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Research Management Cell, Pokhara Multiple Campus, Pokhara, Nepal
Email: research.intelligencepmcrmc021@gmail.com
URL: www.pmcpokhara.edu.np

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Liquidity Crunches in the Banking Industry of Nepal

[1] Bharat Ram Dhungana

Abstract

Liquidity crunches in the Nepalese banking sector have been a critical issue for the last few years. This research aims to examine the causes, consequences, and improvement of liquidity crunches in the context of the Nepalese banking industry. This study is based on primary sources with explanatory and descriptive research design. The study population is all the bankers and experts involved in the banking sector - commercial banks, development banks, and regulatory authorities of Pokhara Metropolitan City, Kaski, Nepal. The five-point Likert scale questionnaires were developed to collect the data from the 213 banking professionals based on the non-probability sampling method. This study found a significant impact of government capital expenditure, bank lending policy, and monetary policy on liquidity crunches in the banking industry. The liquidity crunch hampers the growth of business and industry, and discourages entrepreneurs because they are not getting loanable funds as and when required. It creates instability in the financial system, deteriorates the investment environment, generates high inflation and unemployment rates , and affects economic growth rate in the country. The government should increase capital expenditure capacity . Bank lending policy should be directed towards a productive investment. Appropriate monetary policy should be designed to address the liquidity crunch problem in the banking sector. For this, the government and regulatory authority may promote an inclusive and sound financial system in the nation.

Keywords

Banking industry
Bank lending policy
Capital expenditure
Liquidity crunch
Monetary policy

TODAY, THERE IS a growing concern among regulatory authorities and policymakers about maintaining financial stability for sustained economic growth (Akalpler, 2023; Akyüz, 2006; Creel, Hubert, & Labondance, 2015). Liquidity crunches threaten

1. Associate Professor, School of Business, Pokhara University
Email: dhunganabharat.pu@gmail.com

the stability of the banking industry (Baglioni, 2012; Chen, Lee, & Shen, 2022). There has been a lack of loanable funds in the Nepalese banking industry in the last few years (Lamichhane, 2022). It is often seen as the primary cause of the banking sector's repeated liquidity crises (Khiaonarong et al., 2023). As per the Economic Survey 2022-23 of Nepal, overall capital expenditure in fiscal year 2022-23 was 57.2% of the capital budget. The capital expenditure in the fiscal year 2021-22 was 64.8% of the capital budget, and for the fiscal year 2020-21, it was hardly half (46.2%) of the capital budget at the federal level (MOF, 2023). Based on the above data, low capital expenditure has been a long-standing problem in the Nepalese economy.

A sound and stable financial system facilitates the economic growth of the nation (Levine, 1997; Paun et al., 2019). A strong financial institution promotes capital formation and encourages investment in productive businesses (Habibullah & Eng, 2006; Haini, 2020). The development of the financial sector has a significant impact on the economic growth of the nation through the mobilization of accumulated capital into productive sectors (Dhungana, 2014; Paun et al., 2019; Puatwoe & Piabuo, 2017). Economists have generally reached a consensus on the significant role of financial institutions in economic development (Alawi et al., 2022; Chinoda & Kapingura, 2023; Dhungana, 2014; Ustarz & Fanta, 2021). Schumpeter (1934) concluded that the financial sector is an engine of economic growth by funding productive investment.

A modern and healthy financial system is required for accelerated economic growth to pool and utilize financial resources, reduce costs and risks, expand and diversify opportunities, enhance the efficiency of resources, promote productivity, and facilitate economic growth (Dhungana, 2019; Hasan et al., 2009). Therefore, the financial system needs to be structured on the grounds of international norms and practices that help to develop a strong financial foundation in the country (Jeucken, 2001; Ozili, 2021). The financial and stable financial sector provides the foundations for economic stability and growth of the nation (Kuznyetsova et al., 2022; Shawtari et al., 2023). Liquidity issues are frequently caused by flaws in fund management or bad economic situations, which result in erratic liquidity withdrawals by depositors (Arif & Nauman Anees, 2012). Because banks issue liquid liabilities yet invest in illiquid assets, banks frequently discover liquidity mismatches between asset and liability sides that need to be balanced (Zhu, 2005). As a result, the bank's capacity to monitor and manage liquidity demand and supply is critical for maintaining banking operations (Bianchi & Bigio, 2022; Diamond & Rajan, 2005). If a bank fails to close the gap, it may face liquidity issues, as well as unwillingness exposures like high interest rate risk, large bank reserves or capital requirements, and a tarnished reputation (Davies, 2013; Ellis et al., 2022).

