



# Emerging Trend and Causes of Discrepancy between Proposed and Actual Flows of Foreign Capital into Nepalese Energy Sector

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## ABSTRACT

This paper aims to investigate the trend and causes of vast gap between actual and proposed FDI flows into energy sector by employing principal component analysis and one sample t test. Foreign direct investment is a main source of capital for the development of energy products in Nepal. Therefore, government of Nepal has emphasized to rise inflows of foreign capital to bridge the gap between demand and supply of capital in energy area. However, Nepal has received very small amount of actual FDI from the proposed FDI. It is found the increasing trend of FDI flows into energy sector after 2014/15 and risk factors of the country, market size, administrators' quality, availability of physical infrastructure and public servant performance are the major factors causing the all proposed foreign capital do not actually flow into the energy sector. To minimize this divide, it is imperative to enhance country-risk factors. To narrow this gap, it is imperative to enhance country-risk factors and enhance the performance of bureaucrats in their specific domains.

**Keywords:** Foreign Direct Investment, Energy Production, Principal Component Analysis, Rudeness of Bureaucrats

**JEL Classifications:** G11, R11, F63, F64

## 1. INTRODUCTION

Energy sector is a prominent sector for economic growth of Nepal. Government of Nepal has tried to produce potential amount (85,000 MW) of hydroelectricity by using all possible rivers located in different regions of Nepal. Hydro-power projects are possible to be incorporated for generation of energy only with sufficient capital investments of the nation. The prime sources of capital are domestic savings and foreign investments. The foreign direct investment (FDI) flows have significant role in the development of various sectors (energy, manufacturing, services etc.) of a country which help to accelerate economic growth (Sarkodie and Strezov, 2019). However, Nepal has limited domestic capital for investment in energy as well as other sectors. In this perspective, foreign direct investment flow is one of the best sources of capital to bridge the gap of demand and supply of capital investments in energy as

well as other infrastructure development of Nepal. Therefore, FDI flow plays significant role for rapid hydroelectricity generation, transformation of advanced technology, development of skillful human capital, dynamic management and strategies which is the prerequisite for economic growth.

Nepal has more potentiality of energies but lacks capital. To fill this gap, Nepal should be able to attract more foreign investments to use advanced technology, skilled human capital, effective management in energy sector for more efficiency and diversifications. Policy, regularity environment, government stability, market environment etc. of country have significant role for the attraction of FDI in energy sector. Thus, FDI inflow has pertinent role for the development, modernization and sustainability of energy infrastructure and rapid economic growth in Nepal. At present, most of developing countries are attracting

## 2. LITERATURE REVIEW

more foreign direct investments in various sectors. However, Nepal has not been sufficiently efficient in attracting FDI because of weak infrastructure development, untrained and inefficient human capital, limited market size, lack of advanced technology, political instability, more corruptions, complexities of formalities etc.

Low exchange rate and privatization are the key drivers of FDI flows in energy sector. Recent reforms and incentives for technology have created more potentialities and opportunities to pull more foreign investments in energy sectors but, institutional quality and business environments may adversely affect to attract FDI (Sirin, 2017). Foreign based firms are able to use skillful human capital, advanced technology and efficient management in host countries that means domestic firms are able to utilize them efficiently through FDI (Osei and Kim, 2020). FDI has positive and significant relation with energy diversification and developments, however, energy sustainability can be ensured only source diversification of energies in BRICS economies (Qamruzzaman, 2022).

In the modern economically globalized age, developed and underdeveloped economies have attracted foreign investments in various sectors. FDI and energy are intricately connected. Countries with sufficient and more reliable energy are able to attract more foreign direct investments mostly in energy-based industries. FDI flows are used for the development of energy infrastructure, power plants, renewable energy projects etc. and FDI inflow has significant role in energy consumption that indicates more attraction of FDI leads to make more production and consumptions of energies (Khatun and Ahamad, 2015). Policy makers should address delays in decision making, political instability, corruption, human capital efficiencies and government issues in time to attract more FDI in energy sector for economic development.

