



VAT Refund Puzzle: Legal and Administrative Barriers Affecting Approval and Rejection Trends in Nepal



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ABSTRACT

Value Added Tax (VAT) has been in effect in Nepal for over 27 years, yet empirical assessment is constrained by the availability of only 21 years of official time-series data (FY 2002–2022). This study investigates the determinants of VAT refund approval using a quantitative approach and multiple regression modeling. The results reveal that refund claims and rejections significantly influence approval rates, whereas total VAT collection has no direct impact. Although the model shows a high adjusted R^2 of 0.997, multicollinearity diagnostics confirmed VIF values were within acceptable limits, ensuring model validity and minimizing concerns of overfitting. The findings suggest that procedural clarity, timely documentation, and improved enforcement of self-assessment are more critical than sheer tax volume. With growing VAT contributions to GDP and revenue, persistent refund inefficiencies continue to erode taxpayer confidence. The study recommends simplifying procedures, adopting digital systems, and instituting administrative reforms to strengthen the credibility of the VAT refund mechanism in Nepal.

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Introduction

Value Added Tax (VAT) is a form of consumption tax imposed at each stage of the production and distribution process based on the value added to goods or services. The

core principle of VAT is to tax the incremental value created at each stage of the supply chain. In Nepal, VAT was introduced in 1997, replacing multiple taxes such as sales tax, hotel tax, entertainment tax, and contract tax.

Unlike the sales tax system, which applied tax only at a single point of sale, the VAT system is more advanced as it levies tax on each transaction involving added value. Under the previous sales tax regime, the tax amount was embedded within the cost of goods. In contrast, VAT is charged separately and allows for input tax credit at each level, making it more transparent and efficient.

There is a common misconception that VAT increases the price of goods and services. In reality, each business entity involved in the supply chain deducts the VAT paid on inputs from the VAT collected on outputs, remitting only the net amount to the Inland Revenue Office. Thus, the final burden of VAT falls only on the end consumer.

A VAT refund refers to the reimbursement of VAT paid on goods and services purchased within Nepal. The provisions for VAT refunds are clearly outlined in the Value Added Tax Act, 1996 and the VAT Rules, 1997. According to these legal instruments, certain entities and individuals are entitled to claim VAT refunds, including diplomatic missions, international organizations, foreign tourists, exporters, and industries operating within special economic zones.

To claim a VAT refund, businesses must submit documentary evidence such as purchase invoices, customs declarations, insurance documents, bills of lading, bank receipts, GSP forms, and certification from FNCCI (Federation of Nepalese Chambers of Commerce and Industry). These documents

must be submitted to the Inland Revenue Department (IRD) at Lazimpat, Kathmandu.

Initially, VAT was introduced at the rate of 10 percent, which was later revised to 13 percent from January 15, 2005. For tourists and diplomatic missions, a minimum purchase amount of NPR 10,000 (excluding VAT) is required to be eligible for a VAT refund. Claims must be submitted with a valid passport, VAT invoice, and evidence of eligible purchases.

Despite these intentions, the IRD has faced chronic administrative instability. Between 2058 and 2081 B.S., 20 different Director Generals were appointed, leading to frequent shifts in leadership. Such turnover has hindered strategic continuity, obstructed institutional memory, and delayed the implementation of long-term reforms. Additionally, although the Civil Service Act mandates periodic staff rotation, enforcement has been partial, and politically influenced appointments have weakened operational coherence.

Under the VAT Act, 2052 and VAT Regulations, 2053, taxpayers are entitled to refunds when input VAT exceeds output VAT, especially for zero-rated sectors like exports. Initially, limited local capacity meant all refund claims were centralized at the IRD. However, decentralization began in 2059 B.S., authorizing Inland Revenue Offices (IROs) to approve refunds within specific limits ranging from NPR 20 million to 100 million depending on the office. Nonetheless, inconsistencies in policy implementation,

outdated IT systems, and poor coordination across IROs continue to impede efficiency.

