CRE – VALUATIONS
Effective Techniques

The Need to Know and Learn
FREE Learning Guide

August
2021

Introduction to CRE Valuations

Facts vs Fiction

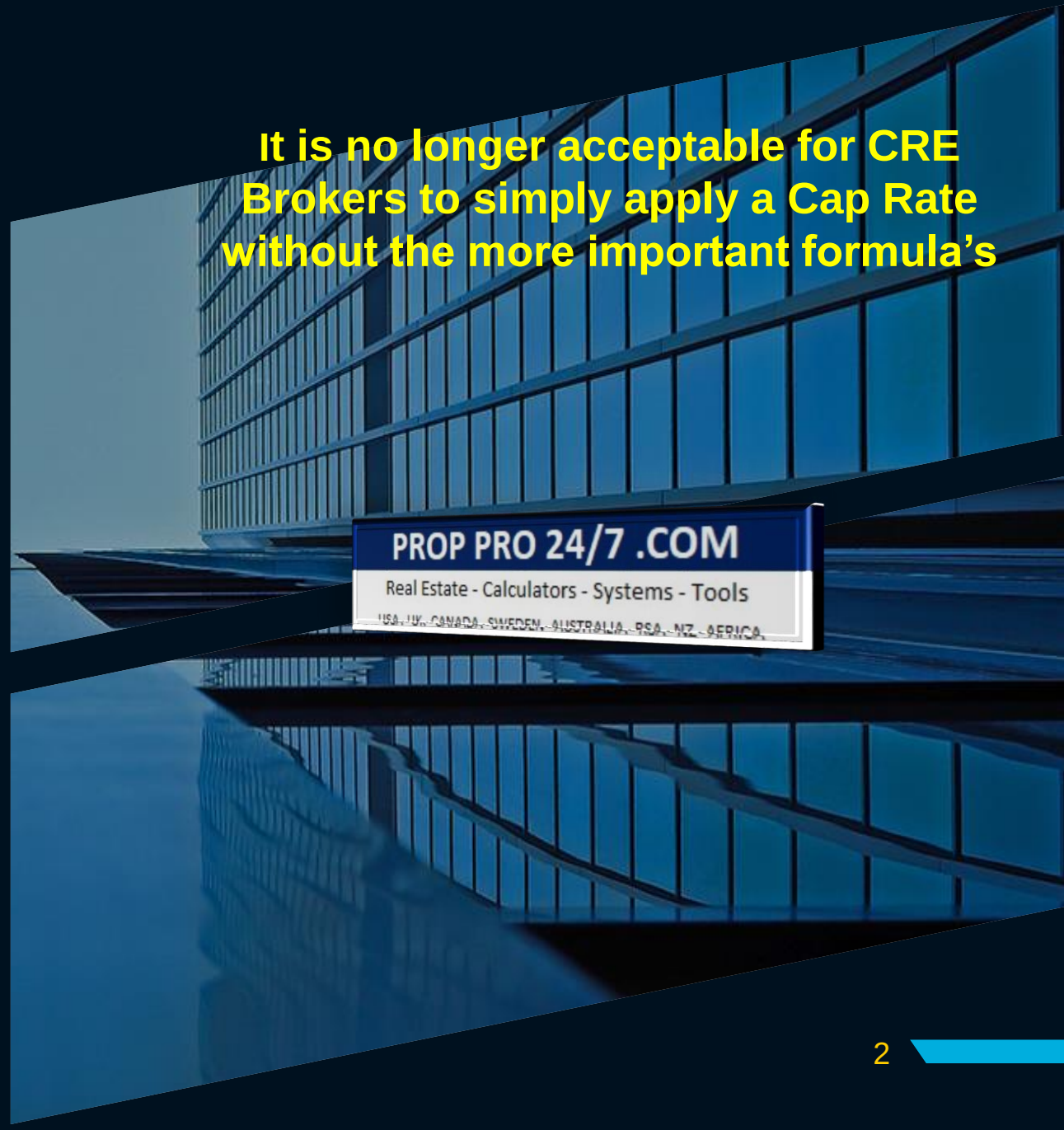
Cap Rates are commonly used to provide an upfront Value to interested parties.

Cap Rates however, will not show potential investors what the returns are over a period longer than 1 year.

The need for NPV, IRR and MIRR cannot be overstated, and they are the International medium for evaluating returns!

For Development Valuations, the required formulae is XNPV and XIRR which is the date sensitive equivalent of NPV and IRR

It is no longer acceptable for CRE Brokers to simply apply a Cap Rate without the more important formula's



CRE Valuations

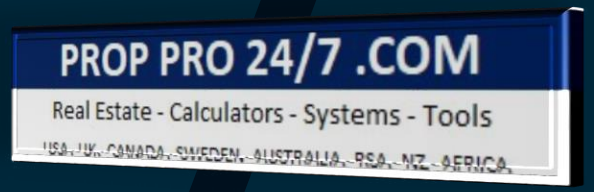
Understanding Valuation Methodology and Performance Indicators

- Ignore historical sales stats, as these are produced in a different economic climate to that of the present! Notwithstanding the fact that there are so many internal sales between owners and their entities for many different reasons, and it becomes impossible to absorb all the varying and influencing factors.
- NPV – Net Present Value must produce a positive amount
- IRR – Internal Rate of Return must be above the “Hurdle Rate”
- MIRR – Modified Internal Rate must be above the “Hurdle Rate”

- Bear in mind, a prudent Investor will target a certain IRR and more importantly a MIRR %

Cap Rates are a function of MIRR and not the other way round!

