A Comparative Analysis of Islamic vs. Conventional Banks and Financial

performance in context of Malaysian Banks.

By

Farhana Chowdhury

A Major Research Project Submitted to Saint Mary's University, Halifax, Nova Scotia in
Partial Fulfilment of the Requirements for the Masters of Finance program
September 4th , 2013, Halifax, Nova Scotia

Written under the Direction of Dr. J Colin Dodds

Approved: Dr. J. Colin Dodds
Faculty Advisor

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Date: September 4th, 2013

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Declaration

I certify that the research report I have presented as an obligation for the completion of the Masters of Science program under Saint Mary's University is solely my own effort other than where I have clearly indicated that it is the effort of others (in which case the extent of any work carried out jointly by me and any other person is clearly identified in it).

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Abstract

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August 28th, 2013

The objective of this study is to evaluate the comparative financial performance of Islamic and conventional banks. To undertake a rigorous comparative study, profitability, liability and liquidity ratios of Islamic banks and conventional banks were used during the period from 1995 to 2009. Banks are selected on the basis of almost having equal weights of invested capital. Financial products offered by Islamic banks are also compared to conventional banks products for better understanding of the institution. A paired sample t-test is used which shows that Islamic banks have high growth rates and profitability over the conventional banks. Moreover the Islamic banks have high liquidity power over conventional banks.

Executive summary

Islamic Banking mechanism magnifies in a way that it can be reached to even small investors who are, generally, unable of doing trades or do not have the time to do so. They also act as managing companies based on PLS (Profit -Loss - sharing) system. However, these profits would only be earned and blessed if the Islamic Banks follows all the Sharia's prescriptions and proscriptions that are related to Finance and are also related to ethical considerations. Through comprehensive analysis there was a discovery that Islamic banking weathered the financial crises of the past including the financial crises of the past, including the 2007-2009 crisis. By analyzing the potential interface between Islamic and conventional banks in the Malaysian banking system, this study was keen to present constructive information for stakeholders to make superior investment decisions and to help both conventional and Islamic banks to mark and re-evaluate their performance based on their level of liquidity, profitability and financial performance. Also, this study hopes to provide significant views on product composition of Islamic banks and how they are pegged with conventional banks.

Acronyms

PLS	Profit -Loss- Sharing
IDB	Islamic Development Board
Ijarah	Leasing
Sukuk	Bond
Takaful	Insurance
GDP	Gross Domestic Products
ROA	Return on asset
ROE	Return on Equity
LTD	Loan to deposit ratio
LAR	Loan to asset ratio

Contents

Chapter -1

1. Introduction:

Islamic banking or the interest free banking system has caught the attention of analysts and academics for the past few years. It was the 2007-2008 financial crises that brought the spot light on this type of banking system. The recent global financial crisis has not only shed doubts on the proper functioning of conventional " Western" banking, but has also increased the attention on Islamic banking as some observers have pointed to its superior performance during the crisis (Hasan and Dridi, 2010).

Many countries, especially Middle East and Asia are presently experiencing what is known as a "dual banking" system, where interest free banks are operating alongside has become conventional banks. The country which enjoyed a dual baking system is the United Arab Emirates where the Dubai Islamic banking was established in 1973 with paid up capital of US$14 million (Metwally, M.M 2012). These banks perform normal business as any conventional banks, but do not pay or receive any interest. The organization operates on Profit-Loss sharing principles based on the Islamic law (known as Shariah law)[1]. Furthermore Shariah law prohibits Muslims from taking or offering riba.[2] On the other hand, conventional banking is based on the debtor-creditor relationship between the depositors and the bank on one hand, and between the borrowers

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[1]Divine Islamic law that encompasses all aspects of human life as revealed in the Qur'an and the Sunnah. Islamic religious law governs not only religious rituals, but aspects of day-to-day life in Islam. Shari'ah, literally translated, means "the way."

[2] A concept in Islamic banking that refers to charged interest. It is forbidden under Shari'ah, Islamic religious law, because it is thought to be exploitive. Depending on the interpretation, riba may only refer to excessive interest; however to others, the whole concept of interest is riba, and thus is unlawful.

and the bank on the other. Interest charged is the price of credit which reflects the opportunity cost of money.

Islamic banks are thus significantly different from conventional banks that are constructed on one component recognized as riba (interest). Sharia compliant products cannot charge interest payments (riba), as only goods and services are allowed to carry a price. Moreover speculation and gambling is prohibited and relies on a PLS (profit- loss- sharing) principle. As a result, both the liability and asset side of the balance sheet emphasises that all transactions should be backed by tangible assets.

However, in practice, Islamic scholars have developed products that resemble conventional banking products, by replacing interest and discounting with fees and a contingent payment structure. Chon and Liu (2009), for example, found that in Malaysia, only a small portion of Islamic bank financing is based on profit- loss sharing and that Islamic deposits are not interest-free, but closely pegged to conventional deposits. Finding confirmed by Khan (2010b) for a sample of large Islamic banks across several countries.

1.1 Impacts of economic and demographic changes:

Increasingly investors are interested in the functionality of the Islamic banking system for its growing trends in the monetary sector. In the past decade, the world's economic centre of gravity has begun to tip in favour of developing economies. Experts such as the leading fund manager, Antoine van Agtmael, have predicted that the combined GDP (Gross National Product) of emerging markets will go beyond that of developed economies within 30 years. Already the developing economy consists of 75% of the world's foreign exchange reserves.

At the same time, there has been a demographic change, with an increase in the population of Muslim countries at the expense of developed markets where populations are stagnating or falling. There are now approximately 1.6 billion Muslims worldwide, comprising 24% of the total world's population. These Muslim populations are increasingly looking for financing tools which comply with the code of belief of Islamic (Sharia) law, while offering the flexibility and range of traditional banking products. Choosing Sharia-compliant products has become a means for many Muslims to provide their Islamic identity.

1.2 Opportunity:

Islamic banking is now one of the world's fastest-growing financial systems, consisting of over 300 organizations in more than 75 countries. Currently a $400 billon market, it is expected to grow to $4 trillion over the next 5 years according to Standard & Poor's analysis. While Islamic banking is intense in the Middle East and South-East Asia (with Bahrain and Malaysia representing the largest hubs), it is also emerging in Europe, and the United States, Russia and in countries where there are huge Muslim minority populations.

There is considerable room for growth as well, particularly in Asia, where a large number of Muslim populations exist and there is a very low coverage by Islamic banks. In Indonesia, with a Muslim population of 195 million, only 1.2% of total banking assets are under Islamic Finance. India, Pakistan and Bangladesh have 439 million potential customers, but less than 10% of the market in each case has been tapped into by the banks offering Sharia-compliant products. Even in the Middle East and North Africa,

considered as the home for Islamic banking, there is limited access to Islamic banking. So there is a huge opportunity in this sector, particularly with the population growth of the Muslim world versus the global population.

Islamic Banking is not, however, necessarily confined only to Muslims. It has been recently argued that the tenets of Islamic Banking can be applied to a wider population, and that the principles offer safeguard which might resist the unrestrained behaviour of individuals who caused the sub-prime crisis and frauds.

1.4 Rationale behind the study:

This paper will try to evaluate the comparative financial performance of Islamic and conventional banks. To make an appropriate comparative study, profitability and liquidity ratios of Islamic banks and conventional banks are used during the period from 1995 to 2009 constructed from balance sheet and income statement data. Due to the time constraint and data availability, only Malaysia was chosen for study purposes.

Malaysia has also been praised for being a global centre for Islamic finance, with a facilitative regulatory framework and targeted incentives. This is especially true for Islamic banking, bonds (Sukuk) and Insurance (Takaful). Malaysia is also a global leader in Sukuk issuance among Islamic nations. The country has a comprehensive banking system which consists of commercial banks, merchant's banks, foreign conventional banks and Islamic banks. The following study will only focus on conventional and Islamic banking systems. A paired t- test has been conducted for this study.

The remainder of the paper is structured as follows. Chapter 2 will review some of the relevant literature regarding Islamic banking. The review has been aptly divided into three segments, the first discussing the theories of Islamic banking, followed by the basis of interest-free banking and characteristics of the emerging Islamic financial system and a comprehensive coverage of Sharia compliant products.Chapter-3 will focus on a literature review as well as a coverage of data and methodology while variable analysis are covered in Chapter 4. Chapter-5 provides a summary and the results. Recommendations are covered in Chapter 6.

Chapter-2 Islamic Banking

2.1 Theories of Islamic banking:

Changes in Islamic banking will continue as a result of the evolutionary process through which it is going. While it is not possible to pin down an exact definition for Islamic banking, this is also the case for conventional baking which is already mature after a long period of growth and continues to develop with changing circumstances. Nevertheless, it will offer a better understanding of Islamic banks if they are cautiously defined within the modern context as depository institutions whose core business is of PLS (Profit and loss Sharing) and sales-based modes of financing.

Islamic Finance is governed by Sharia (Islamic law), which is sourced from the Qur'an and Sunnah. The key ideology of Islamic financing is the prohibition of interest, the principle being that it is improper to increase the value of any commodity purely by lending it to another person. Sharia law also prohibits Masir (speculation) and gambling transactions, Gharar. The latter is the uncertainty about the terms of contract or subject

matter (prohibiting, for example, selling something which you do not own), and investing

in businesses which are considered unlawful or undesirable e.g. alcohol, drugs, gambling.

Usually "In Islamic contracting, gharar (uncertainty and risk) is not permitted i.e., the terms or contracts should be well defined and without any ambiguity.[3] The prohibition of Gharar is designed to prevent the weak from being exploited and thus the zero- sum game in which one gains at the expense of another is not sanctioned." As a result gambling and derivatives such as options and futures are not allowed because of the prohibition of gharar.

2.2 Basis of interest free banks:

Interest-free banks were established to comply with Islamic law that prohibits interest on

all types of loans (personal, commercial, agricultural, industrial etc) whether these loans

are made to friends, private or public companies or governments or any entity. The

essential principle of interest free banking is profit/ loss sharing. It means both supplier

and borrower shares the risks for the capital; both prosper when returns are favourable

and suffer together when returns are poor. This is the basis for what became known as

"interest- free banks".

According to the IDB (Islamic Development Board)[4] Islamic banks are under an

obligation to seek approval about the Islamicity of their products and also a license about

all their operations being in compliance with Shariah. While it is beyond doubt of the

responsibility of the Shari'ah boards to perform the former task, it may be difficult for

them to do justice on the second task, which demands a review of all the different

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[3] The general shariah principle is that the commodity to be sold should exist. The seller, moreover, is required to have acquired t the ownership and be in possession of that commodity.

[4] IDB was established in 1395H (1975) in pursuance of the Declaration of Intent issued at the Conference of Finance Ministers of Muslim Countries held in Jeddah in Dhul Qadah 1393H (December 1973).

transactions of the banks to ensure that they are in compliance with what the Shari'ah

board has specified.

Islamic banks maintain three kinds of accounts

- Current account or deposit account,

- Investment account

- Savings account.

"The current account of Islamic banks is similar to current account of conventional banks. In investment account, capital is not guaranteed and investors agree in advance to share profit or loss at an agreed ratio. Finally, savings account is operated in several ways. In some systems, initial deposit is guaranteed and profit is also shared and in some places capitals are not guaranteed by banks and it is treated as investment account and banks only invest in risk-free projects. Hence, depositors get lower rate of profit. Moreover, Islamic banks also provide services such as money transfer and bill collection. The traditional modes of Islamic trading system still dominate the bank transactions, which may be broadly classified as trade based (Buyer-Seller relationship and Co-ownership), rental based (Lessor-Lessee relationship) and equity based (Partnership and Joint Venture relationship). These modes are also structured in the form of Islamic bond (Sukuk) and Islamic insurance (Takaful)."

2.3 Characteristics of emerging Islamic financial system:

The major characteristics of Islamic financial system are as follows-

(i) The liability side of Islamic banks' balance sheet has two types of deposits in addition

to shareholders' equity:

Investment deposits: Organized on the basis of profit and loss sharing principle as well

as the different sales- based modes of murabhah[5], ijarah,[6] istisna[7] and salam[8] on assets'

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[5] It is sales at a specified margin. The term is now however is used to refer to a sale agreement whereby the seller purchases the goods desired by the buyer and sells them at an agreed marked-up - price, the payment being settled within the agreed time frame, either in instalments or lump sum. The seller bears the risk for the goods until they have been delivered to buyer.
[6] Leasing
[7] A contract in which manufacturer (contractor) agrees to produce (build) and deliver certain good or (premise) at a given price on given date in future. This is an exception to the general Shariah ruling which

side. Even the sales based mode has same risk, but not much as PLS modes. The involvement of investment depositors in the risk of banking is unique to Islamic banking. However the risks of banking can, and should, be minimised through a proper management of banks under suitable regulatory and supervisory framework.

Demand deposits: It does not participate in profit loss sharing principle and debts are owed by banks in which, their repayments must be fully guaranteed. This is also unique to Islamic banks, principally if concept of bailing in becomes accepted in international banking.

(ii) They provide all the normal banking services which conventional banks are expected to perform.

(iii) They also maintain, like another conventional banks, a banking book and trading book.

(iv)The sales based mode used is to create debt, just like the interest based credit of conventional banks. However, unlike the conventional banks, Islamic banks are not yet allowed by juristic verdict to trade in debt. Once they have gained debt instrument, it stays with them until maturity.

(v) Requires collateral for extending finance just like conventional banks. However they cannot rely on it heavily because of risk-sharing and therefore they will be under an obligation to carry out careful evaluation of the risk involved.

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does not allow a person to sell what he does not possess. As against salam, the price here need not to be paid in advance. It may be paid instalments in steps with preferences of the parties or partly at the front end and balance later on as agreed.

[8] Payments are made in advance by the buyer and delivery of goods deferred to the general Shariah ruling that you cannot sell what you don not owe or possess.

2.3 Sharia compliant products:

There are five major principles on the basis of which Islamic and conventional finance can be differentiated. There are prohibitions on riba (interest or excessive interest), prohibitions on gharar (speculation) and prohibitions on financing illegal sectors (weapons, drugs, alcohol, pork).The principle of the profit/loss sharing and the principle that all transaction must be backed by tangible good are foundations and tenets for the system Over the years lots of products have been invented that comply with the shariah and risk sharing criteria.

Islamic products will be discussed descriptively on how they work according to shariah law. Money is considered only as a medium of exchange not like conventional banks where money is traded as a commodity.

