Non-Performing Loans: Perception Of Somali Bankers

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Abstract: Among various indicators of financial stability, banks’ non-performing loan assumes critical importance since it reflects on the asset quality, credit risk and efficiency in the allocation of resources to productive sectors. Non-performing loans has become a concerning issue for banking sector in recent times. Thusly, this study examines the perception of Somali bankers regarding the determinants of NPLs of Somali banks using primary information collected from 180 bankers working in twelve Somali banks. The researcher applied multiple regression and correlation matrix analysis aiming to find out the factors that may have an effect on the non-performing loans of Somali banks. The bankers perceive that the selected variables of this study have an effect on the NPLs of Somali banks. The empirical results of the regression and correlation analysis established strong positive and significant relationship between NPLs of Somali banks and the three variables of unemployment rate, interest rate and inflation rate. The findings also reveal that GDP has a weak but positive and significant relationship with the NPLs, whilst credit monitoring, political interference and banker’s incompetence established a weak positive and insignificant relationship with the NPLs of Somali banks. The study suggests that the bank management should increase their expenditure for training and development programmes, which would enhance the loan quality monitoring, and debt collection management of the bankers. It is also suggested to the government and regulatory bodies that the country’s unemployment rate should be kept low, extra care should be given to inflation rate and interest rate fluctuations, political interference should be limited or reduced to zero and the country’s banking sector need to be revitalised by increasing the commercial banking services capacity of the Central Bank.

Keywords: Non-performing loans, Interest rate, Inflation rate, GDP, Credit monitoring, Political Interference, Banker’s incompetence

1. INTRODUCTION

Commercial bank is described as a financial institution whose current operations consist of accepting deposits from the public and issuing loans. The receiving of deposits and provision of loans distinguishes ‘banks’ from other financial institutions. The existence of both banks and non-bank financial institutions in a formal and organized way is collectively known as the financial system; it consists of an auxiliary network of institutions that provide financial services within a given country (Dhungana and Updhayya, 2012). To name a few of these institutions and the functions they perform are: (1) national banks that issue currency and sets the monetary policy, (2) investments banks which specialise in capital market issues and trading, and (3) commercial banks that takes deposits and gives loans to customers. According to Karim, Chan & Hassan (2010), the banking sector still remains the primary form of financial intermediation in many countries and as such is the biggest channel for the mobilization of domestic savings and local funds, the main source of external capital to firms and the key player in a payment system. Thus, it is undeniable that the banking sector plays a vital role in the growth and improvement of the economies (Viswanadham and Nahid, 2015). They provide loans to individuals, businesses organisations and governments to support them finance investments and development undertakings as a means of assisting their growth in particular and or contributing towards the economic development of a country in general. Accordingly, channelling of funds from the surplus-fund units (SFUs) to deficit-fund units (DFUs) in the form of loans and advances to numerous sectors of the economy is the primary function of the commercial banks. As noted by Kwambai and Wandera (2013), these banks play an important role in emerging economies where most borrowers have no access to capital markets. Thus, they are considered as an intermediary between the depositors and the borrowers. Hence, banks play a major role with in the financial system and their soundness and stability are a main concern for the financial stability of the economic system of a country (Nkurunah, 2014). However, some of the loans given out by the lending institutions unfortunately become non-performing and eventually result in bad debts with adverse consequences for the overall financial performance of the institutions. Loans become non-performing when it cannot be recovered within several months after the stipulated time expires governed by the respective contractual terms and obligations (Bholat et al., 2016). However, if such assets do not generate any income, the banks’ ability to repay the deposit amount (to the depositors) on the due date would be in question. Therefore, the banks with such asset would become weak and such weak banks lose the faith and confidence of the customers. Ultimately, unrecoverable amounts of loans are written off as Nonperforming loans (Mallick, 2010). On the other hand, if the collaterals are inadequate to cover the costs and at the same time, the borrowers are insolvent, the banks have to provide a sum of money as the loan loss provisions from its own capital that may lead to potential unprofitability (Balgova, Nies and Plekhanov, 2016). In extreme cases, very high level of NPLs may lead to an individual bank’s insolvency and further to systematic bank failures (Bholat et al., 2016). Non-performing loans became the source of fear among...
banks and financial sector since the global financial crisis (GFC) while many developed countries found themselves having high level of NPLs at respective state banks (Ozili, 2017). Saba, Kouser, & Azeem (2012) are of the opinion that the issues pertaining to non-performing loans are necessary to be studied as they are responsible for numerous financial and economic difficulties of the developed and developing nations, these issues incorporate less per capita income, diminishing profits and financial crisis of the banking sector. Financial System: The context of Somalia In the context of Somalia, the banking sector is, in reality, in its early stage. Since 1991, Somalia has been moving practically without banks. The Central Bank of Somalia (CBoS) has had very limited commercial banking services, correspondent relationships with foreign banks and inadequate supervisory capacity to oversee the financial sector of the country. Moreover, foreign banks are also basically absent (Paul et al., 2015). Hence, customary money exchange frameworks (the money exchange operators) sprung up to fill the crevices made by the nonappearance of formal banks. The scenario is similar to a nation that has worked without an entrenched central regulatory system or central bank and without a financial regulation by the authorities; financial institutions have essentially been working in a vacuum (Powell, Ford and Nowrasteh, 2008). Therefore, as the country strives to rebuild its shattered economy, the need of a viable commercial banking sector is indispensable. Nevertheless, the banking division in Somalia has realised some gigantic development in the recent five years. New banks have been set up and the existing banks have broadened their administrations to accommodate the increasing demand of financial services. Some portion of the force in development have been activated by the expanded engagement between the government, the international donors and the financial institutions, including the 2013 resumption of associations with the International Monetary Fund (International Monetary Fund, 2017a). Lately, the country has begun to see some investment and new business inaugurations from both local and global businessmen, in spite of the savagery still overflowing in the nation (Economic Index of Freedom, 2017).

1.1 The extent of non-performing loans in Somalia
In the aftermath of the GFC, non-performing loans became a major concern for some developing as well as underdeveloped countries (Akinlo and Emmanuel, 2014). Especially, in the recent years, the rise of high level of NPLs and capital provisions by banks to cover the NPLs in the African region has become major thought for bankers of the region (see Figure 1.). As it was reported, close to one third of the loans are non-performing in the banks of Eastern and Central African countries, which Somalia is part of geographically (International Monetary Fund, 2017c). Another report presents that African Development Bank (AfDB), which has its presence in Somalia, has very high level of NPLs, as one-fifth of their loans are dedicated to private sectors (Humphrey, 2014). Contrarily, some Eastern African countries were reported to have low level of NPLs earlier in this decade, such as, Uganda (2.2 percent), Kenya (6.2 percent), Tanzania (6.7 percent) and Rwanda (11.3 percent) (Haniifah, 2015). However, not a single database (including World Bank database1) was found to have displayed information on the level of NPLs in Somali banks. Though the reasons (factors) that causes rise in NPLs were historically recognized as the macroeconomic factors, with the occurrence of the GFC, the idea has broadened to bank-specific factors as well (Balgova, Nies & Plekhanov, 2016). As the level of NPLs and factors affecting the NPLs in Somali banking sector are not clear yet, it is vital to identify the various factors, which may have significant effect on the loan repayment performance in Somali banks. Hence, a more particular background check on the following sub-topics (the selected variables in this study) would help us to understand the actual scenario and its possible effect on the loan repayment capacity of the banks’ customers in Somalia.
1.1.1 Unemployment rate in Somalia

Somalia is the world’s 83rd most populous country with 10.6 million people (Jaffer & Hotez, 2016). It is to note that a large number of the country’s population are deprived of the basic needs. Over 730 thousand people in the country are dependent on survival aid and only 30 per cent of population has access to clean drinking water. Additionally, there are more than 1.1 million internally displaced population and 1 million refugees in the country (Paul et al., 2015). Along with these, increasing unemployment has added further problems for the people. According to UN report, the region is experiencing an unemployment rate of over 66 per cent (Yusuf, 2015). Furthermore, in the recent years, Somali MTOs are facing difficulties in accessing banking services in the developed countries resulted in resisting them transferring foreign remittances inside the country. Having faced this high risk, both banks and MTOs are exiting the sectors, leading to shortage of funds to the Somali customers living in the country of whom are dependent on the remittance (Paul et al., 2015).

1.1.2 Interest rate in Somali banks

In Somalia, interest rate is religiously prohibited, as it is a 100 percent Muslim society. Instead, the country uses bank profit as a proxy for the interest rate in the market system to influence the determination of money supply and demand (Mohamud, 2015). Though no databases was found to have revealed the trend and level of profit rate in Somalia, the banks in the Eastern African region (Kenya and Uganda) were reported to have lower banking profits due to historically declining interest rates (EY, 2014). The World Bank development indicators show a historical data (1990-1996) of declining effective interest rate in Somalia (see Figure 2); no subsequent reliable information is available. Hence, it is perceived in the study that Somalia also may have similarly low profit rate in the current times.

1.1.3 Inflation rate in Somalia

Somalia historically has been facing high inflation and in the recent years with a high level of fluctuation (Guleid, Maina & Tirimba, 2015). Since 1961 till 2015, the country had an average inflation rate of 22.22 per cent, with a highest 216 per cent of inflation rate recorded in 1990 and lowest -15 per cent recorded in 2010. In 2015, the rate was recoded at -3.5 per cent (see Figure 3). The high range of fluctuation and skyrocketing inflation in the country resulted from lack of financial regulatory mechanisms and massive printing of fake Somali shillings over the past several years. Inflation has further resulted to several
implications including reduction in the citizens’ standard of living and supply of basic needs and overall declining growth of the economy (Center for Research and Dialogue, 2004).

1.1.4 Gross Domestic Product (GDP)
Somalia’s GDP is one of the lowest in the world with a large number of the population being dependent on foreign aids and remittances. However, in the recent years, economic growth of the country remained steady (see figure 4). GDP was calculated as $5.9 billion in 2015 and projected to reach $6.2 billion in 2016. The country remains one of the poorest in the world with a GDP per capita of $450 in 2015 and a poverty headcount of 51.6 per cent. Among the major contributors of GDP, trade including imports and exports is counted for almost 76 per cent of the GDP followed by consumption and investment being 8 per cent of the GDP (World Bank, 2016).

According to the World Bank (2016) in 2015, 32 per cent of the donor commitments were realized as a result of many factors, including lower oil prices and other bureaucratic hurdles. Domestic revenue is still insufficient to allow the government to deliver services to citizens. The administrative and security sectors account for more than 85 per cent of total spending while economic and social services sectors account for about 10 per cent of total expenditure. Poor collection capacity, narrow tax base, absence of the necessary legal and regulatory frameworks, and lack of territorial control hinder full revenue mobilization in the country.