CRE Valuations



We consider a typical CRE Investment scenario where Cap Rates in isolation will lead you to incorrect Valuations

Prop A

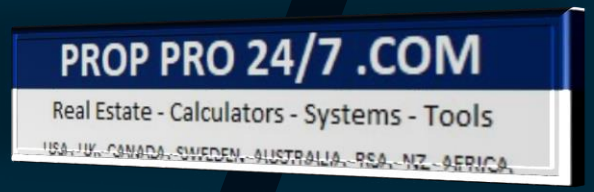
- Cap Rate 7%
- Monthly Income 100 000
- Fixed monthly costs 12 000
- Main. Provision 4 000
- Vacancy % 0%
- Funders Rate 7%
- Funding LTV 40%
- Annual Lease Esc. 3,5%
- Value Growth pa % 3,5%
- VALUE ACCORDING TO YOUR CAP RATE
- 14 400 000

Prop B

- Cap Rate 7%
- Monthly Income 96 000
- Fixed monthly costs 11 500
- Main. Provision 3 700
- Vacancy % 0%
- Funders Rate 7%
- Funding LTV 40%
- Annual Lease Esc. 5%
- Value Growth pa % 3,5%
- VALUE ACCORDING TO YOUR CAP RATE
- 13 851 429

Let us view page 5 and see what these Cap Rates mean for an investor

CRE Valuations



When you target a certain IRR, then the Cap Rate is a function of IRR or MIRR
Most of the prudent Investors will target an IRR and MIRR %

Prop A

- According to your 7% Cap Rate, the property value
- 14 400 000
- IRR 12,80% 10 year Model
- MIRR 12,68%

- Investors will identify that Prop B offers better returns even although the same Cap Rate was applied.

Prop B

- According to your 7% Cap Rate, the property value
- 13 851 429
- IRR 13,45% 10 year Model
- MIRR 13,31%

- This is evidence that a Cap Rate without IRR and MIRR is a fictional Valuation method because it could not consider the higher annual lease Esc. % in Prop B

Either Increase the Cap Rate in Prop A or decrease the Cap Rate in Prop B

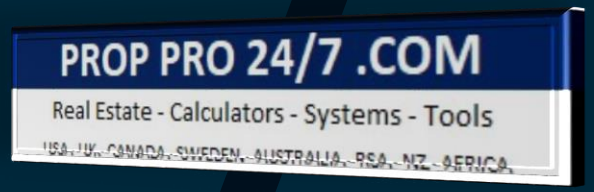
We automate the entire Valuation process. From 9 x Input fields In less than 40 seconds you will have all Cash Flows, Exit Values, NPV, IRR and MIRR
We Automate so that you can Operate!!

CRE Valuations

Factors that influence the results of NPV, IRR & MIRR

- The annual lease escalation %
- The expected annual growth in value %
- The amount of gearing used (LTV)
- Expected vacancy %
- Funders interest rate
- Re-investment rates for MIRR
- All these factors will have an effect on the Cap Rate that will be applied. Meaning that Cap Rates are a function of the Evaluation formula's

CRE Valuations



We now know that Cap rates are a function of the Evaluation formula's – if Prop A and Prop B are to equal one another in Investment Returns, what should the Cap Rates amount to?

Prop A

- Should we wish to achieve the same Investment returns that Prop B originally produced (IRR 13,45% and MIRR 13,31%) then we would have to alter the Cap Rate to 7,4%
- The new value would then equate to 13 621 600

