.¹¹ Thus, we examine both profitability *and* employment trend.

First, we created an index for every enterprise based on gross and net income information (the “Profit Index”).¹² Second, we created an index combining the profitability and employment information reported in the surveys (the “Profit and Employment Index”).¹³ The higher the profitability of the firm, or the higher the profitability of the firm and the more capable it was of sustaining a favorable employment trend, the higher the relevant index score. With these two alternate measures of Indian enterprise success in hand, we set about to determine which enterprise attributes are related to high scores.

¹¹ Wright, *et al.*, *Building the Future*, p. 2.

¹² Because tribal enterprises are generally unwilling to share actual profitability information, the survey asked for revenues and net income to be reported in orders of magnitude (powers of ten—thousands, tens of thousands, hundreds of thousands, etc.). The profitability index is based on a ratio of the reported gross revenue and net income. Firms received:

- 0 if their profits in the last year were negative;
- 1 if their profit in the last year was two orders of magnitude lower than their revenues;
- 2 if their profit was one order of magnitude lower than their revenues; and
- 3 if their profit was of an equal order of magnitude as their revenues.

¹³ Employment is added to the profitability index via a comparison of employment levels in the reporting year to employment levels three years earlier. Firms received an addition to their profitability index depending on their ability sustain employment over the period. They received:

- 0 additional points if the number of jobs they provided was shrinking over the period;
- 1 additional point if the number of jobs they provided remained constant over the period;
- 2 additional points if the number of jobs they provided increased over the period.

Environmental Variables

Before identifying the determinants of success, it is important to take account of variation in the data that results from factors beyond tribal control. This is variation that affects a firm's success, but cannot reasonably be a policy variable with which tribes could hope to influence success. For example, a firm's location may be strongly correlated with the success measure used here, but "relocate" is not useful advice to an enterprise manager committed or required to stay on or near a particular reservation. Our question should be, *given* an enterprise's location, what other factors affect its success?¹⁴

Similarly, reporting firms represent a wide array of industries, and the success results from those industries are highly variable. While it is possible to make a strategic choice about which industries to enter, such decisions require a great deal more data than is available here, and therefore, a better question is this: Which choices affect *all* firms' success, after accounting for their particular industrial sectors?¹⁵

Determinants of Success – The Independent Variables

As noted above, we use the dataset to ask a number of questions. Our analysis yielded three strong findings:

- i) *firms with outstanding technical assistance (TA) needs tend to perform more poorly;*
- ii) *firms with non-politicized boards of directors tend to perform better;*
and
- iii) *firms that were tribally owned tend to perform more poorly.*

¹⁴ Inadvertently, most survey respondents viewed the location question as it was posed on the survey as an "either/or" proposition and therefore checked only one box on the list of possible location variables (on-reservation, off-reservation, urban, rural) rather than two (see question two, Appendix B in Wright, *et al.*, *Building the Future*). This feature of the responses makes statistical analysis of location difficult. Nonetheless, we constructed the variable "Location" to take account of the information we did have; "Location" is coded 0 if the enterprise is located in a rural area or on the reservation and is coded 1 if the enterprise is located in an urban area or off the reservation.

¹⁵ That said, it is interesting to note that gaming is *not* an industry with above average returns when compared to the other enterprises in the sample. Our first tests controlled for every industry sector reported in the survey—agriculture, construction, fish and wildlife, gaming, natural resources, services, and tourism. In this sample, only those enterprises in the agriculture and natural resource sectors demonstrated returns that were significantly different from average; to preserve the statistical power of the dataset, these were the only industrial sectors we controlled for in the remainder of our work. Because one would expect substantial returns in the gaming sector, we suspect that self-selection bias may be a significant problem with this data. Indian tribes unwilling to highlight their gaming success in the contemporary political environment would likely opt not to respond to the survey.

Table 3, below, shows the specific multiple regression results that point to these conclusions.¹⁶ The first column lists the six variables we find to be highly correlated with enterprise success. The second and third columns report the effects of these variables on the “Profit Index” and the “Profit and Employment Index,” respectively.

