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Real Estate or Gold which is the better investment?: Comparison by Time Value of Money Principle & Valuation formula

Over the last 20 years, the Indian economy has experienced significant growth and transformation, driven by various factors such as economic reforms, globalization, technological advancements, and demographic changes.Overall, despite facing challenges and periodic slowdowns, the Indian economy has exhibited resilience and sustained growth over the past two decades, emerging as one of the world's largest and fastest-growing economies.In this scenario, increasing the wealth of lower and upper-middle-class investors, several investment sectors offer opportunities to grow wealth over the long term while managing risk.

1. **Gold Investment**
2. **Real Estate Investment (Land)**
3. **Real Estate Investment (Residential Flat)**
4. **Silver Investment**

Introduction of Time Value of Money

The time value of money is important in various financial decisions, such as investment analysis. It allows individuals and businesses to compare cash flows

occurring at different points in time, facilitating informed decision-making and resource allocation. Understanding the time value of money helps individuals make better financial choices and optimize the use of their resources over time.

The time value of money is based on two key principles

Present Value: This concept refers to the idea that the value of money today is worth more than the same amount of money in the future due to its earning potential. Present value calculations are used to determine the current worth of future cash flows, taking into account factors such as interest rates and the timing of cash flows.

Future Value = P x $1/(1+r)^n$
P= Principal amount
r = Cap Rate
n = time in years

Future Value: Future value is the value of an investment or amount of money at a specified date in the future, based on the assumption of a certain rate of return or interest rate. Future value calculations are used to determine how much an investment will grow over time, taking into account compound interest or other factors that affect its growth.

Future Value = P x $(1+r)^n$
P= Principle amount
r = Cap Rate
n = Time in years

Investment Sector
Gold Investment

*Gold Rate for 10 gram (A)	2001	₹4,300.00
*Gold Rate for 10 gram (B)	2023	₹64,125.00
Escalation	(B) – (A)	₹59,825.00
Increment(x times)	(B)/(A)	14.913
Year lapsed (n)		22
Year Purchase (YP)	P x $(1+r)^n$	
Principle Amount (P)	₹4,300.00	
Future Value = P x $(1+r)^n$	₹64,125.00	
Future Value	P x $(1+r)^n$	
64125	4300 x $(1+r)^{22}$	
(1+r)	1.1307	
Cap Rate (r)	0.1307	13.07%

*Gold Rate Source: Google

This means if anyone invested Rs 1,00,000 in Gold in 2001 then the Then the present value of the Investment is, Rs 1,00,000 x (1+0.1307)^22= ₹14,91,279/-

Real Estate Investment (Land)

*Land rate (New Delhi) (A)	1998	₹57,960.00
*Land rate (New Delhi) (B)	2023	₹7,74,000.00
Escalation	(B) − (A)	₹7,16,040.00
Increment (x times)	(B)/(A)	13.354
Year lapsed (n)		25
Year Purchase (YP)	P x (1+r)^n	
Principle Amount (P)	₹57,960.00	
Future Value = P x (1+r)^n)	₹7,74,000.00	
Future Value	P x (1+r)^n	
₹7,74,000.00	57960 x (1+r)^25	
(1+r)	1.1092	
Cap Rate (r)	0.1092	10.92%

*Land rate as per Delhi Circle rate 1998 (New Delhi Zone 1 Central Zone Connaught Place)

This means if anyone invested Rs 1,00,000 in Real Estate (Land) in 1998 then the Then the present value of the Investment is,
Rs 1,00,000 x (1+0.1092)^25= ₹13,35,403/-
*(Disclaimer: the above scenario may differ depending upon the other factors of real estate)

Real Estate Investment (Residential Flat)

*Residential flat in Tier 2 city (Rate /sqft) (A)	2015	₹3,500.00
*Residential flat in Tier 2 city (Rate /sqft)(B)	2024	₹7,000.00
Escalation	(B) − (A)	₹3,500.00
Increment (x times)	(B)/(A)	2.000
Year lapsed (n)		9
Year Purchase (YP)	P x (1+r)^n	
Principle Amount (P)	₹3,500.00	
Future Value Future Value = P x (1+r)^n	₹7,000.00	
Future Value	P x (1+r)^n	
₹7,000.00	3501 x (1+r)^9	
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(1+r)	1.0801	
Cap Rate (r)	0.0801	8.01%

*Residential Flat rate as per Patna Market rate (Actual)

This means if anyone invested Rs 1,00,000 in Real Estate (Residential Flat) in 2015 then the Then the present value of the Investment is,
Rs 1,00,000 x (1+0.0801)^9= ₹ 2,00,000/-

Silver Investment

*Silver Rate /kg (A)	2000	₹7,900.00
*Silver Rate /kg (B)	2024	₹75,500.00
Escalation	(B) – (A)	₹67,600.00
Increment(x times)	(B)/(A)	9.557
Year lapsed (n)		24
Year Purchase (YP)	P x (1+r)^n	
Principle Amount (P)	₹7,900.00	
Future Value Future Value = P x (1+r)^n	₹75,500.00	
Future Value	P x (1+r)^n	
₹75,500.00	7900 x (1+r)^24	
(1+r)	1.0986	
Cap Rate (r)	0.0986	9.86%

*Gold Rate Source: Google

This means if anyone invested Rs 1,00,000 in Silver in 2000 then the present value of the Investment is,
Rs 1,00,000 x (1+0.0986)^24= ₹ 9,55,696/-

Time Value of Money in Cap Rate %			
Gold Investment	Real Estate (Land)	Residential flat)	Silver Investment
13.07 %	10.92 %	8.01 %	9.86 %

*(Disclaimer : the above scenario may differ depending upon the other factors of real estate)

Conclusion

• Investment in Gold is better compared to Real estate (Land) investment
• Investment in Gold is a better option compared to Land, meanwhile Residential Flats and silver investments have the lowest return