

The Disruption and Reconstruction of PDCA Cycle in Fiscal Performance Evaluation: A Case Analysis of the Performance Audit of an Economic Census Project

Dai Chunxia, Guo Zhonglin

Dongguan City University, Dongguan, Guangdong, China

Abstract: This paper takes the performance evaluation of the funding project for the Fifth National Economic Census in a southern region of China in 2025 as a research sample. Through on-site auditing of 360 personnel files, 270 subsidy vouchers, and 1665 satisfaction questionnaires, it reveals systemic fractures in four key stages of fiscal performance management: Planning (Plan), Execution (Do), Verification (Check), and Application (Action). The study finds that phenomena such as formalistic performance targets, detached budget formulation, ineffective process supervision, and softened application of evaluation results are essentially structural defects in the practical implementation of the PDCA cycle at the grassroots level. Based on audit findings, this paper proposes a targeted closed-loop governance model of "Quantified Target Anchoring – Dual-Track Process Control – Penetrative Effectiveness Evaluation – Rigid Result Linkage" to provide practical references for improving fiscal fund performance management.

Keywords: Fiscal Performance Audit; PDCA Cycle; Economic Census; Budget Performance Management

1. Audit Background and Typical Issues

The annual budget for the economic census funding project in a certain region was 1 million yuan, while actual expenditure reached 3.9 million yuan, with a final performance evaluation rating of "Medium." The audit team identified significant deviations between the evaluation results and actual management effectiveness through procedures such as voucher review, personnel interviews, and data analysis.

The project exhibited severe issues in subsidy

distribution, budget management, personnel management, and data quality, critically compromising the efficiency of the census and the reliability of its results. Sampling revealed that 17.3% (46/270) of census staff received communication subsidies disconnected from actual workloads. For example, census staff member Zhang, responsible for surveying 2 individual businesses (2 workdays), received 5 months of communication subsidies (150 yuan), indicating obvious inefficiency in fund usage. Significant discrepancies existed between the initial budget and actual expenditures: the initial budget omission rate was 65.3%, and the actual expenditure for personnel subsidies alone (2.95 million yuan) approached 3 times the original total budget (1 million yuan). Additionally, budget adjustment procedures were arbitrary, with two mid-year budget supplements lacking adequate justification, leading to a final budget 290% higher than the initial allocation.

In personnel management, access control mechanisms failed, as 31.5% of census staff began work without assessment. This lack of screening resulted in uneven staff quality. Staff turnover reached 21% during the preliminary survey phase and surged to 31.5% during the main census phase, severely disrupting the continuity and stability of the work.

Data quality was also problematic: 5.3% (83) of questionnaires showed evidence of proxy completion (filled out by others on behalf of respondents). Key indicators in proxy-completed data deviated from self-completed data by 12.6%, seriously undermining data authenticity and the overall accuracy and reliability of census results.

2. Audit Evidence Analysis of the Disruption of the PDCA Cycle

Plan Phase: Failure of Target and Resource

Allocation

The failure of target and resource allocation is reflected in both the formalization of performance targets and the disconnection of budget preparation from practice.

Formalization of Performance Targets

It was found that 42% of the performance target statements were procedural clichés, such as “According to the requirements of XX Government Office Document No. XXX [2023]...,” lacking substantial content. This target-setting method simply repeats policy documents without combining the actual needs and characteristics of the economic census project in the southern region, failing to provide clear direction and guidance for project implementation. At the same time, the indicator design is seriously misaligned with the actual economic census business, and even “building scale” was set as an economic census indicator, which cannot accurately reflect project performance. The core of the economic census is to obtain accurate economic data, and “building scale” has no direct correlation with economic data. Such indicator design makes performance evaluation unable to truly measure the implementation effect of the project.

Detached Budget Formulation

The original budget was calculated as 3 million yuan based on “400 people $\times$ 1,500 yuan/month $\times$ 5 months,” but the actual personnel subsidy alone required 2.95 million yuan, revealing three major problems: (1) Failure to account for workload variations between phases (e.g., differing staff needs during preliminary survey vs. main census). (2) omission of necessary costs such as data review and quality inspection; (3) Lack of benchmarking against comparable projects (e.g., neighboring town's per capita cost was 6,500 yuan vs. this case's 7,468 yuan)

Do Phase: Failure of Process Control

Human Resource Management Failure

In terms of human resource management, there were problems such as an imperfect project assessment mechanism and the absence of a pre-job training and capability test system for all census takers. Through detailed verification of on-the-job records and personnel turnover ledgers, many problems were found in personnel management. In the census preparation stage, the proportion of on-the-job personnel without assessment reached 15.8%