Legal barriers also constrain the refund process. The absence of a defined statutory timeline for refund decisions leads to uncertainty. Excessive documentation, minor discrepancies, and discretionary rejection of claims have discouraged legitimate taxpayers. Section 115 of the Income Tax Act provides for administrative review via the Director General, but the process remains ineffective due to hierarchical conflicts and lack of timely decisions. Furthermore, mandatory advance payments 100 percent of undisputed and one-third of disputed taxes render the mechanism financially burdensome.

Even appeals to the Revenue Tribunal under Section 116 demand pre-payment of 50 percent assessed tax and 100 percent penalties, deterring access to justice. Additionally, widespread non-compliance in the market such as grey channel imports and under-invoicing further complicates refund verification and weakens transparency.

In summary, while the IRD's institutional formation was designed to modernize tax administration, legal ambiguity, administrative inconsistency, and non-compliant market practices continue to obstruct effective VAT refund management. Comprehensive reform is necessary to align policy intent with implementation and to promote taxpayer trust and compliance.

Nepal's VAT refund process is still largely manual, causing delays, excessive paperwork,

and frequent taxpayer-tax administrator interactions that may invite discretionary decisions and reduce transparency. In contrast, countries like Thailand, which introduced VAT five years earlier than Nepal, have developed fully digital refund systems with features such as real-time application tracking, automated invoice matching, and risk-based audit selection. France pioneer country have also implemented risk-based audits and automated verification to streamline processes. Germany, Singapore and Australia employ advanced digital frameworks that reduce administrative burden and improve taxpayer services. These examples illustrate effective solutions to administrative challenges faced by VAT refund systems, emphasizing the need for Nepal's modernization.

While many countries provide VAT refund facilities for foreign tourists such as France (refund on purchases over €100), Germany (€50 threshold), or Thailand (2,000 Baht per store) this study focuses solely on business-related VAT refunds within Nepal's resident manufacturing firm. Hence, tourist-oriented refund provisions are referenced only for comparative policy context.

In comparison, Nepal's threshold for VAT refund eligibility is significantly lower (NPR 10,000), which increases accessibility. However, unlike in many developed countries, Nepal's refund process is still largely manual, leading to delays and administrative inefficiencies.

Value Added Tax (VAT) refund mechanisms have been the focus of extensive research, particularly concerning the legal and administrative barriers that delay or reject refunds in developing countries. Keen (2012) highlighted that weak legal frameworks and absence of enforceable refund timelines contribute significantly to refund processing delays. Bird and Gendron (2007) underscored the importance of transparency and automation in refund procedures to maintain tax neutrality and enhance taxpayer compliance. Comparative studies by Kumar and Sarker (2018) in South Asia reveal that procedural complexities and excessive manual documentation obstruct efficient refund processing, suggesting the need for legal reform and digitalization.

In the African context, Fjeldstad and Heggstad (2012) noted that discretionary powers exercised by tax officials often lead to corruption and rent-seeking in the refund process, recommending legally mandated audit systems with strict time limits. Within Nepal, empirical evidence from Koirala (2020) indicates that lack of statutory refund deadlines and high administrative discretion result in frequent delays and rejection of refund claims. Aryal and Sharma (2023), employing mixed-method research, documented increasing trends in refund rejections linked to unclear legal provisions and inadequate administrative oversight. Globally, organizations such as the IMF and OECD emphasize that efficient VAT refund systems rely on automation, clear legal

timeframes, and accountability mechanisms to safeguard taxpayer rights (Harrison & Krelove, 2005; OECD, 2013). However, existing literature largely lacks quantitative analyses of long-term VAT refund trends using time-series data, especially in Nepal.