 The following products are based on partnership loans between banks and borrower-

2.4 Mudarabah: One of the most well known profit-loss sharing agreement. It is an agreement between two or more persons whereby one or more of them will provide entrepreneurship and management to carry on any business venture whether trade industry, or service, with the objective of earning profit. The profit is shared by them in an agreed proportion. The loss is borne only by financiers in proportion to their share in total capital. The entrepreneur's loss lies in not getting any reward for his or her service.

2.5 Musharaka: An Islamic financing technique whereby all partners share equity as well as management. The profits can be distributed among them in accordance with agreed ratios. However, losses must be shared according to their share in equity.

2.6 Mudarabah and Musharaka: Combination of Mudarabah and Musharakah where one transaction takes place under which an entrepreneur has invested capital along with his management skills. Under this mode entrepreneurs not only benefit from the profit, but also entitled for the percentage of profit for sharing entrepreneurial skills. In this case the partner's ratio of profit should not be more than the proportion of investment.

This process is also maintained the deposit side without predetermined fixed return but simply based on profit-loss- sharing principle. Such investment deposits are thus linked to banks' profit levels or to a specific investment account. Thereby depositors are the residual claimant rather than creditors of banks.

The financial products which are based on leasing contracts like conventional banking are as follows-

2.7 Murabahah: The general kind of sale known as "Murabahah" or most commonly known as the "cost-plus" transaction under which seller discloses the actual cost together with freight and custom duty of a commodity to the purchaser and later agrees to sell the commodity on a certain profit added to his cost. It also resembles a leasing contract like conventional banking. By involving in purchase of the good and not making a return on lending. The method of transaction should follow certain rules that are similar to general sale. The approach can also be used where the client needs funds to actually purchase some commodities and not for other purposes like paying the price for already purchased commodity or paying electricity bill. Besides, Murabahah is possible for existing goods and not for future goods and the goods that has some real or intrinsic value measurable in monetary terms.

2.8 Ijarah: Banks keep the ownership of the investment goods and rent it to the client for a fee or feasible transaction amount according to be shariah compliant. In the present context, Ijarah is related to benefits of assets or properties and signifies the transfer of benefits for a fixed period in exchange for certain rent or price. The conditions for valid Ijarah are similar to general lease. Instead of giving as interest-bearing loan, some banks, especially in Western countries lease out equipment to their customers. Banks calculate the total cost they have incurred in the purchase of the assets and add the stipulated interest they could have claimed and replace the latter with monthly rental during the lease period.

On the deposit side, one can differentiate between non-reward demand deposits (amanah or qard), considered as depositors' loans to the bank. Thus similar to the demand deposits in many conventional banks around the world-and savings deposits that do not carry an interest rate, but participate in the profits of the bank. According to some Islamic scholars banks are allowed to pay bonuses on accounts. So investment account as discussed above fully complies with Islamic laws. Investment accounts which mirrors the partnership loans on the asset side, by being fully involved in profit-loss- risk sharing arrangements of Islamic banks As a result funding consist of both funds for which Islamic banks are directly responsible and funds which they manage on behalf of investors.

In short, products which are offered by Islamic banks are the same as in conventional banks and are structured as conventional products and there is strong element of sharing risks in Islamic banks.

Practitioners and academics have observed that in reality most Islamic products are not based on profit-loss sharing but resemble very much debt instrument. Aggarwal and

Yousef (2000) and Khan (2010b) explain this as rational response by Islamic banks to the weak contractual framework prevalent in most countries with Islamic banks, which call for debt-like rather than equity- like instrument.

Chapter-3: Literature Review, Data and Methodology for the Empirical Analysis.

3.1 Literature review:

Malaysia is growing in Islamic banking sector; where a study by Alwyni (2011) had shown that since the last five years, the growth in Islamic banking in Malaysia is rapid and significant, as being compared to the overall growth of the country's banking industry. This study has also revealed that the average growth rate of Islamic banking in Malaysia is 19 percent per annum, compared to the banking industry's 11 percent growth.

Samad (2004) examined the comparative performance of Bahrain's Islamic banks and the conventional commercial banks during the period of 1991-2001. It has been concluded that there is a significant difference in credit performance between these two banking system. However, there was no major difference in profitability and liquidity performances between Islamic banks and conventional banks.

Srairi (2010) evaluated the cost and profit efficiency by using stochastic frontier approach on 71 banks in Gulf countries from the period of 1999 to 2007. The efficiency comparison between Islamic and conventional banks results revealed that the efficiency of banks at Gulf countries is more convincing than other countries in the world. Kaleem and Isa (2003) evaluated the Islamic and conventional deposit returns by using alternative econometric procedure. They also studied the impact of one deposit return on the other

deposit return and concluded that Islamic banking industry contributed significant development to the Muslim countries.

Hanif (2011) examined the similarities and differences between Islamic and conventional banking and found Islamic banking practicing modern conventional banking with little restrictions imposed by the Islamic Sharia. The researcher further argued that it would be wrong to say Islamic banking is merely the copy of conventional banking. A big difference exists in the operation of Islamic financial institutions and conventional banking system.

Viverita (2011) evaluated that Islamic banks observed insignificant cost efficiency at 5% than conventional banks. It was also found that Islamic banks generated more profitability and revenue than conventional banks.

Iqbal (2001) evaluated the performance of Islamic banks through trend analysis and ratios during the period of 1990 to 1998 and revealed that Islamic banks performed quite well compared to conventional banks over the specified period of time. Akhtar, et. al (2011) did a comparative analysis of Islamic and conventional banks by focusing on the importance of size of the firm, networking capital, return on equity, capital adequacy and return on assets with liquidity risk management. It found that size of the banks and networking capital to net assets having a positive but insignificant relationship with liquidity risk. Moreover capital adequacies in conventional banks and return on asset in Islamic banks have positive and significant relationship with liquidity risk.

Jaffar & Manarvi (2011) evaluated the performance of Islamic and conventional banks through CAMEL test during the period of 2005 to 2009. A sample of 5 Islamic banks and 5 conventional banks were selected to measure and compare their performance. It found

that Islamic banks performed better and had higher liquidity than the conventional banks. The study also found that Islamic banks performed better in possessing adequate capital and had better liquidity position, while conventional banks pioneered in management quality and earning ability.

3.2 Data and Methodology:

The data used were from Malaysian_ibank_data with data on both listed and non-listed banks of Islamic and conventional banks, to construct and compare the indicators of financial performance such as liability, liquidity and profitability ratio. Out of 1,879 observations and 267 variables only those variables were chosen that are related to the study from the year 1995- 2009 and only those banks were chosen that are Islamic and conventional banks. For study purposes all the other diverse banks such as commercial banks, merchant banks and investment banks were ignored because of different functions and accounting procedures. Moreover EPS and cash and portfolio investment ratios were ignored as they were not given in the data.

There are many ratios that have been used by researchers to measure bank profitability but the two most often used ratios are return on assets (ROA) and return on equity (ROE) and these were also used for calculating profitability in this paper.

To evaluate the financial performance of the bank, total loan to total asset ratio was used which shows how much of bank assets are tied to loans. For banks, the higher loan ratio means less liquidity. Demirguc-Kunt and Huizinga, (1999) found a positive relationship between loans and bank profitability. Furthermore, conventional banks rely on interest-

based loans while Islamic banks rely on profit and loss sharing interest-free lending. Therefore, this ratio is also used to compare the performance of interest-based loans and interest-free lending.

To estimate the Liabilities of a bank, deposits to total liabilities ratio has been used and is considered as a liability since they measure the impact of liabilities on profitability. On examining deposits in their study Bashir and Hassan (2004) found a negative relationship with profitability.

A paired t- test was conducted to get the significant differences among the calculated results. This test is a nonparametric test that compares two paired groups. It calculates the difference between each set of pairs and analyzes the differences. It is used when each observation in one group is paired with related observation in other group.

The null hypothesis for paired sample test is H_0: $d= U_1-U_2=0$

Where d= mean value of the difference.

This null hypothesis is tested against one of the following alternative hypothesis depending on question posed

$H_0=d$

$H_0>d$

$H_0<d$

It is more powerful than a two sample procedure but only can be used when there is matched sample. Formula for paired t- test

$$t = \frac{\Sigma d}{\sqrt{\dfrac{n\left(\Sigma d^2\right)-\left(\Sigma d\right)^2}{n-1}}}$$

3.3 The variables: Based on ROA(return on asset), ROE(Return on equity), Loan to deposit ratio and Loan to asset ratio a paired t- test has been conducted to compare between conventional and Islamic banks financial performance, liquidity and profitability ratios. The variables that were used along with their STATA results are concluded in Chapter-4.

Chapter -4: The Empirical Results

ROA:

This ratio is the indicator of how profitable a company is compared to its total assets. It also illustrates on how well management is employing the company's total assets to make a profit. The higher the return, the more efficiently management is utilizing it asset base. The ROA ratio is calculated by comparing net income to average total assets and is expressed as a percentage.

Formula: Return on asset= Net income / total assets.

Table - 4.1: Comparisons of profitability between Islamic and Conventional banks:

```
. ttest  commercialbanks= islamicbanks, level(95)

Paired t test
```

Variable	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf. Interval]	
commer~s	56	.9276786	.2416848	1.808604	.4433314	1.412026
islami~s	56	-.3133929	.5185171	3.880227	-1.352524	.7257387
diff	56	1.241071	.577674	4.322916	.0833869	2.398756

```
    mean(diff) = mean(commercialbanks - islamicbanks)            t =   2.1484
Ho: mean(diff) = 0                                   degrees of freedom =       55

Ha: mean(diff) < 0              Ha: mean(diff) != 0              Ha: mean(diff) > 0
Pr(T < t) = 0.9819          Pr(|T| > |t|) = 0.0361          Pr(T > t) = 0.0181
```

ROA: From the STATA analysis the ROA for commercial banks is smaller than Islamic banks. As a result we reject the null hypothesis.

ROE:

The amount of net income returned as a percentage of shareholders equity. Return on equity measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested. ROE is expressed as a percentage.

Formula: Return on Equity = Net Income/Shareholder's Equity

Table -4.2: Comparisons of profitability between Islamic and Conventional banks:

```
Paired t test
───────────────────────────────────────────────────────────────────────
Variable  |    Obs       Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
──────────┼────────────────────────────────────────────────────────────
commer~s  |     37    10.28054   3.322657    20.21093     3.54188    17.0192
islami~s  |     37    11.08135   1.221289     7.428808    8.604463   13.55824
──────────┼────────────────────────────────────────────────────────────
    diff  |     37   -.8008109   3.301102    20.07982    -7.495757    5.894135
──────────┴────────────────────────────────────────────────────────────
    mean(diff) = mean(commercialbanks - islamicbanks)          t =  -0.2426
Ho: mean(diff) = 0                                degrees of freedom =      36

Ha: mean(diff) < 0           Ha: mean(diff) != 0            Ha: mean(diff) > 0
Pr(T < t) = 0.4049        Pr(|T| > |t|) = 0.8097          Pr(T > t) = 0.5951
```

ROE: In this result we cannot the reject the null hypothesis as there is no difference in ROE of commercial banks and Islamic banks.

Loan to deposit ratio:

A commonly used formula for assessing a bank's liquidity by dividing the banks total loans by its total deposits. This is also known as the LTD ratio and is expressed as a percentage. If the ratio is too high, it means that banks might not have enough liquidity to cover any unforeseen fund requirements; if the ratio is too low, banks may not be earning as much as they could be.

Formula: LTD (Loan to deposit ratio) = Total loan / Total deposit

Table-4.3: Comparisons of liquidity between Islamic and Conventional banks:

```
Paired t test
─────────────────────────────────────────────────────────────────────────
Variable  │    Obs      Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
──────────┼──────────────────────────────────────────────────────────────
commer~s  │     50   .4401143   .0437039    .309033    .3522881    .5279406
islami~s  │     50   .4762015   .0300678    .2126111   .4157781    .5366249
──────────┼──────────────────────────────────────────────────────────────
    diff  │     50  -.0360872   .0456339    .3226803   -.1277919   .0556176
─────────────────────────────────────────────────────────────────────────
     mean(diff) = mean(commercialbanks - islamicbanks)        t =   -0.7908
 Ho: mean(diff) = 0                             degrees of freedom =      49

 Ha: mean(diff) < 0          Ha: mean(diff) != 0          Ha: mean(diff) > 0
 Pr(T < t) = 0.2164        Pr(|T| > |t|) = 0.4329         Pr(T > t) = 0.7836
```

LDT: In this result we cannot the reject the null hypothesis. There is no difference in LDT of commercial banks and Islamic banks.

LOAN TO ASSET RATIO:

A measurement indicates that the percentage of a corporation's assets which are financed with loans and financial obligations for one or more year. The ratio offers a general measure of the financial position of a company that states its ability to meet financial requirements for outstanding loans. A year-over-year decrease in this metric would suggest the company is progressively becoming less dependent on debt to grow its business. The calculation for the long term debt to total assets ratio is:

Formula: Long term debt to total asset ratio = long term debt / total asset

Table - 4.4: Comparisons of financial position between Islamic and Conventional banks:

```
Paired t test
─────────────────────────────────────────────────────────────────────────────
Variable  │     Obs        Mean    Std. Err.    Std. Dev.   [95% Conf. Interval]
──────────┼──────────────────────────────────────────────────────────────────
commer~s  │      55    .3507399    .0318834     .2364534     .2868175    .4146622
islami~s  │      55    .4174838    .0248041     .1839524     .3677545    .4672131
──────────┼──────────────────────────────────────────────────────────────────
    diff  │      55    -.066744    .0382564      .283717    -.1434434    .0099555
─────────────────────────────────────────────────────────────────────────────
     mean(diff) = mean(commercialbanks - islamicbanks)           t =   -1.7446
Ho: mean(diff) = 0                                degrees of freedom =        54

Ha: mean(diff) < 0            Ha: mean(diff) != 0             Ha: mean(diff) > 0
Pr(T < t) = 0.0434         Pr(|T| > |t|) = 0.0867          Pr(T > t) = 0.9566
```

LAR: We reject the null hypothesis. There is difference between LAR of Commercial

banks as LAR of commercial banks is smaller than Islamic banks.

Chapter 5 Analyses of the Results:

The over all results reveal from the analysis of profitability of Islamic and conventional bank that, Islamic banks are more worthwhile/ profitable than conventional banks. The results also reveal that Islamic banks were increasing more than conventional banks except for the year 2007 where the mean probabilities of conventional banks were high. But after the event of financial crisis and recession, the profitability of Islamic banks outperforms the profitability of conventional banks.