Commercial banks are the most significant institutions for mobilizing savings and allocating financial resources (Bernard Azolibe, 2022; Dhungana, 2011; Quartey, 2008). They become an important economic growth and development phenomenon because of their many responsibilities (Dhungana, 2014; Haapanen & Tapio, 2016). To do business securely, keep positive relationships with stakeholders, and prevent liquidity issues, banks—as financial institutions—should appropriately manage the supply and demand of liquidity. Unpredictable liquidity withdrawals by depositors due to adverse economic conditions or shortcomings in fund management are the usual causes of liquidity issues (DeYoung & Jang, 2016; Rani, 2017).

Banking sectors are facing these problems due to the low capital expenditure of the government, trade deficit, low deposit ratio, and other factors. Entrepreneurs or business organizations are not getting loanable funds from banking institutions efficiently and adequately due to the problem of liquidity crunch. This research aims to examine the causes, consequences, and improvement of liquidity crunches in the context of the Nepalese banking industry.

Review of Literature

Keynes developed the idea of liquidity preference from the standpoint of issues related to stores of value (Kregel, 1988; Wells, 1971). The price that balances the desire to hold wealth in the form of cash with the amount of accessible cash is first described as the rate of interest (Tobin, 1965). Following a brief explanation, he defines the "schedule of liquidity-preference" as a smooth curve that shows the interest rate falling as the quantity of money increases and introduces transactional, precautionary, and speculative reasons (Keynes, 2018). Thus, ‘managing money' and ‘managing expectations’ are the two facets of Keynes's policy (Rivot, 2013).

Regulatory and supervisory theory emphasizes the function of regulatory and supervisory organizations to prevent liquidity crises (VanHoose, 2007). It implies that sound regulation and supervision can assist in locating and reducing risks that cause liquidity issues in financial organizations (Brownbridge & Kirkpatrick, 2000; Ruozi & Ferrari, 2013). The key objectives of financial regulation are (1) to safeguard customers or investors; (2) to ensure the financial stability and solvency of financial institutions; (3) to promote fairness, efficiency, and transparency in the securities markets; and (4) to support a sound financial system. Consumer protection, financial system stability, and efficiency maximization are the three primary reasons financial institutions must be regulated (Botha & Makina, 2011; Buttigieg et al., 2020; Goodhart, 1989).

The microeconomic roots of bank runs must be explained. There are two main points of view. Diamond and Dybvig (1983), Cooper and Ross (1998), Chang and Velasco (2000, 2001), Park (1997), Jeitschko and Taylor (2001) are among the economists who believe that bank runs are self-fulfilling prophesies that are unrelated to the state of the real economy. The second point of view, as evidenced by empirical studies by Gorton (1988), Calomiris and Gorton (1991), Calomiris and Mason (2003), and recent theoretical work by Allen and Gale (1998), Zhu (2001), Goldstein and Pauzner (2005), sees bank runs as a phenomenon closely related to the state of the business cycle. The banking sector's liquidity problem results from certain banks' aggressive lending practices (Karim et al., 2021).

Because banks play such a critical role in the transmission of monetary policy, the availability of liquidity, and intermediation, structural, legal, and regulatory changes have an impact on bank operations, efficiency, and competitiveness (Wang, 2003). The banking sector is the backbone of the financial system and plays an essential financial intermediary role. Rajan and Zingales (1998), Levine (1998), and Levine and Zervos (1998), among others, suggest that the well-being of the banking sector is positively related to economic growth.

