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The Role of Home Ownership Credit in the Concept of Time Value for Money and the Effect of Banking Credit Costs in Pandemic Era

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***Abstract*---**Money and its function in economic activities are not only based on the value listed in it but also there is time involvement that makes the value of money increase or decrease. The effect of time on the value of money is known as the concept of time value of money. This concept is important because it can help us to make decision for investing, taking loans, insurance, and other economy transaction. For the benefit of the people in a country the concept of time value of money is used to determine the amount of interest rates in home ownership credit. Home ownership lenders can use SWOT methods to develop a home ownership credit program with directed supervision so that risks can be prevented and benefits can be enjoyed.

***Keywords*---**Time Value of Money, Home Ownership Credit.

Introduction

Economic development in the world cannot be separated from the role of money as a medium of exchange in everyday life. Money is a modern innovation that replaces the position of barter or exchanging one item for another. According to one of the experts, *Albert Gailort Hart*; Money is a wealth owned to be able to pay off a certain amount of debt and at a certain time as well (Lovett et al., 2022).
The understanding of experts in general, money is very important in human life for example is in trading activities in the market. This is reinforced by the regulation in the State of Indonesia, namely in Law No. 7 of 2011 on currency, the notion of money is a legal means of payment.

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Based on several definitions and functions of money, we can conclude that money is essential to human life (Brannon and Manshad, 2022). To get it, people take a lot of sacrifices, one of which is by working. From working humans can fulfill the needs of clothing, food, accommodation, and also feel the development of value for money over time *(time value of money)*. The time value of money is a financial concept which is states that the value of money is now more valuable than the value of money with the same amount in the future because of the potential earning capacity of the money (Muda and Hasibuan, 2018). Factors that affect the time value of money are changes in interest rates, inflation, tax policy, and political conditions.

In the concept of management, time value of money is a central concept in which long-term decision-making is needed and has an important role (Simanjuntak et al., 2020). This concept is applied in our daily lives. One example is in the collection of loans / home ownership loans for the future of the family. The more difficult the economy in Indonesia, most people prefer home investment by crediting (Andhika and Erwin, 2021). Taking home ownership credit is done because the value of money has a positive impact in it, for example the value of money when taking credit will be very different in value from when the credit has expired in its time. There will be an increase in the value of money (inflation) every year along with the increase in the value of interest rates. Home Ownership Credit can be filed through one of the financial institutions, named banking (Najaf et al., 2022). The provision of credit collection set by the bank is to pay costs/*costs*, such as notary fees, provision and administration costs, insurance costs, and other costs. The fee is charged to the lender as a borrower.

Literature Review

The Elements of Credit

Credit comes from the Latin *credere* which means trust or *credo* which means I believe. Both understandings contain the understanding that someone who gets credit is a trustworthy person. After knowing the theory of credit foundation, then we also need to know what elements are contained in a credit according to Venkatachalam & Zambelli, (2022).

- Trust; It is a belief of the lender (bank) that the credit provided either in the form of money or services will be completely received back in the future.
- Agreement: set forth in an agreement in which each party will sign off on their respective rights and obligations.
- Term: Each credit granted has a certain period of time that includes the agreed credit return period.
- Risk: consequence from a factor caused by two things. The first is the loss factor caused by the element of intentionality of the customer not to pay his credit even though in terms of financial he can afford. Second, the risk of loss caused by the accident of customers so that they are unable to pay their credit, for example due to natural disasters.

The Home Ownership Credit

Home Ownership Credit is a loan facility from a bank to buy a house on credit (Sinaga et al., 2020). The loan facility is considered as one of the solutions in providing convenience for the community to have a dream home if they do not have cash. Financial institutions that provide mortgage loan facilities are banking.

According to the Law of the Republic of Indonesia No. 10/1998 article 1 explains that the understanding of banks is: Business Entities that collect funds from the community in the form of deposits and distribute them to the community in the form of credit and or other forms in order to improve the standard of living of many people. On the other hand, according to Kasmir (2004) "Banks are financial institutions whose main activity is to collect funds from the community and redistribute the funds to the community and provide other bank services. From several theories about the definition of a bank, it can be concluded that the bank is an institution or container that collects funds from the community which then the funds are used as a distribution facility in the form of credit. In this case we discuss specifically Home Ownership Credit (KPR).