1.1.5 Credit monitoring in Somali banks
No reliable information on the past or present condition of credit monitoring in Somalia is available. As information on the level of NPLs in Somalia is also not available, it was not possible to estimate the trend or pattern of credit monitoring among Somali banks. However, the International Bank of Somalia (IBS) was found claiming to have a risk management committee that is in charge of credit monitoring and assessment (Union of Arab Banks, 2017). However, considering the fact that the country being recovering from its 25 years of civil wars and a large portion of the loans in the past being dedicated to political connections and the supervisory capacity of the CBoS being very weak, the credit monitoring capacity of the loan managers in other Somali banks have always been minimal. Furthermore, they were not required to enhance their monitoring ability and skills. Considering this scenario, IMF came ahead to facilitate a staff-monitored programme for the Somali banks starting from May 2016 to April 2017. The programme is aimed at re-establishing the country’s macroeconomic stability, building capacity to strengthen macroeconomic management, improving
governance and monitoring capacity as well as providing technical assistance (International Monetary Fund, 2016).

1.1.6 Political interference in Somali banking sector
Somalia’s banking system has been vigorously affected by the political tumult for the last few decades that has concealed the nation’s current history. There are currently small numbers of banks operating actively in the country. This, however, is not in stark contrast to pre-1991 Somalia; the nation had a long history of banking system instability. According to KPMG (2014) in the late 1970s and early 1980s the banking system was to a great extent of financing instrument for public agencies. The Commercial and Investment Funds Bank was announced bankrupt, and the Development Bank was not able to provide new loans in 1989. The budgetary framework fell into profound emergency and, with the complicity of degenerate and corrupt authorities, the vast majority of every day operations of the financial system tumbled to the bootleg and black market (Timothy, 2016). As noted by Samatar (2008) prior to the 1991 government collapse, Somalia had three major banks in addition to the Central Bank of Somalia, namely, The Somali Commercial Bank, the Commercial and Savings Bank of Somalia, and the Somali Development Bank, however, much of the national banking system collapsed as a result of the civil war. Generally, credit markets have been to a great extent pre-dominated by casual trust-based group loaning; assurance of credit-worthiness and relief of counterparty risks were both tended to be made through familial and faction relationships. Pre-independence provincial powers had a constrained banking attendance prior to the administrative crumple, and the central bank additionally offered a restricted menu of commercial banking services (Powell, Ford and Nowrasteh, 2008).

1.1.7 Banker’s incompetence at Somali banks
The actual scenario on bankers’ knowledge, skills (competencies) and capacities are not clear to the researcher as no reliable information was found on this matter. However, a study on the personnel working at the United Nations Support Office for the African Mission in Somalia revealed that training and development programmes have a positive impact on employee engagement as well as their capacity and competency improvement (Angela, 2014). Therefore, the need for T&D programmes to improve bankers’ competence at the Somali banks is also essential.

2. STATEMENT OF THE PROBLEM
Issues of non-performing loans have gained more attention in the past few decades due to their major role in financial crisis in many parts around the world including Latin America, East Asia and Sub-Saharan Africa. Saba, Kouser, & Azeem (2012) are of the opinion that Non-Performing Loans are necessary to be studied as they are responsible for numerous financial and economic difficulties of the developed and developing nations, these issues incorporate less per capita income, diminishing profits and financial crisis of the banking sector. Additionally, due to the increment in non-performing loans the US economy, which is perceived as a superpower, has gone under the worst crisis of its history (Nkurrunah, 2014). As such, many banks have failed and governments were incurring considerable costs to revive the banking sector. However, given the relative stability of the banking system made lately, another form of rivalry between the banks giving credit to family units and private ventures has been created. By developing share of bank advances in these areas, banks are exposed to the dangers of stuns on macroeconomic factors resulting bad debts and non-performing loans (Ejigu, 2015). Consequently, in the context of Somalia academic researchers have always neglected researches on the non-performing loans of Somali banks historically. Neither the non-performing loans it self nor the factors affecting NPLs have come to forefront in the research arena. Rather other countries were the preferred locations of many researchers. Moreover, the existing researches of the recent past investigated the factors affecting NPLs in scattered manner. In fact, none of the literatures took account of all the variables (factors) selected in the current study. The closest selection of variables were made by Bhattachar (2014), who did not examine unemployment rate and banker’s incompetence. Hassan, Ilyas and Rehman (2015) ignored inflation rate, unemployment rate and GDP and Mondal (2016) and Farhan et al. (2012) left credit monitoring, banker’s incompetence and political interference for others to study. Hence, the effect of the seven selected variables on the NPLs of not only Somali banks, but also banks of other countries in a single research paper can be regarded as ‘extinct’. Further, in case of six of the seven selected variables except political interference, the existing literatures revealed differential findings in relation to the effect of the variables on NPLs (notably, all the researchers unanimously found only positive and significant relationship between political interference and NPLs). As such, in case of the relationship between GDP and NPLs, whereas Mondal (2016), Makri, Tsagkanos and Bellas (2013) and Saba, Kouser and Azeem (2012) found positive significance, Messai and Jouini (2013), Farhan et al. (2012) and Nkusu (2011) found negative significance and even Vatansever and Hepsen (2013) revealed no significance. Similar phenomena can be noticed in the relationship of inflation rate and interest rate with NPLs. These varying results do not form standard findings like the effect of political interference mentioned above. Hence, for the effect of the other variables on NPLs, the concept is still ambiguous and varies across organisations, industry or country. Lastly, though there are researchers that adopted the OLS (Ordinary Least Square) and GMM (Generalized Method of Moments) method, none of them were found to have adopted these models for investigating the relationships of banker’s incompetence, political interference and credit or loan monitoring. For instance, having adopted the OLS model, Bonilla (2012) investigated the effect of inflation, unemployment and GDP on NPLs, whereas Saba, Kouser and Azeem (2012) only investigated only the effect of interest rate on NPLs. On the other hand, using GMM model, Makri, Tsagkanos and Bellas (2013) examined the effect of GDP and unemployment and San et al. (2015) explored the impact of interest rate, inflation rate and unemployment rate on NPLs. Furthermore, researchers in investigating the factors affecting NPLs except the
aforementioned two studies rarely used the GMM model. As such, considering all above knowledge gaps, the purpose of this research is to examine the effect of the seven selected factors (unemployment rate, interest rate, inflation rate, gross domestic product, credit monitoring, political interference and banker’s incompetence) on the non-performing loans of Somali banks by using quantitative analysis and through distributing questionnaires among the sample bankers of the banks.

3. LITERATURE REVIEW

3.1 Defining the Concept of Non-performing Loans

As defined by Balgova, Nies and Plekhanov (2016), a loan is regarded non-performing when it is overdue or in default for several months. Likewise, According to Asfaw, Bogale and Teame (2016), a non-performing loan is a loan that is in default or close to being default. A loan is said to be in default when it fails to make the repayments of principal or interest specified in its loan contract and has no intention of repaying in the future. When it happens, from debtor’s (borrowers) side they face inability to apply for new loans and from lender’s (banks) side, they face funding costs. Thus in order to meet the funding costs; banks usually foreclose the collaterals provided by banks. However, if the collaterals are inadequate to cover the costs and at the same time, the borrowers are insolvent, the banks have to provide loan loss provisions (a sum of money) from its own capital, leading to potential unprofitability (Balgova, Nies & Plekhanov, 2016). Bholat et al. (2016) also defined that an NPL is a loan, repayment of which has not been made by a borrower according to contractual terms and obligations. They argued that an increase in the number or level of NPL is a bad news for banking and other financial institutions, as their funding costs rise with the increase in NPLs. In extreme cases, very high level of NPLs may lead to an individual bank’s insolvency and further to systematic bank failures. In fact, the concept of NPLs were the most relevant topic in financial sector during the global financial crisis while many countries found themselves with high NPLs at the respective state banks (Ozili, 2017). Cucinelli (2015) perceived that non-performing loans are crucial to credit risk of any types of banks, as their lending behaviour is affected by credit risk negatively. As such, if loans default, it turns to non-performing loans and credit risk increases, banks then tend to provide fewer loans to investors. Therefore, maintaining credit risk to very low level is essential. Though the reasons (factors) that causes rise in NPLs were historically recognized as the macroeconomic factors, with the occurrence of the global final crisis the idea has changed and gone beyond the economic factors to bank specific factors such as poor managerial competencies in evaluating potential debtors and making decisions on wise loan provision (Balgova, Nies & Plekhanov, 2016). Awan, Nadeem and Malghani (2015) found that that the major reasons behind non-performing loans are ineffective monitoring followed by poor credit condition, lack of business management competency and unwillingness. They further asserted that those who made up the most portions of non-performing loans were farmers and traders. Farmers face loan default, probably because they are often the victim of natural calamities like droughts or heavy rain fall, cyclones and landslides for which they cannot collect the repayment amount at their expected time. Traders also face loan default due to their exposure to foreign exchange rate risk and (any) loss in the businesses. Chimikono, Muturi and Njeru (2016) reinstated that non-performing loans are major factors of banks’ income source and if the NPLs increases, it adversely affect the performance of banks.

3.2 Defining the Concept of Unemployment Rate

Kantar and Aktas (2016) provided the simplest definition of unemployment; they defined it as the situation of being without job for a certain short period of time. Musai and Mehrara (2014) stated that unemployment is when some of the population of a country are unable to find a suitable job. According to Sileika and Bekeryte (2013), unemployment is defined as the economic condition whereby working-age individuals are unemployed for at least the last four weeks at a certain point of time and still in need of a job. Hence, unemployment rate is the measure of the unemployed people for at least four weeks in a country. Additionally, unemployment rate is also the measure of economic health, as lower unemployment rate indicates better economic situation in a country. There are also particular definitions of unemployment provided by different organisations and groups. For instance, International Monetary Fund (IMF) defines unemployment as an annual percentage measurement of labour force that cannot find a job. International Labour Organisation (ILO) defines that unemployment is the situation in which people, aged 16 and above, who are without job or continuously searching for job for the last four weeks and available to join work in the next two weeks (Aqil et al., 2014). Furthermore, according to the U.S. Bureau of Labour Statistics (BLS), unemployed people are those who are completely unemployeed, discouraged to work, marginally attached to the labour force, working part-time but want to work full-time and actively looking for jobs (Thies, 2017). Unemployment impacts on society and economy in different ways. It decreases the knowledge and skills of the labour force while increases the costs of producing labour force. According to the economic theory of crime, unemployment causes increased level of crimes such as drug abuse, robbery and smuggling (Musai & Mehrara, 2014).