Study Limitations and Data Constraints

This study is based on secondary quantitative data, without primary data collection. As a result, qualitative aspects were not explored. This presents an open avenue for future researchers to conduct opinion-based or mixed-method studies on the topic

Despite the progressive objectives of VAT such as promoting transparency, equity, and efficiency the initial phase of its implementation in Nepal encountered significant resistance. Strikes and mass opposition movements were fueled by fears of increased tax burdens and administrative opacity, especially among the business community, political actors, consumers, and even within the then government. These confrontations disrupted the smooth rollout of VAT and led to widespread non-cooperation during its formative years.

Institutional unpreparedness further aggravated the situation. Although the Sales Tax Department was initially entrusted with overseeing the VAT system, it neither possessed the procedural guidelines nor the statutory authority necessary to effectively process refund claims. As a consequence, from 1997 to 2001, no formal refund system existed, and the Inland Revenue Department

(IRD) does not hold any official VAT refund records from this period (Inland Revenue Department, 2001).

A structured refund mechanism only began to take shape following the institutional merger in 2058 B.S. (2001/02 A.D.), which led to the formal establishment of the IRD. In the subsequent fiscal year, operational guidelines for VAT refunds were introduced, laying the foundation for a functional refund process. To further strengthen administrative effectiveness, the Government of Nepal created the *Rajaswa Samuha* (Revenue Group), a specialized cadre within the civil service, intended to professionalize and dedicate personnel exclusively to tax administration.

The system evolved further through a series of administrative reforms including the decentralization of refund authority in 2059 B.S., the introduction of enhanced jurisdictional limits in 2064 B.S., and the full delegation of refund authority (excluding zero rated cases) to Inland Revenue Offices (IROs) in 2065 B.S. (November 2008). Collectively, these measures significantly strengthened Nepal's VAT refund administration.

Research issues / problem

Despite the VAT Act provisions allowing timely refunds, Nepal continues to face persistent challenges in VAT refund administration. The secondary data on VAT collection, refund amounts, and rejection rates from fiscal years 2003/04 to 2022/23 indicate fluctuations whose causes are not fully understood. Delays and rejections in

refund processing raise concerns about the efficiency and fairness of the system. Legal ambiguities regarding refund eligibility criteria and absence of binding timelines, combined with administrative inefficiencies such as manual processing and discretionary decision-making, appear to contribute to these challenges. This situation undermines taxpayer confidence and compliance, while also impacting government revenue flows. The core problem is the lack of empirical evidence that quantitatively examines whether legal and administrative factors significantly influence VAT refund trends over time in Nepal.

Research questions

1. What legal and administrative barriers exist in the VAT refund process in Nepal?
2. How effective is Nepal's VAT refund system in comparison to international practices?
3. What are the key challenges in documentation, information management, and refund claim processes?
4. What is the current status of VAT refunds claimed by taxpayer's missions in Nepal?

Research hypotheses

Since this study adopts a quantitative research design and employs regression analysis, both the null (H_0) and alternative (H_1) hypotheses are formulated in accordance with established literature and statistical testing resolutions. The following hypotheses are developed based on the identified VAT refund approval percentage rate as a dependent and VAT collection, VAT refund and VAT refund

rejection amount as independent variables:

Table 1:

Research Hypotheses Based on Legal and Administrative Barriers in VAT Refund System in Nepal

Note. RQ = Research Question

Hypothesis Code	Null Hypothesis (H ₀)	Alternative Hypothesis (H ₁)	Research Question(s)
H ₀₁ / H ₁₁	There is no significant relationship between the VAT refund amount and the VAT refund approval percentage rate.	There is a significant positive relationship between the VAT refund amount and the VAT refund approval percentage rate.	RQ ₂ , RQ ₄
H ₀₂ / H ₁₂	There is no significant relationship between the VAT refund rejection amount and the VAT refund approval percentage rate.	There is a significant negative relationship between the VAT refund rejection amount and the VAT refund approval percentage rate.	RQ ₁ , RQ ₃
H ₀₃ / H ₁₃	There is no significant relationship between VAT collection and the VAT refund approval percentage rate.	There is a significant relationship between VAT collection and the VAT refund approval percentage rate.	RQ ₂

The Value Added Tax (VAT) refund system in Nepal plays a significant role in ensuring tax compliance, promoting exports, and enhancing taxpayer confidence. Despite the existence of legal provisions and administrative mechanisms, businesses and eligible entities often encounter difficulties while claiming VAT refunds. These challenges stem from legal ambiguities, procedural complexities, and delays in administration. In addition, the status and trend of VAT collection, refund, and rejection over time reflect broader issues in the implementation of tax policies. A comparative perspective with international practices further highlights

areas where Nepal's system may require reform.