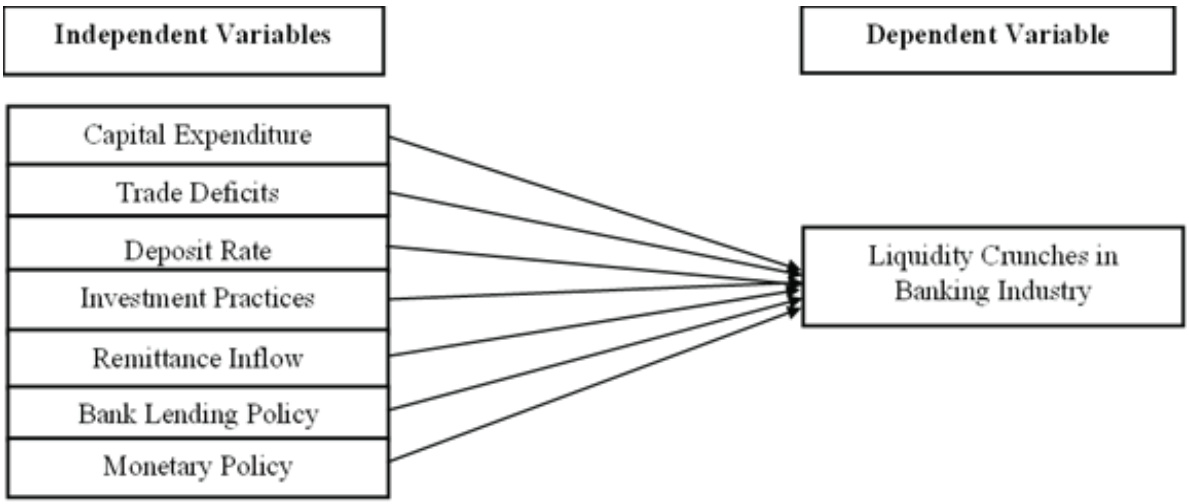
Many empirical findings reveal that liquidity, non-interest income, credit risk, and capitalization all positively and substantially influence bank performance (Abedifar et al., 2018; Mehz-

abin et al., 2022). Regarding the influence of macroeconomic indicators on bank profitability, the findings reveal that economic growth has a positive and considerable impact (Klein & Weill, 2022). Islamic banks are suffering from a liquidity problem, which is having a severe effect on their performance. While some banks are experiencing excess liquidity, others are experiencing a shortage, and in both cases, their profitability is significantly impacted (Islam & Amir, 2016).

Mainali (2022) highlighted the key factors contributing to the liquidity crunch in the context of Nepal: Low deposits, increased lending, decline in the forex reserve, people investing in commodities like gold and silver, low increasing rate of remittance, decrease in export, increase in imports, increased living standard of the people, which leads to excessive consumption of luxurious goods, investment in the unproductive sector, investment made in a foreign land, where people feel safe about their investment, illegal hundis of money to the foreign country, and political instability.

Figure 1

Conceptual Framework of Liquidity Crunches in the Banking Industry



There is limited study on liquidity crunches in the banking industry, and no study has been found in the context of Nepal. Liquidity crunch issue is common in developing countries like Nepal. Developed countries are not facing the problem of liquidity crunches. This research is novel and expected to provide new literature on liquidity crunches in the banking sector.

Methodology

This research is based on explanatory and descriptive research design to investigate the causes, consequences, and strategies for the improvement of liquidity crunches in the Nepalese banking industry with references to Pokhara Metropolitan City, Kaski, Nepal. The survey includes the opinion of the financial institutions, including commercial banks, development banks, and regulatory authorities. The population of the study is all the bankers/experts who have been involved in the banking sector for the last three or more years. Yamaro Yamane formula was used to calculate the sample size suggested by (Israel, 1992; Olayinka et al., 2013) and the desired sample size was

found 231. However, seven forms were incomplete, and eleven respondents did not respond even if followed up for the response. As a result, the final sample size was 213 for this study. The non-probability sampling (convenience sampling) method was used. The primary data was collected through structured questionnaires from the banking professionals involved in the financial sectors for the last three or more years.