Table 3
Determinants of Enterprise Success
 Effects on Profitability and Employment Sustainability
 of Selected Enterprise Characteristics

Characteristic of the Enterprise	Measure of Enterprise success	
	Profit Index	Profit and Employment Index
1. The enterprise managers have received technical assistance.	-0.41 [†]	-0.34 [‡]
2. Technical assistance needs were not fully met.	-0.92	-0.89
3. Elected leaders do not sit on the enterprise board.	0.40	0.88
4. The enterprise is tribally owned.	-0.43	-0.70
5. The enterprise is in a rural or reservation location.	0.38	0.92
6. The enterprise is in the agricultural or natural resource sector.	1.70	1.52
7. Constant term	2.03	3.10
Proportion of the variation in performance explained by the model.	32%	22%
Number of valid observations in the sample	59	53
Range of index values	0-3	0-5
Average index value	1.85	3.38

[†] For the profit index, all effects of the enterprise characteristics are statistically significant at the 90 percent confidence level; when a control for start-up enterprises is added (which may be more likely to utilize TA), enterprise managers' receipt of TA becomes a statistically insignificant variable and the statistical significance of the remainder of the variables rises to 94 percent.

[‡] For the profit and employment index, all effects of the enterprise characteristics are statistically significant at the 90 percent confidence level except the first (enterprise managers have received TA), which is not significant at all; when a control for start-up enterprises is added (which may be more likely to utilize TA), the statistical significance of these other characteristics rises to the 95 percent confidence level.

A number of interesting results are readily apparent from Table 3. First, whether profitability alone or a combined profitability and employment trend index is used as a measure of enterprise success, the results are very similar.

¹⁶ The general results shown are robust to other specifications, including multinomial logit.

Positive effects in the second column are associated with positive effects in the third column and vice-versa. Second, self-reported insufficiency of technical assistance (item 2 in Table 3) has as large negative effect on success.¹⁷ Given the construction of the index scores, the data from this survey suggest that meeting unmet TA needs is roughly equivalent to increasing profitability by an order of magnitude or to positively changing the employment trend (since the change for item two is roughly negative one).¹⁸ Third, the independence of boards of directors is helpful for enterprise success (item 3 in Table 3). Fourth, the data indicate that tribal ownership tends to reduce both profitability and the chances of employment stability (item 4 in Table 3).¹⁹ We discuss each of these points in greater detail below.

The fact that many Indian-owned enterprises appear to have remaining needs for technical assistance—despite the fact that many of them *do* receive TA—indicates that available assistance fails to meet these needs. Because Indian enterprises in the sample report unmet technical assistance needs in high correlation with diminished enterprise success, the real need may be for linked financial and managerial capital investments—that is, targeted, firm-specific TA, arranged in conjunction with capital investment. In fact, in the international arena, development institutions are already making this course correction. They are turning away from “aid capital” (i.e., foreign aid) and toward the development of private capital markets, particularly venture capital. The advantage of such markets is that they result in an alignment of investors’ and firm managers’ incentives—venture capitalists find it in their best interest to do all they can to facilitate appropriate knowledge transfers, minimize capital risk, and increase returns from start-up enterprises. Thus, the data appear to indicate that policy toward Indian enterprises ought to mimic venture capital models in at least one way—the combination of financial investment with knowledge transfer. Nonetheless, if we take federal “aid capital” as a given, the sur-

¹⁷ Note that the presence of TA of any kind (item 1 in Table 3) was not strongly related to profitability and not related at all to the index of profitability and employment trends.

¹⁸ See notes 12 and 13. Note also that there may be a causal relationship in the other direction if respondents observe their firms doing badly and conclude from performance alone that they need more technical assistance (as opposed to marketing intelligence, capital, etc). Resolving causation on this issue is beyond the scope of this analysis; however, given the widespread need for human capital development in Indian Country, it is reasonable to presume as a starting point that, compared to non-Indian enterprises, the need for technical assistance is more acute.

¹⁹ Characteristics 5 and 6 in Table 3 control for location (see note 14) and industry sector (see note 15). Given that the coefficients are significant and positive in both cases, it might seem that an indicated long-term strategy would be to open agriculture or natural resource-based enterprises in rural or reservation locations—but that conclusion is likely unwarranted. As discussed above, the influence of industry sectors on profitability is best measured by a much larger dataset. Moreover, the location variable may be picking up the “signal” of other characteristics not included in the analysis for lack of data.

vey data indicate that, to ensure a good return on investment, tribal enterprises also must have adequate access to technical and managerial skill development resources.

Additionally, the results underscore the importance of enterprise and tribal institutions. In our statistical tests, enterprises with corporate boards did not perform markedly differently than enterprises without corporate boards. Instead, it was the existence of a *non-politicized* board that mattered to success. Indeed, in this sample, all enterprises with a profit index score of zero lacked an independent board. The implication is that a board that serves as a buffer between the (inherently) political tasks of setting tribal direction and strategy and the more specialized and technical tasks of managing enterprises contributes to success. This result from the statistical data is congruent with the results from NCAI's case studies, which indicate that keeping political actors and their constituents' immediate concerns out of business decisions is beneficial to enterprise health.