Research objectives

1. To examine the legal framework and identify administrative and procedural barriers in the VAT refund system in Nepal.
2. To assess the current procedures and documentation requirements for claiming VAT refunds.
3. To analyze the status and trends of VAT collection, refund, and rejection amounts in Nepal using time series data.

Research gap

A critical review of previous studies highlights a major gap: although legal and administrative barriers in Nepal's VAT refund system are often mentioned, there is a lack of quantitative research analyzing their long-term impact on refund outcomes. Most studies use descriptive or cross-sectional methods and do not apply time-series regression analysis. International comparisons are also limited. This study addresses these gaps by using secondary time-series data transformed into logarithmic form and analyzed through SPSS software. Regression is run with VAT refund approval percentage as the dependent variable, capturing the statistical relationship with VAT collection, refund, and rejection trends. It further explores documentation and information system challenges, while benchmarking global practices. If unresolved, these systemic issues may weaken taxpayer confidence, harm business cash flows, reduce

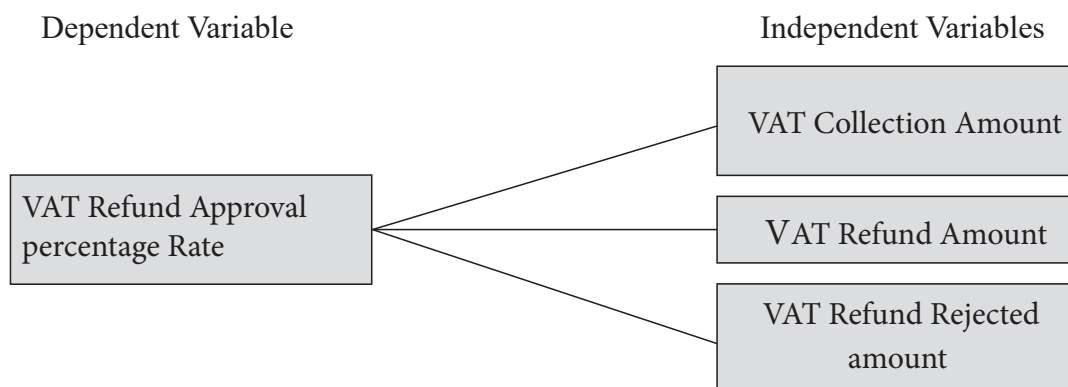
compliance, and damage fiscal credibility. Thus, the study provides a robust empirical foundation for improving VAT refund efficiency in Nepal.

Research methodology

This study adopts a quantitative research design based on secondary time series data to examine the trends and dynamics of VAT collection, refund, and rejection in Nepal. The analysis covers annual data for a defined period (e.g., FY 2002/03 to FY 2022/23), obtained from official publications of the Inland Revenue Department (IRD) and the Ministry of Finance.