3.3 Relationship between Unemployment rate and Non-performing Loans

In terms of relationship between unemployment rate and NPLs, some studies found significant relationship between unemployment rate and non-performing loans, while few others supported the contrary view. Makri, Tsagkanos and Bellas (2013) examined the non-performing loans of the banks in Eurozone and concluded that the non-performing loans have strong correlation with various macroeconomic factors such as gross domestic product and unemployment rate. Balgova, Nies and Plekhanov (2016) reported that their findings in terms of relationship between economic condition (such as, unemployment rate) and non-performing loan supported the theoretical view of the earlier literatures, which indicates a positive relationship between the two. Bonilla (2012) applied the Ordinary
Least Square (OLS) model in examining the factors affecting NPLs in two European countries, namely, Spain and Italy. The study considered credit growth, wage, inflation, unemployment and GDP as the independent variables among these, only unemployment, wage and GDP were found to have significant effect on NPLs. Furthermore, by applying the ‘6-months lag’ model for Spanish banking sector and ‘12-months lag’ model for Italian banking sector, the study found that unemployment rate affects more significantly on Spanish banks than Italian banks. Mileris (2014) studied the non-performing loans in the commercial banks of the EU countries and proved the view that banking non-performing loans are heavily dependent on economic changes such as, rise in unemployment. As such, they have a positive relationship between each other. The study implied that the rise of NPLs in 2010 is considered to be caused by the increasing level of unemployment in 2009 in the EU countries. However, the study by Mondal (2016) on the non-performing loans of 22 commercial banks in Bangladesh found that macroeconomic factors such as, unemployment rate is positively but insignificantly correlated with the non-performing loans in Bangladeshi banks. He concluded that though he found statistically insignificant relationship between unemployment rate and non-performing loans, he also found that non-performing loan would still increase by 1.18 per cent, if the unemployment rate increases by 1 per cent, as both of them were positively correlated. Likewise, Kurti (2016) also found insignificant but positive relationship between unemployment rate and non-performing loans in Albanian banking sector. Additionally, contrary to all above, Klein (2013) revealed insignificant relationships between unemployment rate and NPLs in the Central, Easter and South Eastern European banks. The study used panel data model for the period of 1998 to 2011 and examined the potential impact of GDP growth, unemployment and inflation on NPLs. However, only the unemployment turned out to be insignificant. Bhattarai (2014) examined the possible effect of energy crisis, lack of timely budgetary expenditure, government and instable political environment, monitoring and evaluation of loans, banker’s perception, interest rate, unemployment rate and exchange rate on the non-performing loans of Nepalese commercial banks and also concluded that unemployment rate is not much important variable to influence NPLs in Nepal.

3.4 Defining the Concept of Interest Rate
Khon Maynard Keynes postulated one of the most remarkable concepts of interest rate in his theory of interest rate; more specifically in his work, “The General Theory of Employment, Interest and Money” (1936). According to Keynes, interest rate determines the level of employment, affects money supply and investment activities in the economy. Keynes provided three distinct definition of interest rate. Firstly, it is the compensation or reward to the lenders for not-hoarding the money with them. Secondly, it is the price that balances up the desire to hold cash within lenders and the supply of cash to borrowers. Thirdly, it is a measure of reluctance to give out money in liquid form to the borrowers (Appelt, 2016). Khan and Sattar (2014) provided the simplest definition of interest rate in their paper. As they stated, interest rate is the amount of money or fee paid by someone to someone else for using the latter’s money. It is paid by debtor (investors) when money is borrowed and received by creditor (banks) when money is lent. It is the additional amount of money charged by banks on the principal amount of a debt security or loan contract to the loan-receiving investors. It is expressed in the unit of percentage on annual basis. Thus, an interest rate can be easily recognized and understood from its standard figure used worldwide. Based on Keynes’ theory of interest rate, any changes in interest rate tremendously affect investment activities. As such, rising interest rates increase the investment cost, since bond prices rise when interest rates rise; and when bond prices are high, investors are reluctant to borrow from banks with high price and high interest rate. Thus, the demand for investment is reduced when interest rate rises. However, when interest rate falls, the scenario is completely opposite. Bond prices also fall accordingly and investors become more interested to borrow with low price and low rate of interest. This situation stimulates investment (Khurshid, Wuhan & Suyuan, 2015). The above situation can be explained in terms of interest rate spreads. Interest rate spreads is the difference between the interest rate charged to borrowers and the rate paid to depositors (Were & Wambua, 2014). When interest rate falls, the interest rate spreads increases in turn and investors feel reluctant to save and rather spend more on investment. However, when interest rate rises, the interest rate spreads decreases and it makes the investment decision difficult Khan and Sattar (2014). Interest rates can be either short-term or long-term. Example of a short-term interest rate that matures within a year is federal funds and example of a long-term interest rate that matures in more than one or more years is yields on private bonds or Treasury securities. Short-term interest rate usually has more impact on aggregate demand than its counterpart, since investors’ perceptions are normally based on short-term forecast and demand (Kiley, 2014). Interest rates can also be either fixed or variable types. Fixed interest rates are unchangeable regardless of the situation and interest rate movement and therefore, interest rate risk remains with the lenders. However, variable interest rates are adjusted concurrently to hedge against the uncertain future interest expense faced by borrowers (usually medium to large firms) and therefore, the interest rate risk is transferred to the borrowers (Athavale & Edmister, 2011).

3.5 Relationship between Interest Rate and Non-performing Loans
In case of the association of interest rates with non-performing loans, researchers were of different views. Whereas some of them found to have a positive relationship, some others found negative relationship. Few others also concluded an insignificant relationship between the two variables. Warue (2013) examined the impact of several macroeconomic factors (such as, lending interest rates, real GDP, GDP per capita, government expenditure and exports and imports) on non-performing loans of different bank size (large, medium and small banks) from 1995 to 2009, employing both pooled and fixed type of panel econometrics approach. The study found that lending interest rate has a positive and significant relationship with non-performing loans in
larger and medium banks; however, no significant relationship with small banks’ non-performing loans. Jameel (2014) conducted a 10 years long study from 2000 to 2010 also using time-series econometric model aiming to examine the relationships of GDP, weighted average lending rate, loan’s maturity time period, capital adequacy ratio and credit deposit ratio with the non-performing loans in Pakistani banking sector. The study concluded that whereas, determinants such as, GDP growth rate and capital adequacy ratio negatively affect non-performing loans, weighted average lending (interest) rate positively affects the non-performing loans in Pakistan. On the contrary, Chege (2014) studied on the non-performing loans of 39 commercial banks in Kenya and revealed that interest rate has a strong but negative linear relationship with NPL. As such, higher interest rate will result into higher non-performing loans in Kenyan banks. In relation to the duration of interest rate’s impact on non-performing loan, Sheefani (2015) asserted that macroeconomic factors such as, interest rate and inflation rate determines NPLs in the long run in the Namibian banking sector. However, since the macroeconomic environment in the country is very critical, he suggested for continuous monitoring on the performance of non-performing loan and interest rate fluctuation. However, Islamoglu (2015) opposed the view and commented that the relationship between commercial loan interest rate and non-performing loan is rather short-term in terms of causality relationship. The study was conducted based on time-series data from 2002 to 2013 using the VARM (Vector Autro-Regression Model) and VECM (Vector Error Correction Model). The VARM was used to test multivariate regression among the variables and the VECM was used to identify more than one integration relationship between time-series. Furthermore, the Granger Causality Test was also used to test the long-term effect of the selected independent factors. However, Bhattarai (2014) revealed that interest rate was one of the variables that was found to have insignificant relationship with NPLs in Nepalese banking sector. The other variables used in this study were inflation rate, unemployment rate, exchange rate, political interference and ownership, loan monitoring and evaluation, energy crisis, budgetary expenditure, growth rate of GDP and borrower’s honesty. The study used macroeconomic theory as the conceptual theory, which states that expansionary situation and declining situation create optimistic environment and pessimistic environment respectively in the business. Hassan, Ilyas and Rehman (2015) examined the effect of various bank-specific factors such as, interest rate, credit monitoring, credit assessment and rapid credit growth and social factors such as, banker’s incompetence and political interference on NPLs and revealed that only interest rate had a weak significance on NPLs of Pakistani banking sector in comparison to the other variables.

3.6 Defining the Concept of Inflation Rate

Inflation is defined as the persistent rise in the general level of prices (Samuel & Nurina, 2015). However, not every rise in the price level is regarded as inflation. Only if the rise in the price level is constant, sustained and enduring, it is regarded as inflation (Bayo, 2011). Furthermore, there are more conditions to denote a rise in the price level as inflation such as, the price level rise should affect almost all the commodities and should not be temporal. As such, if the rise in the price level only affects a single commodity or even occurs for a single day, it is not regarded as inflation (Kanwar, 2014). Inflation is measured by inflation rate, generally in the unit of annual percentage change in the general price index (usually CPI). Inflation rate is defined as the rate at which the general level of prices for goods and services rise annually (Kanwar, 2014). Inflation has both positive and negative impacts on the economy. From the aspect of positive impacts, central bank can adjust nominal interest rate to mitigate future recessions and increase investment in non-monetary capital projects. However, the negative impacts are more extensive, with the rise of inflation, the real value of money decreases, investment and savings may even become discouraged among investors and they may begin hoarding money perceiving that the prices would increase in the future (Uwubanwem & Eghosa, 2015). Inflation is measured using three approaches, namely, the Gross National Product (GNP) implicit deflator, the Consumer Price Index (CPI) and the Wholesome or Producer Price Index (WPI or PPI) (Samuel & Nurina, 2015). There are also several causes of inflation, revealed by academic literatures. Based on the drivers, inflation is denoted by particular names. Excessive growth in money supply is the main driver of inflation, as most of the economists agree. Additionally, excessive aggregate demand causes inflation, which is known as demand-pull inflation. When inflation arises from upward pressure of production costs, it is regarded as cost-push inflation. However, while inflation arises from inefficient production, distribution or marketing system in the economy, it is denoted as structural inflation (Kanwar, 2014; Bayo, 2011).

3.7 Relationship between Inflation Rate and Non-performing Loans

Similar to the relationship of interest rate with NPLs, researchers also found both positive and negative relationship with non-performing loans. Farhan et al. (2012) conducted a perception study of the bankers in 10 Pakistani banks on the effect of macroeconomic factor on non-performing loans. They examined the possible association of inflation, unemployment, GDP growth, exchange rate, interest rate an energy crisis with NPLs. The study revealed that along with all other variables (except GDP growth), inflation had a positive and significant relationship with non-performing loans in Pakistan. They stated that economic determinants of NPLs could be derived using life-cycle consumption model. The model argues that low-income borrowers have more probability to be default on loans as they have more chances to be unemployed and are unable to repay loans with high interest rates. Mehmood, Younas and Ahmed (2013) studied on the macroeconomic effect on non-performing loans in Pakistani commercial banks and concluded that inflation rate is positively significant in relationship with non-performing loans. As such, if 1 unit decreases inflation rate, the NPL will as well decreased by 2.59 units (2.6 times). However, Abebrese, Pickson and Opare (2016) found a negative but significant relationship between inflation and loan performance. As such, if inflation increases, it reduces loan performance. In another word, the level of non-performing loans increases with the
rise of inflation (positive relationship). However, Anjom and Karim (2016) reported a negative but significant effect of inflation on non-performing loans in Bangladeshi banking sector. As such, an increase in inflation rate would decrease the level of NPLs. Though both these studies found contrary findings, Khemraj and Pasha (2009) uniformed these views. According to them, high inflation in the current period would reduce the level of non-performing loans; however, the high inflation from the previous period would cause increment in the level of non-performing loans. As such, he found both negative and positive relationship between inflation and non-performing loans in Guyanese banking sector, but in two different time perspectives. Some researchers also found insignificant relationship between inflation rate and NPLs. Gezu (2014) found that inflation rate (INFR) has negative and insignificant relationship with non-performing loans in Ethiopian commercial banking sector. It indicates that though rising inflation may reduce the amount of NPLs, the relationship is not very clear or established. Bhattarai (2014) revealed that inflation rate has insignificant relationship with NPLs along with the other variables, which are interest rate, unemployment rate and exchange rate in the Nepalese banking sector. Likewise, the study by Ali and Iva (2013) who examined the bank-specific factors on NPLs in the Albanian banking sector revealed that inflation rate had an insignificant effect on NPLs. They further found that real exchange rates and loan growth rate have a positive relationship with NPLs, whereas GDP growth and interest rate have negative association with NPLs.