The liquidity measures revealed that Islamic banks were more liquid than conventional banks which indicate that they are in a growing stage and obtaining benefits from unique product features.

Due to the existence of PLS (Profit loss sharing) principles, contractual agreements, and the absence of speculation, the financial performance are better than conventional banks. This has led to perhaps a surprising result compared to the mainstream financial services community, that Islamic banks are more profitable and liquid than conventional banks.

Chapter-6 Recommendations:

Islamic banking is no longer regarded as a business entity to fulfil the religious obligations of the Muslim community. More significantly it is a business that is inextricably linked to the global financial system and winning over customers whilst retaining the old ones (Wilson, 1995). Instead of considering Islamic banks as a religious financial entity, investors need to reconsider their thought on this type of institution which is growing faster than the overall banking sector in several core markets. According to Ernst & Young, 10 of the world's 25 rapid growth markets have large Muslim population which offers strong growth prospects for the Islamic banking sector.

The discussion and the analysis of in this paper might stimulate more research in this area since much more work remains for future research. Limitations of the study were availability of the data. Comprehensive financial data on Islamic banks are unavailable as Islamic banks are themselves relatively new. Hence the study has relied on financial data from other sources. The confidentiality of the data was another set back to this study as well.

There is a need for disaggregating data on the specific products and business lines which will help to generate a better understanding of the differences between Islamic and conventional banks for future studies.

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Appendix A

BANKS of Malaysia	LAR(Loan to asset to ration)	ROA (Return on asset)	ROE(Return to Equity)
Commercial Banks	0.5519844	2.39	14.8
Islamic Banks	0	-0.16	-2.26
Islamic Banks	0.0724776	0.15	1.65
Islamic Banks	0.1369067	1.69	13.93
Commercial Banks	0.3950964	1.18	9.25
Commercial Banks	0.3678115	0.71	6.03
Commercial Banks	0.1640725	1.17	11.41
Commercial Banks	0.1254019	0.79	8
Commercial Banks	0.1275268	0.13	2.19
Commercial Banks	0.1085503	1.38	23.01
Commercial Banks	0.0985732	2.42	15.95
Commercial Banks	0.055361	1.25	8.95
Commercial Banks	0.1000401	1.8	13.12
Commercial Banks	0.0046965	1.15	8.62
Commercial Banks	0.0029803	1.74	14.45
Commercial Banks	0.0032239	1.07	10.09
Commercial Banks	0.0043492	1.42	12.83
Commercial Banks	0.0040761	0.56	5.17
Commercial Banks	0.0001318	1.2	10.88
Commercial Banks	0.0001703	0.86	19.4
Commercial Banks	0	-1.1	-34.56
Commercial Banks	0.0009312	0.57	17.8
Commercial Banks	0.7922736	0.03	0.46
Commercial Banks	0.6948474	1.22	18.87
Commercial Banks	0.7219774	1.4	24.3
Commercial Banks	0.6494353	1.2	22.8
Commercial Banks	0.6370029	1.21	25.76
Commercial Banks	0.6499069	1.21	26.57
Commercial Banks	0.5855948	1.32	29.88
Commercial Banks	0.5646275	1.73	36.99
Commercial Banks	0.4973663	0.69	12.94
Commercial Banks	0.4664594	2.32	21.71
Commercial Banks	0.4764954	1.59	18.53
Commercial Banks	0.5148306	1.81	13.29
Commercial Banks	0.6068736	0.64	3.53
Commercial Banks	0.454318	1.37	3.48
Commercial Banks	0.4432937	2.68	8.91
Commercial Banks	0.4067563	1.93	9.23
Commercial Banks	0.7339854	-10.94	-88.39
Commercial Banks	0.400985	0.81	14.13
Commercial Banks	0.3205847	0.38	7.4
Commercial Banks	0.273178	0.31	5.66
Commercial Banks	0.1996099	2.89	41.45
Commercial Banks	0.1891865	1.72	19.35
Commercial Banks	0.1751665	2.41	21.65
Commercial Banks	0.5434653	1.68	10.96
Commercial Banks	0.5948757	-0.95	-5.92

Commercial Banks	0.6790742	0.37	1.13
Commercial Banks	0.5242312	1.05	18.07
Commercial Banks	0.5893151	1.43	22.56
Commercial Banks	0.2619974	0.65	10.28
Commercial Banks	0.5854807	1.79	25.6
Commercial Banks	0.573199	1.74	21.62
Commercial Banks	0.4199947	1.63	18.69
Commercial Banks	0.3537594	0.21	2.38
Commercial Banks	0.4157576	0.08	0.11
Commercial Banks	0.4414904	0.83	1.4
Commercial Banks	0.3861259	0.66	1.45
Islamic Banks	0.2926366	0.75	2.03
Islamic Banks	0.3353388	1.18	3.17
Islamic Banks	0.3858476	1.93	5.74
Islamic Banks	0.3823547	1.18	3.78
Islamic Banks	0.404294	1.29	4.35
Islamic Banks	0.4191749	0.96	14.84
Islamic Banks	0.4133359	1.12	17.08
Islamic Banks	0.2854537	1.16	15.18
Islamic Banks	0.3371734	0.31	3.66
Islamic Banks	0.3619615	0.93	10.71
Islamic Banks	0.3289622	1.11	12.26
Islamic Banks	0.2926503	0.87	10.36
Islamic Banks	0.3349482	0.93	11.25
Islamic Banks	0.3858573	1.68	18.98
Islamic Banks	0.3823547	1.54	17.9
Islamic Banks	0.3144585	2.39	27.93
Islamic Banks	0.2767034	1.34	16.31
Islamic Banks	0.4036345	1.36	17.53
Islamic Banks	0.4414325	1.06	13.7
Islamic Banks	0.011964	-0.15	-1.67
Islamic Banks	0.3374881	0.75	15.98
Islamic Banks	0.2253249	1.37	23.11
Islamic Banks	0.320065	1.39	20.55
Islamic Banks	0.0082642	1.8	26.76
Islamic Banks	0.7346646	1.01	15.04
Islamic Banks	0.5959852	0.24	3.4
Islamic Banks	0.7964182	0.86	11.16
Islamic Banks	0.7427649	0.49	8.15
Islamic Banks	0.6627697	0.64	10.35
Commercial Banks		0.93	12.16
Commercial Banks	0.3194579	0.94	12.11
Commercial Banks	0.3011244	0.91	11.39
Commercial Banks	0.2958338	-0.86	-10.41
Commercial Banks	0.326087	0.48	6
Commercial Banks	0.3095172	1.35	16.06
Commercial Banks	0.3420503	0.71	8.1
Commercial Banks	0.5812441	0.65	15.12
Islamic Banks	0.4460301	1.19	24.66
Islamic Banks	0.5125366	0.69	12.45
Islamic Banks	0.5371947	1.77	23.24
Islamic Banks	0.5711771	1.28	16.6

Commercial Banks	0.5423056	1.38	18.26
Commercial Banks	0.5436054	1.61	19.66
Commercial Banks	0.5463815	1.02	11.37
Commercial Banks	0.6473398	0.21	2.16
Commercial Banks	0.6563316	1.85	17.22
Commercial Banks	0.6301646	2.08	17.37
Commercial Banks	0.6689895	1.87	13.83
Commercial Banks	0.6377347	1.6	11.51
Commercial Banks	0.6279491	1.68	12.09
Commercial Banks	0.604095	1.71	14.77
Commercial Banks	0.6582597	1.52	17.17
Commercial Banks	0.6485313	1.38	19.24
Commercial Banks	0.5212507	1.37	22.42
Commercial Banks	0.6335439	1.42	25.96
Commercial Banks	0.6061506	1.23	23.26
Commercial Banks	0.4558492	0.86	11.74
Commercial Banks	0.5170654	1.18	15.79
Commercial Banks	0.6788545	1.2	17.08
Commercial Banks	0.6700257	0.32	4.4
Commercial Banks	0.7188641	0.72	8.73
Commercial Banks	0.7598982	0.51	5.71
Commercial Banks	0.686083	0.46	4.89
Commercial Banks	0.7359421	0.16	1.59
Commercial Banks	0.6849318	0.26	2.87
Commercial Banks	0.6580888	0.12	1.51
Commercial Banks	0.6257561	0.37	5
Commercial Banks	0.6208759	0.49	7.01
Commercial Banks	0.5746006	0.76	11.44
Commercial Banks	0.5098798	1.11	15.85
Commercial Banks	0.5649969	0.95	15.46
Commercial Banks	0.5877373	0.87	13.27
Commercial Banks	0.4359114	1.18	16.62
Commercial Banks	0.5105062	1.21	18.06
Commercial Banks	0.5389556	0.1	1.49
Commercial Banks	0.5833628	0.6	7.9
Commercial Banks	0.3753018	0.61	7.23
Commercial Banks	0.4428969	0.52	5.85
Commercial Banks	0.4895388	0.19	2.03
Commercial Banks	0.4885381	0.43	5
Commercial Banks	0.4703016	0.41	5.4
Commercial Banks	0.4999931	0.47	6.76
Commercial Banks	0.5393531	0.56	8.56
Commercial Banks	0.5770387	0.8	12.52
Commercial Banks	0.607365	1.1	16.22
Commercial Banks	0.7051963	0.85	16.41
Commercial Banks	0.6034771	0.94	16.17
Commercial Banks	0.5982055	1.07	16.09
Commercial Banks	0.5601731	0.89	10.69
Commercial Banks	0.5703413	0.23	2.47
Commercial Banks	0.6035095	0.32	4.92
Commercial Banks	0.6232761	0.58	10.08
Commercial Banks	0.6243276	0.13	2.13

Commercial Banks	0.6737846	0.42	6.47
Commercial Banks	0.6241732	0.54	7.91
Commercial Banks	0.6207527	0.2	3.03
Commercial Banks	0.6342079	0.72	10.36
Commercial Banks	0.6382388	0.89	11.41
Commercial Banks	0.6797569	0.88	11.12
Commercial Banks	0.6778546	1.17	14.75
Commercial Banks	0.6271476	0.91	16.65
Commercial Banks	0.5273044	1.16	19.79
Commercial Banks	0.5001841	1.27	20.27
Commercial Banks	0.5454323	1.34	18.96
Commercial Banks	0.5580589	0.1	1.3
Commercial Banks	0.6244188	0.82	10.51
Commercial Banks	0.6261197	1.12	13.68
Commercial Banks	0.6508154	0.6	7.62
Commercial Banks	0.6845696	1.16	14.52
Commercial Banks	0.6492174	1.32	15.29
Commercial Banks	0.6889372	1.45	17.07
Commercial Banks	0.6572099	1.37	15.94
Commercial Banks	0.6582651	1.36	16.51
Commercial Banks	0.6987891	1.35	17.42
Commercial Banks	0.6903977	1.14	15.03
Commercial Banks	0.6432455	0.26	3.27
Commercial Banks	0.5591719	0.23	4.76
Commercial Banks	0.562019	1.22	26
Commercial Banks	0.5544487	1.16	21.97
Commercial Banks	0.5683836	1.2	19.91
Commercial Banks	0.6333413	0.91	15.3
Commercial Banks	0.6835313	-2.58	-55.98
Commercial Banks	0.6254163	0.23	1.51
Commercial Banks	0.6556809	0.8	7.18
Commercial Banks	0.6352217	-0.85	-12.01
Commercial Banks	0.6912315	-6.2	-198.68
Commercial Banks	0.5023482	0.2	166.46
Commercial Banks	0.569701	1.18	16.04
Commercial Banks	0.6390468	1.34	13.8
Commercial Banks	0.6087686	1.48	13.78
Commercial Banks	0.5982192	1.15	9.35
Commercial Banks	0.5887273	0.93	6.41
Commercial Banks	0.6261287	1.34	7.88
Commercial Banks	0.5710245	0.3	2.14
Commercial Banks	0.5216675	1.02	8.78
Commercial Banks	0.5774274	1.47	11.93
Commercial Banks	0.5378999	1.39	11.77
Commercial Banks	0.5984339	1.27	10.22
Commercial Banks	0.5993769	2.4	18.08
Commercial Banks	0.5862265	1.12	18.1
Commercial Banks	0.6798467	1.13	15.04
Commercial Banks	0.6494924	0.97	11.62
Commercial Banks	0.6230912	0.34	4.12
Commercial Banks	0.6575996	1.14	13.04
Commercial Banks	0.6335831	0.57	10.6

Commercial Banks	0.6367509	0.7	11.17
Commercial Banks	0.60761	0.92	13.89
Commercial Banks	0.6232242	-0.86	-14.76
Commercial Banks	0.5861036	-5.31	-183.89
Commercial Banks	0.5488225	-4.89	229.35
Commercial Banks	0.6117197	1.33	19.49
Commercial Banks	0.5978752	1.36	15.33
Commercial Banks	0.5141335	1.78	17.67
Commercial Banks	0.4259912	0.98	8.49
Commercial Banks	0.525629	0.39	2.93
Commercial Banks	0.5594951	0.71	5.83
Commercial Banks	0.5309897	0.71	7.19
Commercial Banks	0.5925069	0.87	9.52
Commercial Banks	0.6470212	1.17	12.32
Commercial Banks	0.6559832	1.22	13.4
Commercial Banks	0.655368	1.16	12.01
Commercial Banks	0.7276406	0.99	9.68
Commercial Banks	0.6574463	1.6	16.64
Commercial Banks	0.5230058	1.58	17.14
Commercial Banks	0.586606	1.57	15.26
Commercial Banks	0.5908855	0.6	6
Commercial Banks	0.5662434	-1.13	-12.94
Commercial Banks	0.6569978	2	23.68
Commercial Banks	0.6195536	1.88	23.04
Commercial Banks	0.6810357	1.94	21.38
Commercial Banks	0.6947422	1.18	12.92
Commercial Banks	0.7099835	0.57	6.28
Commercial Banks	0.6565418	0.64	6.67
Commercial Banks	0.6397085	-0.69	-7.56
Commercial Banks	0.6488972	-4.16	-62.85
Commercial Banks	0.5620718	0.38	6.67
Commercial Banks	0.6150278	0.38	5.85
Commercial Banks	0.6296075	0.83	10.96
Commercial Banks	0.6527642	0.78	9.18
Commercial Banks	0.6555318	0.73	9.13
Commercial Banks	0.5846385	0.76	9.72
Commercial Banks	0.65966	1.02	12.69
Commercial Banks	0.6342033	0.93	11.2
Commercial Banks	0.6563511	1.9	18.88
Commercial Banks	0.5951591	1.6	15.78
Commercial Banks	0.6140445	1.76	18.3
Commercial Banks	0.5444781	5.2	44.93
Commercial Banks	0.595742	1.11	7.85
Commercial Banks	0.6155999	1.53	10.9
Commercial Banks	0.5907969	1.76	26.26
Commercial Banks	0.6685987	1.15	18.52
Commercial Banks	0.6510489	1.11	18.77
Commercial Banks	0.6968654	0.19	2.85
Commercial Banks	0.7094129	0.5	6.83
Commercial Banks	0.7345076	1.5	20.97
Commercial Banks	0.6899918	1.04	14.52
Commercial Banks	0.6914281	1.22	15.92