This semi-logarithmic model allows for interpreting the percentage impact of changes in monetary tax variables on the VAT refund approval rate. Descriptive analysis and trend visualization support the regression findings. Research Framework as;

Figure 1:
Conceptual research framework



The dependent variable is the VAT Refund Approval Rate (percent), representing the proportion of approved refund claims relative to total refund claims. The independent variables include VAT Collection, VAT Refund, and VAT Rejection amounts, all of which were transformed using natural logarithms to address skewness, reduce

heteroscedasticity, and meet the assumptions of Ordinary Least Squares (OLS) regression. To evaluate the determinants of VAT refund approval, a multiple linear regression model was employed. The ratio of the approved VAT refund amount to the total VAT refund claimed, expressed as a percentage.

$$\text{VAT Refund Approval Rate} = \frac{\text{VAT Refund Approval}}{\text{VAT Refund Claimed}} \times 100$$

Model Representation - Regression Equation:

$$\text{Refund Approval Rate (Percentage)} = \alpha + \beta_1 \log(\text{VAT Collection}) + \beta_2 \log(\text{Refund Claimed}) + \beta_3 \log(\text{Refund Rejected}) + \dots + \epsilon_t$$

Where:

α = Intercept

β_1 = (Ln VAT Collection)

β_2 = (Ln VAT Refund)

β_3 = (Ln VAT Rejection)

ϵ^t = Error term

Ln = Log

t = Time (fiscal year)

To assess the determinants of VAT Refund Approval Rate, a multiple linear regression model was applied using the latest version Statistical Package for the Social Sciences (SPSS) software which enabled the computation of regression coefficients, testing the statistical significance of predictors through p-values, and evaluating the overall model fit using R-square and Adjusted R-square values. Additionally, SPSS facilitated essential diagnostic tests such as multicollinearity assessment through Variance Inflation Factor (VIF) and detection of autocorrelation using the Durbin-Watson

statistic.

Multicollinearity was checked using the Variance Inflation Factor (VIF) to ensure model reliability. Predictors were chosen for their theoretical relevance to VAT refund approval, avoiding over-specification. VIF values below 5 are acceptable (Hair et al., 2010), while values above 10 signal severe multicollinearity. The Durbin-Watson (DW) statistic was also considered, with acceptable values typically ranging from 1.5 to 2.5 (Gujarati & Porter, 2009). These criteria guided the model diagnostics.

Results and discussion

Collection, Refund Claims, Approvals, and Rejections under Nepal's VAT System

Since its inception in 1997/98 A.D., VAT has become a vital component of Nepal's revenue system. Its contribution to GDP rose from 2.45 percent in 1997/98 to 6.61

percent in 2020/21, before declining to 5.51 percent in 2023/24, largely due to the COVID-19 pandemic's economic impact. In terms of total revenue, VAT's share increased modestly from 22 percent in 1997/98 to 23.80 percent in 2023/24, reflecting its sustained fiscal significance despite ongoing administrative and structural challenges (Annual Report, IRD, 2024).

Table 2:

Collection, Refund Claimed, Refund, Rejected and Refund Approval Rate of VAT (2002-2022)

Year	Value Added Tax Collection		VAT Refund Claimed		VAT Refund amount		VAT Claimed Re-fund Rejected		VAT Refund Approval Rate
	Amount	Growth	Amount	Growth	Amount	Growth	Amount	Growth	
2002	1,345.97	-	307	-	155	-	152	-	0.50
2003	1,447.89	7.57	356	15.96	168	8.39	188	23.68	0.47
2004	1,888.54	30.43	343	(3.65)	208	23.81	135	(28.19)	0.61
2005	2,161.07	14.43	390	13.70	285	37.02	105	(22.22)	0.73
2006	2,609.56	20.75	518	32.82	409	43.51	109	3.81	0.79
2007	2,981.57	14.26	480	(7.34)	352	(13.94)	128	17.43	0.73
2008	3,970.09	33.15	449	(6.46)	320	(9.09)	129	0.78	0.71
2009	5,492.09	38.34	393	(12.47)	225	(29.69)	168	30.23	0.57
2010	6,166.36	12.28	761	93.64	227	0.89	534	217.86	0.30
2011	7,093.04	15.03	1,061	39.42	339	49.34	722	35.21	0.32
2012	8,341.84	17.61	1,354	27.62	342	0.88	1,012	40.17	0.25
2013	10,110.46	21.20	962	(28.95)	511	49.42	451	(55.43)	0.53
2014	11,252.18	11.29	823	(14.45)	603	18.00	220	(51.22)	0.73
2015	12,241.19	8.79	991	20.41	505	(16.25)	486	120.91	0.51
2016	16,106.83	31.58	722	(27.14)	423	(16.24)	299	(38.48)	0.59
2017	20,680.98	28.40	578	(19.94)	476	12.53	102	(65.89)	0.82
2018	24,012.13	16.11	560	(3.11)	459	(3.57)	101	(0.98)	0.82
2019	22,101.65	(7.96)	306	(45.36)	226	(50.76)	80	(20.79)	0.74
2020	28,201.91	27.60	668	118.30	380	68.14	288	260.00	0.57
2021	31,427.91	11.44	1,858	178.14	342	(10.00)	1,516	426.39	0.18
2022	28,663.17	(8.80)	2,363	27.18	537	57.02	1,826	20.45	0.23
Total	248,296.43	343.50	16,243	398	7,492	1,295.16	8,751	379.24	11.71
Average	11,823.64	16.36	773.48	18.97	356.76	61.67	416.71	(95.24)	55.78

