

SUBSTITUTION EFFECTS: DO INFLATION AND DEFLATION AFFECT ISLAMIC HOME FINANCING?

Hanudin Amin^{a*} , Rosita Chong^a

^a*Labuan School of International Business and Finance, Universiti Malaysia Sabah*

Received: 06 June 2007, Revised: 15 August 2007, Accepted: 23 December 2007

ABSTRACT

This is a peer-reviewed article

This paper considers the substitution effects on Islamic home financing in Malaysian Islamic banks. The Islamic principle that supports Islamic financing is *Bay Bithaman Ajil* (BBA). Many debates were made on the validity of BBA, however in Malaysia it is widely employed as one of the financing schemes available. Even conventional banks with Islamic window such as Maybank, HSBC, Public Bank to name a few are among those banks that are currently providing Islamic home financing. Although differences do exist with respect to the policy, such as those that relate to the pricing of the schemes. Supporting documents and related costs associated with Islamic home financing. Overall, Islamic home financing is *Shariah*-compliant and thus should be seen as an alternative for Muslims financing instead of problem. In the full-fledged Islamic banks, Islamic home financing is seen more apparent to become one of the sources of profit to the banks. Finally, the authors suggest an explanation based on the theory of substitution effect to explain the choice between Islamic home financing and conventional home loan. It is hoped that the paper will benefit academicians as well as practitioners.

Keywords: *Malaysia, Islamic home financing, profit rate, flat rate*

* Corresponding author: Hanudin Amin Universiti Malaysia Sabah, Labuan International Campus, School of International Business and Finance, Jln. Sg. Pagar, 87000 F.T. Labuan, Malaysia. E-mail: hanudin@ums.edu.my

1. Introduction

The dual banking system in Malaysia has enable banks to offer two forms of home financing method, the conventional home loan and the Islamic home financing. In recent years, over a period of more than a decade, financial institutions have offered a wide variety of home financing facilities from which consumers could choose. It is well known that the main difference between Islamic banks and conventional banks is interest rates (Haron and Shanmugam, 2000). In Islamic banks, interest rates are forbidden and unlawful to be practiced. Therefore, a new solution has to be created in order to ensure Islamic banks do not appear to be similar to the interest-based conventional banking system. The solutions are twofold; first, Islamic banks employ *hibah* rate or profit sharing ratio when providing profit to depositors of the banks. Second, Islamic banks employ profit rate when charging the customers on Islamic home financing. No interest rates will be given. The *hibah* rate is given based on Islamic banks' performance. It is not a guarantee by the bank. However, interest rate is a guarantee by conventional banks, regardless of whether the banks gain profit or not. This is a burden in the case of conventional banks. If they incur loss in their banking operation, the loss will be borne by them alone. However, in the case of Islamic banks, the loss will be shared by both parties; the depositor and the banks.

Shaharuddin and Safian (2005) undertook a study on Islamic variable rate financing which is acceptable from Islamic perspective. This study has revealed an innovation of Islamic home financing. However, in this present study, a focus is only for flat rate rather than Islamic variable rate financing.

In this paper, the main objective is to explain Islamic home financing and its performance in relation to the economic situation such as in inflation and deflation. A comparison between the Islamic home financing and conventional home loan is inevitable in the effort to analyze its performance. The paper will be only touch on Islamic home financing, as this is popular among married couples. For example, a newly married couple who has a good job, and want to purchase a house. Since the couple has just started working, hence their saving is not much. They need to accumulate saving overtime in order to be able to buy a house by cash. But price of houses tend to increase with time and hence will be costly to buy it. However, with the availability of Islamic financing, it will enable them to buy the house of their dream. Most importantly, Islamic home financing is stable due to the flat rate imposed on the facility. The flat rate is defined as a profit rate that is constant regardless of the market rate. This definition is initially based on the practice that Islamic banks offer the financing by fixing a selling price and the profit rate. Therefore, the customer will consistently pay the fixed monthly payment or installment from the beginning of the payment period to the final settlement by the customer. Evidently, the monthly payment will remain the same, *Shariah* has allow Islamic banks to apply the flat rate which is a free-market rate in order to provide a different feature of Islamic banking system as compared to conventional banking system.