3.8 Defining the Concept of Gross Domestic Product

Gross Domestic Product (GDP) is the basic measure of the economic status, performance and development of a country (Samuel & Nurina, 2015). GDP is defined as the total market values of all officially recognised final goods and services in a country in a given period of time (year) (Rahman, 2013). As Desmond et al. (2015) stated, GDP includes the products and services produced and delivered respectively in a country both by nationals and non-nationals residing in the country. However, in accumulating the market values, GDP does not simply add up quantities of the goods and services directly. Moreover, the values of goods and services produced by nationals at foreign country do not fall in the scope of GDP. The values of non-market goods, illegal goods and leisure activities also are not included in the scope of GDP. In addition, no intermediate goods are considered in calculating GDP, rather only final goods. GDP benefits us in several ways. Firstly, it is used to measure the healthiness of a country. Secondly, it is used to determine the standard of living of individuals in the country. Thirdly, it is used to determine the growth prospects of the economy of a country. Fourthly, it is used to compare the size of economies from all over the world. Furthermore, it is also used to compare the growth rate of world economies (Desmond et al., 2015). GDP is generally categorised into two types, namely, Real GDP and Nominal GDP. Real GDP does not take account of the rising prices and hence, it ignores any possibility of inflation. On the other hand, Nominal GDP assumes that prices of goods and services may increase. Hence, it increases while an economy faces inflation or rising prices. The relationship between the two types is Real GDP = (Nominal GDP / price index) X 100. GDP is also expressed in terms of GDP per capita, which is the total output of the country per person (Mallett & Keen, 2012). There are three methods to measure GDP, namely Expenditure method, Value-Added or Production method and Income method. The foremost method takes into account of consumption (C), investment (I), government expenditure (G) and gross exports (X) and imports (M). As such, the equation to find GDP according to the expenditure method stands as GDP = C + I + G + (X – M). Under the income method, GDP is calculated as GDP = Compensation of employees + Rent + Interest + Proprietor’s Income + Corporate Profits + Indirect business taxes + Depreciation + Net foreign factor income. Net foreign factor income is the difference between income earned by the rest of the world and income earned from the rest of the world. Moreover, under the value-added method (also known as output method or net product method), GDP is calculated as GDP = value of sales of goods – value of purchase of intermediate goods to produce the goods sold (Konchitchki & Patatoukas, 2014).

3.9 Relationship between Gross Domestic Product and Non-performing Loans

Similar to the characteristics of the association of both inflation rate and interest rate with NPLs, researchers also revealed both positive and negative relationship of gross domestic product (with GDP) with NPLs. It is hereby important to note that GDP in this study can be interchangeably referred to the GDP growth rate in other academic literatures. In case of positive and significant relationship between GDP and NPLs indicate that the level of non-performing loans rise with the rise of GDP growth rate and vice versa. Mondal (2016) examined the effect of four macroeconomic variables (GDP, unemployment, inflation and interest rate spread) on the NPLs of 22 commercial banks in Bangladesh applying the time-series data from 2005 to 2014. The study revealed that whereas both GDP and unemployment is positively significant to NPLs, interest rate and inflation rate behaves otherwise. Additionally, Makri, Tsagkanos and Bellas (2013) examined the factors affecting non-performing loans of the banks in 14 out of 17 Eurozone countries and concluded that the non-performing loans have strong positive correlation with various macroeconomic factors (annual percentage GDP growth rate, unemployment and public debt) and bank-specific factors (capital adequacy ratio, return on equity and rate of previous year’s NPLs). Their study employed the Generalised Method of the Moments (GMM difference) estimation method, as it provides unbiased and consistent results. Saba, Kouser and Azeem (2012) investigated the effect of Real GDP per capita, interest rate and total loans on the NPLs of US banking sector using a panel data from 1985 to 1997 using OLS regression model. The study revealed that Real GDP per capita has the strongest and significant relationship (68 percent) with NPLs followed by interest rate (40.7 percent) and total loans (28.1 percent). However, majority of the researchers revealed that GDP affects NPLs significantly but negatively. It indicates that declining
growth rate of GDP would increase the amount of NPLs. As such, Messai and Jouini (2013) investigated on the association of both macroeconomic variables (GDP growth rate, interest rate and inflation rate) and bank-specific factors (loan loss reserves to total loans ratio, return on assets and profitability of bank assets) with the NPLs of 85 banks in three European countries, namely, Italy, Greece and Spain from 2004 to 2008. The study found that while GDP growth rate and profitability of bank assets shows significant negative relationship with NPLs, the remaining variables show contrary or positive relationships. Moreover, Farhan et al. (2012) also found significant negative relationship of GDP growth with NPLs of Pakistani banks, whereas the other variables (interest rate, inflation, exchange rate and energy crisis) were found to have positive relationships. Additionally, Tsumake (2016) studied on the Botswana banking sector using 10 years of data and revealed that whereas GDP growth and inflation have a negative and significant relationship with the NPLs, the other two variables, real interest rate and unemployment rate affect significantly and positively on the NPLs of Botswana banks. Nkusu (2011) conducted a study to investigate the linkage between non-performing loans and macroeconomic performance of 26 advanced economies from 1998 to 2009 and concluded that poor macroeconomic performances such as slower GDP and higher unemployment rate could be associated with increasing non-performing loans in advanced economies. The study adopted a panel vector autoregressive (PVAR) approach (as it helps to identify how the variable respond to the shock affecting each variable) and relied upon the impulse response functions (IRFs) to identify the significance of the response of each variable over a four-year forecast period. There are also very few studies, which found insignificant relationships between GDP and NPLs. Vatansever and Hepsen (2013) investigated the Turkish banking sector and revealed that the variables such as, Turkey’s GDP growth, the Euro Zone’s GDP growth, debt ratio, loan to asset ratio, consumer price index, real sector confidence index, USD/Turkish Lira rate and the volatility of the Standard & Poor’s 500 stock market index have insignificant effect on NPLs.

3.10 Defining the Concept of Credit Monitoring
Credit Monitoring generally refers to information gathering for not only new loans but also evaluating the information gathering process for existing loans (Insteford & Hiroyuki, 2015). Regular monitoring of loans involves daily, weekly or fortnightly reviewing the borrowers’ position in terms of transactions, fund utilisation and fund diversion (Alam, Haq & Kader, 2015). The main rationale of credit monitoring is to detect signs of difficulty in repaying loans by the borrowers and minimize potential losses (Ugoani, 2016). Loan monitoring is an integral part of banks or bank-specific (internal) factor which aims to ensure credit facilities remain within the performing loan circle or simply, credits are collected in not more than 90 days of the loan maturity or specific credit collection period according to the particular credit terms. Hence, credit monitoring takes place to ensure full compliance of loan agreement from the borrowers as to whether the loan is being used for eligible purposes, the quality of the loan is being maintained or the repayment sources of the borrowers are protected so that no unexpected default occurs (Idris & Nayan, 2016). There are several tools used by banks in monitoring their loans such as, relationship management, transaction account monitoring, loan stress testing, internal credit scoring and ratings. Among all of these, credit bureau ratings have been suggested as one of the timely method as it has more capacity of forecasting the likelihood of loan default (Nakamura & Roszbach, 2013).

3.11 Relationship between Credit Monitoring and Non-performing Loans
Most researchers indicated poor credit monitoring to be the cause of increased non-performing loans. In another word, they found strong negative relationship between credit monitoring and NPLs. As such, the weaker the credit monitoring becomes, the higher the non-performing loans rise up. Asfaw, Bogale and Teame (2016) investigated on the major factors affecting the NPLs of Development Bank of Ethiopia (DBE) using the samples from 77 NPLs. The independent variable they selected was bank-specific factors (credit assessment, credit monitoring, high interest rate, credit size and lax credit terms) and customer-specific factors (loan diversion, willful defaulting and poor credit culture of customers). As the result of their study revealed, along with all the above factors, credit monitoring was identified as a major cause of NPLs. Abdeta (2015) also studied on the Development Bank of Ethiopia (DBE) and asserted a similar view that credit monitoring and follow ups directly affect NPLs of the bank. The study revealed that poor monitoring and follows up increases NPLs by 31.8 percent compared to strict monitoring and follow up. As such, the probability of NPLs is high when the banks undertake poor monitoring and follow up. However, the study also pointed out that even if a loan is poorly assessed, it may avoid loan default by adequate monitoring. Similarly, Geletta (2012) also revealed that failed loan monitoring, poor credit assessment, aggressive lending, underdeveloped credit culture, borrower’s lack of knowledge, willful default and fund diversion, lenient credit terms and excessive financing by banks are the main causes of loan default of both the state-owned and private banks in Ethiopia. Hassan, Ilyas and Abdul Rehman (2015) examined the effect of bank-specific factors (credit monitoring, credit growth, interest rate and credit assessment) and social factors (political interference and banker’s acceptance) on the NPLs of Pakistani banks. The findings of their study showed that except interest rate, all other factors have significant effect on NPLs. As such, lack of credit monitoring is also a major factor to cause high NPLs in Pakistan. There are also some other literatures that explained the above findings in the light of hypotheses of ‘bad luck’ and ‘skimming’ postulated by Berger and DeYoung in 1997. For instance, as Rajha (2016) Abdeta (2015) and Klein (2013) reinstated, the ‘bad luck’ hypothesis argues that bad management that is characterised by poor credit scoring, loan underwriting, monitoring and controlling skills often pose the probability to have increased NPLs. Accordingly, the ‘skimming’ hypothesis argues that high cost efficiency affects the NPLs. Banks often try to achieve short-term profits by
reducing the costs on monitoring. Though it may help the banks in short-term, they pose themselves in risks in the long-term. Thus, the NPLs grow high in the long run when the banks dedicate less effort in ensuring loan quality. However, there are researchers who found contrary findings. Joseph et al. (2012) examined the factors affecting NPLs of CBZ Bank Limited in Zimbabwe and revealed that internal factors such as poor credit monitoring, insider loans, inadequate risk management, weak credit analysis and poor credit policy have very limited influence on the NPLs, rather external factors such as government policy, natural disaster and borrower’s integrity significantly affects the NPLs in Zimbabwe. Defining the Concept of Political Interference Shen and Lin (2012) defined political interference as the situation in which executives of government banks are substituted within 12 months of the political elections in a country. They are of the view that financial performance declines when a bank is politically involved. As such, a politically influenced bank displays the worst performance compared the non-political and private banks. They also argued that developing countries are largely affected by political interference than developed countries. Moreover, withdrawing any political interference would lead a bank to revive its profitability and performance. According to Kumar (2014), political interference causes significant costs to economy. A political interference may be imposed in the form of regulating banks’ lending decisions to certain sectors. Hence, if government banks are regulated to stop lending to certain sectors like manufacturing firms, those firms may face significant costs and the banks at the same time are to make adequate decision to mitigate the situation and increase the amount of loans to other permitted sectors. Ozaki (2014) asserted that government-influenced state banks’ operations in Nepal are politically interfered in many ways. For example, lending decisions, planning, budgeting as well as appointment, transfer and promotion of a chief executive officer and other executives may be under strict political intervention from time to time. The study revealed that even in the case of a politically-influenced bank which was being managed by external management after restructuring takes place, the Nepalese government still continued to control its lending decisions by offering loan waivers and lending to politically priority sectors. Agarwal et al. (2016) defined a politically-influenced bank as only if it has 45 percent or more loans provided to politically connected people or businesses. They also found that politically connected loans increase the loan volume of commercial banks by 0.7 percent and decrease the interest rate spreads by 5 to 6 percent, lowering down the banks’ profitability. They perceived that political interference may take two forms: one is by controlling lending decisions and the other one is by appointing a politically involved person as the chairman of the bank’s board management. For example, a politically engaged bank would offer favourable loan terms to its politically connected clients with longer maturities, larger loan quantities and lower collateral requirements. Furthermore, if a politically engaged person becomes the chairman of the bank’s management board, the recruitment of unskilled, unexperienced and politically favoured employees increases in the bank and decisions on almost all the aspects of the bank are interfered by the chairman.