Commercial Banks	0.694271	1.34	15.77
Commercial Banks	0.694482	0.83	9.17
Commercial Banks	0.7017254	0.97	11.78
Commercial Banks	0.7310306	0.93	12.52
Commercial Banks	0.7100656	0.94	13.7
Commercial Banks	0.7674437	1	15.15
Commercial Banks	0.5908195	1.15	16.58
Commercial Banks	0.6780673	0.94	18.94
Commercial Banks	0.6860418	1.13	19.6
Commercial Banks	0.6525571	1.2	18.02
Commercial Banks	0.6606398	0.83	12.95
Commercial Banks	0.6418803	-2.7	-54.68
Commercial Banks	0.5941261	0.97	11.2
Commercial Banks	0.6761131	1	12.06
Commercial Banks	0.5996355	1.19	14.72
Commercial Banks	0.5080219	0.84	10.71
Commercial Banks	0.5932137	0.92	11
Commercial Banks	0.6573322	1.69	17
Commercial Banks	0.5772802	1.44	13.17
Commercial Banks	0.5280168	1.09	8.94
Commercial Banks	0.5911989	1.4	11.31
Commercial Banks	0.6177012	1.97	16.47
Commercial Banks	0.5890613	3.05	31.53
Commercial Banks	0.6358546	1.31	17.63
Commercial Banks	0.6269382	1.48	23.26
Commercial Banks	0.6449358	1.44	24.28
Commercial Banks	0.6599984	1.4	24.25
Commercial Banks	0.6535636	1.27	22
Commercial Banks	0.6075495	0.77	8.53
Commercial Banks	0.6488166	1.04	11.42
Commercial Banks	0.6616075	0.22	3.23
Commercial Banks	0.6668111	0.45	6.54
Commercial Banks	0.5987025	1.31	13.8
Commercial Banks	0.5740576	0.7	8.29
Commercial Banks	0.5671724	0.83	8.88
Commercial Banks	0.543514	1.13	12.91
Commercial Banks	0.5172578	0.55	7.19
Commercial Banks	0.4682004	0.16	2.08
Commercial Banks	0.4439614	0.99	11.81
Commercial Banks	0.4722879	0.25	5.7
Commercial Banks	0.4431982	0.94	20.43
Commercial Banks	0.4458232	0.29	5.77
Commercial Banks	0.4382044	1.43	18.41
Commercial Banks	0.397799	1.05	15.79
Commercial Banks	0.5271176	0.89	13.38
Commercial Banks	0.5741707	0.99	15.95
Commercial Banks	0.4978795	0.63	10.28
Commercial Banks	0.5659888	0.35	5.26
Commercial Banks	0.2986034	0.83	11.46
Commercial Banks	0.3712522	0.79	10.04
Commercial Banks	0.4212572	0.86	9.71
Commercial Banks	0.3774198	0.9	10.03

Commercial Banks	0.3807265	0.3	2.86
Commercial Banks	0.4197896	-0.29	-2.76
Commercial Banks	0.4498916	1.51	14.9
Commercial Banks	0.4845118	1.66	16.21
Commercial Banks	0.4847681	0.94	10.42
Commercial Banks	0.4704109	0.95	11.62
Commercial Banks	0.6055827	1.06	12.66
Commercial Banks	0.6010379	0.88	9.85
Commercial Banks	0.5652275	0.82	9.26
Commercial Banks	0.5667009	0.59	7.01
Commercial Banks	0.5589377	0.56	6.79
Commercial Banks	0.6114219	0.34	4.16
Commercial Banks	0.5344784	0.08	0.11
Commercial Banks	0.6017607	0.44	2.03
Commercial Banks	0.4174649	0.58	4.72
Commercial Banks	0.7007275	0.71	4.46
Commercial Banks	0.5604087	0.71	12.43
Commercial Banks	0.5443388	1.37	16.92
Commercial Banks	0.6199286	1.47	10.69
Commercial Banks	0.6258955	4.17	39.9
Commercial Banks	0.6084008	1.92	17.99
Commercial Banks	0.6005869	1.12	18.71
Commercial Banks	0.5995892	1.62	24.66
Commercial Banks	0.4552087	0.25	3.69
Commercial Banks	0.5214524	0.52	8.08
Commercial Banks	0.5616908	-0.75	-13.33
Commercial Banks	0.6459269	0.93	14.76
Commercial Banks	0.706662	0.87	13.77
Commercial Banks	0.7074008	1.19	19.86
Commercial Banks	0.6468259	1.61	24.57
Commercial Banks	0.6640048	0.69	9.47
Commercial Banks	0.6729448	0.5	7.79
Commercial Banks	0.6264824	-0.98	-17.74
Commercial Banks	0.5777155	0.7	12.14
Commercial Banks	0.6855572	0.8	13.93
Commercial Banks	0.6948604	0.15	1.33
Commercial Banks	0.7211808	0.25	1.97
Commercial Banks	0.6662917	0.64	5.09
Commercial Banks	0.6875537	0.09	0.6
Commercial Banks	0.6552813	-0.6	-4.28
Commercial Banks	0.7033616	0.72	5.31
Commercial Banks	0.6644576	0.71	4.9
Commercial Banks	0.6677436	0.38	3.5
Commercial Banks	0.7022731	0.54	6.26
Commercial Banks	0.7242199	1.48	16.45
Commercial Banks	0.6900445	4.02	43.88
Commercial Banks	0.6821741	0.83	9.6
Commercial Banks	0.6803294	0.59	6.69
Commercial Banks		0.5	5.36
Commercial Banks	0.2703008	0.44	4.86
Commercial Banks	0.509201	1.97	23.3
Commercial Banks	0.6453424	1.87	22.9

Commercial Banks	0.1507069	1.94	21.39
Commercial Banks	0.2427814	1.2	13.07
Commercial Banks	0.1514959	0.55	6.03
Islamic Banks	0.6131308	0.62	6.45
Islamic Banks	0.5900905	-0.67	-7.36
Islamic Banks	0.5223992	-4.16	-63.02
Islamic Banks	0.4183877	0.35	6.03
Commercial Banks	0.4831683	0.38	5.84
Commercial Banks	0.4323381	0.85	11.34
Commercial Banks	0.8786213	0.76	8.98
Commercial Banks	0.7760776	0.62	7.38
Commercial Banks	0.7664055	0.69	7.81
Commercial Banks	0.7206506	1.11	12.03
Commercial Banks	0.7005163	1.02	10.95
Commercial Banks	0.6773103	0.91	17.47
Commercial Banks	0.672736	1.05	17.98
Commercial Banks	0.8792982	1.21	18.02
Commercial Banks	0.8862493	0.85	9.29
Commercial Banks	0.8973321	0.29	2.74
Commercial Banks	0.821731	0.32	4.6
Commercial Banks	0.6922765	0.72	11.87
Commercial Banks	0.7215315	0.28	4.36
Commercial Banks	0.6626881	0.58	8.62
Commercial Banks	0.3959835	0.65	9.23
Commercial Banks	0.6000354	0.37	5.21
Commercial Banks	0.627028	0.81	11.02
Commercial Banks	0.6407575	1.03	12.85
Commercial Banks	0.5839399	1.2	15.01
Commercial Banks	0.6281812	0.67	8.52
Commercial Banks	0.5801145	1.02	12.46
Commercial Banks	0.6072552	0.21	3.16
Commercial Banks	0.5674671	2.34	33.72
Commercial Banks	0.5815683	2.45	30.04
Commercial Banks	0.700284	1.3	14.34
Commercial Banks	0.7212158	1.28	12.32
Commercial Banks	0.6695644	2.32	18.13
Commercial Banks	0.660219	1.93	16.1
Commercial Banks	0.6660067	1.2	11.05
Commercial Banks	0.5902807	1.98	21.48
Commercial Banks	0.6777592	1.54	21.36
Commercial Banks	0.6855481	1.29	19.24
Commercial Banks	0.6522501	1.16	16.93
Commercial Banks	0.6603964	1.29	18.08
Commercial Banks	0.641906	1.42	19.02
Commercial Banks	0.5942249	1	13.65
Commercial Banks	0.6735907	0.75	15.96
Commercial Banks	0.5977849	1.37	23.09
Commercial Banks	0.5061454	1.39	20.51
Commercial Banks	0.5923954	1.81	26.79
Commercial Banks	0.6570975	0.99	14.77
Commercial Banks	0.6014553	0.34	4.25
Commercial Banks	0.5756114	0.88	10.19

Commercial Banks	0.6149943	0.74	10.54
Commercial Banks	0.6299587	0.82	10.61
Commercial Banks	0.6981707	1.01	10.92
Commercial Banks	0.6350019	0.97	10.65
Commercial Banks	0.6767735	0.89	10.26
Commercial Banks	0.6646447	-0.8	-9.11
Commercial Banks	0.6835689	0.49	5.74
Commercial Banks	0.492983	1.52	17.03
Commercial Banks	0.5642346	0.87	9.23
Commercial Banks	0.6526718	0.98	17.36
Commercial Banks	0.6301218	1.12	16.09
Commercial Banks	0.6397364	0.91	11.66
Commercial Banks	0.6363186	0.32	4.12
Commercial Banks	0.6253675	0.96	11.9
Commercial Banks	0.5781884	0.63	7.53
Commercial Banks	0.520074	0.74	8.01
Commercial Banks	0.5690546	1.18	13.45
Commercial Banks	0.5775943	0.63	8.28
Commercial Banks	0.6900712	0.14	1.86
Commercial Banks	0.6716877	0.72	8.67
Commercial Banks	0.6147326	1.41	16.11
Commercial Banks	0.5957792	1.2	13.81
Commercial Banks	0.6308298	1.33	16.42
Commercial Banks	0.6513959	0.99	12.15
Commercial Banks	0.5868359	0.58	6.42
Commercial Banks	0.5811778	1.05	12.61
Commercial Banks	0.6566154	0.22	1.46
Commercial Banks	0.5824389	0.79	6.89
Commercial Banks	0.5608349	-0.84	-11.53
Commercial Banks	0.5538989	-5.09	-130.98
Commercial Banks	0.6316088	0.24	16.81
Commercial Banks	0.694995	0.68	7.78
Commercial Banks	0.6665893	1.46	17.88
Commercial Banks	0.456416	1.57	21.23
Commercial Banks	0.5175815	1.23	16.99
Commercial Banks	0.6791329	0.47	5.78
Commercial Banks	0.6703395	1.86	20.66
Commercial Banks	0.7190984	1.4	15.91
Commercial Banks	0.7731586	1.06	12.44
Commercial Banks	0.686116	0.88	10.03
Commercial Banks	0.7346213	0.88	11.11
Commercial Banks	0.6682585	1.03	16.3
Commercial Banks	0.6490828	1.42	22.38
Commercial Banks	0.6203644	1.22	19.12
Commercial Banks	0.647285	1.25	21.06
Commercial Banks	0.5954462	1.4	21.68
Commercial Banks	0.5349475	0.64	6.02
Commercial Banks	0.5148229	1.91	19.47
Commercial Banks	0.5714231	2	19.7
Commercial Banks	0.5685282	1.38	13.69
Commercial Banks	0.6233793	0.54	5.69
Commercial Banks	0.6361901	1.73	15.81

Commercial Banks	0.6593346	2.55	19.52
Commercial Banks	0.6637764	0.49	10.58
Islamic Banks	0.5910498	1.81	29.79
Islamic Banks	0.4427843	1.89	24.21
Islamic Banks	0.384664	2.37	29.62
Islamic Banks	0.3514888	1.03	13.93
Commercial Banks	0.5497651	1.99	28.96
Commercial Banks	0.6240155	1.64	25.51
Commercial Banks	0.6296701	0.03	0.49
Commercial Banks	0.6125172	1.22	18.87
Commercial Banks	0.605258	1.4	24.3
Commercial Banks	0.6093768	1.2	22.81
Commercial Banks	0.6875152	1.21	25.76
Commercial Banks	0.6878089	1.21	26.57
Commercial Banks	0.6230894	1.32	29.88
Commercial Banks	0.6668974	1.67	37.39
Commercial Banks	0.7065955	0.68	13.38
Commercial Banks	0.6178176	1.82	16.09
Commercial Banks	0.643592	1.15	12.06
Commercial Banks	0.6359836	1.11	13.39
Commercial Banks	0.6392147	0.46	4.78
Commercial Banks	0.7230055	0.82	7.72
Commercial Banks	0.6594722	1.32	13.47
Commercial Banks	0.681451	2.37	24.41
Commercial Banks	0.6726286	1.06	10.3
Commercial Banks	0.6812395	2.43	21.81
Commercial Banks	0.6619728	1.13	10.3
Commercial Banks	0.7339495	2.33	26.68
Commercial Banks	0.6874191	0.89	11.51
Commercial Banks	0.651019	0.9	12.39
Commercial Banks	0.6705083	1.02	14.79
Commercial Banks	0.6724079	0.94	12.88
Commercial Banks	0.6539019	0.68	7.64
Commercial Banks	0.6913447	1.5	18.15
Commercial Banks	0.6794875	1.58	20.97
Commercial Banks	0.6286744	1.22	16.79
Commercial Banks	0.6307982	0.29	3.61
Commercial Banks	0.6287444	1.21	13.47
Commercial Banks	0.7373573	1.41	15.84
Commercial Banks	0.7574582	1.07	12.42
Commercial Banks	0.7367514	0.88	10
Commercial Banks	0.6829436	0.86	10.79
Commercial Banks	0.8361478	1.02	16.05
Commercial Banks	0.8499281	1.42	22.24
Commercial Banks	0.8918356	1.22	19.02
Islamic Banks		1.25	20.95
Islamic Banks	0.7220041	1.33	21.33
Commercial Banks	0.5258486	0.69	6.87
Commercial Banks	0.634941	1.81	19.61
Commercial Banks	0.6736533	1.9	19.93
Commercial Banks	0.6414194	1.27	13.25
Commercial Banks	0.6964313	0.58	6.05