In response to this concern, let us define first what is Islamic home financing? The concept normally used is BBA. How is it possible for BBA to be used in Islamic home financing. The following may verify the concern:

- a) Under Islamic home financing or well-known Home Financing-i for some bank, the banks will purchase the house at banks cash price and resell back to

- the customer at a specified price, to be paid for over a period mutually agreed upon;
- b) There are two contracts involve namely Property Purchase Agreement (PPA) and Property Sale Agreement (PSA). The former refers to the agreement between Islamic banks and the owner of the house. The latter refers to the agreement between Islamic banks and the purchaser of the house (the customer);
 - c) Under PSA, the customer will be given an elucidation on the selling price (the purchase price plus markup). Thereafter based on the selling price, the customer monthly payment is determined and to be paid in the same amount from month 1 until the final settlement. For example, if the monthly payment is set as RM800.00, therefore the customer needs only to pay RM800.00 from month 1 until the final settlement. It indicates that Islamic home financing offer certainty in the monthly payment and is hassle-free; and
 - d) The customer can plan his monthly expenses and financial goals more efficiently and not be affected by fluctuating Base Lending Rates (BLR).

2. Economic situation and its effect on Islamic home financing

In order to increase our understanding on Islamic home financing, the following case illustrates how it work.

For example, Abu purchases a house by applying for BBA financing facility from Bank Mukminin Berhad (BMB). The profit rate is fixed at 8% for RM 700.00 until the settlement. Although, it is benefiting for Abu in terms of monthly payment at RM700.00 but the economy conditions may affect his interpretation about the payment.

In order to understand the above-mentioned case, say we have two scenarios. [1] Inflation and [2] Deflation:

Scenario 1: Inflation and its affect to Islamic home financing

Let us assume that during this time, the amount to be reimbursed by Abu is RM700.00 and it will not change according to interest rates as what would happen with conventional home financing. On the contrary, the borrower, say Ali will find difficult to pay his monthly payment for home loan under the conventional bank, say Bank Riba Berhad (BRB). He pays usually at RM600.00, but due to inflation, he has to pay at RM900.00, which is burdensome from the customer's point of view. In contrast, Abu will find it as a good option to choose Islamic home financing because the monthly payment will constant at RM700.00 which is relatively cheaper. Therefore, by analyzing these individuals, we can justify that Islamic home financing offers fixed monthly payment because it does not change during inflation. Comparatively, conventional home loan offers unfixed monthly payment since it does move parallel with inflation.

In order to justify that Abu is problem-less in the above case, customers need to be educated. The following information may explain how Islamic home financing offers more long term peace of mind to Abu. Table 1 below illustrate scenario 1.

Table 1: Home financing/loan

	<i>Islamic home financing</i>	<i>Conventional home loan</i>
BLR	Not applicable	Yes, applicable
Inflation	Constant (8%)	Positive (before 7%, after 8%)
Underlying principle	BBA	Not applicable

Regardless of the rate, the country faces inflation because of the increment in the average price of the goods in the market. In order to reduce the pressure of inflation, our government via Bank Negara Malaysia (BNM) involves curbing the pressure through a monetary policy such as interest rate control.

BNM announces to increase the interest rates imposed by conventional banks in the country. Consequently, conventional banks tend to increase their interest rates as well as to re-examine the interest rate offers for the existing home loan offers to the customer. On the contrary, Islamic home financing tends to be uncertainty-free because it does not have any relationship with inflation control by the government.

Based on the Table 1, let us say before inflation, Ali carries only 7% of interest in his home loan from a conventional bank. However, during inflation, BNM increases BLR from 6.7% to become 7.7%. If the basis point is 30, the interest charge will be 7% and 8% respectively.

On the other hand, Abu can have a peace of mind because the BLR or interest rates increment will not affect his monthly payment because 8% profit rate does not have any relationship to the BLR. Therefore, the monthly payment will be constant at RM700.00.

However, pricing for Islamic home financing which is based on the flat rate system does not price financing equitably. To some extent, pricing for Islamic home financing is mixed-blessing. For instance, the flat rate imposed by Islamic banks benefit individuals more as compared to the banking institutions. Therefore, some adjustments are needed to reduce the gap between both the customers of the banks and the Islamic banks.