3.12 Relationship between Political Interference and Non-performing Loans

As reviewed below, all the recent studies unanimously revealed the existence of a significant effect of political interference on non-performing loans of banks around the world. As such, Hassan, Ilyas and Abdul Rehman (2015) revealed significant relationship between political interference and NPLs from the Pakistani banking perspective. They added that when terms of the loan advancements are compromised and when loans are being disbursed under political pressures to politicians it leads to even higher non-performing loans. Similarly, having investigated on the Nigerian state-owned banks, Adeyemi (2011) discovered that political interference has an impact on non-performing loans. As the study revealed, most public-owned financial institutions in Nigeria were politically influenced to grant loans and overdrafts to politicians, which eventually became bad debts and remained unpaid. Agarwal et al. (2016) examined the political interference on the Mexican commercial banks and revealed that though the loan terms are better for political loans rather than non-political loans, they often result to higher default rates. In fact, the default probability rises by 12 percent upon provision of a loan to a politically involved client. Likewise, Bhattacharai (2014) in her study on the Nepalese commercial banks indicated that unstable political environment increases the level of NPLs. Collins and Wanjau (2011) also revealed that political interference was the major contributor to the bad loans in the Kenyan banking sector that took place in the form of insider lending (provision of loan given to insiders of the banks who are politically engaged). For example, most of the large local bank failures such as, Continental Bank and Pan African Bank befallen due to extensive insider lending to politicians.

3.13 Defining the Concept of Banker’s Incompetence

Incompetence, in general, refers to the underlying knowledge, skills and attributes that enable people to deliver effective and improved job performance (Brits & Veldsman, 2014). Besides these, competence may refer to expertise and emotional intelligence all of which are key elements in improving a banker’s competence (Tejada, 2015). In fact, competence is regarded as one of the crucial component of professionalism in banking industry. According to Bashah et al. (2012), competencies can be of two types: essential competencies and differentiating competencies. Examples of the prior one is knowledge, skills and abilities that are easy to develop. However, the latter one is difficult to develop, such as, self-images, motives and social roles. They further asserted that the differentiating competency enables a banker to provide superior performance being differentiated from the average performance. Julius (2015) reinstated seven characteristics of managerial competencies in banks, such as, technical (job-related) skills, interpersonal skills, conceptual skills (to understand the goals of the banks), diagnostic skills (to be able to assess each individual borrower), communication skills, decision-making skills (to be able to accurately decide on who to provide loans).
and time management skills (to facilitate the debt collection process effectively). As banker’s competence has been widely discussed with its importance since the global financial crisis, the researcher was also of the view that banker’s competence helps to prevent loan defaults, financial losses and bank failures to many extent.

3.14 Relationship between Banker’s Incompetence and Non-performing Loans

While referring to banker’s incompetence, some researchers denoted it as poor management, bad management or unskilled management. Though there are few researchers who found both significant and insignificant relationships between the banker’s competencies and the level of non-performing loans, this relationship theory has been disregarded by majority of the researchers historically or even in the recent times. Hassan, Ilyas and Rehman (2015) in their study on the Pakistani banks found significant relationship between banker’s incompetence and NPLs. They found that about 83 percent of the bankers commented that adequate and up to date training plays key role in making effecting loan decisions. In fact, this is the only study that used the term ‘banker’s competence’ in the recent times aiming to find its effect on NPLs. According to them, bankers with high qualification are in a place to judge the credibility of a borrower more effectively, contributing to lower loan default cases. They placed banker’s incompetence under the category, social factor rather than the bank-specific factors as they argued that competent bankers can understand and communicate their customers to convert their NPLs into performing loans. Likewise, Islam and Nishiayama (2016) examined the banks in four South Asian countries, namely, Bangladesh, India, Pakistan and Nepal and revealed that besides, inflation, GDP growth, bank size and cost inefficiency, bad management also explains the level of NPLs in the banking sector. Similar findings were revealed by Iuga and Lazea (2012) who asserted that incompetence of the banking personnel is the main cause of increasing NPLs. They further pointed out few characteristics of the incompetency, such as, inappropriate interview, inadequate financial analysis and monitoring of the clients as well as inaccurate documentation and acceptance of poorly guaranteed loans. However, Quadt and Nguyen (2016) revealed that bad management does not have any significant relationship with NPLs, rather only external factors explains the level of NPLs. They examined the relationship between efficiency and NPLs at 40 Nordic (Denmark, Finland, Norway, Sweden and Iceland) banks by applying the Granger-causality technique. As the study concluded, the level of NPLs is increased with the increase in external or macroeconomic factors (inflation, interest rate and GDP) rather than any internal factor of banks.

3.15 Research Gaps

Gap identification is vital to a research project, which involves the existence of a practical problem to be investigated, clear contradiction with and among the existing literatures (Dissanayake, 2013). As such, for a research gap or knowledge gap to be justified, the reasons might be that the chosen research site has always been out of others’ research focus, not many researchers investigated the selected variables previously, some of the researchers have made their researches inconclusive by recommending future research on the topic or particular variables or when there are evident contradiction among the previous literatures in terms of the causality-effect relationship. In the following paragraphs, the above rationales are discussed in separate points. Firstly, though quite a number of researchers (Asfaw, Bogale and Teame (2016), Tsumake (2016), Abdeta (2015), Chege (2014), Gezu (2014) and Joseph et al. (2012)) have come ahead to investigate the factors affecting NPLs in some countries in the African continent, not a single existing research of the recent or far past focused on the non-performing loans in the Somali banking context. Hence, this research may focus on the Somali banks’ NPLs and possible associated the factors to fill the gap precisely. Secondly, none of the reviewed literatures investigated effect of all the variables (selected in this study) in a single research paper. Though Mondal (2016), Ilyas and Abdul Rehman (2015), Bhattarai (2014) and Farhan et al. (2012) took account of four to five of these variables in their studies, other researchers were not even closer to this consideration (selection). Therefore, considering the seven independent variables (possible factors) in this study, it will be adding new information to the research database. Thirdly, some of the researchers made their studies inconclusive by recommending few variables to be studied in the future researches. It is found that not many researchers examined the effect of credit monitoring, political interference and banker’s incompetence on NPLs, rather they suggested these to be studied in future. For instance, Sheefani (2015) suggested that the effect of credit monitoring needs to be studied in the future. Fourthly, in case of political interference, no contrary literature stating insignificant relationship was found. Hence, if the current study finds insignificant effect of political interference on NPLs, it will be a unique information in the field of non-performing loans and banking. Last but not least, all the variables except political interference were found to have significant or insignificant relationship with non-performing loans. For instance, whereas Balgova, Nies and Plekhanov (2016), Mileris (2014), Makri, Tsagkanos and Bellas (2013) and Bonilla (2012) found significant relationship between unemployment rate and NPLs, Mondal (2016), Kurti (2016), Bhattarai (2014) and Klein (2013) found contrary or insignificant relationship. Likewise, Asfaw, Bogale and Teame (2016), Abdeta (2015), Geletta (2012) revealed significant relationship, whereas Joseph et al. (2012) concluded insignificant relationship between credit monitoring and NPLs. Hence, the identified gap is whether significance or insignificance is the real phenomenon in terms of the causality of each variable with NPLs in the context of Somali banks. This study is directed to be the first-hand and reliable source of the above information.

4. DATA ANALYSIS AND FINDINGS

4.1 Pearson Correlation

According to Pallant (2013) Pearson correlation coefficient is a measure of the strength of a linear association between two variables and is denoted by (r). Basically, a Pearson correlation attempts to draw a line of
best fit through the data of two variables. It takes the range values from +1 to -1, the sign out the front indicates whether there is a positive correlation or negative correlation. Therefore, a value of 0 indicates that there is no association between the two variables while a value of 1 indicates a positive association; that is, as the value of one variable increases, so does the value of the other variable, and a value of -1 indicates a negative association; that is, as the value of one variable increases, the value of the other variable decreases. Therefore, though different authors suggest different interpretations, for this research the strength of the relationship is based on Cohen (1988)’s guidelines in determining the strength of the correlation between the variables as shown in table one below.

**Table1: Cohen’s 1988 Guidelines**

<table>
<thead>
<tr>
<th></th>
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<th>r</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Small</td>
<td>.10 to .29</td>
</tr>
<tr>
<td>2</td>
<td>Medium</td>
<td>.30 to .49</td>
</tr>
<tr>
<td>3</td>
<td>Large</td>
<td>.50 to 1.0</td>
</tr>
</tbody>
</table>

The following tables illustrate the correlation coefficient between the dependent variable (Non-performing loans) and the independent variables of this study (unemployment rate, interest rate, inflation rate, GDP, credit monitoring, political interference, banker’s incompetence). The Pearson correlation test indicates a significant and a positive correlation between the dependent variable and all the seven independent variables of this research, the strongest relationship exists between the first independent variable (unemployment rate) and the dependent variable (non-performing loans) where the r= (.543**). This is followed by interest rate, r= (524**) and inflation rate r=(.511**), then political interference (.291**), credit monitoring r=(.264**), GDP r=(.252**), banker’s incompetence (.194**). Correlation between Non-performing loans and Unemployment Rate As table 2 exhibits, the relationship between unemployment rate and non-performing loans was investigated using Pearson correlation test (r), with the value of alpha set at 0.05, this shows strong positive correlation between the two variables (r=0.543, p-value = 0.000 <0.05). This supports the alternative hypothesis that there is a relationship between unemployment rate and non-performing loans of Somali banks.