Commercial Banks	0.6667168	1.75	15.37
Commercial Banks	0.6282535	2.37	17.65
Commercial Banks	0.6494353	-0.44	-2
Commercial Banks	0.6370029	0.59	3.52
Commercial Banks	0.6499097	0.26	2.42
Commercial Banks	0.5855968	-0.78	-10.19
Commercial Banks	0.5646292	-0.18	-2.92
Commercial Banks	0.4973676	2.17	29.84
Commercial Banks	0.4664594	0.4	5.63
Commercial Banks	0.4671222	1.91	27.45
Commercial Banks	0.5393118	2.24	29.64
Commercial Banks	0.5418412	1.48	17.19
Commercial Banks	0.6227409	1.56	19.11
Commercial Banks	0.6338324	2.05	25.6
Commercial Banks	0.6737821	1.05	14.71
Commercial Banks	0.6082731	-1.14	-19.29
Commercial Banks	0.5442824	-2.08	-39.78
Commercial Banks	0.4817724	1.79	32.62
Commercial Banks	0.4728181	1.66	26.44
Commercial Banks	0.4702237	1.32	20.01
Commercial Banks	0.422688	1.43	23.18
Commercial Banks	0.4428257	1.49	24.79
Commercial Banks	0.4474338	1.5	24.23
Commercial Banks	0.4226936	1.77	28.46
Commercial Banks	0.4329888	1.65	27.11
Commercial Banks	0.4373958	1.79	27.94
Commercial Banks	0.6830712	1.17	17.18
Commercial Banks	0.6713332	1.42	17.39
Commercial Banks	0.6869522	1.52	19.33
Commercial Banks	0.6533791	1.96	25.06
Commercial Banks	0.7389748	1	14.15
Commercial Banks	0.6874889	-1.39	-23.48
Commercial Banks	0.6509675	-2.08	-39.78
Commercial Banks	0.6704625	1.79	32.62
Commercial Banks	0.6723715	1.66	26.44
Commercial Banks	0.653877	1.32	20.01
Commercial Banks	0.6915191	1.43	23.18
Commercial Banks	0.6794694	1.49	24.79
Commercial Banks	0.628711	1.5	24.23
Commercial Banks	0.6308284	1.77	28.46
Commercial Banks	0.6303024	1.65	27.11
Commercial Banks	0.748883	1.78	28.56
Commercial Banks	0.7668482	1.21	18.55
Commercial Banks	0.7549124	0.94	16.08
Commercial Banks	0.7209124	0.8	13.87
Commercial Banks	0.8423138	0.89	15.37
Commercial Banks	0.8567947	0.65	6.35
Commercial Banks	0.8981547	-5.7	-50.16
Commercial Banks	0.1629976	2.12	20.85
Commercial Banks	0.4302131	1.92	15.97
Commercial Banks	0.5569897	0.25	2.33
Commercial Banks	0.5368647	1.18	11.47

Commercial Banks	0.5360918	0.22	2.93
Commercial Banks	0.5139595	1.09	14.71
Commercial Banks	0.6463184	1.25	17.7
Commercial Banks	0.594277	0.01	0.11
Commercial Banks	0.5176987	-1.35	-16.44
Islamic Banks		3.67	33.53
Islamic Banks	0.681969	1.85	15.95
Islamic Banks	0.7317073	1.69	16.46
Islamic Banks	0.6959656	1.56	15.94
Commercial Banks	0.6829559	-1.37	-16.89
Commercial Banks	0.6703432	2.14	27.03
Commercial Banks	0.6771313	1.59	18.22
Commercial Banks	0.5743831	1.44	16.41
Commercial Banks	0.6444618	1.34	16.45
Commercial Banks	0.532586	1.32	15.15
Commercial Banks	0.4783424	1.44	36.33
Commercial Banks	0.5942984	1.2	31.19
Commercial Banks	0.6435375	0.47	13.63
Commercial Banks	0.5976866	0.42	12.73
Commercial Banks	0.5643871	0.78	22.6
Commercial Banks	0.5877072	2.81	59.24
Commercial Banks	0.5937131	1.9	28.01
Commercial Banks	0.5402613	0.96	12.09
Commercial Banks	0.5402546	0.51	6.93
Commercial Banks	0.4825005	0.66	10.38
Commercial Banks	0.6827613	0.61	10.28
Commercial Banks	0.6775946	0.01	0.14
Commercial Banks	0.6865073	0.79	7.19
Commercial Banks	0.5811	1.69	15.57
Commercial Banks	0.6444618	2.02	17.75
Commercial Banks	0.5325883	2.38	19.73
Commercial Banks	0.4783443	5.08	33.33
Commercial Banks	0.5942984	4.17	22.42
Commercial Banks	0.6435375	2.12	10.55
Commercial Banks	0.5976866	1.64	7.4
Commercial Banks	0.5643871	1.7	7.17
Commercial Banks	0.5877072	2.08	8.24
Commercial Banks	0.5937146	0.74	3.36
Commercial Banks	0.5402645	1.38	7.3
Commercial Banks	0.5626918	2.45	14.3
Commercial Banks	0.5191368	1.36	8.55
Commercial Banks	0.5175667	2.15	13.33
Commercial Banks	0.5865965	0.94	27.96
Commercial Banks	0.5400971	0.69	17.84
Commercial Banks	0.6171377	0.51	12.95
Commercial Banks	0.5897941	0.1	2.25
Commercial Banks	0.6583425	0.35	6.77
Commercial Banks	0.6435561	3.05	48.19
Commercial Banks	0.5567495	2.56	31.81
Commercial Banks	0.6388153	1.56	5.01
Commercial Banks	0.4708418	0.38	1.83
Commercial Banks	0.499828	0.94	5.79

Commercial Banks	0.5582148	2.5	22.72
Commercial Banks	0.4304772	2.83	28.14
Commercial Banks	0.4413043	2.01	21.62
Commercial Banks	0.3690789	1.81	20.28
Commercial Banks	0.2601807	2.43	29.05
Commercial Banks	0.1850194	1.83	24.66
Commercial Banks	0.1043005	1.56	24.54
Commercial Banks	0.0835599	1.56	23.81
Commercial Banks	0.0636607	1.25	19.13
Commercial Banks	0.1106177	1.07	17.81
Commercial Banks	0.0581118	1.35	28.06
Commercial Banks	0.0583244	1.61	37.08
Commercial Banks	0.0895803	1.41	26.55
Commercial Banks		1.68	26.31
Commercial Banks		1.59	17.75
Commercial Banks		1.36	15.29
Commercial Banks		1.51	17.38
Commercial Banks		3.61	34.7
Commercial Banks		0.95	7.48
Commercial Banks	0.0000831	1.42	10.43
Commercial Banks	0.0000863	0.52	8.24
Commercial Banks		0.78	11.51
Commercial Banks		1.74	22.23
Commercial Banks		2.58	22.72
Commercial Banks		1	6.36
Commercial Banks	0.7925475	0.8	5.45
Commercial Banks	0.7765831	1.4	7.74
Commercial Banks	0.7109952	0.44	1.54
Commercial Banks	0.6470666	1.09	3.1
Commercial Banks	0.6974201	0.88	3.12
Commercial Banks	0.6599256	1.27	5.39
Commercial Banks	0.6041756	1.68	6.84
Commercial Banks	0.6099498	1.92	6.94
Commercial Banks	0.6614011	1.54	6.37
Commercial Banks	0.5498292	0.57	12.24
Commercial Banks	0.4672492	0.77	13.98
Commercial Banks	0.4590949	0.97	16.22
Commercial Banks	0.4033278	-0.73	-13.75
Commercial Banks	0.4025869	-5	-184.5
Commercial Banks	0.4334686	-4.66	229.35
Commercial Banks	0.0000847	2.08	29.82
Commercial Banks	0.0000633	2.42	30.53
Commercial Banks	0	1.3	14.54
Commercial Banks		1.17	11.34
Commercial Banks		2.33	18.28
Commercial Banks		1.98	16.56
Commercial Banks		1.2	11.08
Commercial Banks	0.7424523	1.81	19.54
Commercial Banks	0.4564961	1.6	22.02
Commercial Banks	0.6494223	1.39	20.81
Commercial Banks	0.6258696	1.19	17.45
Commercial Banks	0.520463	1.33	18.4

Commercial Banks	0.5378212	1.42	18.75
Commercial Banks	0.5513168	1	13.57
Commercial Banks	0.5977467	1.54	11.11
Commercial Banks	0.6002765	1.23	10.25
Commercial Banks	0.6492066	1.63	14.03
Commercial Banks	0.7541242	2.01	14.82
Commercial Banks	0.6139989	2.57	19.9
Commercial Banks	0.5235865	1.36	11.59
Commercial Banks	0.5142536	1.54	13.18
Commercial Banks	0.5320089	0.35	2.68
Commercial Banks	0.4482056	1.17	8.49
Commercial Banks	0.4302191	1.12	8.06
Commercial Banks	0.6103022	1.01	7.18
Commercial Banks	0.6440471	1.05	7.28
Commercial Banks	0.6428443	0.46	3.26
Commercial Banks	0.6540412	0.55	4.68
Commercial Banks	0.6419949	1.54	11.11
Commercial Banks	0.6502771	1.23	10.25
Commercial Banks	0.4370571	1.63	14.03
Commercial Banks	0.3985578	2.01	14.82
Commercial Banks	0.4982699	2.57	19.9
Commercial Banks	0.4793661	1.36	11.59
Commercial Banks	0.2125	1.54	13.18
Commercial Banks	0.2099515	0.35	2.68
Commercial Banks	0.23091	1.17	8.49
Commercial Banks	0.2579752	1.12	8.06
Commercial Banks	0.2297312	1.01	7.18
Commercial Banks	0.112373	1.05	7.28
Commercial Banks	0.1024191	0.46	3.26
Commercial Banks	0.1018613	0.55	4.68
Commercial Banks	0.1006949	2.74	13.76
Commercial Banks	0.074607	3.11	16.46
Commercial Banks	0.6093192	4.32	23.07
Commercial Banks	0.672653	4.11	20.42
Commercial Banks	0.6467863	7.2	39.07
Commercial Banks	0.6670526	4.26	22.15
Commercial Banks	0.6101451	1.84	8.08
Commercial Banks	0.6140395	1.29	4.63
Commercial Banks	0.6810114	1.6	5.63
Commercial Banks	0.6239172	1.4	5.2
Commercial Banks	0.6006334	1.45	6.43
Commercial Banks	0.6326947	2.4	13.68
Commercial Banks	0.6518748	1.61	11.1
Commercial Banks	0.5870868	2.3	15.65
Commercial Banks	0.5813861	2.5	22.72
Commercial Banks	0.6566105	2.83	28.14
Commercial Banks	0.5822224	2.01	21.62
Commercial Banks	0.560466	1.81	20.28
Commercial Banks	0.5534317	2.43	29.05
Commercial Banks	0.6308742	1.83	24.66
Commercial Banks	0.694254	1.56	24.54
Commercial Banks	0.6659184	1.56	23.81

Commercial Banks	0.7423214	1.25	19.13
Commercial Banks	0.732291	1.07	17.81
Commercial Banks	0.68424	1.35	28.06
Commercial Banks	0.8238021	1.61	37.08
Commercial Banks	0.8012363	1.41	26.55
Commercial Banks	0.6424536	1.68	26.31
Commercial Banks	0.5934442	0.8	19.01
Commercial Banks	0.65732	1.06	17.98
Commercial Banks	0.5564416	-0.91	-15.11
Commercial Banks	0.4927324	-0.81	-13.98
Commercial Banks	0.4971963	1.39	13.34
Commercial Banks	0.4733347	1.2	13.74
Commercial Banks	0.5717033	0.62	7.08
Commercial Banks	0.6936987	3.55	35.19
Commercial Banks	0.7423214	1.69	16.96
Commercial Banks	0.732291	1.33	14.24
Commercial Banks	0.68424	1.34	14.34
Commercial Banks	0.8238021	0.51	5.43
Commercial Banks	0.8012363	-0.65	-7.51
Commercial Banks	0.6424536	0.63	6.54
Commercial Banks	0.5934442	1.59	16.02
Commercial Banks	0.65732	-0.18	-2.24
Commercial Banks	0.5564416	0.15	1.65
Commercial Banks	0.4927324	1.69	13.93
Commercial Banks	0.4971963	1.18	9.25
Commercial Banks	0.4733347	0.71	6.03
Commercial Banks	0.5717033	1.17	11.41
Commercial Banks	0.6936987	0.79	8
Commercial Banks	0.468385	0.16	2.69
Commercial Banks	0.310166	1.41	23.32
Commercial Banks	0.2915033	1.12	18.87
Commercial Banks	0.2389372	1.2	20.68
Commercial Banks	0.1377032	0.05	0.8
Commercial Banks	0.1009523	0.22	3.98
Commercial Banks	0.1163631	1.69	25.81
Commercial Banks	0.1775423	1.76	23.24
Commercial Banks	0.0943305	1.91	24.34
Commercial Banks	0.0893903	1.74	22.86
Commercial Banks	0.0371532	2.14	16.68
Commercial Banks	0.01378	1.87	12.06
Commercial Banks	0.051823	-0.94	-5.81
Commercial Banks	0.0418159	0.37	1.1
Commercial Banks	0.6258696	-1.75	-17.91
Commercial Banks	0.520463	3.67	33.53
Commercial Banks	0.5378212	1.93	15.95
Commercial Banks	0.5513168	1.75	16.46
Commercial Banks	0.5977467	1.56	15.94
Commercial Banks	0.6002765	-1.37	-16.89
Commercial Banks	0.6492066	2.14	27.03
Commercial Banks	0.7541242	1.59	18.22
Commercial Banks	0.6139989	1.44	16.41
Commercial Banks	0.5235865	1.34	16.45