Results and Discussion

Demographic Profile of Respondents

The demographic profile of respondents includes gender, banking experience, involvement in banks, education level, designation, and specialization area of the respondents. The demographic profile of respondents has been presented in Table 1.

Table 1

Demographic profile

Demographic variables		No. of respondents	Percentage
Gender	Male	125	59.6
	Female	86	40.4
Banking experience	3 to 5 years	126	59.2
	5 to 10 years	69	32.4
	Above 10 years	18	8.4
Involvement	Commercial banks	166	77.9
	Development banks	35	16.5
	Regulatory authority	12	5.6
Education level	Intermediate	4	1.9
	Bachelors	68	31.9
	Masters	135	63.4
	Above masters	6	2.8
Designation	Director	12	5.6
	Branch Manager	22	10.3
	Officer	75	35.3
	Non-Officer	104	48.8
Specialization	Finance	143	67.1
	HRM	8	3.8
	Marketing	24	11.3
	Others	38	17.8
Total		**213**	**100**

Note: Field survey 2023 and authors' calculation.

Table 1 shows that the majority of the respondents are male (59.6%), with banking experience elow five years (59.2%), master-level education (63.4%), and finance specialization (67.1%). In terms of involvement in financial institutions, most respondents are involved in commercial banks (77.9%), and more than half of the total respondents (51.2%) are officers and above level.

Capital Expenditure and Liquidity Crunch

One of the significant factors of the liquidity crunch is the capital expenditure of the government. Capital expenditure related causes for liquidity crunches have been presented in Table 2.

Table 2

Capital Expenditure Related Causes for Liquidity Crunch

Capital Expenditure Related Factors	**Descriptive Statistics**			
	N	**Mean**	**SD**	**Decision**
The low capital expenditure of the government is a highly responsible factor for liquidity crunches in the banking sector.	213	**3.88**	0.971	High perception
Liquidity crunch increases if the government does not spend its capital expenditure on time.		3.76	**1.058**	High perception
High capital expenditure ensures liquidity in the banking sector.		3.56	0.982	Low perception
An ineffective government monitoring system on capital spending increases the liquidity crunch in the economy.		**3.88**	1.016	High perception
Unnecessary hurdles in public procurement increase liquidity crunch in the economy.		3.58	**0.947**	Low perception

Note: *Field survey 2023 and authors' calculation.*

Weighted average: 18.66/5 = 3.73

Table 2 shows that the majority of the respondents appeared to feel that the low capital expenditure of the government was a highly responsible factor for liquidity crunches in the banking sector. Likewise, most participants felt that liquidity crunch increased when the government did not spend its capital expenditure on time. They also perceived that an ineffective government monitoring system on capital spending increased the liquidity crunch in the economy. This study is consistent with increased bank panic when new loans for actual investments like working capital and capital exenditures decreased (Ivashina & Scharfstein, 2010). The performance of the borrowers is adversely affected by unfavorable capital shocks to banks. Businesses that mainly depended on banks for funding viewed a more significant reduction in capital spending (Chava &

Purnanandam, 2011).

Trade Deficit and Liquidity Crunch

The trade deficit is another factor that creates a liquidity crunch in the banking sector. Table 3 shows the trade deficit related causes for liquidity crunch.

Table 3

Trade Deficit Related Causes for Liquidity Crunch

Trade Deficit Related Factors	**Descriptive Statistics**			
	N	**Mean**	**SD**	**Decision**
A trade deficit is a highly responsible factor for liquidity crunches in the banking sector.	213	**3.97**	1.01	High perception
Liquidity crunch increases in the banking sector when the size of imports increases in the country.		3.93	**0.97**	High perception
Liquidity crunch increases in the banking sector when the size of exports decreases.		**3.62**	**1.11**	Low perception
Trade surplus ensures liquidity in the banking sector.		3.68	1.01	Low perception
The government's highly liberal policy (such as luxurious products and self-finance abroad study) has increased liquidity crunches.		3.75	1.02	Low perception

Note: *Field survey 2023 and authors' calculation.*

Weighted average: 18.95/5 = 3.79

Table 3 shows that the majority of the respondents expressed their opinion that a trade deficit is a highly responsible factor for liquidity crunches in the banking sector. Likewise, most participants felt that the banking sector's liquidity crunch increases when the size of imports increases in the country. This study is consistent with the fact that the trade deficit has been considered a factor in the liquidity problem (Islam, 2020).