Scenario 2: Deflation and its affect to Islamic home financing

As in scenario 1, the amount to be reimbursed by Abu will be at RM700.00 and it will not change according to interest rates charge by conventional banks. On the contrary, the borrower, say Ali will find better to pay his monthly payment for home loan under the conventional bank, for example, Bank Riba Berhad (BRB). He normally pays RM600.00, however, due to deflation his monthly payment is reduced to RM500.00. In contrast, Abu finds it is a wrong option to choose Islamic home financing. This is because the monthly payment remains constant at RM700.00, which is now relatively expensive. Therefore, it can be justified that Islamic home financing offers fixed monthly payment because it does not move based on deflation, but it causes dissatisfaction to Abu about the monthly payment. Comparatively, conventional home loan offers unfixed monthly payment since it does move parallel with the deflation similar to scenario 1.

The problem now is how to justify that Ali is better off in the above scenario. In order to educate readers, the following information may explain how conventional home loan is cheaper in the event of deflation:

Table 2: Home financing/loan

	Islamic home financing	Conventional home loan
BLR (as case 1)	Not applicable (as case 1)	Yes, applicable (as case 1)
Deflation	Constant (8%) (as case 1)	Positive (before 7%, after 5%)
Underlying principle (as case 1)	BBA (as case 1)	Not applicable (as case 1)

Assume that the country faces deflation. In order to reduce the pressure of deflation, the government via BNM announces a reduction in the interest rates imposed by conventional banks. Consequently, conventional banks decreases their interest rates and to re-examine the interest rate for the existing home loan offers to the customer. On the contrary, Islamic home financing is uncertainty-free because it does not have any relationship with the deflation control by the government.

Based on Table 2, let us say, before deflation, Ali only carries 7% of interest in his home loan from a conventional bank. However, during the deflation, BNM increases BLR from 6.7% to become 4.7%. If the basis point is 30 so the interest charge will be 7% and 5% respectively.

On the other hand, Abu now finds that he incurs a high financing cost than Ali. If deflation occurs over a longer period, Ali will benefit from conventional banking system. However, Abu will not benefit from the monthly payment he pays for Islamic home financing. This is so because Abu monthly payment is fixed at 8% profit rate and does not have any relationship to the BLR. Therefore, the monthly payment is constant at RM700.00 and not competitive as compared to Ali. No policy by Islamic banks to change the rate since the rate has been fixed at the beginning of contract to avoid *gharar*.

Again as mentioned earlier, pricing for Islamic home financing which is based on the flat rate system does not price financing equitably. To some extent, it offers a long term peace of mind because of fixed payment, as it benefits the customers by eliminating element of uncertainty in the content of the agreement. At the same time, it is also based on the market rate in order for all parties as the Islamic banks, home purchasers and depositors to benefit.

3. Explanation of the substitution between the two facilities

In a dual banking framework such as Malaysia, there is potential for substitution for Islamic banking products and conventional banking products. This is because both of the products share the similar features. However, there are differences in term of pricing and underlying principles. Hence, in this paper, the authors propose a “substitution effect” to explain the switch between the two types of home financing facilities based on

the following reasons:

1. Pricing sentiment – In Islamic banking financing, customers rely on the profit rate/fixed rate as promised between the bank and customer of the bank. Therefore the profit generated by the bank is fixed until settlement. In contrast, conventional banking loans are different in practice. For instance, the monthly payment varies according to the market rate, and the monthly payment would also vary from time to time according to inflation or deflation. Unlike Islamic banking finance, conventional bank sets a price of the loan according to Base Lending Rate (BLR) plus basis point;
2. Alternative menus – Due to the different prices between Islamic banking financing and conventional loan. Unlike the conventional banking facilities, the Islamic banking financing mark-up is certain and would not change once both the bank and the customer agree; and
3. Economy health – In a dual banking framework, Malaysians are attracted to the different features of the Islamic banking financing and conventional banking financing. For instance, during inflation (assuming nothing else changes) Malaysians substitute financing facilities from conventional banks to Islamic banks in order to get a cheaper price for financing. This is because inflation has affected the real burden of the conventional financing facility. In contrast, during deflation (assuming nothing else changes) Malaysians change from Islamic banks to conventional banks in order to undertake conventional loans which are relatively cheaper rather than Islamic financing.