Commercial Banks	0.5142536	1.32	15.15
Commercial Banks	0.5320089	-1.24	-1.28
Commercial Banks	0.4482067	-0.47	-1.09
Commercial Banks	0.4302191	-1.03	-4.71
Commercial Banks	0.5500726	0.05	1.02
Commercial Banks	0.5152138	-0.34	-6.18
Commercial Banks	0.6310263	0.35	6.32
Commercial Banks	0.7604228	0.62	11.94
Commercial Banks	0.7421565	0.36	6.8
Commercial Banks	0.7647121	0.22	4.2
Commercial Banks	0.7711105	0.54	8.19
Commercial Banks	0.7405308	0.38	4.42
Commercial Banks	0.784761	0.25	3.47
Commercial Banks	0.7848364	0.34	5.59
Commercial Banks	0.7814688	0.16	2.83
Commercial Banks	0.6247749	0.05	1.02
Commercial Banks	0.6812171	-0.37	-6.67
Commercial Banks	0.6920429	0.35	6.26
Commercial Banks	0.5775719	0.62	11.94
Commercial Banks	0.3932081	0.75	14.89
Commercial Banks	0.3678115	0.78	18.23
Commercial Banks	0.1640725	0.45	11.24
Commercial Banks	0.1254019	0.52	9.93
Commercial Banks	0.1275268	-2.7	-16.7
Commercial Banks	0.1085503	0.22	1.73
Commercial Banks	0.0985732	0.94	10.17
Commercial Banks	0.0553492	0.53	10.34
Commercial Banks	0.0999664	-25.78	-33.4
Commercial Banks	0.6329187	-6.84	-29.65
Commercial Banks	0.6669394	-1.63	-14.99
Commercial Banks	0.6256586	0.23	2.83
Commercial Banks	0.5658861	0.54	7.01
Commercial Banks	0.669401	0.25	3.67
Commercial Banks	0.6305083	0.59	8.01
Commercial Banks	0.5712069	1.1	14.2
Commercial Banks	0.5604283	1.43	17.01
Islamic Banks	0.3927549	0.97	10.85
Islamic Banks	0.3278984	0.67	7.96
Commercial Banks	0.694393	0.9	9.95
Commercial Banks	0.5317279	0.9	10.15
Commercial Banks	0.5971601	0.86	10.59
Commercial Banks	0.6018619	-8.63	508.23
Commercial Banks	0.4413043	1.34	56.52
Commercial Banks	0.3690789	1.83	32.9
Commercial Banks	0.2828749	0.63	11.36
Commercial Banks	0.1850194	-0.23	-0.23
Commercial Banks	0.1043005	0.57	8.53
Commercial Banks	0.0835599		
Commercial Banks	0.0636607	2	16
Commercial Banks	0.1106342	1.11	9.12
Commercial Banks	0.0581118	1.25	11.52
Commercial Banks	0.0583162	1.48	13.81

Commercial Banks	0.0895803	2.53	24.74
Islamic Banks	0.3858476	0.32	6.17
Islamic Banks	0.3827413	0.61	11.69
Islamic Banks	0.4044945	0.35	6.62
Islamic Banks	0.4186171	0.23	4.45
Islamic Banks	0.4130114	0.54	8.17

Appendix B

Total deposit.	Total loan	Total asset	LDR(Loan to deposit ratio)
5573.6	4482.5	8120.7	0.8042378
0	0	361.9	
897.5	90.8	1252.8	0.1011699
1492.8	249.8	1824.6	0.1673365
2570.5	1168.3	2957	0.454503
2224.4	1009.9	2745.7	0.4540101
2241.6	450.1	2743.3	0.2007941
2439.4	370.5	2954.5	0.1518816
2693.3	427.1	3349.1	0.1585787
3358.1	443.2	4082.9	0.1319794
3048.9	430.4	4366.3	0.1411657
8849.6	600.6	10848.8	0.0678675
2801.7	624	6237.5	0.2227219
2542.7	14.3	3044.8	0.0056239
3300.1	11.4	3825.1	0.0034544
3255	12.3	3815.3	0.0037788
4017.6	20.1	4621.5	0.005003
4753.6	22.1	5421.8	0.0046491
6128.4	0.9	6826.8	0.0001469
5078.9	1	5871.3	0.0001969
7354.1	0	8128.3	0
5558.2	6	6443	0.0010795
246.405	214.23	270.399	0.8694223
344.607	250.653	360.731	0.727359
386.726	297.163	411.596	0.768407
17172.5	13110.8	20188	0.7634765
18544.1	13550.9	21272.9	0.7307392
20518.9	15394.8	23687.7	0.7502741
25571	17452.6	29803.2	0.6825153
29955.9	19710.3	34908.5	0.6579772
33547.1	19461.1	39128.3	0.5801127
35460.9	19551.6	41914.9	0.5513566
31832.5	19211.2	40317.7	0.6035089
34869.9	21146	41073.7	0.6064256
790.1	676.3	1114.4	0.8559676
1291	889.6	1958.1	0.6890782
2545.5	1635	3688.3	0.64231
2298.6	1330.5	3271	0.5788305
122.8	150.1	204.5	1.222313
553.3	309.4	771.6	0.5591903

1471.1	594.3	1853.8	0.4039834
1730	518	1896.2	0.299422
2783.3	593.5	2973.3	0.2132361
2755.9	560.2	2961.1	0.203273
2758	520.7	2972.6	0.1887962
2712.9	1639.2	3016.2	0.6042243
2903.3	1938.7	3259	0.6677573
2934.8	2479.3	3651	0.8447935
4040.4	2729.2	5206.1	0.6754777
4374.1	3297.1	5594.8	0.7537779
2504.9	1468.6	5605.4	0.5862909
1559.1	970.2	1657.1	0.6222821
1645	1012.9	1767.1	0.6157447
2135.6	954.9	2273.6	0.4471343
1948.7	752.8	2128	0.3863088
2342	1063.3	2557.5	0.4540137
2321.6	1137.5	2576.5	0.4899638
1992.1	841.6	2179.6	0.4224688
6846.5	2140.9	7315.9	0.3126999
7459	2703.3	8061.4	0.3624212
9606.4	3962.5	10269.6	0.4124854
12295.6	5148.1	13464.2	0.4186945
12408.2	5585.2	13814.7	0.4501217
12715.1	6042.7	14415.7	0.4752381
13833.1	6578.2	15914.9	0.4755406
3160.7	1001.6	3508.8	0.3168918
4762.1	1726.8	5121.4	0.3626131
5008.7	1968.6	5438.7	0.3930361
6133.3	2159.9	6565.8	0.3521595
6846.5	2141	7315.9	0.3127145
7459	2703.3	8070.8	0.3624212
9606.3	3962.6	10269.6	0.4125001
12295.4	5148.1	13464.2	0.4187013
3123.8	1227.3	3902.9	0.3928869
5787.5	1734.1	6267	0.2996285
5513.3	2449.9	6069.6	0.4443618
5865.8	2880.7	6525.8	0.491101
432.59	6.236	521.232	0.0144155
4136.548	1618.472	4795.642	0.3912615
8097.272	2025.452	8989.03	0.25014
17558.162	5970.502	18654.029	0.3400414
41.862	2.408	291.376	0.0575223
2073.832	1866.779	2540.995	0.9001592
4367.141	2860.348	4799.361	0.6549703
4623.132	4089.622	5135.018	0.8845999
5464.079	4553.237	6130.118	0.8333036
6369.039	4702.496	7095.219	0.7383368
118.7		505.1	
190.1	165	516.5	0.8679642
513	257.1	853.8	0.5011696
522.5	253.5	856.9	0.4851675
499.5	286.5	878.6	0.5735736

717.6	335.3	1083.3	0.467252
681.5	376.7	1101.3	0.5527513
898.1	741.9	1276.4	0.8260773
6605.8	3400.4	7623.7	0.5147598
7125.3	4147.6	8092.3	0.5820948
7227.7	4514.8	8404.4	0.6246523
8229	5351.7	9369.6	0.6503463
49987.9	32543	60008.6	0.6510175
53945.6	36374	66912.5	0.6742718
66524.8	45297.7	82904.9	0.6809145
69902.6	56277.2	86936.1	0.8050802
71475.7	57489.4	87592	0.8043209
79885.8	61003.9	96806.3	0.7636389
93352.2	74574.6	111473.5	0.7988521
96978.2	75007.3	117615.2	0.7734449
104701.7	80160.4	127654.3	0.7656074
117384.8	86718.5	143551.1	0.7387541
145572.1	115481.6	175434.7	0.7932949
164392.6	127848.4	197135.3	0.7777017
175516.3	118557	227447.2	0.6754757
180752.7	138855.4	219172.5	0.7682065
193574.8	144431.8	238277.1	0.7461292
2383.7	1293.7	2838	0.5427277
2603.5	1651.3	3193.6	0.6342616
3885.7	3238	4769.8	0.8333119
5369.5	4348.4	6489.9	0.8098333
6832.7	6009.2	8359.3	0.8794767
7829.3	6930.5	9120.3	0.8852005
7900	6400.4	9328.9	0.8101772
14916.2	12948.9	17595	0.8681099
15721.1	12989.8	18965.1	0.8262653
16699.9	13249.5	20133.3	0.7933879
19060.9	14556.4	23262.1	0.7636786
18925.5	14631.5	23565.9	0.7731103
19622.5	13549.6	23580.9	0.6905134
21662.1	13433.6	26346.6	0.620143
22873.2	15619	27644.4	0.6828516
27421.1	18718.2	31847.9	0.6826203
12955.1	7103.7	16296.2	0.5483323
13795	8496.1	16642.5	0.6158825
13925.8	9173.4	17020.7	0.6587342
22152.8	16310.3	27959.1	0.7362636
23810.7	10508.9	28001.2	0.441352
27908.7	14681.9	33149.7	0.526069
29776.6	17700.4	36157.3	0.5944399
35286.9	20461	41882.1	0.5798469
35653.6	19730	41951.8	0.5533803
36643.9	21618.5	43237.6	0.5899618
37107.9	24393.7	45227.7	0.6573722
42945.6	30713	53225.2	0.7151605
50499.6	37575	61865.6	0.7440653
52422.1	45539.6	64577.2	0.86871

78463.2	55718.8	92329.6	0.7101265
91810.3	66812.8	111688.7	0.7277266
117431.2	82787.7	147789.5	0.704989
149202.7	99327.9	174155.2	0.6657245
167869.5	118386.3	196163.1	0.7052281
193505.9	135335.8	217136.2	0.6993884
13272.4	9957.9	15949.8	0.7502713
13920.4	11826.2	17551.9	0.8495589
18667.9	14211.3	22768.2	0.7612693
29373.6	22593.6	36397.1	0.7691805
40014.4	31364.5	49454.6	0.7838303
38854.9	31229.6	48930.9	0.8037494
38507.4	33303.4	48993.1	0.8648571
38994.5	32875	48498.6	0.8430676
49717.8	38109	60765.6	0.7665061
59015.3	37607.4	71320.1	0.6372483
60956.6	37090.9	74154.5	0.6084804
70488.7	46879.3	85948.9	0.6650612
69593.1	47470.5	85063.6	0.682115
67848.1	52600.1	84238.5	0.7752627
14220.6	10505.6	16778.9	0.7387593
14295.3	11058.2	16991.3	0.773555
15167.6	12893.8	18834.9	0.8500884
20247.9	15843.5	24404	0.7824762
31210.9	26320.5	38204.5	0.8433111
42758.4	34155	51969.7	0.7987905
40696.2	33348.5	50661.2	0.81945
41551.4	36513.9	52253.1	0.8787646
42601.9	36117.6	52314.2	0.8477932
53006.2	41521.5	64550	0.7833329
63122.7	43105.1	77087.4	0.682878
59302.5	47634.2	84755.5	0.803241
65661.8	52741.6	95124.4	0.8032312
78360.2	53703.1	94483.9	0.6853364
77764.9	60127.9	94937.6	0.773201
9707.6	7738.6	11321.5	0.7971693
12713	9146.4	14624.5	0.7194526
13014.5	9800.2	14946.6	0.7530217
15799.5	11843.2	18644.2	0.7495934
16534	13339.8	19298.6	0.8068102
47800.7	28879.7	57489.4	0.604169
48969.3	33291.5	58436.8	0.6798443
49473.4	37422.2	58559.4	0.7564105
51472.5	38349.2	62994.7	0.7450425
52954	39908.7	66712.5	0.7536485
61910.4	43514.6	73913	0.7028642
70822.6	54153.5	86489.4	0.7646359
99437.7	72965.4	127779.8	0.73378
113093.5	73011.8	139958.5	0.6455879
117674.5	84922.2	147069.9	0.7216704
62454.3	38991.4	72488.2	0.6243189
68510.1	48939.5	81779.3	0.7143399

76868.6	56462.8	94202.5	0.7345366
91212.1	64741.8	110438.2	0.709794
94375.4	77852.1	114514.2	0.8249195
97934.3	76301.4	117478.5	0.779108
105905.2	79177.5	127072.1	0.7476262
119212.2	92654	140897.3	0.7772191
120907.5	95453.1	150656	0.7894721
128593.8	102488.5	160955.4	0.7969941
144852.2	109070.5	179507.4	0.7529778
157056.9	119593.8	191895.3	0.7614679
164985.7	131453.6	224283.9	0.7967575
193211.5	140864.8	256667.3	0.7290705
210249	164614.2	269100.7	0.7829488
241380.5	185783.2	310739.1	0.7696695
25674.1	15269.3	29699.1	0.5947356
35689.7	16740.9	39298.7	0.4690681
33572.5	19721.6	37520	0.5874332
40294.1	25497.2	45571.8	0.6327775
48328	29052.2	54713.3	0.6011463
50591.1	32573.6	54975.9	0.6438603
2175.2	1923.4	2972.7	0.8842406
4170.5	3495.8	5329.1	0.8382208
6277	4885.9	7455.2	0.7783813
5266.9	4460	6129.4	0.8467979
6273.6	4803.5	7306.3	0.7656688
3440.6	2116.5	4046.8	0.6151543
3659.1	2732	4657.3	0.7466317
4724	3649.9	6177	0.7726291
5898.1	4472.7	7898.9	0.758329
5813.5	5150.6	7839.6	0.8859723
7430.4	6326.2	10210.9	0.8513943
12717.8	11809.5	17340.5	0.9285804
13169.7	12106.3	17425.6	0.919254
13990.9	13230.4	18634.8	0.9456432
16480.3	14118.8	21504.8	0.8567076
17243.8	15018.5	23477.1	0.8709507
18396	16280.7	25089.8	0.885013
3767.7	2682.6	4772.7	0.7119994
4733	3566.3	5798.6	0.7534967
5758.3	4420.6	7021.2	0.7676919
5961.1	4624.9	7085.1	0.7758467
6216.9	4880.5	7445.1	0.7850376
3786.1	2728.8	4667.5	0.7207416
4777.6	3985.6	6041.9	0.8342264
6349.3	5025.3	7923.8	0.7914731
7134	5654.4	8614.9	0.7925988
6464.3	4753	7986.1	0.7352691
6412.4	4670.3	7605.8	0.7283232
4272.9	2712.1	4981.1	0.6347212
4493.1	3346.7	5617.7	0.7448532
5688.7	4508.9	7324.4	0.7926064
7047.6	5437.4	9203.5	0.771525