FDI flows have pertinent role for the development of infrastructure, production process, employment generation, energy generation, trade balance, balance of payments etc. which increase competitive strength of domestic investments and start to develop financial institutions and markets. Financial development with FDI flows helps to accelerate economic growth of Nepal. Energy is the basic component for infrastructure development, smooth operation of production activities, utilization of advanced technology, digitalization of banking and other services etc. Therefore, Nepal should make large investment in energy sectors to generate required energy power to reduce import of petroleum products and smooth operation of various business, banking, marketing activities for rapid financial and economic development. This is not possible only with domestic investment. Therefore, government of Nepal has tried to attract large chunk of FDI within country by changing foreign investment policy in 2019. Out of total FDI inflow in Nepal in 2022, thirty-two percent of foreign capital was received by energy sector (Nepal Rastra Bank, 2022). However, large numbers of foreign investors were committed to invest in energy sector but, very small amount of committed FDI actually flows into energy sector of Nepal indicating the big gap between committed and actual flows of FDI. Therefore, this paper focuses to explore the causes of gap between committed and actual flows of FDI in energy sector of Nepal.

Absolute advantage theory (Musonera, 2005) argued market forces are major factors which help to raise production of goods and services at appropriate place and ensure to expand market size. Expansion of market was the main determinant of foreign direct investment. Buckley and Casson (1976) developed internalization theory of FDI that emphasizes on intermediate inputs and technology. According to this theory inflow of FDI depends upon nature of country, availability of resources, volume of industry and firms. Dunning (1973) developed eclectic theory based on combination of three economic theories (theory of firms, industrial organization and industrial trade theory) to explain capability and inclination of firm to work for markets in a foreign country via FDI. Dunning (1977) identified four factors (markets, natural resource, strategic assets, and efficiency) which influences inflows of FDI. All these theories have emphasized market size as well as availability of resources that affects inflows of FDI within country.

Various scholars (Abbas and Mosallamy, 2016; Asiedu, 2012; Buffie, 1993; Dunning, 1980; Hartman, 1984; Herzer et al. 2008; Jun, 1994; Leitao and Faustino, 2011; Sahoo, 2004; Mottaleb and Kalirajan, 2010; Renani and Mirfatah, 2012; Sahoo, 2004; Tsai, 1994) examined determinants of FDI flows on different countries based on location theory of FDI and all these studies identified market size and existing resources were major factors help to choose appropriate location for foreign investment.

Odi (2013) examined impact of FDI in energy sector by employing time series data of 2000-2011. Cointegration test and error correction model were used to identify the role of FDI in power sector development and found foreign capital has significant contribution to develop power sectors. Maran and Anitha (2015) explored impact of FDI in Indian energy sector by employing time series data in two phases pre-liberalization (1980-1990) and post-liberalization (1991-2010). Ordinary least squares method was used to investigate factors affecting FDI flows into Indian energy sector. Market size and return from investment were major factors influencing FDI flows into energy sector. Furthermore, liberalization was another factor that opens the market for foreign investors to invest in energy sectors. Hence, liberalization was way of rising FDI flows into Indian economy. Furthermore, Khatun and Ahamad (2015) investigated FDI in energy sector of Bangladesh by employing time series data of 1972-2010 and found causal relationship between FDI flows into power sector and growth of GDP in Bangladesh.

Lv and Spigarelli (2016) analyzed effects of institutional factors and role of location determinants of Chinese FDI in EU energy sector by employing fixed effects logistic model. Data were collected from different FDI related Chinese firms (202 firms) located into 17 EU countries. This study found rule of law, market size, human capital, political stability, good control of corruption are the major determinants of Chinese FDI outflows in EU countries. Sirin (2017) investigated flows of FDI in power sector and identified opportunities and risk in energy sector. Panel data from 2002 to 2012 were used to explore major drivers of FDI in

energy sector and revealed privatization, low real exchange rate were major factors which rise flows of FDI in energy sector.