**Table 1 Correlations between DV and IV1**

<table>
<thead>
<tr>
<th>Correlations</th>
<th>DV</th>
<th>IV1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-performing Loans</td>
<td>Pearson Correlation</td>
<td>.543**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>180</td>
</tr>
<tr>
<td>Unemployment Rate</td>
<td>Pearson Correlation</td>
<td>.543**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>180</td>
</tr>
</tbody>
</table>

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

Source: The researcher computed from SPSS software version 22.0

**Correlation between Non-performing loans and Interest Rate**

Pearson correlation test (r) was used to investigate the relationship between interest rate and non-performing loans of Somali banks. With Alpha value set at 0.005, the correlation analysis established a strong positive relationship between the variables (r= 0.524, p-value = 0.000 <0.05) as can be seen in table 3. We reject the null hypothesis and support the alternative hypothesis that there is a relationship between interest rate and the non-performing loans of Somali banks.

**Table 3: Correlations between DV and IV2**

<table>
<thead>
<tr>
<th>Correlations</th>
<th>DV</th>
<th>IV2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-performing Loans</td>
<td>Pearson Correlation</td>
<td>.524**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>180</td>
</tr>
<tr>
<td>Interest Rate</td>
<td>Pearson Correlation</td>
<td>.524**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>180</td>
</tr>
</tbody>
</table>

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

Source: The researcher computed from SPSS software version 22.0
4.1.1 Correlation between Non-performing loans and Inflation Rate
Based on the Pearson correlation analysis test in table 4, inflation rate and non-performing loans of Somali banks are found to have a strong positive relationship at 0.000 significance level as the p-value of these two variables is less than 5% and their correlation coefficient $r=0.511$. This supports the alternative hypothesis that there is a relationship between inflation rate and non-performing loans of Somali banks.

Table 4: Correlations between DV and IV3

<table>
<thead>
<tr>
<th>Correlations</th>
<th>DV</th>
<th>IV3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-performing Loans</td>
<td>Pearson Correlation</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.511**</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>180</td>
</tr>
<tr>
<td>Inflation Rate</td>
<td>Pearson Correlation</td>
<td>.511**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>180</td>
</tr>
</tbody>
</table>

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

Source: The researcher computed from SPSS software version 22.0

4.1.2 Correlation between Non-performing loans and GDP
By using Pearson correlation test ($r$) to examine the relationship between GDP and non-performing loans of Somali banks. With Alpha value set at 0.005, the correlation analysis established a positive relationship between the variables ($r=0.252$, p-value = 0.001 <0.05) as shown in table 5. This supports the alternative hypothesis and we reject the null hypothesis that there is a relationship between GDP and the non-performing loans of Somali banks.

Table 5: Correlations between DV and IV4

<table>
<thead>
<tr>
<th>Correlations</th>
<th>DV</th>
<th>IV4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-performing Loans</td>
<td>Pearson Correlation</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.252**</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>180</td>
</tr>
<tr>
<td>GDP</td>
<td>Pearson Correlation</td>
<td>.252**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.001</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>180</td>
</tr>
</tbody>
</table>

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

Source: The researcher computed from SPSS software version 22.0

4.1.3 Correlation between Non-performing loans and Credit Monitoring rate
As table 6 exhibits, the relationship between credit monitoring and non-performing loans was investigated using Pearson correlation test ($r$), with the value of alpha set at 0.05, the evidence shows that there is strong positive correlation between the two variables ($r=0.264$, p-value = 0.000 <0.05). This supports the alternative hypothesis that there is a relationship between credit monitoring and non-performing loans of Somali banks.

Table 6: Correlations between DV and IV5

<table>
<thead>
<tr>
<th>Correlations</th>
<th>DV</th>
<th>IV5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-performing Loans</td>
<td>Pearson Correlation</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.264**</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>180</td>
</tr>
<tr>
<td>Credit Monitoring</td>
<td>Pearson Correlation</td>
<td>.264**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>180</td>
</tr>
</tbody>
</table>

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

Source: The researcher computed from SPSS software version 22.0
4.1.4 Correlation between Non-performing loans and Political Interference

Based on the Pearson correlation analysis test in table 7, political interference and non-performing loans of Somali banks are found to have a positive relationship at 0.000 significance level as the p-value of these two variables is less than 5% and their correlation coefficient $r=0.291$. This supports the alternative hypothesis that there is a relationship between political interference and non-performing loans of Somali banks.

\[
\text{Correlation between DV and IV6}
\]

<table>
<thead>
<tr>
<th>Correlations</th>
<th>DV</th>
<th>IV6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-performing Loans</td>
<td>Pearson Correlation</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>180</td>
</tr>
<tr>
<td>Political Interference</td>
<td>Pearson Correlation</td>
<td>.291**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>180</td>
</tr>
</tbody>
</table>

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

Source: The researcher computed from SPSS software version 22.0

4.1.5 Correlation between Non-performing loans and Banker’s Incompetence

\[
\text{Correlation between DV and IV7}
\]

<table>
<thead>
<tr>
<th>Correlations</th>
<th>DV</th>
<th>IV7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-performing Loans</td>
<td>Pearson Correlation</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.009</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>180</td>
</tr>
<tr>
<td>Political Interference</td>
<td>Pearson Correlation</td>
<td>.194**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.009</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>180</td>
</tr>
</tbody>
</table>

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

Source: The researcher computed from SPSS software version 22.0

As table 8 exhibits, the relationship between banker’s incompetence and non-performing loans was investigated using Pearson correlation test ($r$), with the value of alpha set at 0.05, the findings and results shows a very weak positive correlation between the two variables ($r=0.194$, p-value $= 0.009 <0.05$). This supports the alternative hypothesis that there is a relationship between banker’s incompetence and non-performing loans of Somali banks.

4.2 Regression Model

4.2.1 Model Summary

The regression results comprise three tables the Model Summary, the Annova and the Coefficients table. The first table (Model Summary) provides information about the regression line’s ability to account for the total variation in the dependent variable. Table 9 demonstrates model summary of the dependent variable of this research that is non-performing loans. In accordance to table, the R Square value is 0.420 and the Adjusted Square value is 0.396. R Square is known as the coefficient of determination with its value ranging between (0) and (+1) and measures the proportion of variation in a dependent variable that can be explained statistically by the independent variables. Moreover, it also shows the degree of goodness of fit for the multiple regression equation estimated by the researcher.

\[
\text{Model Summary}
\]

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.648a</td>
<td>0.420</td>
<td>0.396</td>
<td>2.33584</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), IV7, IV3, IV4, IV6, IV1, IV5, IV2

This indicates if the independent variable of this study can be explained by the dependent variables, the coefficient of determination R Square would have been equal to (1). However, in this research, 42% of the variation of the dependent variable could be explained by the independent variables, in other words, 42% of the values fit the model. Additionally, the R Square and the Adjusted R Square respectively values at 0.420 and 0.396 and could indicate there is a moderate degree of goodness of fit in the regression model of the researcher.
4.2.2 Anova and Coefficients of the Study

The analysis of variance tests (ANOVA) tests whether the model is significantly better at predicting the outcome. Precisely, the F-ratio represents the ratio of the improvement in prediction that results from fitting the model (labelled ‘Regression’ in table 31), relative to the inaccuracy that still exists in the model (labelled ‘Residual’ in table 10) (Pallant, 2013). If the improvement due to fitting the regression model is much greater than the inaccuracy within the model then the value of F will be greater than 1 and SPSS calculates the exact probability of obtaining the value of F by chance (Piaw, 2013). For the data of this research the F=17.8, which is very unlikely to have happen by chance (p < .001). This can be interpreted that the final model significantly improves the ability to predict the outcome variable.

In another words, table 31 shows that F = 17.768 with significance (Sig.) of 0.000, which means that the probability of these results occurring by chance is less than 5%. The F-Test determines the probability of the relationship between dependent variable and the independent variables occurring by chance (Greener, 2008). Additionally, table 32 below shows the coefficients of this research. The T-test is generally used to determine the probability of the impact of the independent variables on the dependent variable occurring by chance (Greener, 2008). The results of the T-test for the individual regression coefficients for the IVs of this research (unemployment rate, interest rate, inflation rate, GDP, credit monitoring, political interference and banker’s incompetence) are respectively 4.392; 2.378; 2.809; 0.776; 1.236; 0.103 and 0.050. The probability of occurrence of the first four variables is less than 5%; On the other hand, the probability of occurrence of the last three variables is greater than 5%.

### Table 10: ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>680.171</td>
<td>7</td>
<td>97.167</td>
<td>17.768</td>
<td>.000b</td>
</tr>
<tr>
<td>1 Residual</td>
<td>940.629</td>
<td>172</td>
<td>5.469</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1620.800</td>
<td>179</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Non-performing Loans
b. Predictors: (Constant), IV7, IV3, IV4, IV6, IV1, IV5, IV2

### Table 11: Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
</tr>
<tr>
<td>(Constant)</td>
<td>2.496</td>
<td>.284</td>
<td>.093</td>
</tr>
<tr>
<td>Unemployment Rate</td>
<td>356</td>
<td>.081</td>
<td>.321</td>
</tr>
<tr>
<td>Interest Rate</td>
<td>181</td>
<td>.076</td>
<td>.191</td>
</tr>
<tr>
<td>Inflation Rate</td>
<td>245</td>
<td>.087</td>
<td>.219</td>
</tr>
<tr>
<td>GDP</td>
<td>051</td>
<td>.066</td>
<td>.050</td>
</tr>
<tr>
<td>Credit Monitoring</td>
<td>092</td>
<td>.075</td>
<td>.090</td>
</tr>
<tr>
<td>Political Interference</td>
<td>009</td>
<td>.082</td>
<td>.008</td>
</tr>
<tr>
<td>Banker’s Incompetence</td>
<td>004</td>
<td>.086</td>
<td>.003</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Non-performing Loans

However, the beta values tell us about the relationship between the DV and the IVs. The positive sign of the beta indicates that there is a positive relationship between the predictor and the outcome. Thusly, for this data all the predictors have positive values and the beta for the seven independent variables are 0.356 for unemployment rate, 0.181 for interest rate, 0.245 for inflation rate, 0.051 for GDP, 0.092 for credit monitoring, 0.009 for political interference and 0.004 for banker’s individual. Furthermore, each of these beta values has an associated standard error indicating to what extent these values would vary across different samples, and these standard errors are used to determine whether or not the b value differs significantly from zero. Therefore, if the t-test associated with b values is significant (sig. is less than 0.05) then the predictor is making a significant contribution to the model. Accordingly, as table 11 implies the “sig.” value of the first four IVs is less than 0.05 indicating that these predictors are making contribution to the model, while the “sig.” value of the last three IVs shows to be greater than 0.05 meaning that these predictors do not contribute to the model.