6816.8	6067.6	9075.1	0.8900951
14054.1	11458.2	17599.6	0.8152924
19149.7	16771.6	24067.2	0.8758153
19829.8	17491	24655.6	0.8820562
20523.7	19137.3	26054.6	0.9324489
23447	20562.1	29800.5	0.8769608
23178.4	21506.8	31104.9	0.9278811
24717.2	22702.8	32700.2	0.9185022
1001.7	820.6	1181.6	0.8192073
1287.7	1061.5	1512.7	0.824338
1618.6	1430.7	1957.1	0.883912
2282.8	1882.1	2650.6	0.8244699
1982.7	1866.5	2432.1	0.9413931
5355.9	4226.9	7154.3	0.7892044
7106.3	6264.8	9239.2	0.8815839
9402.9	8289.1	12082.5	0.8815471
12475.7	9979.1	15292.3	0.7998829
11940.2	9500	14380	0.7956315
12452.3	9636.1	15012.3	0.773841
13168.8	9295.4	15645.5	0.7058654
16547.4	13689.6	20247.5	0.8272961
16864.4	12406.1	20689.4	0.7356383
17519.1	10743.9	21148.5	0.6132678
14295.8	10708.1	18051	0.7490382
19993.8	16436.2	25004.4	0.8220648
25134.3	16986.7	29425.4	0.6758373
27877.7	16848.7	31909.4	0.6043791
29048.7	19516.3	33011.4	0.6718476
31464	21989.3	35598.6	0.6988717
2376.4	1753.4	2976.6	0.7378388
2736.7	2123.5	3339.6	0.7759345
3722.8	2757.4	4398.2	0.740679
3770.4	2980.7	4621.7	0.7905527
3813.1	3111.1	4713.8	0.8158978
4453.8	3549.7	5431.3	0.7970048
8706.9	6306	10379.4	0.7242531
11471.9	9128.2	14069	0.7957008
16586.4	13574.4	20517.3	0.8184054
19002.8	15075.8	22608.8	0.7933462
21078.3	14691.8	24539.4	0.6970106
31212.8	20300.8	35363.7	0.6503999
34761.9	22821.6	40237.5	0.6565119
37248	23382.3	43020.6	0.6277465
37900.3	22536.2	43568.6	0.594618
42848.6	22970.1	49060.4	0.5360758
51504.3	25582.7	57623.7	0.49671
53944.8	28618.9	60596.3	0.5305219
61833	31654.9	71423.8	0.5119419
68920.5	34534	77461.2	0.5010701
69987.5	34795.4	79404.5	0.4971659
30339.6	13378.1	33630.3	0.4409451
27252.5	16207.6	30747.6	0.5947197

32106.1	20935.7	36462.5	0.6520786
39294.8	22211.1	44611.4	0.5652427
40363.1	25006.8	44182.5	0.6195461
16864.2	5866.9	19647.8	0.3478908
20021.5	8636.7	23263.7	0.4313713
21373	10511.8	24953.4	0.4918261
25768.6	11112.9	29444.4	0.4312575
26520.8	11604.2	30479.1	0.4375509
26552.4	12970.7	30898.1	0.4884945
27777.3	14583.1	32414.7	0.5250006
33733.3	19653.3	40563.1	0.5826083
38737.3	22540.6	46497.7	0.5818836
48201.3	27266.1	57962.3	0.5656714
76049.7	53856.1	88932.7	0.7081698
92685.7	64579.9	107447.3	0.6967623
116547	75891.4	134267	0.6511656
135773.9	89805.7	158471.1	0.6614357
141183.8	93174.3	166698.9	0.6599504
156171.4	107962.8	176576.6	0.6913096
700.1	426.3	797.6	0.608913
736.5	519.5	863.3	0.7053632
1405.8	640.6	1534.5	0.4556836
787.1	645.3	920.9	0.819845
1218.1	778.8	1389.7	0.6393564
3257.3	2106.7	3870.2	0.6467626
4784.5	3629	5853.9	0.758491
7648.3	5757.3	9198.5	0.7527555
9251	6709.2	11027.6	0.7252405
8772.6	6221.6	10359.2	0.7092083
8074.4	5838.8	9738	0.7231249
10664	5740	12609.6	0.5382596
11175.1	6841.3	13119.7	0.6121914
10872	7384.1	13146.2	0.6791851
16401.9	13141.9	20345.8	0.8012425
504.3	405.2	573.4	0.80349
581.3	474.1	670.2	0.8155858
802.9	587.9	908.9	0.7322207
894.9	665.2	1001.8	0.7433233
859.9	646.7	961	0.7520642
869.6	607.5	969.7	0.6985971
2850.5	1853.6	3208.5	0.6502719
3330.8	2719.4	3966.7	0.8164405
5970.2	4830.6	6951.9	0.8091186
9152.5	7983.4	11069.9	0.8722644
11005.3	8588.7	12890.3	0.7804149
11792.6	9348.6	13596.9	0.7927514
14904.4	11658.7	17791.9	0.7822321
20048.6	17387.8	24721	0.8672826
26991.4	20573.6	30963	0.762228
26906.3	21288.4	31881.1	0.791205
27626.2	23556.7	33543.5	0.8526942
29953.9	25925.7	35798.1	0.86552

33250.1	27192.1	39406.3	0.817805
34668.8	28232.8	41386.5	0.8143576
36673.8	29637.6	43563.6	0.8081409
118.7		505.1	
2577	813.2	3008.5	0.3155607
5106.7	3212.6	6309.1	0.6290951
7212.3	6219.1	9636.9	0.8622909
217	46.9	311.2	0.216129
71.6	41.2	169.7	0.575419
132.8	23.8	157.1	0.1792169
5836.5	3944.7	6433.7	0.6758674
5325.7	3672.9	6224.3	0.6896558
6987.1	4242.3	8120.8	0.6071618
8009.9	3824.9	9142	0.4775216
670.7	366	757.5	0.5456985
682.7	334.5	773.7	0.4899663
25023.8	28581.2	32529.6	1.142161
25750.2	26009.7	33514.3	1.010078
39134.2	36564.9	47709.6	0.9343464
45908.3	40736.5	56527.4	0.887345
53289.6	43465.5	62047.8	0.8156469
63797.7	52325.2	77254.4	0.8201737
71588.5	56739.9	84342	0.792584
25025.7	28591.7	32516.5	1.142493
25752	29692.1	33503.1	1.153002
28493.2	31512.6	35118.1	1.105969
45910.2	46215.3	56241.4	1.006646
46534.7	37095.5	53584.8	0.7971578
45923.2	39948.6	55366.4	0.8699002
59845.2	46899.9	70772.2	0.7836869
1593.8	741.4	1872.3	0.4651776
1750.6	1357.1	2261.7	0.7752199
3447	2659.1	4240.8	0.7714245
5754	4791.2	7477.4	0.832673
7062.7	5094.7	8724.7	0.7213531
6581.3	5050.2	8039.4	0.767356
6955.9	5310.6	9154.4	0.763467
12756.7	9787.8	16118.1	0.7672673
17324.7	11283.8	19884.5	0.6513129
16701.8	11864.4	20400.7	0.7103665
27833.8	23552.3	33632.5	0.8461762
30225.3	25922.3	35942.5	0.8576358
28557.4	23099.3	34499	0.8088727
29411.6	23557.8	35681.8	0.8009697
30812.6	24825.2	37274.7	0.8056834
5373.2	4227	7161	0.786682
7113.3	6264.8	9243.4	0.8807164
9415.3	8289.1	12091.2	0.8803862
12482.6	9979.1	15299.5	0.7994408
11952.4	9500	14385.3	0.7948194
12461.6	9636.1	15011.7	0.7732635
13175.7	9295.4	15642.9	0.7054957

16563.8	13639.2	20248.5	0.8234342
16882.3	12365	20684.7	0.7324238
17523.1	10698.9	21138	0.6105598
14299.9	10689.3	18044.2	0.7475087
19996.7	16423.1	24993.4	0.8212906
22018	15746.7	26181	0.715174
22308.8	15100.3	26233.5	0.6768764
23901.6	17054.1	27730.5	0.7135129
26336.3	19108.6	30333.1	0.7255613
9803.8	7980.3	11430.3	0.8140007
13099.9	9551	15040.9	0.7290895
13391.8	10403.7	15372.5	0.776871
16691	13335.1	20063.5	0.7989395
17134.4	13983.7	20456.9	0.8161184
53560.8	31372.4	63637.9	0.5857344
53081.6	35648	63179.4	0.6715698
52429.1	41267.2	63228.1	0.7871048
56883.8	43471.6	68989.2	0.7642176
56707.3	46844.7	73225	0.8260788
67187.1	52927.2	83177.2	0.7877584
68468.9	57188.6	91448	0.8352493
97535.7	76986.6	133151.4	0.7893171
124884.6	80617.5	155011.6	0.6455359
136240.3	95687.1	168151	0.7023407
161053.2	113480.7	196471.3	0.7046162
2642.2	2231	3233	0.8443722
3344.8	2706.7	4029.7	0.8092262
3746.7	2886.6	4695.7	0.770438
9510.4	7125.4	11959.8	0.7492219
8124	6377.5	10109.7	0.7850197
7239.4	5940.6	9119.8	0.8205929
9707.2	7141.5	12169.5	0.735691
9512.3	7300	12560.7	0.7674274
15174.1	12997.9	19795.3	0.8565846
19889.2	14564.7	25006.4	0.7322919
23037.3	16189.9	28867.5	0.702769
25446.9	17201	31054.4	0.6759566
25827.7	20232.2	32032.8	0.7833527
29150.8	25004.6	35978.1	0.8577672
34299.4	27586	41383.8	0.8042707
2383.7	1295.4	2838.2	0.5434409
2603.5	1653	3193.7	0.6349145
3886.7	3239.6	4770.2	0.8335092
5369.7	4349.9	6489.1	0.8100824
6835.4	6010.8	8358.8	0.8793633
5900.1	5532.8	7156.1	0.9377468
7907.1	6401.6	9330.2	0.8096015
11365.8	10296.6	14016.2	0.9059283
12645.3	10606.8	15872.3	0.8387939
13535.1	10912.9	16812.8	0.8062667
16225.6	12424.1	20027.1	0.7657098
17408	13952.1	21554.8	0.8014763

17996.8	12913.8	21687.6	0.7175609
20164.8	13019.5	24337.9	0.6456548
19472.9	13305.7	25845.2	0.6832932
24315.3	16277.9	28486.6	0.6694509
3762.2	2682.6	4718.5	0.7130403
4733.5	3577.2	5738.4	0.7557198
5760.3	4433.1	6968.2	0.7695954
5963.5	4637.1	7033	0.7775803
6219.9	4891.7	7369.5	0.7864596
14403.4	8628.5	14598.6	0.5990599
17611.6	8452	19088.3	0.479911
20812.7	9061.3	23556.4	0.4353736
25212.7	9661.9	27488.5	0.3832156
3265.5	2106.7	3832	0.6451386
4797.1	3628.9	5815.4	0.7564778
7665.2	5757.2	9143.2	0.7510828
9273.9	6710.8	10956.1	0.7236221
8848.3	6252.8	10330.8	0.7066668
8087.2	5869.7	9632.3	0.7258013
348.1	282.5	410.9	0.8115484
404.4	334	485.6	0.8259149
576.5	419.9	673.9	0.7283608
625.1	481.9	722.6	0.7709167
597.9	489.6	692.9	0.818866
869.7	607.5	983.3	0.6985167
2178.7	1914.3	2974.4	0.8786433
3981.4	3256.3	5120.1	0.8178782
6030.7	4594.1	7187.1	0.7617855
5039.1	4317.5	5971.6	0.8567998
6184.4	4806.3	7288.1	0.7771651
6112.2	5019.5	7365.9	0.8212264
8264.2	6645.1	9879.3	0.8040827
10889.1	8941.2	13124.9	0.8211147
14581.2	11493.9	17363.1	0.7882684
12786.2	10990.6	14974.6	0.8595673
14241.2	11563.9	16822.2	0.8120032
17108.8	13093.1	20111.7	0.7652845
16435	14230.4	21223.3	0.8658594
17527.1	15073.1	22416.6	0.8599883
20737.9	16657.3	25473.7	0.8032299
22606.1	19080.7	27599.4	0.8440509
25470.8	20931	30804.1	0.8217645
30701.9	23067.7	36692.6	0.7513443
35546.9	26611.8	42187.5	0.7486392
37513.4	28044.2	44603.5	0.7475782
1941.3	1808	2452	0.9313347
2742.2	2597.4	3429.1	0.9471956
3577.9	3333.8	4525	0.9317757
4792.4	4051.7	5932.7	0.8454428
4907.5	5114.8	6117.1	1.042241
4268.5	4671.8	5496.7	1.094483
4901.1	5397.3	6051.9	1.101243