Deposit Rate and Liquidity Crunch

The deposit rate is a responsible factor in liquidity crunch. The deposit rate related causes for liquidity crunch have been presented in Table 4.

Table 4

Deposit Rate Related Causes for Liquidity Crunch

Deposit Rate Related Factors	N	Descriptive Statistics Mean	SD	Decision
A low deposit ratio is a highly responsible factor for liquidity crunches in the banking sector.		3.66	**1.04**	High perception
Liquidity crunch increases in the banking sector when there is poor financial inclusion.		**3.77**	**0.93**	High perception
Poor financial literacy reduces the low deposit ratio and increases liquidity crunches.	213	3.66	0.99	High perception
A low saving rate decreases the deposit ratio and increases the liquidity crunches in the banking sector.		3.47	1.04	Low perception
Liquidity crunch increases when there is a more significant influence on the informal economy.		**3.42**	0.95	Low perception

Note: *Field survey 2023 and authors' calculation.*

Weighted average: 17.98/5 = 3.60

Table 4 shows that the majority of the respondents appeared to feel that the liquidity crunch increases in the banking sector when there is poor financial inclusion. Likewise, a low deposit ratio is a highly responsible factor for liquidity crunches in the banking sector. They also perceived that poor financial literacy reduces the low deposit ratio and increases liquidity crunches. This study is consistent with financial stability, which may be influenced by high and growing levels of financial inclusion. When there is economic instability, credit busts are less noticeable in nations with more inclusive banking systems (Ahamed & Mallick, 2019; Neaime & Gaysset, 2018).

Investment Practices and Liquidity Crunch

Investment practice is another factor that affects liquidity crunch. Table 5 shows the investment related causes for liquidity crunch.

Table 5

Investment Related Causes for Liquidity Crunch

Investment Related Factors	Descriptive Statistics N	Mean	SD	Decision
Unproductive investment is a highly responsible factor for liquidity crunches in the banking sector.		**4.09**	**0.91**	High perception
The excessive consumption of luxurious goods (such as gold and silver) increases liquidity crunches.		3.79	1.06	Low perception

Investment in real estate increases liquidity crunches in the banking sector.	213	**3.66**	**1.17**	Low perception
The country's lack of a good business environment is the reason behind the liquidity crunch.		3.88	1.07	High perception
Unstable government policy on investment increases liquidity crunches in the banking sector.		4.00	1.05	High perception

Note: *Field survey 2023 and authors' calculation.*

Weighted average: 19.42/5 = 3.88

Table 5 shows that the majority of the respondents expressed their opinion that unproductive investment is a highly responsible factor for liquidity crunches in the banking sector. Likewise, most participants felt that unstable government policy on investment increases liquidity crunches in the banking sector. Also, they appeared to think that the country's lack of a good business environment is the reason behind the liquidity crunch. This study is consistent with a liquidity crunch leading to the collapse of asset prices, such as investment in real assets (Calvo, 2012).

Remittance Inflow and Liquidity Crunch

Remittance inflow is a responsible factor in the liquidity crunch. The remittance related causes for liquidity crunch have been presented in Table 6.