Note: Various year annual report Inland Revenue Department, Lazimpat, Kathmandu, Nepal.

In the above Table 2 provides a 21-year overview of Nepal's Value Added Tax (VAT) system, highlighting annual trends in VAT collection, refund claims, refund approvals, rejected amounts, and the corresponding approval rates.

VAT collection in Nepal rose steadily from NPR 134.60 billion in 2002/03 to NPR 310.42 billion in 2021/22, reflecting economic growth and improved tax administration despite short-term COVID-19-related declines. VAT refund claims increased significantly, peaking at NPR 236.30 billion, though occasional sharp drops suggest irregular taxpayer behavior or policy changes. Refund approvals did not always track claims, claims rose by 178.14 percent in 2021/22, but approvals fell by 10 percent, indicating possible delays or stricter scrutiny. Rejected amounts fluctuated, with spikes in 2010/11, 2020/21, and 2021/22, suggesting increased audits or disallowances. The refund approval rate was volatile and declined to 0.18 in 2021/22, revealing deepening procedural inefficiencies and compliance issues in the VAT refund system.

Trends of Tax Collection, Refund Claims, and Approvals under Nepal's VAT System

The chart given below presents a longitudinal analysis of Nepal's VAT system over 21 fiscal years, focusing on annual VAT collection, refund claimed, and refund approved, along with the refund rejected amounts, along with the refund approval rate. The data reveals a steady increase in VAT collection, indicating enhanced revenue mobilization and expanding economic activities, despite intermittent declines during crisis periods such as the COVID-19 pandemic. Refund claims and approvals demonstrate considerable volatility, with notable surges during certain years reflecting policy shifts, administrative reforms, or taxpayer behavior. However, the rising trend in rejected amounts and the declining refund approval rate in later years suggest increasing scrutiny or inefficiencies in the refund mechanism. The chart highlights the need for more transparent and responsive VAT refund administration to maintain taxpayer trust and compliance.

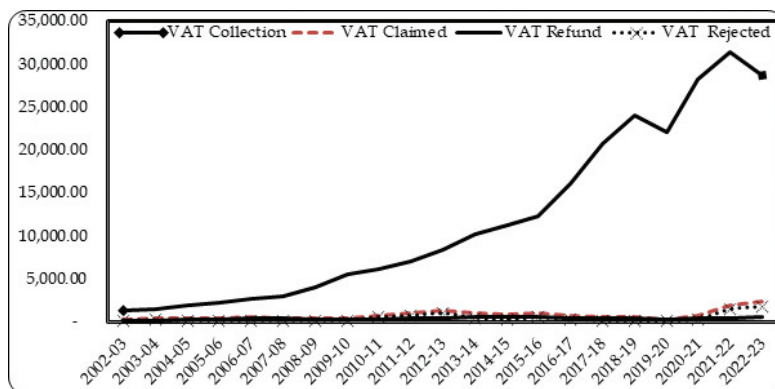


Figure 1 Trends of Tax Collection, Refund Claims, and Approvals under Nepal's VAT System