In the investigation of major determinants of FDI flows into power sector of Bangladesh, Mahbub and Jongwanich, (2019) collected data by using mixed method of semi-structure interview and structural questionnaire method from 25 FDI based power companies whereas 20 conventional and remaining 5 were renewable power companies. The descriptive analysis results confirmed that regulatory factors like government's commitment on investment of foreign capital, acquisition of land, tax rate, and availability of infrastructure were major decision-making factors in investing FDI in power sector. Kiliçarslan (2019) analyzed connection between FDI flows and renewable energy production in Brazil, Russia, India, China, South Africa and Turkey by using time series data of 1996-2015. Padroni cointegration and panel autoregressive distributed test confirmed long run relationship between FDI flows and renewable energy production in these countries.

Parab et al. (2020) examined the relationship between FDI flows and renewable energy consumption of 43 countries by employing panel data of 2005-2017. Panel data analysis confirmed the unidirectional cointegration and long run relationship between FDI flows and renewable energy consumption and it has made the significant impact on sustainable development. Samour et al. (2022) explored the impact of FDI, financial development and economic growth on renewable energy consumption in UAE by employing bootstrap autoregressive distributed lag model with time series data of 1989-2019. This study found that economic growth, financial development and FDI flows within UAE significantly affects on renewable energy consumption. Furthermore, Akpanke et al. (2023) investigated the impact of FDI on renewable energy consumption on 15 African countries by employing time series data from 1990 to 2021. Second generation method and panel autoregressive distributed lad model was used to analyze the data. This study found that FDI and public sector credit made the positive and significant impact on renewable energy consumption in long run in African countries.

The stated scholars' theories and empirical studies have explored determinants and relationship between FDI flows and its impact on energy sectors in different areas of the world. However, these studies have not addressed the emerging trend of FDI flows into energy sector and causes of big gap between proposed and actual flows of FDI into energy sector of under developing countries. Therefore, this study has tried to fill this gap in this paper.

### 3. METHOD AND DATA COLLECTION

The main purpose of this study is to investigate disparity between actual and proposed FDI flows in energy sector of Nepal based on location theory of Dunning (1977), a comprehensive analysis is made using inferential techniques. This study has utilized factor analysis to condense a multitude of variables into more manageable constructs and employed a one-sample t-test to assess significance of these constructed variables. The aim of this paper is to gain insights into the factors influencing observed gap and determine whether identified variables have a significant role in this context.

In order to investigate factors contributing to disparity between anticipated and actual FDI flows, this study has focused on various dimensions (country risk factors, bureaucratic quality, infrastructure, financial considerations, market size, and bureaucratic performance). These factors were derived through factor analysis, and a subsequent t-test assessed their significance. The anticipated outcome was a negative association between country risk factors and the gap, while a positive relationship was expected with market size, bureaucratic quality, bureaucratic performance, infrastructure, and financial variables.

This study is based on primary data collected through survey with structured questionnaire by using 5-Point-Likert scale. The simple random sampling technique has been employed to collect data from 100 FDI based industries and analyzed through principal component analysis and one sample t test. Furthermore, to check reliability of data, Cronbach's Alpha ( $\alpha$ ) for consistency or reliability test has been employed.

$$\text{Coefficient of Cronbach (1951)'s Alpha } (\alpha) = \frac{kv}{[1+(k-1)k]}$$

v represents number of items; k is the mean of inter-item correlation.

Calculated value of  $\alpha > 0.7$  represents variables used in analysis are acceptable or reliable (George and Mallery, 2009). Furthermore, one sample t test was carried out from constructed variables to identify either variables significantly affect FDI flows into energy sector or not. Information was gathered through a survey method, employing a 5-point Likert scale where observed variables were rated on a scale from 1 (strongly disagree) to 5 (strongly agree). To distinguish between disagreement and agreement, a cut-off point of 3 was set for each statement, with a hypothesized mean of 3. In this context, test variable was evaluated against test value, which is hypothesized mean (3) in the population.