Table 6

Remittance Related Causes for Liquidity Crunch

Remittance Related Factors	Descriptive Statistics			
	N	**Mean**	**SD**	**Decision**
A low remittance rate is a highly responsible factor for liquidity crunches in the banking sector.		3.63	1.01	Low perception
Increased remittance in the economy ensures liquidity in the banking sector.		**3.92**	**0.98**	High perception
The informal way of sending remittances increases liquidity crunches in the banking sector.	213	**3.55**	**1.11**	Low perception
The liquidity crunch increases when remittances are used to import luxury goods or to invest in the unproductive sector.		3.76	1.02	High perception
Liquidity crunch increases when there is poor financial education for migrant workers regarding the effective utilization of remittance.		3.62	1.00	Low perception

Note: *Field survey 2023 and authors' calculation.*

Weighted average: 18.48/5 = 3.70

Table 6 shows that the majority of the respondents appeared to feel that the increased remittance in the economy ensures liquidity in the banking sector. Likewise, most respondents felt that the liquidity crunch increases when remittances are used to import luxury goods or invest in the unproductive sector. This study is consistent with remittances from migrants helping the

financial sector grow in both size and effectiveness (Odugbesan et al., 2021).

Bank Lending and Liquidity Crunch

Bank lending is another factor that affects the liquidity crunch. Table 7 shows the banking lending related causes for liquidity crunch.

Table 7

Bank Lending Related Causes for Liquidity Crunch

Bank Lending Related Factors	Descriptive Statistics			
	N	Mean	SD	Decision
Bank lending policy is a highly responsible factor for liquidity crunches in the banking sector.		**3.48**	**1.06**	Low perception
Excessive lending in unproductive sectors is a significant reason for the liquidity crunch.		**3.87**	0.97	High perception
Bank lending policy on the economy's priority and productive sectors helps minimize the liquidity crunches.	213	3.82	0.99	High perception
The main reason for the liquidity crunch is the lack of deposits compared to loans.		3.78	0.98	High perception
The liquidity problem increases when BFIs adopt an unstable and poor lending policy.		3.81	**0.94**	High perception

Note: *Field survey 2023 and authors' calculation.*

Weighted average: 18.76/5 = 3.75

Table 7 shows that the majority of the respondents expressed their opinion that excessive lending in unproductive sectors is a major reason for the liquidity crunch. Likewise, most of the participants felt that bank lending policy on priority and productive sectors of the economy helps to minimize liquidity crunches. Also, they appeared to feel that the liquidity problem increases when BFIs adopt an unstable and poor lending policy. The majority of respondents perceived that the main reason for the liquidity crunch is the lack of deposits compared to loans. This study is consistent with the banking sector's liquidity problem as a result of aggressive lending practices (Karim et al., 2021). When making lending decisions, commercial banks should consider the nation's overall macroeconomic conditions, factors that impact GDP generally, and their liquidity ratio specifically (Timsina, 2014).

Monetary Policy and Liquidity Crunch

Monetary policy is a responsible factor in the liquidity crunch. Monetary policy related causes for liquidity crunch have been presented in Table 8.

Table 8
Monetary Policy Related Causes for Liquidity Crunch

Monetary Policy Related Factors	Descriptive Statistics			
	N	Mean	SD	Decision
Monetary policy is a highly responsible factor for liquidity crunches in the banking sector.		3.76	1.03	High perception
The poor monetary tools increase liquidity crunches.		**3.82**	**0.90**	High perception
A higher interest (lending) rate increases the liquidity crunches in the banking sector.	213	**3.31**	**1.08**	Low perception
The ineffective role of regulatory authority increases liquidity crunches.		3.77	0.96	High perception
The poor financial market increases liquidity crunches.		3.78	0.96	High perception

Note: *Field survey 2023 and authors' calculation.*

Weighted average: 18.44/5 = 3.69

Table 8 shows that the majority of the respondents appeared to feel that the poor monetary tools increase liquidity crunches. Likewise, most of the respondents felt that the poor financial market increases liquidity crunches. Also, they perceived that the ineffective role of regulatory authority increases liquidity crunches. The majority of respondents felt that monetary policy is a highly responsible factor for liquidity crunches in the banking sector. This study is consistent with a decline in bank liquidity creation is strongly correlated with monetary policy tools (Monnet & Vari, 2023; Pham et al., 2021).

Consequences of Liquidity Crunch

The liquidity crunch affects the growth of business and industry, discourages investment and creates unemployment in the country. Table 9 shows the consequences of liquidity crunch.