(63/395), and in the census stage, this proportion increased to 18.5% (73/395); at the same time, the personnel loss rate was serious, with a loss rate of 21.0% in the census preparation stage and as high as 31.5% in the census stage. On-the-job personnel without assessment, due to the lack of necessary professional training and skills, may not be able to accurately collect and enter data in the census work, affecting data quality. The high loss rate has disrupted the continuity of the census work and increased the difficulty and cost of project management. Further analysis of the reasons for personnel loss includes multiple factors such as high work intensity, low remuneration, and limited career development space.

Absence of Internal Control in Fund Payment

The fixed communication subsidy is disconnected from the workload, and the subsidy distribution lacks a workload verification process. For example, a census taker who actually completed the census of five units (should receive a subsidy of 110 yuan) received a 150-yuan communication subsidy for five months, exposing the management loophole of “emphasizing approval and neglecting verification.” This kind of irregular subsidy distribution not only damages the work enthusiasm of census takers but also leads to unreasonable expenditure of fiscal funds. The subsidy distribution mechanism lacks effective review and supervision, allowing some unqualified subsidies to be distributed, resulting in waste of funds. At the same time, the unreasonable setting of subsidy standards cannot reflect the principle of more work and more pay, which is not conducive to improving the work efficiency and quality of census takers.

Weak Data Quality Control

Proxy completion (“filled in by a financial company”) of census data, notably by accounting firms (5.3% of 1,665 questionnaires), significantly undermined data quality. An analysis of 1665 questionnaires from the surveyed objects found that 83 of them were marked as “filled in by a financial company,” accounting for 5.3%; further comparison found that the deviation rate in key indicators such as total assets and operating income between proxy-filled data and self-filled data was as high as 12.6%, seriously affecting data quality. The reasons

for the financial company to fill in data on behalf of others mainly include low cooperation degree of the surveyed objects and tight census time. However, the emergence of proxy-filled data seriously violates the requirement of authenticity of economic census data, causing deviations in economic analysis and decision-making based on these data. The phenomenon of proxy-filled data reflects two levels of problems: first, the audited unit has not established a data field verification system; second, performance evaluation has not included “data authenticity” in the process control indicators.

Check Phase: Inadequate Cost-Benefit Analysis & Flawed Satisfaction Survey

Absence of Cost-Benefit Analysis

The per capita census cost in the southern region's economic census project was 7468 yuan, significantly higher than the 6500 yuan in a neighboring town. However, during the performance evaluation process, there was no analysis of the causes of this difference, nor was the low-efficiency subsidy problem identified. For example, for personnel with a workload of less than 10 units, the per capita subsidy exceeded the standard by 240%. The performance evaluation only focused on the total cost and did not conduct an in-depth analysis of cost composition and cost-benefit. For the problem of high per capita census cost, there was no exploration of whether it was due to unreasonable personnel allocation, low work efficiency, or other reasons. At the same time, the neglect of the low-efficiency subsidy problem led to the inefficient use of fiscal funds and unnecessary waste.

Defects in Satisfaction Survey Design

The survey design and implementation failed to capture real issues like subsidy inequity and data authenticity problems. From the survey data, the census takers' satisfaction score for the fairness of subsidies was 9.53, but there were actually 23 people with subsidy inversion problems; among the surveyed objects, 77.3% gave positive evaluations, but the proxy-filled data made the data authenticity questionable, making the satisfaction survey unable to truly reflect the actual situation. The satisfaction survey had defects in design and implementation, failing to fully consider the actual existing problems, resulting in a disconnect between the survey results and the actual situation. It exposed that the survey

sample did not cover key groups and the questions were not targeted (for example, it did not ask “whether the subsidy amount matches the workload”). For the satisfaction survey of census takers, the actual situation of subsidy distribution was not deeply understood, making the survey results unable to truly reflect the demands of census takers. For the satisfaction survey of the surveyed objects, due to the existence of proxy-filled data, it was impossible to accurately understand the surveyed objects' real views and feelings about the census work.