### 4. RESULTS AND DISCUSSION

Nepal has undergone significant legal infrastructure reforms to enhance its appeal for FDI following the period of liberalization. These reforms encompass implementation of policies focused on technology transfer, corporate taxation, and subsidies for exportable goods. These strategic measures aim to create a favorable environment for foreign investors, and show causing Nepal's commitment to fostering economic growth through modernized legal frameworks and incentives. Even if comprehensive legal reforms, Nepal has encountered challenges in attracting a substantial share of approved FDI. Between 1996 and 2022, total actual flow of FDI into Nepal has been relatively low around 36.2% of total approved FDI (NRB, 2022). However, FDI flows into energy sectors of Nepal has been increasing trend after 2015/16.

Table 1 shows current increasing trend of FDI flows into energy sector of Nepal from 2014/15 to till. Out of total flows of FDI, 12% of share was occupied by energy sector in 2014/15 whereas this amount of share has increased up to 38.6 % in 2017/18 and 34.8% in 2021/22. The trend of FDI flows in energy sector has

had increasing trend due to favorable government policy. India and China both countries have committed to purchase electricity from Nepal that caused the rise of the market size of energy product and easy to produce electricity from rivers are the major reasons of FDI flows into Nepalese energy sector. Furthermore, Nepal has started to develop infrastructure to export energy product towards the big country India and China. India is ready to purchase all energy products from Nepal produced by Indian companies. Therefore, Indian companies have started to invest in energy product in one hand. On the other hand, China and other foreign countries also found an appropriate location for investment that has caused the rising of FDI flows in energy sector.

The phenomenon of disparate levels of foreign direct investment (FDI) in Nepal has been subject to in-depth examination delves various aspects, including political factors, rule of law, market size, financial considerations, presence of infrastructure, country risk, and bureaucratic quality. The descriptive statistics of the variables are presented in Table 2.

In Table 2, an examination has been conducted to assess the impact of rule of law on respondents' perspectives regarding five distinct statements, gauged through 5-point Likert scales. Consequently, a mean score exceeding 3 indicates respondents' heightened emphasis on variables linked to the rule of law. Notably, average scores for each variable surpass the threshold of 3. This suggests that, according to respondents' evaluations, rule of law emerges as a prominent factor contributing significantly to the substantial

disparity observed between actual and proposed FDI flows into Nepalese energy sector.

Table 3 displays key statistical metrics, including average score, standard deviation, skewness, and kurtosis, pertaining to variables associated with market size. Notably, these variables exhibit average scores surpassing the specified cut-off point of 3, indicative of a relatively small market. As per respondents' perspectives, this aspect serves as another contributing factor to the gap between proposed and real flows of FDI in energy sector of Nepal.

Table 4 shows the disparity between committed and actual flows of foreign direct investment (FDI) into energy sector can be attributed to three key factors, each represented by a mean score above the 3.0 cut-off point. These factors include the mean score of 3.59 indicating inconsistent trends in the Nepalese capital market, a mean value of 3.34 reflecting excessive legal protection for workers, and a mean score of 3.17 denoting the provision of low tax incentives for investors. These elements collectively contribute to the observed gap in FDI, highlighting areas where improvement or reform may be necessary to attract and retain foreign investment in Nepalese energy sector.

Table 5 presents the average scores for various statements related to the current infrastructure situation in Nepal. The mean scores of four statements stand out, exceeding the cut-off point of 3 and potentially contributing to the gap between proposed and actual flows of FDI. These statements include low development of physical transportation (3.88), scarce of energy in the investment area (3.86), limited marketable and business structures (3.41), and low level of research and development accommodations (3.36). On the other hand, the mean score of limited development of communication (2.95) falls below the cut-off point of 3 and is not considered a significant factor responsible for the observed gap in FDI.

Table 6 shows the mean scores for all five statements from Table 6 surpassing the cut-off point of 3 suggest that respondents' perspectives on country risk factors serve as evidence for the gap between proposed and actual flows of FDI into energy sector.