2.3. Types of Home Ownership Credit

Indonesia has two types of Home Ownership Credit, namely:

a. Subsidized Home Ownership Credit
   This type of credit is intended for people with lower middle income in order to meet housing needs or home improvements that have been owned.
b. Non-Subsidized Home Ownership Credit
   Is a credit intended for all communities whose provisions are set by the bank, so that the determination of the amount of credit and interest rates is carried out in accordance with the policy of the bank concerned.

Credit Scoring Principles (5 C + 7 P)

Here is the principle of credit assessment that can basically provide information about *good faith (willingness to pay)* and *ability to pay (ability to pay)* :

- Character: looking at the nature or character of the customer
- Capacity: looking at the customer's capabilities
- Capital: looking at customer financing sources
- Condition: Looking at the economic conditions
- Collateral: looking at the guarantee conditions
- Personality: assessing the customer's personality
- Party: classifying customers
- Purpose: know the customer's purpose
- Prospect: assessing customer's business
- Payment: measures customer payments
- Profitability: analyzing customers' profitability
- Protection: looking at customer credit care

Based on the definitions of money and home ownership credit can be explained that money can be invested in the form of home ownership credit which later have an object added value adjusted for the increase in interest rate value every year.

Research Methods

This paper was created with the aim of analyzing the relationship between Home Ownership Credit in the Time Dimension of Value for Money and the Effect of Banking Credit Costs. The method carried out in analyzing this is the SWOT Research Method of analysis, namely:

- *Strenghtness Point*
  It is an analysis by making observations, analysis of an object to identify good, powerful, and other things that are positive.
  In this case, we can see that the home loan object is one example of how *time value of money works*. For example: when we buy a house on credit in 2022 at a price of 500 million, then 10 years later the price of the house when it has been paid off will differ in value assuming inflation of 10% annually, which is 1 billion. The analysis becomes an important point that *the time value of money* greatly affects long-term investments.

- *Weakness Point*
  Is a grouping of things or points that are still weak, there are negative deficiencies encountered by mortgage objects. At this point found the weakness of the object, namely in the form of a credit process that takes a long time, the cost / cost of interest charged to creditors. Credit rate calculation techniques depend on the type of credit offered by the bank. In Indonesia there are three methods of general interest rate determination techniques, namely: *fixed rate* (fixed), *sleding rate* (decrease), and *annuity rate* (floating). The three models of determining interest rates are often an obstacle for the community when they want to take home loans.

- *Opportunities*
  It is a group of things that allow the opportunity to advance, the existence of profitable potential. Based on the analysis, the technique of efficiency of interest that must be paid by creditors along with the principal of the loan can be done with financial cooperation between banks and the Government. For example, by creating a subsidized home program. That way the lower middle class also has the same opportunity to own a home.

- *Threat*
  It is restrictions, threats, challenges that endanger the survival of the organization. It can be done by providing an internal banking program such as discounts or interest deductions, giving a percentage of penalty for running interest when the creditor wants to complete his credit earlier than the promised time. Providing loan value to creditors based on the ability to pay creditors, so bad credit numbers can be effective.

  With the SWOT method, banking management can develop a home ownership credit program with directed supervision, and also creditors can enjoy long-term investment value with a sense of security.

Results and Discussion

Results

Based on observations and analysis through SWOT methods, *the implementation of Value Of Money* is believed to improve public sector accountability and improve public sector performance, for example banking. The benefits of implementing the concept *of Value Of Money* in public sector organizations, namely:

a. Increase the effectiveness of public services, in the sense of credit services provided on target.
b. Improve the quality of home ownership credit services by providing *discount* programs or *cashback* credit.
c. Provide opportunities for people to have home investments with interest rates that are easily affordable.

Discussion

The concept of Time Value of Money is closely related to the concepts of inflation and purchasing power. The correlation between time value of money and purchasing power tends to be negative. This is due to inflation that continues to occur from year to year, so that purchasing power decreases. For example: in 1998 the price of Pure London gold per gram was still at Rp 50,000, - then in 2022, the price of gold jumped high to Rp 892,000 per gram. This happens due to inflation every year and affects the rising price of goods and the decrease in people's desire to buy and invest in gold.