Act Phase: Disconnection of Rectification Closed Loop

Subsequent audit tracking of the rectification situation showed that suggestions such as “strengthening performance awareness” were not transformed into specific quantitative indicators; the subsidy distribution lacked an effective correction mechanism and did not set key control standards such as workload thresholds; the performance evaluation results were also not included in the basis for the next year's budget preparation, still using the “base + growth” model, and did not reflect the “determining funds based on performance” principle. The rectification work failed to form an effective closed loop. The rectification measures lacked specificity and operability, making the rectification work formalistic. For the strengthening of performance awareness, there were no clear specific goals and assessment methods, making it impossible to ensure the effective implementation of rectification measures. The absence of a subsidy distribution correction mechanism made it impossible to correct the irregular subsidy distribution problem in time. The disconnection between performance evaluation results and budget preparation also made performance evaluation lose its due binding and guiding role, failing to promote the rational allocation and use efficiency of fiscal funds.

3. Audit Solutions for the Reconstruction of the PDCA Cycle

Plan Phase: Establishing a “Three-Dimensional Quantitative Anchoring Mechanism of Policy, Business, and Performance”

Firstly, policy compliance anchoring. In the budget preparation process, the budget

preparation needs to refer to the “Central Government Project Expenditure Budget Management Measures,” compare the costs of similar projects (such as neighboring town cases), and ensure that the budget complies with industry standards with a deviation rate controlled within $\pm 10\%$, ensuring that the budget meets policy requirements and industry standards. By conducting in-depth research and interpretation of policy documents, clarify the policy basis and requirements for budget preparation to avoid policy violations. At the same time, draw on the cost data of similar projects in the same region to provide references for budget preparation, making the budget more scientific and reasonable.

Secondly, business demand anchoring. Based on the actual number of census objects, dynamically calculate the human resources needed and formulate a reasonable per capita census taker allocation standard to closely integrate the budget with the actual business. For example, dynamically calculate the human resources needed according to “the number of census objects $\div$ the average daily workload per person” and set the per capita census taker allocation standard (such as one census taker for every 50 households). Before budget preparation, conduct a detailed survey of census objects to accurately grasp the census workload. Combine the characteristics and requirements of the census work to formulate a scientific and reasonable human resource demand calculation method to ensure that personnel allocation meets work needs while avoiding human waste.

Finally, performance target anchoring. Set core performance indicators, such as the first-hand data collection rate $\geq 95\%$; per capita census cost $\leq 7,000$ yuan; stage loss rate $\leq 20\%$. As key assessment indicators, improve the scientificity and effectiveness of budget preparation. The setting of core performance indicators should closely revolve around the goals and priorities of the project and accurately measure the implementation effect of the project. By assessing core performance indicators, guide the project implementation units to focus on the key links and key work of the project, improve the implementation quality and efficiency of the project.

Do Phase: Implementing “Dual-Track Process Control”

Regarding personnel management, implement

a dual-signature system for job qualifications, with the statistics department conducting qualification reviews and the audit department conducting record-filing spot checks simultaneously.; establish a loss rate circuit breaker mechanism, when the stage loss rate reaches or exceeds 20%, immediately freeze new recruitment to stabilize the personnel team. The dual-signature system for job qualifications can ensure that census takers have the necessary professional quality and ability, providing a guarantee for the smooth progress of the census work. The loss rate circuit breaker mechanism can promptly identify personnel loss problems and take effective measures to control them, avoiding serious impacts of personnel loss on project implementation.

Regarding subsidy distribution, design an anti-inversion calculation formula: communication subsidy = $\min(5, \text{ceil}(\text{actual working days} / 22)) \times 30$ yuan, ensuring that subsidy distribution is reasonable and compliant. This formula fully considers the actual working days of census takers, avoiding the situation where subsidy distribution does not match the workload. At the same time, establish a strict subsidy review system to strictly control every link of subsidy distribution, ensuring the rational use of subsidy funds.

Check Phase: Promoting “Penetrating Evaluation”

Firstly, establish a data source tracing mechanism. By setting up a data collection ledger to record and track the collection process of each piece of data, ensure that the data source is traceable. For proxy-filled and proxy-handled data, mark with the “DT” identifier, and in performance evaluation, deduct corresponding points according to the proportion of marked data (for example, deduct 0.5 points for every 1% increase in proxy-filled data), guiding project implementation units to pay attention to the authenticity and reliability of data.

Secondly, construct a cost-benefit matrix (see Table 1). By analyzing different cost and benefit combinations under project implementation strategies, optimize resource allocation. The cost-benefit matrix can intuitively show the situation of the project under different cost and benefit levels, providing references for project decision-making. Through the analysis of the cost-

benefit matrix, find the optimal project implementation strategy in terms of cost and

benefit, and improve the use efficiency of fiscal funds.