Also of note, tribal ownership of enterprises is correlated with reduced enterprise success, even after accounting for the independence of boards. As discussed above, tribally owned enterprises face competing pressures (as do all government-owned enterprises): the pressure to raise profits for the community (that is, to be accountable to shareholders) and the pressure to meet other community needs such as employment training (that is, to provide benefits to constituents). These dual pressures and the always-present possibility that elected leaders can interfere in the day-to-day running of businesses in the name of constituent service place an extra burden on tribally owned enterprises. Thus, while independent boards may provide an increase in profitability, our data indicate there is an additional premium on good institutions of government where tribally owned enterprises are concerned.²⁰

The data did not support conclusions on any of the other questions posed in the bulleted list on page 6. To be specific, this dataset and our indices indicate:

- Employing tribal or other Indian workers does not have a statistically measurable impact (positive or negative) on firms' success.
- Advertising is not correlated with success.
- Exploitation of Indian resources or tribes' other comparative advantages (like special economic niches) does not measurably affect firms' success.

²⁰ An effort was made to poll enterprises on other attributes related to tribal governance (for example, whether they had recourse to effective dispute resolution mechanisms) in order to test the relationship established in Table 1; however, there was insufficient data to robustly test whether certain other non-board related governance mechanisms could overcome the negative influence of tribal ownership on our success indexes.

- Management turnover does not appear to affect success.

There are plausible substantive reasons these strategies may have no bearing on firms' success. For example, advertising may be indispensable to certain Indian enterprises, but only because it is an essential component of *sector* enterprise behavior, and thus, it would have no effect on *Indian* enterprise profitability.²¹ Moreover, there may be a methodological reason this analysis could not identify effects: the dataset may have been too small to assess the strategies' impacts. In any statistical analysis of this type, the useable dataset shrinks as missing data disqualify certain observations, and this dataset, in particular, was fairly small to begin with. In sum, to be sure that the above hypotheses can be ruled out, a broader sampling of enterprises would be needed.²²

This is not the only sense in which the dataset may be too small. The average firm in this analysis had a profitability-and-employment rating of 3.33. In other words, failing firms and very marginal firms were markedly under-represented in the sample. The average firm was fairly profitable and, for at least three years, provided a steady number of employment opportunities. This underscores our impression (raised in note 15) that self-selection bias is a major shortcoming of this dataset. Enterprises that had gone out of business, of course, could not respond to the survey. Moreover, managers of enterprises that are struggling to survive may not have had the time or inclination to respond. Without these enterprises, this data sample is significantly skewed toward the successful end of the population of Indian enterprises. This inherent bias toward success may explain the counterintuitive result that management turnover does not affect success—it is likely that all Indian firms that suffered from management turnover remained unpolled.

Recommendations

A recurring theme in the surveys and in NCAI's case studies is that effective enterprise and tribal governance matter to success. Enterprises that are insulated from political pressures are more successful. Where political leaders can interfere directly in enterprises, pressures tend to mount for them to do so—to the detriment of performance. Conversely, where mechanisms exist to separate strategic (that is, political) decision-making from operational (that is, managerial) decision-making, enterprises seem to perform better. Moreover, a critical shortage of technical assistance may be having a direct negative impact on tribal enterprise success. Without this technical assistance, investments by the federal government will fall short of their potential, and investments by the private sector may not be forthcoming at all.

²¹ If there were an arms race in advertising in a given industry sector, it is plausible that no firm's advertising would yield significant differences in profitability.

²² See also note 15.

Thus, there are implications for both tribal and federal policymakers. Tribal policymakers can ensure that a separation of functions exists between civic governance and corporate governance. Around the world, government-owned businesses face challenges that other enterprises do not, and this places a premium on structures of good corporate governance. This analysis of Indian firms indicates that a strategic review of enterprise governance systems—particularly for under-performing enterprises—is a warranted and important task for tribal governments. The good news is that the task is a piece of the economic development puzzle that is fully within the scope of tribal control where enterprises are owned by the tribe and within the scope of enterprise control under private ownership.

While prior Harvard Project research indicates that no organization is better suited to the task of governance overhaul than the tribes themselves, there is also a supporting role for federal policymakers to play in improving corporate governance and tribal self-governance. Much the way venture capital firms provide managerial talent and organizational advice with their investments of funds, the federal government could accompany its grants and other aid to tribal enterprise with even more readily available and higher quality knowledge, executive education, and information. A good deal of support has been provided in the past by various federal agencies, yet this research indicates substantially more could be done to improve the quantity and/or quality of technical assistance.