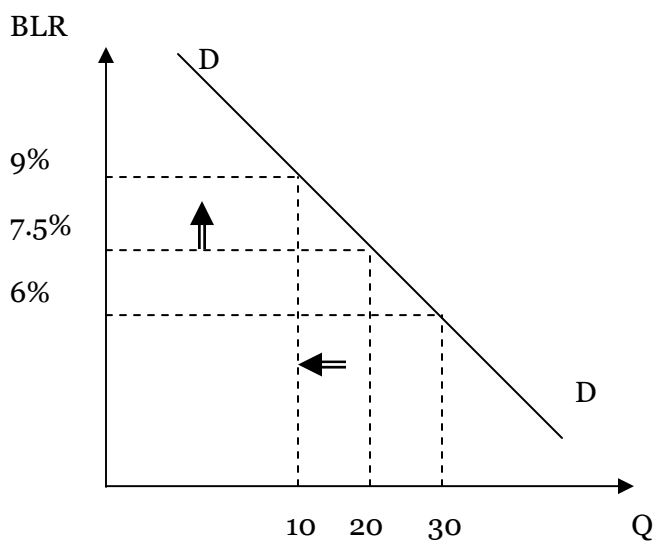
Islamic home financing does not have any relationship with the interest rates as compared to conventional home loan. Therefore, any changes in the interest rates will not affect the profit rate or flat rate as imposed by an Islamic bank in Islamic home financing. Therefore, the cost of obtaining home loan from conventional banks will increase too. However this central action does not affect the cost of obtaining home financing from an Islamic bank. For example, say the BLR is 6%, and due to inflation, BNM increases the BLR rate from 6% up to 9% that may create restriction to the demand for conventional home loan. On the contrary, Islamic home financing does not move positively or negatively with BLR. The profit rate, for example 7% will remain constant regardless inflation or deflation.

In fact, Islamic home financing is an alternative financing that can be acquired by Malaysians. Therefore, once BNM increases the rate, the demand for conventional home loan decreases due to the high cost of obtaining the loan. Alternatively, the public will choose Islamic home financing which is relatively cheaper than conventional. Consequently, the demand for Islamic home financing increase and this is best illustrated as follows:

Scenario 1: Substitution effect in times of inflation

Graph 1 discusses the implication of the price of conventional home loans and quantity to be purchased by the public. The following elucidation may help to generate a brief understanding on conventional home demand:

Graph 1: Demand for conventional home loans



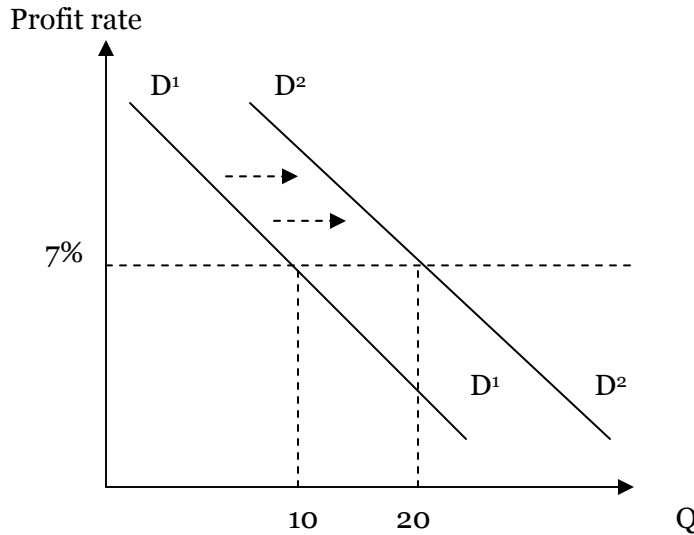
Let us assume, inflation hits the country. BNM increases the BLR for conventional banks. This action is shown by the movement of BLR from 7.5% to 9%, the quantity demanded will change from 20 units to 10 units indicates negative relationship between BLR and quantity for conventional home loans. The increment in the BLR demonstrates that the conventional home loans are expensive as compared before BLR increases. This is because BLR has increased the cost of borrowing of conventional home loans.

Consequently, the existing loans are adjusted to reflect the market rate where more payment must be paid by the customer. Since the price increases, therefore potential customers for conventional home loans may find an alternative in order to purchase their dream home.

In a single banking framework, perhaps the movement happens within the system from one bank to another only to be differentiated in the BLR level but still subject to the determination from BNM. This creates pressure on customers because they have to pay a higher price for the financing. However, the banking institutions receive a higher profit than before due to the increase in the cost of borrowing as reflected by the increase in BLR.