Therefore, financial management is concerned with investment decisions not only considering the concept of *time value of money*, but also takes into account purchasing power and inflation. Both factors have an impact on the calculation of real return on investment made. The example of the application of the concept in this discussion is in the field of Home Ownership Credit (KPR) organized by banking institutions.

Table 1. The Bank of Mandiri Mortgage Installment

SUKU BUNGA ALL EMPLOYEE

BUMN Hadir untuk negeri mandiri

TABEL ANGSURAN KPR MANDIRI BUNGA 8.88 % FIXED 10 TAHUN MINIMAL TENOR 10 TAHUN

LIMIT KREDIT		JANGKA WAKTU KPR										
	Tahun	10	11	12	13	14	15	16	17	18	19	20
	Bulan	120	132	144	156	168	180	192	204	216	228	240
100.000.000		1.260.273	1.189.463	1.131.283	1.082.804	1.041.935	1.007.140	977.269	951.438	928.964	909.303	892.023
125.000.000		1.575.341	1.486.829	1.414.104	1.353.505	1.302.419	1.258.926	1.221.586	1.189.298	1.161.205	1.136.629	1.115.029
150.000.000		1.890.409	1.784.195	1.696.924	1.624.207	1.562.903	1.510.711	1.465.903	1.427.157	1.393.445	1.363.955	1.338.034
200.000.000		2.520.545	2.378.926	2.262.566	2.165.609	2.083.870	2.014.281	1.954.537	1.902.876	1.857.927	1.818.606	1.784.046
225.000.000		2.835.613	2.676.292	2.545.387	2.436.310	2.344.354	2.266.066	2.198.854	2.140.736	2.090.168	2.045.932	2.007.051
250.000.000		3.150.681	2.973.658	2.828.207	2.707.011	2.604.838	2.517.851	2.443.171	2.378.596	2.322.409	2.273.258	2.230.057
300.000.000		3.780.818	3.568.389	3.393.849	3.248.413	3.125.805	3.021.421	2.931.806	2.854.315	2.786.891	2.727.909	2.676.068
310.500.000	A	3.913.146	3.693.283	3.512.634	3.362.108	3.235.209	3.127.171	3.034.419	2.954.216	2.884.432	2.823.386	2.769.731
327.750.000	N	4.130.543	3.898.465	3.707.780	3.548.891	3.414.942	3.300.903	3.202.998	3.118.339	3.044.678	2.980.241	2.923.605
500.000.000	G	6.301.363	5.947.315	5.656.415	5.414.022	5.209.676	5.035.702	4.886.343	4.757.191	4.644.818	4.546.515	4.460.114
525.000.000	S	6.616.431	6.244.681	5.939.236	5.684.723	5.470.160	5.287.487	5.130.660	4.995.051	4.877.059	4.773.841	4.683.120
550.000.000	U	6.931.499	6.542.047	6.222.056	5.955.424	5.730.643	5.539.273	5.374.977	5.232.910	5.109.300	5.001.167	4.906.126
575.000.000	R	7.246.567	6.839.413	6.504.877	6.226.125	5.991.127	5.791.058	5.619.294	5.470.770	5.341.541	5.228.493	5.129.131
600.000.000	A	7.561.635	7.136.779	6.787.698	6.496.826	6.251.611	6.042.843	5.863.611	5.708.629	5.573.782	5.455.818	5.352.137
625.000.000	N	7.876.703	7.434.144	7.070.519	6.767.527	6.512.095	6.294.628	6.107.929	5.946.489	5.806.023	5.683.144	5.575.143
650.000.000		8.191.771	7.731.510	7.353.339	7.038.228	6.772.578	6.546.413	6.352.246	6.184.348	6.038.264	5.910.470	5.798.148
675.000.000	B	8.506.839	8.028.876	7.636.160	7.308.929	7.033.062	6.798.198	6.596.563	6.422.208	6.270.505	6.137.796	6.021.154
700.000.000	U	8.821.908	8.326.242	7.918.981	7.579.631	7.293.546	7.049.983	6.840.880	6.660.068	6.502.746	6.365.122	6.244.160
725.000.000	L	9.136.976	8.623.607	8.201.802	7.850.332	7.554.030	7.301.768	7.085.197	6.897.927	6.734.986	6.592.447	6.467.165
750.000.000	A	9.452.044	8.920.973	8.484.622	8.121.033	7.814.514	7.553.553	7.329.514	7.135.787	6.967.227	6.819.773	6.690.171
800.000.000	N	10.082.180	9.515.705	9.050.264	8.662.435	8.335.481	8.057.124	7.818.148	7.611.506	7.431.709	7.274.425	7.136.183
850.000.000	A	10.712.316	10.110.436	9.615.905	9.203.837	8.856.449	8.560.694	8.306.783	8.087.225	7.896.191	7.729.076	7.582.194
900.000.000	N	11.342.453	10.705.168	10.181.547	9.745.239	9.377.416	9.064.264	8.795.417	8.562.944	8.360.673	8.183.728	8.028.205
950.000.000		11.972.589	11.299.899	10.747.188	10.286.641	9.898.384	9.567.834	9.284.051	9.038.663	8.825.155	8.638.379	8.474.217
1.000.000.000		12.602.725	11.894.631	11.312.830	10.828.044	10.419.351	10.071.405	9.772.686	9.514.382	9.289.637	9.093.031	8.920.228
1.250.000.000		15.753.406	14.868.289	14.141.037	13.535.055	13.024.189	12.589.256	12.215.857	11.892.978	11.612.046	11.366.288	11.150.285
1.500.000.000		18.904.088	17.841.946	16.969.245	16.242.065	15.629.027	15.107.107	14.659.028	14.271.573	13.934.455	13.639.546	13.380.342