Analysis of Correlation Matrix

The correlation matrix reveals meaningful relationships among the logarithmic values of VAT collection, VAT refund, VAT rejection, and the VAT refund approval rate. The table below 3 presents Pearson correlation coefficients (r) with their one-tailed significance values (p), illustrating the strength and significance of relationships between variables. For example, the strong negative correlation between percentage of VAT Refund Approval

Rate and Ln VAT Rejection amount ($r = -0.913$, $p = 0.000$) indicates a meaningful association, likely reflecting administrative dynamics where increased rejections lower approval rates. In contrast, the weak and insignificant correlation between percentage of VAT Refund Approval Rate and Ln VAT Collection amount ($r = -0.153$, $p = 0.254$) may be attributed to factors such as VAT collection encompassing non-refundable domestic sales, which weakens direct linear relationships.

Table 3:

Correlation Matrix with Significance (1-tailed)

Variables		LnVAT Collection	LnVAT Refund	LnVAT Rejection	% of VAT Refund Approval
Ln VAT Collection	Pearson Correlation	1	-	-	-
	Sig. (1-tailed)		-	-	-
Ln VAT Refund Claimed	Pearson Correlation	.633**	1	-	-
	Sig. (1-tailed)	0.001		-	-
Ln VAT Rejection amount	Pearson Correlation	.408*	0.283	1	-
	Sig. (1-tailed)	0.033	0.107		-
VAT Refund Approval Rate	Pearson Correlation	-0.153	0.13	-.913**	1
	Sig. (1-tailed)	0.254	0.287	0	-
N		21	21	21	21

** Correlation is significant at the 0.01 level (1-tailed).

* Correlation is significant at the 0.05 level (1-tailed).

Interpretation of regression results

A multiple linear regression was conducted to examine the impact of VAT related variables on the VAT Refund Approval Percentage

Rate. The model included three predictors: natural logarithm of VAT Collection, VAT Refund Amount, and VAT Refund Rejection Amount. The dependent variable was the VAT Refund Approval Percentage Rate

Table 4:*Analysis of model summary*

Correlation (r)	Coefficient of Determination (r ²)	Adjusted r ²	Standard error of regression standard (S _e)	Change Statistics					Durbin Watson
				r ² Change	F Change	Df1	Df2	Significant f change	
0.999 ^a	0.998	0.997	0.01082	0.998	2335.797	3	17	0.000	1.535

a. Predictors: (Constant), Ln VAT

Rejection, Ln VAT Refund, Ln VAT Collection

b. Dependent Variable: VAT Refund Approval Rate

The regression model reveals a statistically robust association between the VAT Refund Approval Rate and the selected predictors log transformed VAT Collection, Refund Claimed, and Refund Rejected. With an R Square of 0.998, the model explains 99.8 percent of the variance in the approval rate, underscoring the critical influence of these fiscal variables.

The remaining 0.20 percent of unexplained variation may stem from unobserved or omitted factors such as tax administrative efficiency, audit practices, legal amendments, or macroeconomic conditions. Although minor in statistical weight, these elements could bear practical significance. Thus, future research may incorporate qualitative and institutional dimensions to strengthen explanatory depth and policy insight.

Table 5:*Analysis of variance (ANOVA) of SPSS output*

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	0.821	3	0.274	2335.797	0.000 ^b
	Residual	0.002	17	0.000		
	Total	0.823	20			

a. Dependent Variable: VAT Refund Approval Rate

b. Predictors: (Constant), Ln VAT Rejection, Ln VAT Refund, Ln VAT Collection

The ANOVA findings (Table 5) indicate that the regression model offers strong explanatory power in analyzing the VAT Refund Approval Rate. With a Regression Sum of Squares of 0.821 (df = 3) and a minimal Residual Sum of Squares of 0.002 (df = 17), the model captures nearly all of the variation through its selected

predictors. The high F-statistic (2335.797, $p < 0.001$) further confirms that the variables included log values of VAT Collection, Refund Claimed, and Refund Rejected are statistically significant contributors to the model's performance.