The following Graph 2 further explains what has happened previously in Graph 1. In this graph, an explanation is given on the implication of BLR to Islamic home demand, especially when interest rate is rising. The following discussion offers a brief understanding, which is necessary to differentiate between conventional home loans and Islamic home financing:

Graph 2: Demand for Islamic home financing



Based on the above graph, when interest rate is rising, therefore the BLR is increased from 6% to 9% as shown in graph 1. Therefore, the price of conventional home loan is expensive, hence they are not affordable to some people who in the past could have afford it. Therefore, they will not choose conventional home loans because of the cost and will find a cheaper one, for example, Islamic home financing.

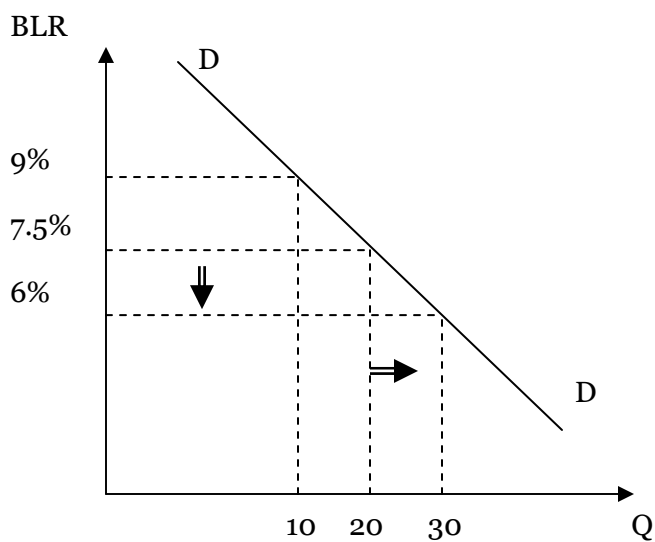
This is so as Islamic home financing carries fixed rate/flat rate among practitioner, which does not change according to the market rate, and more secure rather than conventional home loans. Therefore, individuals switch from conventional bank to Islamic bank in order to undertake Islamic home financing which is relatively cheaper than conventional home loans during inflation. Inflation does not increase the cost of financing of Islamic home financing, since the government cannot impose BLR which is riba and uncertain from Islamic point of view.

Consequently, the quantity demanded for Islamic home financing is increased from 10 units to be 20 units, which reflects the increment in the price of conventional home loans. This is known as the “substitution effect” between conventional home loans and Islamic home financing.

Scenario 2: Substitution effect during deflation

The following Graph 3 discusses on the implication of the price of conventional home loans and quantity to be purchased by the public during deflation. The following illustration provides an understanding on conventional home demand during that period of crisis:

Graph 3: Demand for conventional home loans

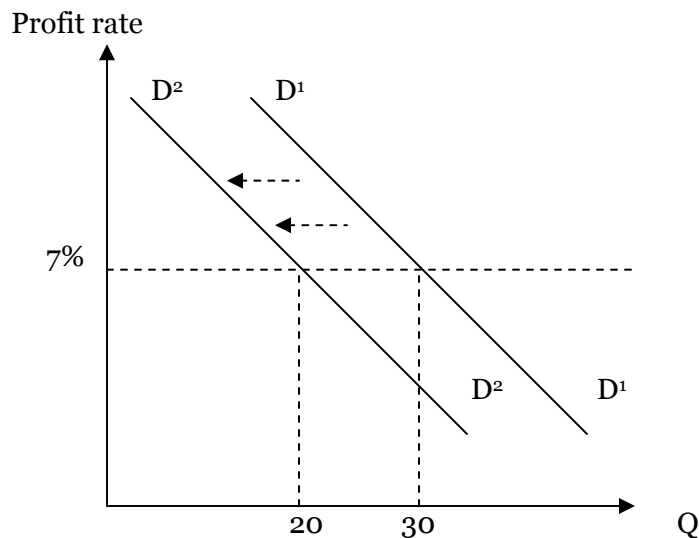


Let us assume, the country faces deflation in 2007. Therefore, BNM will reduce the BLR for conventional banks. The movement of BLR shows this action from 7.5% to 6%, quantity will also move from 20 units to 30 units, which indicates negative relationship between BLR and quantity for conventional home loans.