Table 9
Consequences of Liquidity Crunch

Consequences Related Factors	Descriptive Statistics			
	N	Mean	SD	Decision
Hampers the growth of business and industry.		**4.16**	0.98	High perception
Discourages entrepreneurs because they are not getting loanable funds as and when required.		4.11	0.97	High perception
Loss of public confidence in the formal financial institutions.		3.85	0.92	Low perception

Poor utilization of factors of production		3.90	0.87	Low perception
The high unemployment rate in the country		3.92	0.95	High perception
Greater influence of the informal economy	213	3.77	0.87	Low perception
Increases high level of import and trade deficit.		3.74	1.00	Low perception
Instability in the financial system		4.08	**0.83**	High perception
Failure of the banks and regulatory institutions		**3.62**	**1.04**	Low perception
Higher inflation rate		3.95	0.93	High perception
Lack of investment environment.		4.04	0.94	High perception
A low economic growth rate exists in the country.		3.92	0.93	High perception

Note: *Field survey 2023 and authors' calculation.*

Weighted average: 47.06.44/5 = 3.92

Table 9 shows that the majority of the respondents perceived that the liquidity crunch hampers the growth of business and industry, discourages entrepreneurs because they are not getting loanable funds as and when required, creates instability in the financial system, deteriorates the investment environment, creates high inflation and unemployment rate in the country, and a low economic growth rate exists in the country. This study is consistent with investment declines significantly and persistently as a result of liquidity shock (Quint & Tristani, 2018).

Correlation among the Liquidity Crunch Variables

The correlation between a dependent variable (LC) and independent variables (CE, TD, DR, IP, RI, BLP, and MP) has been presented. The correlation among the liquidity crunch variables has been shown in Table 10.

Table 10

Correlation among the Liquidity Crunch Variables

Variables	CE	TD	DR	IP	RE	BLP	MP	CLC
CE	1							
TD	0.543**	1						
DR	0.375**	0.528**	1					
IP	0.438**	0.619**	0.555**	1				
RI	0.369**	0.505**	0.451**	0.625**	1			
BLP	0.341**	0.472**	0.501**	0.617**	0.542**	1		
MP	0.366**	0.376**	0.462**	0.525**	0.508**	0.610**	1	
LC	0.495**	0.506**	0.514**	0.587**	0.524**	0.614**	0.694**	1

Note: *Field survey 2023 and authors' calculation.*

***Pearson Correlation is significant at the 0.01 level (2-tailed).*

Table 10 shows that among the dependent and independent variables, there is a moderate level (0.40 to 0.69) of positive significant correlation between liquidity crunches (LC) and monetary policy (MP), bank lending policy (BLP), investment practices (IP), remittance inflow (RI), deposit rate (DR), trade deficit (TD), and capital expenditure (CE) respectively.

Regression Analysis for the Consequences of Liquidity Crunch

The multiple regression model was applied to determine the impact of independent variables such as capital expenditure, trade deficit, deposit rate, investment practices, remittance inflow, bank lending policy, and monetary policy on the dependent variable – the consequences of liquidity crunch. The regression analysis for the liquidity crunch has been presented in Table 11.

Table 11

Regression Analysis for the Liquidity Crunches

Variables	Beta	T-value	P-value	VIF	Decision
(Constant)	0.635	3.211	0.002	-	-
CE	0.155	3.219	**0.001**	1.496	Supported H_1
TD	0.054	1.076	0.283	2.071	Not supported H_2
DR	0.078	1.349	0.179	1.707	Not supported H_3
IP	0.074	1.304	0.194	2.455	Not supported H_4
RI	0.036	0.747	0.456	1.872	Not supported H_5
BLP	0.131	2.523	**0.012**	2.064	Supported H_6
MP	0.354	6.825	**0.000**	1.815	Supported H_7
R- Square	**Adjusted R-Square**	**df**	**F-value**	**P-value**	
0.610	0.596	7, 204	45.516	0	Good model