		131.5	
14487.2	11877.4	16450.6	0.8198548
8105.9	5059.4	9621.4	0.6241626
7895.6	6171.5	9719.8	0.7816378
8733.7	7758.6	11517.2	0.888352
13364.5	10114.8	15769.4	0.7568409
12634.6	11150.7	16011.2	0.8825527
15637.5	11974.9	17961	0.765781
17805	12790.3	20358.5	0.7183544
17172.5	13110.8	20188	0.7634765
18544.1	13550.9	21272.9	0.7307392
20518.9	15394.8	23687.6	0.7502741
25571	17452.6	29803.1	0.6825153
29955.8	19710.3	34908.4	0.6579794
33547.1	19461.1	39128.2	0.5801127
35460.9	19551.6	41914.9	0.5513566
36303	20579.3	44055.5	0.5668761
36524	23057.2	42753	0.631289
4406.4	3000.5	5537.6	0.6809414
6250.8	5092.9	8178.2	0.8147597
9365.5	7849	12383.4	0.8380759
10725.1	9267.4	13754.3	0.8640853
12114.2	9181.7	15094.7	0.7579287
15568.7	10072.6	18506.2	0.6469775
20484.1	11900.5	24701.5	0.5809628
22097.4	12545	26532.4	0.5677139
23746.4	13406.5	28510.9	0.5645698
31375.5	15546	36778.9	0.4954821
51578.5	25578.1	57761.1	0.4959062
48592.6	24671.1	55139.1	0.5077131
58041.4	27966	66161.4	0.4818285
62060.3	30306.1	69992.8	0.4883331
62093.3	30938.1	70732.5	0.4982518
6786	5563	8144.1	0.819776
9264.8	7389.7	11007.5	0.7976103
12061.2	9922.2	14443.8	0.8226545
16399.1	12638.9	19343.9	0.770707
13982.3	12058	16317.2	0.862376
14232.5	11578	16841	0.8134903
17089.2	13096.1	20117.9	0.7663378
16411.1	14230.7	21225.2	0.8671387
17502.6	15074.1	22419.3	0.8612492
20717.7	16658.3	25476.2	0.8040614
22585.1	19081.5	27593.6	0.8448712
25457.1	20931.6	30805.8	0.8222303
30687.7	23068.1	36691.1	0.7517051
35532.3	26612	42185.8	0.7489523
40549	30174.4	47872.9	0.7441466
2199.8	2044.9	2730.6	0.9295845
3102.2	2928.9	3819.4	0.9441364
4033.9	3784.3	5012.9	0.9381244
5235.3	4598.7	6379	0.8784025

4906.1	5122.7	6081.7	1.044149
4263.7	4675.1	5456.5	1.096489
4898.4	5398	6010.1	1.101992
1467.7	324.3	1989.6	0.220958
2951.7	1568.6	3646.1	0.5314226
6506.1	4263.7	7654.9	0.6553389
8745.8	5319.9	9909.2	0.6082805
8997	5441.6	10150.5	0.6048238
8531.4	5235.5	10186.6	0.6136742
3269.7	2500.8	3869.3	0.7648408
4287.4	3069.5	5165.1	0.7159351
5210	3314.1	6401.6	0.6361037
		153	
7224.6	6370	9340.6	0.8817097
8478.4	8055	11008.5	0.9500613
11600.2	9810.4	14096.1	0.8457096
9520.5	7801.2	11422.7	0.8194107
12042.3	9657.5	14406.8	0.8019648
13524.1	11440.2	16895.1	0.8459122
20522.5	13794.5	24016.2	0.6721647
20545.3	14989.6	23259.1	0.7295877
20491.8	11995.7	22523.5	0.5853903
21597.3	11715.8	24492.5	0.5424659
20342.3	13750.4	23137.2	0.6759511
21576	15918.8	24736.4	0.7378013
25423.8	17279.3	28910.3	0.6796505
29801.1	18963.8	33600.7	0.6363457
31889.8	21476.7	36543.2	0.6734661
35417.3	24343.9	41002.8	0.6873449
40756.8	26007.1	48138	0.6381046
41240.7	26792.2	49591.8	0.6496543
44924	25458.8	52764.3	0.5667082
10500.4	8566.4	12546.7	0.8158165
13044.8	10541	15556.5	0.8080615
14526.6	12330.7	17961.5	0.8488359
21578.8	14608.1	25138.7	0.6769653
20545.3	14989.6	23259.1	0.7295877
20491.7	11995.7	22523.4	0.5853931
21597.3	11715.8	24492.4	0.5424659
20342.3	13750.4	23137.2	0.6759511
21576	15918.8	24736.4	0.7378013
25423.8	17279.3	28910.3	0.6796505
29801.1	18963.8	33600.7	0.6363457
31889.8	21476.7	36543.2	0.6734661
35417.2	24343.9	41002.7	0.6873469
40756.7	26007.2	48137.9	0.6381086
44485	29719.3	52816.3	0.6680747
47506	28623.8	55137.3	0.6025302
2579.4	1574.8	3042.7	0.6105296
3553.4	2471.8	4213.8	0.6956155
4543.3	2916.2	5399.4	0.6418682
5196.6	4105.2	6652	0.7899781

5370	3743.6	6347.3	0.6971322
4809.6	3830.5	5818.4	0.796428
5205.8	4169.6	6479	0.8009529
7409.5	4849.4	8710.2	0.6544841
6712.5	5208.9	8154	0.776
1268.5	830	1762.8	0.6543161
1473.8	1017.1	2034.9	0.6901208
1758.4	1310.8	2348.2	0.7454504
2100.9	1168.1	2713.5	0.5559998
1250.1	751.1	1702	0.6008319
1424	702.8	1904.2	0.4935393
1328.4	619.1	2379.5	0.4660493
1874.4	586.9	3172.1	0.3131135
1980.7	319.9	3067.1	0.1615086
3909.4	418	5002.4	0.1069218
3937	323.6	5083.2	0.0821946
4182.9	595.3	5381.6	0.1423175
6951.2	515.8	8876	0.074203
7102.2	709.4	12163	0.0998845
7004.3	977.5	10912	0.1395571
1195		1259.4	
1635.3		1719	
2154		2240.2	
2241.1		2330.1	
2551.9		2668.6	
2241		2404.1	
2206.3	0.2	2407.5	0.0000906
2113.8	0.2	2317.3	0.0000946
3096.8		3317.4	
3302.1		3521.7	
3722.8		3960.2	
3035.4		3247	
1333.2	1548.4	1953.7	1.161416
1685.7	1834.6	2362.4	1.088331
1714.4	1771.8	2492	1.033481
2225.6	1969.8	3044.2	0.8850647
1804.5	1843.7	2643.6	1.021723
2454.6	2183.1	3308.1	0.8893914
1985.4	1820.2	3012.7	0.9167926
2207.1	1966.6	3224.2	0.8910334
1832.5	1888.3	2855	1.03045
1942.8	1625.9	2957.1	0.8368849
2645.6	1818.3	3891.5	0.6872921
3298.7	2079.7	4530	0.6304605
4414.7	2251.9	5583.3	0.5100912
4920.3	2583.4	6417	0.5250493
4847.6	2947.5	6799.8	0.6080328
1132	0.1	1181.1	0.0000883
1500.4	0.1	1579	0.0000666
1881.3	0	1966.9	0
1799.3		1898.1	
1761		1870.9	

1666.3		1836.3	
1539.2		1756.4	
738.2	843.5	1136.1	1.142644
1875.3	1046.7	2292.9	0.5581506
1822.1	1472.5	2267.4	0.8081335
4560.4	4039.3	6453.9	0.8857337
6490.1	4603.6	8845.2	0.7093265
8946	5937.6	11040.1	0.6637157
10683.3	7322.7	13282.2	0.6854343
12937.8	9078.1	15187.2	0.7016726
15689.1	11114.3	18515.3	0.708409
17804	14720.5	22674.6	0.8268086
17132.8	17115.3	22695.6	0.9989786
24968	18985.4	30920.9	0.7603893
32451.6	19968.7	38138.3	0.6153379
32134.8	18968.5	36885.5	0.590279
32701	20357.8	38265.9	0.6225437
39970.2	20504.2	45747.3	0.5129871
39192.5	19848.8	46136.5	0.5064439
3476.3	2565.1	4203	0.7378823
4066.9	3104.5	4820.3	0.7633579
5243.9	3938.9	6127.3	0.7511394
4604.6	3648.7	5578.7	0.7924032
4730.1	3680.3	5732.6	0.7780597
4453.6	3531.2	5430.3	0.7928866
1618.2	980.8	2244.1	0.6061056
1644.3	862.2	2163.3	0.5243568
1770.4	1180.8	2369.8	0.6669679
1144.3	741.1	1546	0.6476448
1400	363.8	1712	0.2598571
1639.5	415.2	1977.6	0.2532479
910	290.3	1257.2	0.319011
546.7	232.9	902.8	0.4260106
544.5	211.1	918.9	0.3876951
1007.6	159.3	1417.6	0.1580985
1096.4	155.8	1521.2	0.1421014
1005	149.4	1466.7	0.1486567
867.8	139.1	1381.4	0.1602904
980.4	156.6	2099	0.1597307
4360.8	3190.7	5236.5	0.7316777
5630.1	4640.7	6899.1	0.824266
7371.8	5806.2	8977	0.7876232
8067.6	6394.5	9586.2	0.7926149
7222.6	5347.8	8764.8	0.7404258
6412	4670.2	7605.7	0.7283531
3475.4	2839	4168.8	0.8168844
3898.3	3032.3	4860.1	0.7778519
9633.7	7263.4	12092.9	0.7539575
8124	6377.5	10079.9	0.7850197
7239.3	5940.6	9113.1	0.8206043
9707.1	7141.5	12164.3	0.7356986
9512.2	7300	12556.2	0.7674355

15173.8	12998	19795.6	0.8566081
19888.9	14564.7	25015.7	0.732303
23036.2	16189.9	28886.5	0.7028026
25445.7	17201.1	31080.8	0.6759924
25826.7	20232.2	32070.1	0.7833831
29150.3	25004.6	36016.5	0.8577819
34299	27586	41425.5	0.80428
556	601.8	810.7	1.082374
891.1	918	1253.6	1.030187
870.1	854	1248.1	0.9814964
843.8	1012.7	1229.3	1.200166
1518.5	1503.6	1876.6	0.9901876
1832.1	1364.7	2124.2	0.7448829
2126.5	1437.5	2422.3	0.6759934
2104.9	1622.2	2467.9	0.770678
2340.9	1514.3	2721.4	0.646888
2317.2	1345.8	2731.3	0.5807872
2582.8	1516.2	3049.5	0.5870373
2533	1432.5	3026.4	0.5655349
2744.8	1992.1	3484.5	0.7257723
2395.6	3245.4	4678.4	1.354734
556	601.8	810.7	1.082374
891.1	918	1253.6	1.030187
870.1	854	1248.1	0.9814964
843.8	1012.7	1229.3	1.200166
1518.5	1503.6	1876.6	0.9901876
1832.1	1364.7	2124.2	0.7448829
2126.5	1437.5	2422.3	0.6759934
2104.9	1622.2	2467.9	0.770678
2340.9	1514.3	2721.4	0.646888
2317.2	1345.8	2731.3	0.5807872
2582.8	1516.2	3049.5	0.5870373
2533	1432.5	3026.4	0.5655349
2744.8	1992.1	3484.5	0.7257723
2395.6	3245.4	4678.4	1.354734
318.5	348.9	744.9	1.095447
311.4	299	964	0.9601799
764.8	334.5	1147.5	0.4373693
730.4	263.5	1102.8	0.3607612
1146.5	212.6	1543.9	0.1854339
1061.5	146.3	1449.2	0.1378238
985.5	157.8	1356.1	0.1601218
617.1	179.3	1009.9	0.2905526
1018.2	136.1	1442.8	0.1336673
849.9	114.5	1280.9	0.1347217
1794.7	84.1	2263.6	0.0468602
2019.6	38.3	2779.4	0.0189642
2786.3	207.8	4009.8	0.0745792
1743	152.9	3656.5	0.0877223
4560.4	4039.3	6453.9	0.8857337
6490.1	4603.6	8845.2	0.7093265
8946	5937.6	11040.1	0.6637157

10683.3	7322.7	13282.2	0.6854343
12937.8	9078.1	15187.2	0.7016726
15689.1	11114.3	18515.3	0.708409
17804	14720.5	22674.6	0.8268086
17132.8	17115.3	22695.6	0.9989786
24968	18985.4	30920.9	0.7603893
32451.6	19968.7	38138.3	0.6153379
32134.8	18968.5	36885.5	0.590279
32701	20357.8	38265.9	0.6225437
39970.1	20504.2	45747.2	0.5129884
39192.5	19848.8	46136.5	0.5064439
2693.8	1590.7	2891.8	0.5905041
5636.6	3183.3	6178.6	0.5647553
6025.2	4092.9	6486.1	0.6792969
4566.3	3762.8	4948.3	0.824037
1589.8	1364.9	1839.1	0.8585356
2528.8	2172.7	2841.2	0.8591822
3673	3193.4	4141.3	0.8694255
6240.7	5253.4	7094.1	0.8417966
7723.4	7220.9	9201.4	0.934938
9946.7	9054.5	11536.8	0.9103019
10523.9	9419.2	12053.2	0.8950294
1332.4	1075.3	1721.1	0.80704
1490.8	1267.2	1860.2	0.8500134
1307.3	1206.3	1743.1	0.9227415
2125.3	1427.7	2471.9	0.671764
2570.5	1168.3	2971.2	0.454503
2224.4	1009.9	2745.7	0.4540101
2241.6	450.1	2743.3	0.2007941
2439.4	370.5	2954.5	0.1518816
2693.3	427.1	3349.1	0.1585787
3358.1	443.2	4082.9	0.1319794
3048.9	430.4	4366.3	0.1411657
8849.6	600.6	10851.1	0.0678675
2801.7	624	6242.1	0.2227219
5255.2	3724.6	5884.8	0.7087456
7222.9	5461.9	8189.5	0.7561921
8286.6	5675.6	9071.4	0.684913
8976.1	5577.6	9856.4	0.6213835
14289.2	10910.5	16298.9	0.7635487
15161.9	10848.4	17205.8	0.715504
14408.9	9126.4	15977.4	0.6333863
12075.4	7422.2	13243.8	0.6146546
638	315.5	803.3	0.4945141
703.6	364	1110.1	0.5173394
2934.8	2479.4	3570.6	0.8448275
4040.4	2729.2	5132.7	0.6754777
4374.1	3297.1	5521.3	0.7537779
2504.9	3329.5	5532	1.329195
1250.1	751.1	1702	0.6008319
1424	702.8	1904.2	0.4935393
1328.4	619.1	2188.6	0.4660493

1874.4	586.9	3172.1	0.3131135
1980.8	319.9	3067.1	0.1615004
3909.4	418	5002.4	0.1069218
3937.1	323.6	5083.2	0.0821925
4183	595.4	5381.7	0.142338
6951.2	515.8	8876	0.074203
7102.2	709.3	12163	0.0998705
7004.3	977.5	10912	0.1395571
9606.4	3962.5	10269.6	0.4124854
12278.9	5148.1	13450.6	0.4192639
12400.9	5585.3	13808.1	0.4503947
12698.4	6027.5	14398.6	0.4746661
13824.8	6569.4	15906.1	0.4751895