**Table 1: Trend of Real Flows of FDI in Energy Sector**

Years	Actual flows (Rs in millions)	% Of total FDI flows
2014/15	12,772.9	12.0
2015/16	19,177.5	15.1
2016/17	22,323.8	13.9
2017/18	30,641.5	38.6
2018/19	36,655.0	23.5
2019/20	54,660.9	28.3
2020/21	70,147.3	30.8
2021/22	86,815.0	34.8

Data Abstracted from Nepal Rastra Bank (2022)

**Table 2: Analysis of legislation related variables**

Items	Mean	Standard deviation	Skewness	Kurtosis
Inadequate property rights legislation	3.58	1.30	0.83	0.57
Complexities in approving FDI due to policy issues	4.15	0.95	0.81	0.20
Lack of transparency in government actions related to FDI	3.99	1.14	0.98	0.31
Limited government institutions for FDI promotion and regulation	3.56	1.33	0.59	0.99
Weak judicial independence	3.45	1.31	0.44	0.96

Source: Field survey 2022

**Table 3: Analysis of market size related variables**

Items	Mean	Standard Deviation	Skewness	Kurtosis
Small amount of per-capita income	3.31	1.40	-0.34	-1.31
Slow economic growth	3.35	1.26	-0.59	-0.93
Lack of competitiveness for domestic products in the global market	3.95	1.20	-0.99	0.25
Challenges in foreign marketing	3.78	1.21	-0.94	-0.1
Lack of factors of production	3.59	1.30	-0.68	-0.78

Source: Field survey 2022

**Table 4: Analysis of financial related variables**

Items	Mean	Standard deviation	Skewness	Kurtosis
Devaluation of the Nepalese currency	2.81	1.29	0.49	-0.96
Volatility in the Nepalese capital market	3.59	1.18	-0.92	-0.28
Inadequate financial institutions	2.85	1.29	0.29	-1.18
No Provision of tax rebate	3.17	1.31	-0.26	-1.16
Excessive legal safeguards for workers	3.34	1.28	-0.34	-0.86

Source: Field Survey 2022

**Table 5: Examination of the accessibility of infrastructure**

Items	Mean	Standard deviation	Skewness	Kurtosis
Low development of physical transportation	3.88	1.26	-1.01	-0.17
Limited development of communication	2.95	1.34	0.26	-1.36
Scarce of energy	3.86	1.17	-1.22	0.73
Low level of research and development accommodations	3.36	1.31	-0.17	-1.29
Limited marketable and business structures	3.41	1.29	-0.50	-1.17

Source: Field Survey 2022

**Table 6: Assessment of risk factors in a nation**

Items	Mean	Standard deviation	Skewness	Kurtosis
Elevated inflation rate	3.14	1.25	-0.29	-1.23
Elevated debt rate	3.19	1.36	-0.16	-1.33
Elevated trade deficit	3.71	1.28	-0.85	-0.53
Significant corporate taxation level	3.39	1.18	-0.39	-0.99
Inadequate security measures impacting foreign investments	3.98	1.14	-0.88	-0.37

Source: Field Survey 2022

**Table 7: Evaluation of administrative efficiency and quality**

Items	Mean	Standard Deviation	Skewness	Kurtosis
Low efficiency among bureaucrats	4.16	1.07	-1.30	1.32
Unethical behavior within bureaucratic ranks	4.26	1.04	-1.32	1.58
Pessimistic demeanor of administrators	3.51	1.28	-0.32	-1.15
Discourteous conduct exhibited by bureaucrats	3.07	1.19	0.45	-0.74
Excessive bureaucratic procedures causing delays	3.99	1.15	-1.31	1.19

Source: Field Survey 2022

Table 7 brings attention to respondents' assessments of current qualities of bureaucrats. The mean scores for four statements, specifically the unethical behavior within bureaucratic ranks (4.26), low efficiency among bureaucrats (4.16), excessive bureaucratic procedures causing delays (3.99), and pessimistic demeanor of bureaucrats (3.51), all surpass the cut-off point of 3. These elevated scores indicate that these aspects contribute significantly to the observed gap between proposed and real flows of FDI into energy sector.