Table 6:*Analysis of coefficients of SPSS output.*

Model B	Unstandardized Coefficients		Standardized Coefficients	t	Sig. Lower Bound	95 percent Confi- dence Interval for B		Collinearity Statistics	
	Std. Error	Beta				Upper Bound	Tolerance	VIF	
(Constant)	0.513	0.037		14.016	0.000	0.436	0.591		
1 Ln VAT Collection	0.000	0.003	0.001	0.053	0.958	0.006	0.007	0.542	1.845
Ln VAT Refund	0.220	0.008	0.422	27.352	0.000	0.203	0.236	0.598	1.672
Ln VAT Rejection	0.222	0.003	1.033	78.972	0.000	0.228	0.216	0.832	1.201

Dependent Variable: VAT Refund Approval Rate

The regression results (Table 6) align with the study's research questions and hypotheses. LnVAT Collection has no significant impact on refund approval ($t = 0.053$, $p = 0.958$), confirming that higher VAT revenue does not ensure greater refund approvals—likely due to limited export-based transactions and procedural bottlenecks. LnVAT Refund Claimed has a significant positive effect ($\beta = 0.220$, $p < 0.001$), indicating that well-substantiated claims increase approval rates. Similarly, LnVAT Rejected shows a positive relationship ($\beta = 0.222$, $p < 0.001$), suggesting that some rejected amounts may be reconsidered or partially approved through administrative reviews. These findings reject the second and third null hypotheses and highlight the importance of documentation, transparency, and legal review processes in determining VAT refund outcomes in Nepal.

Results and Discussion

This study analyzed the trends and determinants of VAT refund approvals in Nepal using time-series data from FY 2002

to 2022. Over this period, VAT's contribution to GDP increased from 2.45 percent to a peak of 6.61 percent in FY 2020/21, before slightly declining to 5.51 percent in FY 2023/24. Similarly, VAT's share in total government revenue rose from 22 percent to 23.80 percent, reflecting its growing fiscal significance.

Correlation analysis revealed a positive association between refund approval rates, VAT collection, and refund claims, while a negative association was observed with refund rejections.

The multiple regression models showed a high adjusted R^2 value of 0.997, which initially suggested possible overfitting concerns. Despite the model's high adjusted R^2 of 0.997, multicollinearity diagnostics confirmed that all VIF values remained within acceptable thresholds, supporting the model's validity and reducing concerns about overfitting.

The analysis confirmed that refund claims and rejection amounts significantly influence approval rates, whereas total VAT collection has no direct effect on approval outcomes. Procedural inefficiencies such as

delayed filings, excessive documentation requirements, and weak enforcement of the self-assessment system contribute to inconsistent refund performance. Administrative instability, highlighted by frequent changes in leadership at the Inland Revenue Department, further impedes the smooth functioning of the refund process.

Beyond the statistical findings, procedural challenges affect taxpayer confidence. Taxpayers dissatisfied with field-level refund decisions may seek administrative review from the IRD's Director General, whose rulings often uphold the original decisions. Although appeals to the Revenue

Tribunal are legally possible, lengthy delays and prepayment requirements deter many taxpayers, fostering frustration and uncertainty.

Overall, the data shows that while Nepal's VAT collection has steadily increased, the effectiveness of the refund mechanism remains inconsistent. Delays, rejection spikes, and declining approval rates indicate the urgent need for streamlined processes and greater legal accountability. Strengthening legal clarity, digitizing refund procedures, and ensuring stable administrative leadership are essential steps to rebuild trust and improve the efficiency of Nepal's VAT refund system.

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