The reduction in the BLR demonstrates that the conventional home loans are cheaper. This is because BLR tends to reduce the cost of borrowing of conventional home loans. Consequently, the existing loans are adjusted to reflect the market rate where less payment is paid by the customer. Since the price is decreased, therefore potential customers for conventional home loans may retain their position in conventional banks.

The following Graph 4 continues the explanation of graph 3. In this graph, an explanation is given on the implication of BLR to Islamic home demand, especially when interest rate decreases. The following discussion offers a brief understanding, which is necessary to differentiate between conventional home loans and Islamic home financing:

Graph 4: demand for Islamic home financing



In reference to the above Graph 4, when interest rate decreases, the BLR decreases from 7.5% to 6%. However, the profit rate for Islamic financing is fixed at 7%. Therefore, the price of conventional home loans is cheaper and people would be affordable.

Hence, they would choose conventional home loans because they are cheaper than Islamic home financing. In practice, Islamic home financing carries fixed rate/flat rate among practitioner, which does not change according to the market rate. In a deflation, individuals who took up Islamic financing will suffer because of the high price as compares to conventional home loan.

As far as home financing, individuals would switch their financing facilities from Islamic banks to conventional banks. This is because conventional home loan is relatively cheaper than Islamic home financing. Deflation does not reduce the cost of undertaking an Islamic home financing, since it is fixed. Additionally, the government cannot impose BLR which is *riba* and uncertain from Islamic point of view.

Consequently, the quantity demanded for Islamic home financing is reduced from 30 units to be 20 units. This reduction reflects the decrement in the price of conventional home loans. This is due to the “substitution effect” between conventional home loans and Islamic home financing.

4. Conclusion

In conclusion, this paper gives a brief understanding on the substitution between Islamic home financing and conventional home loan. Generally, Islamic home financing offers fixed payments for the settlement of the financing at the beginning of the payment until settlement. It does not have any positive or negative relationship to inflation and deflation. However, some economic problems will not cause any anxieties especially with regards to Islamic home financing. This is because they are aware of the amount of the monthly payment reimbursed as the customer of Islamic banks.

On the contrary, conventional home loan offers unfixed payments for the settlement of the financing because it can be affected by the economy condition. This is because conventional home financing has positive relationship with inflation and deflation. For instance, in inflationary times, the monthly payment will increase whereas during deflationary times, the monthly payment will decrease. During inflation, customers feel the pressure because the monthly payment for home loan is high. However, customers under Islamic home financing will find his monthly payment is unchanged. Hence finds it relatively cheaper. The customer under conventional home loan views this as unfair since the monthly payment he has to make in comparison to Islamic home financing. However during the deflation, the customer under Islamic home financing finds his monthly payment is unfair. Even though, it is unchanged, the existing monthly payment is now relatively expensive in comparison to the monthly payment of conventional home loan. The customer under conventional home loan finds his burden is reduced because the monthly payment will be less during the deflation.

This unfairness has led to a creation of a new solution for Islamic banks to offer Islamic home financing based on variable rate and not the fixed rate regime. In response to this concern, BNM introduced variable rate financing in 2003 to offer hedging to Islamic banks in terms of its profitability in the context of vigorous competition in the banking industry in Malaysia. Offering variable rate financing means the rate will be tailored according to the market condition. For instance, during inflation, the customer will need to pay more because hibah is at minimum. Comparatively, during deflation, the customer will need to pay less because more hibah is awarded to the customer. However, this is not the end of the story, because the variable rate financing creates new debates. On the proponent side, it is permissible because we are practicing *maslahah*. On the opponent side, it is not permissible because we are applying the rule of interest rates in determining the monthly payment, which is indirectly determined. Based on these contentions, variable rate is still not practiced widely by Islamic banks in Malaysia.

This paper attempts to provide an understanding of the shift between the two forms of financing facilities offered by the financial institutions. A theory of substitution effect is deemed appropriate to explain this phenomenon.

References

- Haron, S, & Shanmugam, B. (2000). *Islamic banking system*. Kelana Jaya: Pelanduk.
- Shaharuddin, A., & Safian, Y.H.M. (2005). Variable rate financing in Malaysian Islamic banking: A jurisprudential analysis. *Proceedings of the International Conference in Economics and Finance (ICEF) 2005*, 175-181.