Above analysis focuses on presenting average responses from respondents regarding the disparity between proposed and actual flows of FDI in energy sector. However, it acknowledges the need to delve deeper into the underlying reasons for this gap. To address this, a principal component analysis has been administered to identify the causes of gap between proposed and actual flows of FDI into Nepalese energy sector.

Kaiser-Meyer-Olkin (KMO) and Bartlett's test statistics for sample adequacy and significance level; here, KMO value  $>0.5$  is considered to be sample adequacy for further analysis of the data (Kaiser and Rice, 1974). The value of KMO (0.68) is acceptable, thereby leading to a compact pattern of correlation, and hence, factor

analysis can yield distinct and reliable results. Furthermore, in the context of factor analysis, Eigen values associated with each factor indicate the amount of variance explained by each linear component. Six distinct components have been identified in this analysis, as they possess Eigen values exceeding one. The cumulative contribution of these six factors accounts for a total of 67.80% of the variance.

The analysis, as detailed in Table 8, presents a rotated component matrix illustrating the factor loadings for each observed variable. To refine the model, items with factor loadings below 0.5 are slated for elimination. Examining the first five variables, with principal component values of 0.820, 0.890, 0.691, 0.671, and 0.599, they align with factor one, termed as the aggregate risk factor of nation. Factor two encompasses four variables with principal component values of 0.769, 0.757, 0.724, and 0.617, collectively identified as the bureaucratic quality factor.

Similarly, factor three incorporates four variables with values of principal components (0.691, 0.608, 0.594, 0.589), forming the infrastructure variable. Factor four, five, and six group variables with principal component values (0.747, 0.728, 0.650, 0.621), (0.824, 0.742, 0.680), and (0.900, 0.797), categorizing them as financial, market size, and bureaucrat's performance factors,

**Table 8: Loaded factors**

Items	Factors					
	1	2	3	4	5	6
Elevated debt rate	0.820					
Existing elevated inflation levels	0.890					
Substantial trade deficit magnitude	0.691					
Ineffective existing law about property rights	0.671					
High rate of corporate tax	0.599					
Low efficiency among bureaucrats		0.769				
Policy complication to approve the FDI		0.757				
Unnecessary complex process created by bureaucrats for foreign investors		0.724				
Pessimistic demeanor of bureaucrats		0.617				
Scarce of energy			0.691			
Insufficient availability of factor inputs			0.608			
Insufficient availability of communication facilities			0.594			
Low level of research and development accommodations			0.589			
Big size of government				0.747		
Depreciating exchange rate of Nepalese currency				0.728		
Inconsistent trends of Nepalese capital market				0.650		
Insufficient availability of financial institution				0.621		
Low level of per capita income of the people					0.824	
Low level of existing GDP growth rate					0.742	
Lack of competitiveness of domestic products in international market due to high production costs					0.680	
Rudeness of bureaucrats with foreign investors						0.900
Negative attitude of bureaucrats to foreign investors						0.797

Extraction method: Principal component analysis  
 Rotation method: Varimax with Kaiser Normalization  
 Rotation converged in 10 iterations

respectively. In total, six factors have been identified to assess reliability. Their impact is deemed either significant or negligible in relation to any discrepancies between committed and actual flows of foreign direct investment (FDI) into Nepal.

Cronbach’s Alpha analysis has been used to examine the sensible and theoretical assurance of each question in the data set. If the  $\alpha$ -score surpasses 0.7, it signifies strong internal reliability for the scale items. The reliability test exclusively considers variables that have loaded in the rotated component matrix.

Table 9 illustrates the reliability of the items, suggesting that the scale of all questions, based on loaded factors, exhibits commendable reliability. With an Alpha score of each grouped variable is more than 0.70 and justified inter-item correlation, it indicates a high level of internal consistency for the all-factor construct, making it suitable for subsequent analysis.

One sample t test has carried out to explore the location determinants and causes of discrepancy between proposed and actual flows of FDI in energy sector of Nepal.

Table 10 exhibits the one sample t statistics calculated from the constructed variables of from principal component analysis. The first part of Table 10 shows the basic information of constructed variables whereas mean value of all variables except financial factors lays score above 3. Second section of Table 10 demonstrates the calculated results of one sample t-statistics.