	JANGKA WAKTU (TAHUN)										
	10	11	12	13	14	15	16	17	18	19	20
NILAI KOEFISIEN	0.012602725	0.011894631	0.01131283	0.010828044	0.010419351	0.010071405	0.009772686	0.009514382	0.009289637	0.009093031	0.008920228

PERSYARATAN UMUM

a. WNI yang berdomisili di indonesia
b. Pegawai/wiraswasta/Profesional
c. Telah bekerja min 2 tahun
d. Usia 21-60 tahun
e. Penghasilan min Rp. 2.500.000.00/bulan
f. Suami istri diperkenankan untuk JOINT INCOME
g. LIMIT KREDIT 100 JUTA SAMPAI 5 MILYAR
h. *Pembelian Ruko, Jangka Waktu Maks. 15 Thn*

PERSYARATAN ADMINISTRASI

a. FC KTP Suami Istri & Pas Foto 3X4
b. FC Kartu Keluarga
c. FC Surat Nikah / Cerai / Keterangan Belum Nikah
d. FC Rekening Tabungan 3 bulan terakhir
e. FC NPWP pribadi /SPT Tahunan
f. FC Slip Gaji Kolektif bulan terakhir
g. FC SK Pegawai (80%, 100% dan Terakhir)
h. FC Sertifikat, IMB, STTS/SPPT PBB
i. FC KWITANSI DP & Surat Penawaran Harga Rumah
j. FC KTP Penjual Suami Istri
k. Perjanjian Kredit & RK. Pinjaman dari Bank Asal (Khusus T

BIAYA YANG DIKENAKAN

a. Biaya Appraisal Rp 350.000,- (DIBAYAR DIMUKA)
b. Provisi kredit 1%
c. Administrasi 0.01% Rp. 500.000.00
d. Biaya notaris (sesuai tarif dan perhitungan)
e. Biaya premi asuransi jiwa dan kebakaran
f. Materai 6000 (12 lembar)

From the example of the Home Ownership Loan installment Table 1, the community is more facilitated for long-term investments without spending money in cash. The ease in the process of credit application requirements is warmly welcomed by the people of Indonesia, so that from year to year more use banking credit facilities than buying in cash at once. This is clearly seen from the comparison diagram of people who buy homes on credit and cash.