Table 1. Cost-Benefit Matrix of the Economic Census Project

Cost Dimension	High Benefit (Data Quality $\geq 90\%$)	Low Benefit (Data Quality $< 70\%$)
Low Cost	★ Promote electronic census	▲ Optimize form design
High Cost	● Increase data review personnel	✕ Prohibit excessive subsidy distribution

Finally, reverse satisfaction survey. Set reverse satisfaction indicators, such as “Did you personally fill in the census form?” “Does your subsidy amount match your workload?” and other reverse questions, with a sampling proportion of no less than 20% of the valid samples, to more truly understand the project implementation effect from the public's perspective. Reverse satisfaction indicators can make up for the shortcomings of traditional satisfaction surveys and more truly reflect the public's actual feelings and evaluations of the project. By collecting public feedback, promptly identify problems in project implementation and take effective measures to improve.

Act Phase: Implementing “Three Rigid Linkages”

Budget linkage mechanism: Next time's budget quota = benchmark value $\times$ performance coefficient, where: ① performance evaluation “excellent” (≥ 90 points): coefficient 1.1; ② “good” (80-89 points): coefficient 1.0; ③ “medium” (60-79 points): coefficient 0.9; ④ “poor” (< 60 points): suspend budget arrangement. This linkage mechanism can motivate project implementation units to improve project implementation quality and efficiency because the performance evaluation results directly affect the budget quota for the next time. At the same time, it can also encourage project implementation units to pay more attention to performance evaluation work and actively cooperate with the conduct of performance evaluation.

Linkage with cadre assessment: For projects with a performance evaluation of “medium” level for two consecutive years, freeze the promotion channel of the project supervisor to enhance cadre responsibility awareness. Linking performance evaluation results with cadre assessment can make cadres pay more attention to the implementation effect of the project, actively perform their duties, and ensure the smooth implementation of the project. At the same time, it can also form a good incentive mechanism to encourage cadres

to continuously improve their work ability and level.

Rectification cancellation management: Strictly implement the process of “[rectification notice] $\rightarrow$ [unit evidence] $\rightarrow$ [audit review] $\rightarrow$ [fiscal filing]” to ensure that rectification work is effectively implemented. Rectification cancellation management can conduct full-process tracking and supervision of rectification work to ensure that each problem is effectively solved. By establishing a rectification ledger, register and cancel each rectification problem one by one to ensure that rectification work is not formalistic and achieves tangible results.

4. Conclusion: From Cycle Disruption to Governance Reconstruction

This case shows that the core of the failure of fiscal performance audit lies in the systemic disruption of each link of the PDCA cycle: the plan phase with “target formalization and budget coarseness,” the execution phase with “loose management and control absence,” the check phase with “evaluation being formalistic,” and the act phase with “insufficient rectification rigidity.” The solution is to use the audit penetration to build an “anchoring effect”: through budget comparison to anchor resource misallocation, formula transformation to anchor process 失控, penetrating evaluation to anchor data distortion, and result bundling to anchor responsibility implementation, promoting the transformation of fiscal performance management from “procedural compliance” to “efficiency priority.”

In future audit practice, it is recommended to focus on: establishing a cross-year performance tracking mechanism to strengthen the constraints of mid-term assessment on budget adjustment; exploring the application of “smart audit” technology, such as using big data analysis to warn of risks such as abnormal subsidies and personnel loss; and promoting the public disclosure of performance audit results to leverage social supervision to drive

fiscal management.

References

- [1] Wang Zishuai. Issues and Countermeasures of Government Budget Performance Management in Administrative and Public Institutions [J]. Chinese Agricultural Accounting, 2025, 35(10): 45-47.
- [2] Cao Tangzhe. Key Directions of Budget Performance Management under the Background of Deepening Fiscal and Tax System Reform [J]. China Finance, 2024, (18).
- [3] Liang Haidong. Research on the Optimization Path of Project Management Quality for Small and Medium-sized Manufacturing Enterprises Based on PDCA [N]. Henan Economic Daily, 2025-05-22(009).
- [4] Wu Jianwen. Practical Research on the Application of PDCA Cycle Model in Investment Management of Science and Technology Fixed Asset Investment Projects [J]. China Science and Technology Industry, 2025, (05): 50-52.
- [5] Qin Kang, Jiang Jing, Zhu Fenfen, et al. Exploring the Path to Improve the Effectiveness of Course Teaching Quality Based on the PDCA Cycle: Taking “Clinical Rescue and Nursing of Common Internal Diseases” as an Example [J]. Technology Wind, 2025, (13): 35-37+41.