The study employs a one-sample t-test with a test value of 3 based on a 5-point Likert scale questionnaire. The country risk factor is

**Table 9: Reliability test using Cronbach’s alpha of all clubbed variables**

Variables	Cronbach’s Alpha	No. of Items
Country-risk factor	0.803	5
Bureaucrat Quality	0.740	4
Infrastructure	0.750	4
Financial Factors	0.780	4
Market Size	0.800	3
Bureaucrat Performance	0.786	2

Cronbach’s alphas have been computed based on the first loading factor from the rotated component matrix

**Table 10: One-sample “t” statistics**

Items	Mean	Standard deviation
Risk factors	3.40	0.97
Administrators’ quality	4.15	0.81
Infrastructure	3.44	0.92
Financial	2.98	0.91
Dimensions of market	3.53	1.04
Public servant performance	3.28	1.13

Items	One-sample test		
	t-statistics	P-values	Mean Difference
Risk factors	3.47	0.00	0.40
Administrators’ quality	14.78	0.00	1.15
Infrastructure	4.14	0.00	0.44
Financial	-0.26	0.76	-0.02
Dimensions of market	4.67	0.00	0.53
Public servant performance	1.87	0.07	0.28
Degree of freedom	99		

The compare means and t statistics have been calculated from the constructed value of different loaded factors from rotated matrix Table 8

found to be statistically significant, supported by a t-statistic of 3.47. The positive mean difference indicates that the observed sample mean (3.47) exceeds the hypothesized mean of 3, suggesting that risk factors, including high inflation, debt, trade deficit, and corporate tax rate, contribute to the disparity between committed and actual FDI flows in Nepal. Likewise, poor administrator quality, represented by a positive and statistically significant t-statistic of 14.78, is identified as another factor causing discrepancies in FDI flows. This construct encompasses poor administrator performance, corrupt attitudes, and rudeness of bureaucrats with foreign investors, and policy complications. The positive mean difference (1.14) reinforces the conclusion that poor administrator quality is a major contributor to the gap between proposed and real FDI flows. Furthermore, the study finds that the availability of infrastructure in Nepal significantly influences FDI flows. A positive and statistically significant t-statistic of 4.14 indicates that the mean of the sample is greater than the hypothesized mean of 3. Inadequate energy supply, poor transportation, and deficient research and development facilities are identified as key aspects of poor infrastructure contributing to the substantial gap between actual and proposed FDI flows in Nepal.

Risk factors, administrators' quality, availability of physical infrastructure, financial condition, dimensions of market and bureaucrat performance are the major factors helping to choose the appropriate location for investment into Nepalese economy. Therefore, all proposed FDI has not transformed into actual flows of FDI into Nepalese energy sector. This result identified as the major determinants of actual FDI flows into energy sector are the risk factor, market size, administrators' quality, existing infrastructure, existing situation of property right, rule of law is consistent with prior studies (Lv and Spigarelli, 2016; Mahbub and Jongwanich, 2019; Sirin, 2017).

## 5. CONCLUSION AND IMPLICATIONS

Government of Nepal has assumed an initiative to open up the Nepalese economy to the global market which has led to increased Foreign Direct Investment inflows. This has indeed generated fresh prospects for Nepal's overall development. This move has positively impacted the performance of domestic firms and facilitated the globalization of local businesses. However, it is noteworthy that the patterns observed in the actual FDI and proposed FDI flows into Nepal exhibit significant volatility, with a growing gap between them in energy sector of Nepal. The selection of investment locations by foreign investors appears to be influenced by various factors such as economic conditions, the existing rule of law, political stability, bureaucratic efficiency, and the attitudes of government officials.

To address the widening disparity between proposed and actual FDI flows, it becomes imperative for the Nepalese government to focus on enhancing the competence and efficiency of bureaucrats, improving economic indicators, and stabilizing the political environment in Nepal. This concerted effort is crucial for fostering a more conducive investment climate and ensuring that the envisioned economic benefits materialize as intended.

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