Note: *Field survey 2023 and authors' calculation.*

The study reveals an R square value of 0.610, indicating that 61% of the variation in the liquidity crunches is explained by the variation in all the independent variables. To assess the presence and degree of multicollinearity in the regression model, the tolerance and variance inflation factor (VIF) was calculated. All the assumptions of linearity and normality were checked and validated. A multiple regression analysis was conducted to predict the liquidity crunch on capital expenditure, trade deficit, deposit rate, investment practices, remittance inflow, bank lending policy, and monetary policy. The following hypotheses show the outcome of regression:

H_1 : *Government capital expenditure significantly impacts liquidity crunches in the banking industry.*

The linear regression model shows a significant impact of government capital expenditure

on liquidity crunches in the banking industry at a 0.01 level of significance. The study finds a significant impact of the liquidity shortage on the quality of capital investment decisions (Chava & Purnanandam, 2011; Hellowell & Vecchi, 2013).

H_2: *Trade deficits significantly affect liquidity crunches in the banking industry.*

The linear regression model shows no significant impact of trade deficit on liquidity crunches in the banking industry at a 0.01 level of significance. However, the trade deficit has been considered a factor in the liquidity problem (Islam, 2020).

H_3: *The deposit rate significantly impacts liquidity crunches in the banking industry.*

The linear regression model shows no significant impact of deposit rate on liquidity crunches in the
banking industry at a 0.01 level of significance. But when there is financial instability, credit busts are less noticeable in nations with more inclusive banking systems (Ahamed & Mallick, 2019).

H_4: *Investment practices significantly affect the liquidity crunches in the banking industry.*

The linear regression model shows no significant impact of investment practices on liquidity crunches in the banking industry at a 0.01 level of significance. However, liquidity crunch leads to the collapse of asset prices, such as investment in real assets (Calvo, 2012).

H_5: *The remittance inflow significantly impacts liquidity crunches in the banking industry.*

The linear regression model shows no significant impact of remittance inflow on liquidity crunches in the banking industry at a 0.01 level of significance. But remittances from migrants help the financial sector grow in both size and effectiveness (Odugbesan et al., 2021).

H_6: *Bank lending policy significantly impacts liquidity crunches in the banking industry.*

The linear regression model shows a significant impact of bank lending policy on liquidity crunches in the banking industry at a 0.01 level of significance. This study is consistent with the banking sector's liquidity problem as a result of aggressive lending practices (Karim et al., 2021).

H_7: *Monetary policy significantly impacts liquidity crunches in the banking industry.*

The linear regression model shows a significant impact of monetary policy on liquidity crunches in the banking industry at a 0.01 level of significance. This study is consistent with a decline in bank liquidity creation, which is strongly correlated with monetary policy tools (Monnet & Vari, 2023; Pham et al., 2021).

Conclusion and Suggestions

There has been a significant liquidity problem in Nepal's banking sector for the past few years. This study found a significant impact of capital expenditure of government, bank lending policy, and monetary policy on liquidity crunches in the banking industry. But there is no impact of trade deficit, deposit rate, investment practices, and remittance inflow on liquidity crunches. The liquidity crunch hampers the growth of business and industry, discourages entrepreneurs because they are not getting loanable funds as required. It also creates instability in the financial system, deteriorates investment environment, generates a high unemployment rate in the country, and affects economic growth rate in the country.

A modern and sound financial system is necessary for faster economic growth of the country. For this, regulatory authory may focus on combining and leveraging financial resources, lowering costs and risks, broadening and diversifying opportunities, enhancing resource efficiency, increasing productivity, and enabling economic growth. The following suggestions are required for managing the liquidity crunches in Nepalese financial institutions: (i) The capacity of government's capital expenditure should increased. (ii) Bank lending policy should be directed towards a productive investment. (iii) Monetary policy should address the liquidity crunch problem in the banking sector. Government and regulatory authority may promote an inclusive and sound financial system in the nation. This study is based on the primary sources quantitative data confined to financial institutions located at Pokhara Metropolitan City, Kaski, Nepal. Further research can be conducted using mixed methods (quantitative and qualitative) representing different provinces of Nepal.

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