4.3 Comparisons of Findings with the Literature

4.3.1 Unemployment Rate

The first objective of the study was to examine the effect of unemployment rate on the non-performing loans of Somali banks. Thusly, the empirical correlation results of this study suggest that there is a strong positive (r=0.543) relationship between unemployment rate and NPLs of Somali banks. Moreover, the regression coefficient results indicate significant relationship (Sig.=0.000) between the two variables. Together the findings of correlation and regression this study establishes a strong positive and significant relationship between the two variables. These findings are in line with the previous literatures of Makri, Tsagkanos and Bellas (2013) who examined the non-
performing loans of banks in Eurozone and found a strong positive correlation and others such as Balgova, Nies and Plekhanov (2016), Bonilla (2012), Mileris (2014) who all found a positive correlation between unemployment rate and non-performing loans. However, the results of this study also contradict the literatures of Mondal (2016), Kurti (2016) and Klein (2013) who all found insignificant relationship between unemployment rate and NPLs. As noted by to Musa and Mehrara (2014) unemployment impacts on society and economy in different ways. It decreases the knowledge and skills of the labour force while increases the costs of producing labour force. According to the economic theory of crime, unemployment causes increased level of crimes such as drug abuse, robbery and smuggling. However, in Somalia the unemployment rate is very high, 66% as of 2015 according to the World Bank and this high unemployment could be one of the main reasons of the high non-performing loans in Somali banks.

4.3.2 Interest Rate
The second objective of the study was to examine the effect of interest rates on the NPLs of Somali banks. Both the regression and correlation results indicate that there is a strong positive and significant \( r=0.524 \), \( \text{Sig.}=0.002 \) relationship between the interest rate and NPLs. The finding of this variable is consistent with the findings revealed by Jameel (2014) and Warue (2013) who both found positive and significant relationship of interest rate on NPLs. On the other hand, the finding of this variable is inconsistent with the studies of Chege (2014) who studied commercial banks of Kenya and found positive but negative linear relationship, Bhattachari who revealed that interest rate have insignificant relationship with NPLs in Nepalese banks and Hassan, Ilyas and Rehman (2015) who examined the effect of various bank-specific factors including interest rate and revealed that only interest rate had a weak significance on NPLs of Pakistani banking sector in comparison to the other variables. However, as argued by Nkusu (2011) an upsurge in interest deteriorates the credit disbursment ability of the debtors, therefore banks should constantly review the interest rates on loans since loan failures are higher for banks which increase their real interest rates.

4.3.3 Inflation Rate
The third objective of this study was to examine the effect of inflation rate on the NPLs of Somali banks. Similar to the unemployment and interest rates the empirical correlation results of the third IV (Inflation rate) reveals strong positive relationship \( r=0.511 \) between NPLs of Somali banks and the fluctuation of inflation in the country, while the correlation results also show significant relationship between the variables \( \text{Sig.}=0.000 \) which is consistent with the findings of Mehmood, Younas and Ahmed (2013) and Farhan et al. (2012) who found positive and significant relationship of NPLs and inflation rate of Pakistani banks; and Abebresse, Pickson and Opare (2016), Anjom and Karim (2016), who discovered negative but significant relationship of NPLs and inflation rate of Bangladeshi banks. However, the findings of this variable are inconsistent with the literature of Gezu (2014), Bhattari (2014) and Ali and Iva (2013) who established a negative and insignificant relationship between NPLs and inflation rate in Ethiopian commercial banks, Nepalese banking sector and Albanian banking sector respectively. Therefore, based on the literatures reviewed the relationship between inflation rate and non-performing loans seems ambiguous. According to Nkusu (2011) higher inflation rate can affect the level of NPLs positively or negatively. Theoretically high inflation should reduce the real value of debt and hence make debt servicing easier. However, high inflation may pass through to nominal interest rate and weaken some borrower’s ability to service debt by reducing real income when wages are adhesive (Louzis, Vouldis and Metaxas 2010).

4.3.4 Gross Domestic Product (GDP)
The fourth objective of this study was to examine the effect of GDP on the NPLs of Somali banks. The empirical correlation results of this variable established a very weak positive relationship \( r=0.252 \), \( \text{Sig.}=0.001 \) between GDP and NPLs of Somali banks. Additionally, the regression coefficients’ results indicate significant relationship \( \text{Sig.}=0.001 \) between the variables. Though, the results of the correlation and the regression were similar by direction, the correlation results indicate weakness of the relationship. This infers that increase in GDP growth rate results in a decrease of the level of NPLs of loan giving banks and vice versa. These findings are being consistent with the findings of Mondal (2016), Tsumake (2016), Makri, Tsagkanos and Bellas (2013), Messai and Jouini (2013), Saba, Kouser and Azeem (2012) and Farhan et al. (2012) who all found positive relationship between GDP and NPLs and Nkusu (2011) and Vatansever and Hepsen (2013) who also revealed insignificant relationship between the NPLs and GDP growth rate. Nevertheless, Beck, Jukubik and Piloiu (2013), insinuate that in theory an improvement in the real economy should see an instantaneous reduction in the NPLs of a country. This is because the growing economy increases the borrowers’ income and ability to repay debts and generally increases the overall financial soundness and stability. Thusly, when all subjects in the economy are supposedly getting higher incomes, they will be more capable of settling their debts and this will lead to lesser bad debts, defaults and non-repayments.

4.3.5 Credit Monitoring
The fifth objective of this study was to examine the effect of credit monitoring on the NPLs of Somali banks. The empirical results of the correlation indicate a very weak positive correlation \( r=0.264 \) between credit monitoring and the NPLs of Somali banks. Moreover, the regression coefficients results show insignificant relationship between the variables \( \text{Sig.}=0.218 \). Thusly, both the regression and correlation results establish weak positive insignificant relationship. The findings of this study are in line with the findings of Asfaw, Bogale and Teame (2016), Hassan, Ilyas and Abdul Rehman (2015), Abdeta (2015) and Geletta (2012), who all found a positive relationship between NPLs and credit monitoring. There are other literatures that explained the above findings in the light of hypotheses of ‘bad luck’ and ‘skipping’ postulated by Berger and DeYoung (1997). For instance, as Rajha (2016) Abdeta (2015) and Klein (2013) reinstated, the....
‘bad luck’ hypothesis argues that bad management that is characterised by poor credit scoring, loan underwriting, monitoring and controlling skills often pose the probability to have increased NPLs. Accordingly, the ‘skimping’ hypothesis argues that high cost efficiency affects the NPLs. Banks often try to achieve short-term profits by reducing the costs on monitoring. Though it may help the banks in short-term, they pose themselves in risks in the long-term. Thus, the NPLs grow high in the long run when the banks dedicate less effort in ensuring loan quality and this might be the reason of this finding causing the weak positive insignificant relationship between the NPLs of Somali banks and credit monitoring.

4.3.6 Political Interference
The sixth objective of this study was to examine the effect of political interference on the NPLs of Somali banks. The empirical results of the correlation established a very weak positive correlation (r=0.291) between NPLs and political interference of the Somali banks. Moreover, the regression coefficients results show insignificant relationship between the variables (Sig.=0.918). Thusly, both the regression and correlation results establish weak positive insignificant relationship and the findings of this variable are consistent with the results of Hassan, Agarwal et al. (2016), Ilyas and Abdul Rehman (2015), Bhattarai (2014), Wanjau (2011) and Adeyemi (2011), who all unanimously revealed the existence of a significant effect of political interference on the NPLs of banks around the world, though the results of this study establish insignificant. The reason behind this insignificant positive effect of political interference on the NPLs of Somali banks could be the initiatives that the Somali central government is undertaking for the last couple of years to mitigate and reduce the political corruption involving state banks.

4.3.7 Banker’s Incompetence
The seventh and last objective of this study was to examine the effect of banker’s incompetence on the NPLs of Somali banks. The correlation findings of this variable established the weakest positive correlation (r=0.194) of this study, which is between NPLs of Somali banks and banker’s incompetence. Moreover, the regression coefficients results show insignificant relationship between the variables (Sig.=0.961). Thusly, together the regression and correlation results establish weak positive and insignificant relationship between NPLs and banker’s incompetence. The findings of this variable are consistent with the results of Islam and Nishiyama (2016), Hassan, Ilyas and Rehman (2015) and Iuga and Lazea (2012). Adequate and up to date training of the bank officers involving the loan giving process plays a key role in making effective loan decisions. In fact, Hassan, Ilyas and Rehman (2015) done the only study that used the term ‘banker’s competence’ in the recent times aiming to find its effect on NPLs of Pakistani banks. According to them, bankers with high qualification are in a place to judge the credibility of a borrower more effectively, contributing to lower loan default cases. They placed banker’s incompetence under the category, social factor rather than the bank-specific factors as they argued that competent bankers could understand and communicate their customers to convert their NPLs into performing loans.

5. SUMMARY AND DISCUSSION OF THE FINDINGS
As Somali banking sector has long been facing high non-performing loans, the situation played as a motive behind conducting this study. Furthermore, since no earlier research was found that examined the NPLs of Somali banks, this knowledge gap also motivated the study. This study considered non-performing loans as the dependent variable and unemployment rate, interest rate, inflation rate, gross domestic product, credit monitoring, political interference and banker’s incompetence as the independent variables. Interestingly, this is the first ever study that took into account all the above variables in a single study. The research objectives of the study were to investigate the effect of all the aforementioned variables on the NPLs of Somali banks. Accordingly, the research considered both public and private Somali banks as the research site and the respondents were selected using a non-probability sampling method. It also implemented a quantitative analysis by distributing and collecting survey questionnaire to the respondent bankers. The collected primary data were analysed using SPSS tool. The results from the demographics of the respondents show that majority of the respondents were male (72.2 %), young, below 30 years old (56.7%), completed degree level (55%) and have experience of more than 3 years (54.4%). The null hypotheses of the study recognise that each of the independent variables has an impact on the NPLs of Somali banks. However, the findings of the study show that all the null hypotheses are rejected. Firstly, the study found that unemployment rate has an effect on the NPLs of Somali banks. This finding is consistent with the findings of Balgova, Nies and Plekhanov (2016), Mileris (2014), Makri, Tsagkanos and Bellas (2013) and Bonilla (2012). Secondly, this study revealed that interest rate has an impact on the NPLs of Somali banks. The finding is consistent with the findings revealed by Jameel (2014) and Warue (2013). Thirdly, the study also found that inflation rate has an effect on the NPLs of Somali banks which is consistent with the findings of Abebrese, Pickson and Opare (2016), Anjom and Karim (2016), Mehmood, Younas and Ahmed (2013), Farhan et al. (2012) and Khemraj and Pasha (2009). Fourthly, gross domestic product was found to have an impact on the NPLs of Somali banks, being consistent with the results of Mondal (2016), Tsumake (2016), Makri, Tsagkanos and Bellas (2013), Messai and Jouini (2013), Saba, Kouser and Azeem (2012) and Farhan et al. (2012). Fifthly, credit monitoring was also found to have an impact on the NPLs of Somali banks, which is consistent with the findings of Asfaw, Bogale and Teame (2016), Hassan, Ilyas and Abdul Rehman (2015), Abdeta (2015) and Geletta (2012). Sixthly, the study revealed that political interference also has an impression on the NPLs of Somali banks. The result is consistent with the results of Hassan, Agarwal et al. (2016), Ilyas and Abdul Rehman (2015), Bhattarai (2014), Wanjau (2011) and Adeyemi (2011). Last but not least, banker’s incompetence was also found to have an impact on the NPLs of Somali banks, which is consistent with the findings of Islam and Nishiyama (2016), Hassan, Ilyas and Rehman (2015) and Iuga and Lazea (2012).
5.1 Contributions of the Study