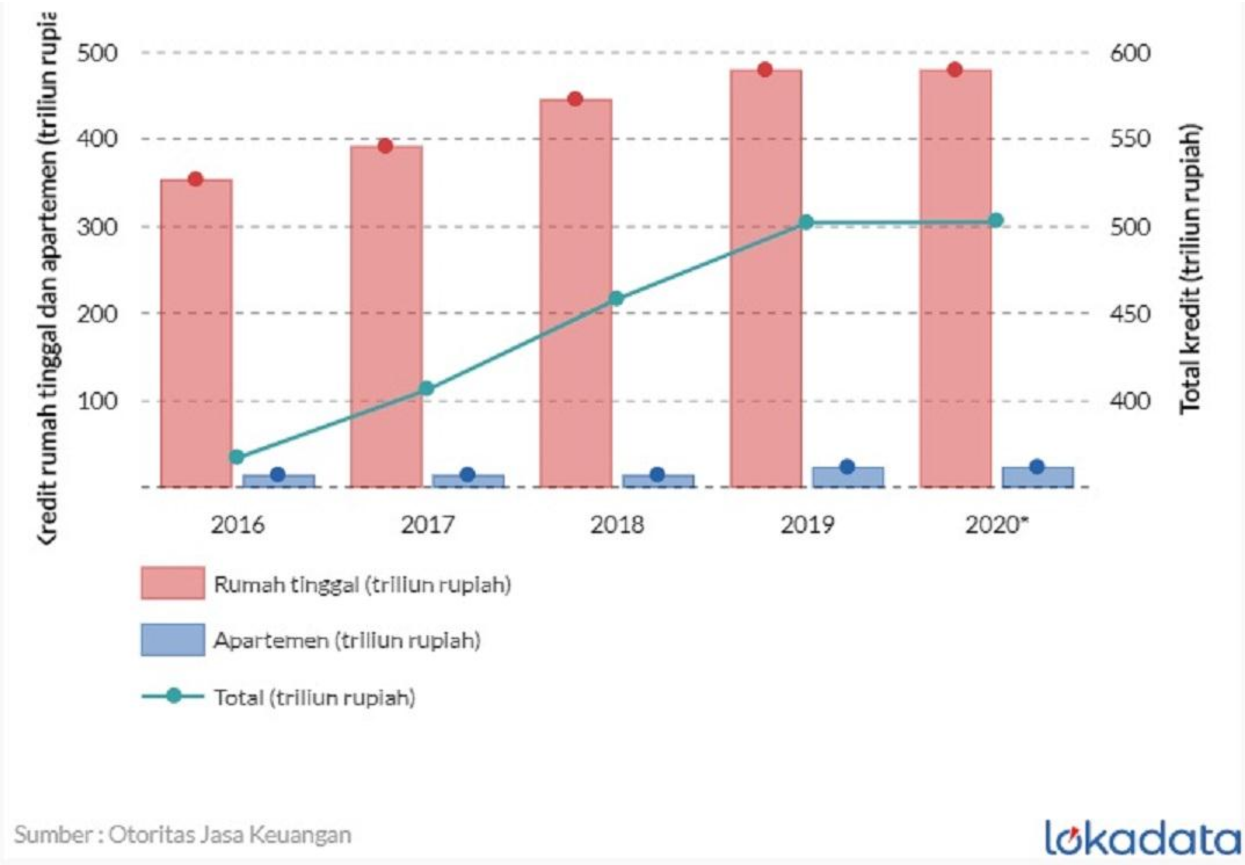

Figure 1. Mortgage Credit Development 2016-2020

Based on the Figure 1 explained the development of people's purchasing power in the form of residential loans every year. This shows that inflation is very impactful in everyday life. Although the burden / cost of interest rates increases or differs every year it does not affect people's purchasing power in investing long-term.

Conclusion

After descripting the role of Home Ownership Credit (KPR) as one example of the application of the concept *of time value of money* and the influence of costs in banking credit, it can be concluded that:

1. There is a positive and significant influence between the interest rate on Home Ownership Loans (KPR) and inflation as part of the concept of money time value.
2. Provide convenience for the community in investing with mediators the concept of time for money.

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