5.1.1 Theoretical contributions
Firstly, not a single existing research focused on the non-performing loans in the Somali context, as far as our knowledge concerns. Hence, this study fulfils the lacking of literatures on the NPLs of Somali banking sector. Secondly, none of the earlier literatures took account of all the variables (factors) selected in the current study. However, this study has covered the gap by examining all the seven variables in a single research. Thirdly, some of the reviewed literatures recommended for future researches, especially in case of the impact of several variables on non-performing loans that those studies did not investigate. For example, Sheefani (2015) suggest that the impact of credit monitoring need to be studied by future literatures. Thus, this study fulfils the suggestions made by the researchers at large extent. Fourthly, the three variables, namely, credit monitoring, political interference and banker’s incompetence were not studied in a single research by many researchers. Only Hassan, Ilyas and Abdul Rehman (2015) was found to have studied the impact of these three variables on NPLs. Hence, this study also added important information in the case of impact of the three factors on non-performing loans. Fifthly, the study is found to have empirical evidence that the findings of this study were inconsistent with the conclusion made by several researchers such as, Bhattachary (2014) and Klein (2013) in case of the impact of unemployment rate on NPLs; Hassan, Ilyas and Rehman (2015) and Bhattachary (2014) in case of the impact of interest rate on NPLs; Gezu (2014), Bhattachary (2014) and Ali and Iva (2013) in case of the impact of inflation rate on NPLs; Vatansever and Hepsen (2013) in case of the impact of GDP on NPLs; Joseph et al. (2012) in case of the impact of credit monitoring on NPLs and Quadt and Nguyen (2016) in case of the impact of banker’s incompetence on NPLs.

5.1.2 Practical contributions
The measure of non-performing credit is one of the markers of a financial system’s strength or weakness, the less the non-performing loans the better the financial soundness of the economy. In the event that the non-performing credit is more, there will be poor financial related wellbeing and emergency may bring about the economy. Therefore, studying and identifying factors that contribute to the borrowers’ inability to repay the advances is necessary. As the bankers’ perception towards the major factors triggering non-performing loans were considered, the study recognised the selected independent variables and their impact on the NPLs. It is expected that the study will benefit the researchers of the field and similar interests. As the research has added new information in the context of Somali banking sector and in case of the impact of the selected seven variables on NPLs, the future researchers will be able to obtain necessary information from the study’s findings investigating NPLs in Somali banks. The study will also benefit bankers (loan managers) of the Somali banks. The loan managers will be able to identify the major causes or factors of NPLs in their banks more effectively as all the seven factors in this study were found to have impact on the NPLs. Additionally, they will be able to analyse customers’ financial background, measure the loan quality and take necessary steps to facilitate a better debt collection process while facing the possibility of loan defaults. The findings of the study would also encourage the Somali banking authority to organise internal and spend for external trainings and development programmes that would increase the level of bankers’ competency, especially in case of loan quality monitoring and assessment. It may consequently reduce the level of non-performing loans. The study further benefits the government and national regulatory organisations, as they will be able to understand and identify the root causes of high NPLs in the country’s banking sector. Accordingly, it would encourage them to keep unemployment rate, interest rate and inflation rate and political interference low for a healthy financial system.

5.2 Limitations of the Study
Limitations are normally those factors that limit a study from obtaining expected outcomes. This study has also several limitations addressed below. Firstly, time constraint is a major limitation to this study as the primary data were collection over a period of only one month. Hence, the study does not reflect the banker’s perception regarding the impact of the selected variables on NPLs in the long run. Secondly, financial constraint is also another limitation to this study that restricted the researcher from obtaining data from a large number of banks. As such, not all the Somali banks were approached mentioned in the chapter 1. Thirdly, lack of cooperation from the respondents was also another limitation of this study. While approached, a number of bankers were reluctant to respond to the questionnaire and consequently, the response rate was primarily not high. However, the researcher managed to obtain expected primarily data from the pre-calculated number of samples eventually. Last but not least, though this study aimed to examine the possible effect of the variables on the NPLs, it did not investigate the direction of the impact such as, positive or negative relationship. Hence, this is also a limitation of the research.

5.3 Recommendations for Future Research
This study did not investigate the direction (positivity or negativity) of the impact of the selected variables on the non-performing loans of Somali banks. Hence, it is suggested that the future researchers may investigate the direction of the selected variables in a single research. Furthermore, this research did not take account of the bank-specific factors such as, credit assessment, credit size, credit terms, credit growth, capital adequacy ratio, return on equity, return on assets, and loan loss reserves to total loans ratio, and profitability of bank assets and macroeconomic factors such as, public debt, exchange rate, government expenditure and exports and imports. Hence, the future researchers may investigate the possible impact of the aforementioned variables on the NPLs of Somali banks. Recommendation to the Management of the Somali Banks In order to ensure a better relationship management with the customers, an effective loan quality assessment and an efficient debt collection process, there is no other means than improving the competencies (the
knowledge and skills according to recent trends) of the bankers, especially loan managers. Furthermore, Banks need to deliberately and regularly organise training and development (T&D) programmes focusing on credit enhancement process, credit approval conditions, loan quality monitoring and debt collection process for respective employees of loan and risk management departments. Furthermore, monitoring programmes such as, the SMP organised by IMF (mentioned in chapter 1) can be collaborated with international agencies that will make the bankers and loan managers understand the bigger picture of credit monitoring and its effect on reducing loan defaults in various countries.

5.3.1 Recommendation to the Government and Financial Regulatory Authorities

One of the reasons of high NPLs in the Somali banks is the high unemployment rate in the Somali region. Hence, it is clear that due to high unemployment, many debtors are unable to repay loans within the loan maturity. In order to avoid the situation, the government should ensure a job or income source for all the citizens. This will increase the demand for more expenditure among the public and in turn will increase the growth of GDP, resulting to lower the NPLs. Therefore, managing unemployment is critical for political dependability. The unemployed youth populace (67 per cent) contributes essentially to unpredictable movement and cooperation in fanatic exercises, including Al-Shabaab the activist jihadist group, which is seen as another type of employment in the country. With high youth unemployment and low overall labour force participation, the Somali experts set up the National Development Plan that spotlights on the accompanying key points: how to accomplish higher financial development, make employments, and assimilate the Somali outcasts and refugees coming back from Kenya; remittances streams; and organizing social wellbeing nets and squeezing philanthropic conditions (International Monetary Fund, 20017a). As several earlier study found both positive and negative of interest rate on non-performing loans, it is ambiguous that whether government needs to increase interest rate reduce it. The local government should be extra careful in navigating the monetary policy of the region so that they can avoid any inverse action to increasing NPLs and may fluctuate the level of interest rate depending on the financial situation of the banks. The government of Somalia also needs to be careful in endorsing policy on maintaining the inflation rate in the country. For the past few years, the country has been facing both ups and downs in the inflation rate. In 2015, the country faced deflation after an inflation in the previous year (see Figure 3 in chapter 1). However, it is suggested that the government should maintain upwards within 2 to 3 percent inflation rate in the upcoming years so that the industry remains competitive, the wages (salary scales) of productive workers are adjusted and, in some cases, may boost economic growth. GDP was also found to have ambiguous relationship with NPLs in the reviewed studies. As currently, the GDP growth in the country is steady, the government should ensure that it does not decline and remains steady or go upwards in order to meet the goals of higher average incomes, better standards of living, lower unemployment, lower government borrowings and improved public services and investment. One major concern in Somalia is the issue of corruption, which needs laws to be implemented to ensure fair, and transparent dealings across the spectrum of financial markets and companies to have proper disclosures. Recently Anti-Corruption Act is brought to Somali parliament waiting to be passed. Furthermore, the government needs to ensure that the banks especially the state banks have limited political involvement and fewer amounts of loans provided to politically engaged debtors (Sufi, 2017). However, if the government can ensure very limited or no political loans, that will result into lower level of NPLs indeed. Somalia is one of the world’s most remittance-dependent country being the recipient of US$1.3 billion every year that accounts for 25-45 per cent of the country’s economy and about 80 per cent of start-up capital of small businesses in the region (International Monetary Fund, 2017b). However, the problem facing the regional banking section is that till now, there is inadequate commercial banking services and supervisory capacity of the Central Bank (Paul et al., 2015). Furthermore, the Central Bank has very limited corresponding relationship with the foreign banks and money transfer operators. Hence, it is suggested that the government should build more sustainable financial industry by increasing the commercial banking services capacity of the Central Bank and maintaining good relationships with foreign governments in order to ensure quick arrival of the remittances and lower NPLs.

6. CONCLUSION

Non-performing loans are not only a threat to the economic and financial stability of a country but also globally as we have seen financial crisis by the theses loans in East Asian Countries, America and Sub-Saharan Africa. Moreover, a colossal volume of non-performing loans fills in as preface to financial fragility. Thusly, there is a need of identifying the factors responsible for these loan defaults, as many authors and researchers believe that once these factors are identifying then policies and regulations can be put in place to minimise and or prevent the causes. The existing literature in the area of non-performing loans concentrated on analysing secondary data in finding out the major factors contributing to the loan defaults, however, this study focused on the views and perceptions of the Somali bankers who deal with and handle the daily activities of the loan portfolios. It is the researchers’ believe that the bankers who are actually dealing with these issues on a daily basis could better describe the factors or elements causing or contributing the loan defaults. Therefore, this study incorporates the first ever investigation of the effect of unemployment rate, interest rate, inflation rate, GDP, credit monitoring, political interference and banker’s incompetency on NPLs in the context of Somali banking sector. The findings of the study revealed that all the factors were found to have an effect on the NPLs of Somali banks. It is expected that the study has added valuable information in the field of NPLs and its factors. The research is expected to be equally beneficial for prospective researchers, management of the banks and the government. Finally, it is suggested that the bank management should increase...
their expenditure for training and development programmes, which would enhance the loan quality monitoring, and debt collection management of the bankers. It is also suggested to the government and regulatory bodies that the country’s unemployment rate should be kept low, extra care should be given to inflation rate and interest rate fluctuation, political interference should be limited or reduced to zero and the country’s banking sector need to be revitalised by increasing the commercial banking services capacity of the Central Bank.

7. REFERENCES