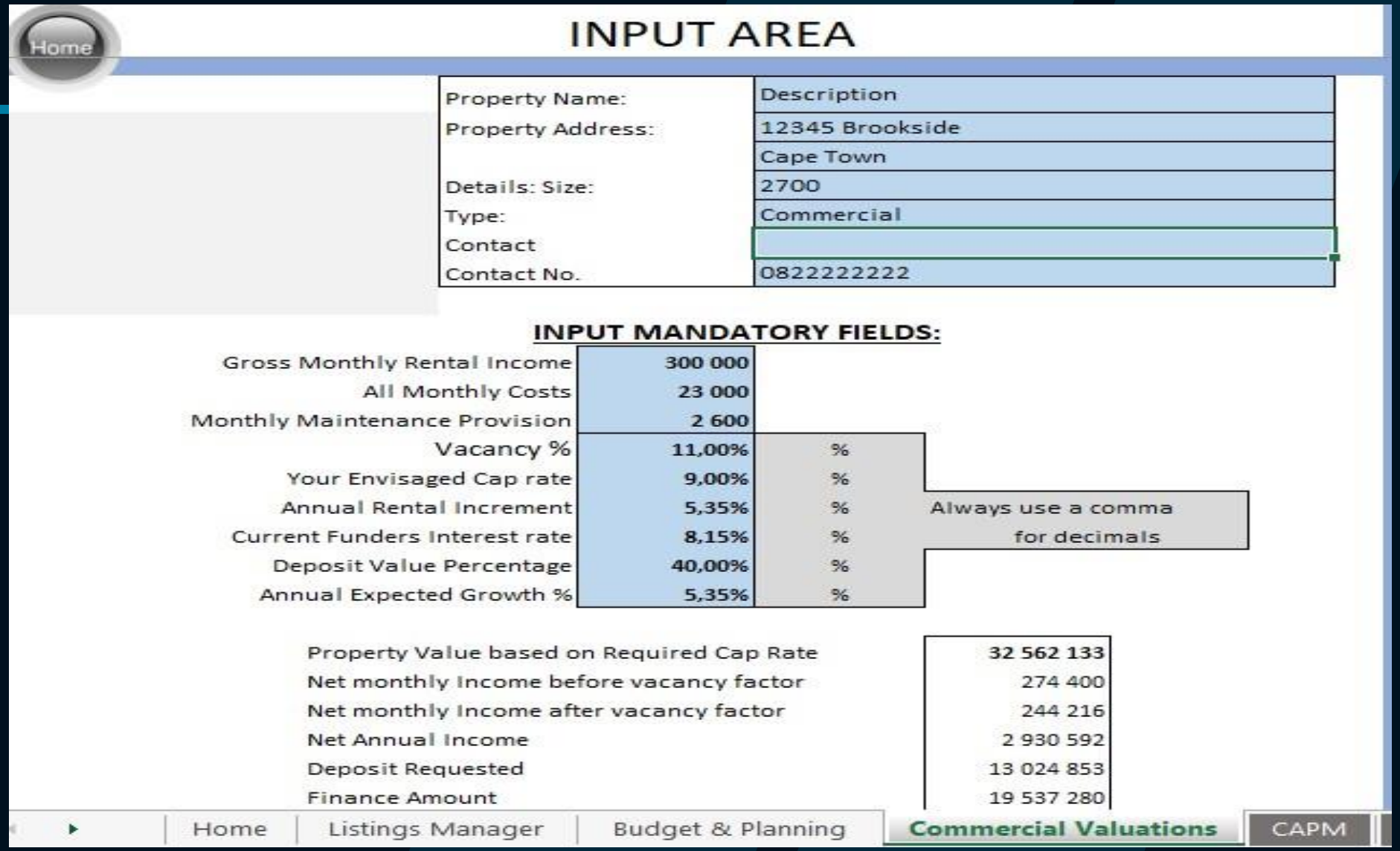
Prop B

- Should we wish to achieve the same Investment returns that Prop A originally produced (IRR 12,80% and MIRR 12,58%) then we would have to alter the Cap Rate to 6,64%
- .The new value would then equate to 14 602 400

By using a Cap Rate and not the correct formula's, we made a huge mistake – PROP A was originally valued at 550 000 more than PROP B whereas in truth, the Smart Investor will have realised that PROP B is in fact worth 200 000 more than PROP A – a massive 750 000 swing!

PROPPRO247.COM - Input Sheet

9 x Input Fields - In less than 40 seconds



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5 YEAR REPORT

Deposit, if any, (%)	40%
Annual Growth value %	5,35%

PROPPRO247.COM Calculated Results & Report:

Property Value based on Required Cap Rate	32 562 133
Net Monthly Income before vacancy %	274 400
Net Monthly Income after vacancy	244 216
Net Annual Income	2 930 592

Cash flow analysis and break even

Years	Income	Mortgage	Net Income	Balance
Deposits			-13 024 853	-13 024 853
1	2 930 592	4 770 595	-1 840 003	-14 864 857
2	3 087 379	4 770 595	-1 683 217	-16 548 073
3	3 252 553	4 770 595	-1 518 042	-18 066 115
4	3 426 565	4 770 595	-1 344 030	-19 410 146
5	3 609 886	4 770 595	41 095 015	21 684 869

Exit Value included in final cash flow

With your chosen growth %

NPV	9 427 377
IRR	18,83%
MIRR	17,50%
Cap Rate	9,00%
LTV	60%

Exit value at 5 years
or Balance Sheet value
or Change % in Input Sheet

42 255 724
Exit Value

Mortgage Calculator Below

Original Principal	19 537 280
Deposit	13 024 853
Loan Term (Years)	5
Annual Interest Rate	8,15%
No. Payments per year	12
Monthly Payments	397 550

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7 YEAR REPORT

Deposit, if any, (%)	40%
Annual Growth value %	5,35%

PROPPRO247.COM Calculated Results & Report:

Property Value based on Required Cap Rate	32 562 133
Net Monthly Income before vacancy %	274 400
Net Monthly Income after vacancy	244 216
Net Annual Income	2 930 592

Cash flow analysis and break even

Years	Income	Mortgage	Net Income	Balance
Deposits			-13 024 853	-13 024 853
1	2 930 592	3 671 692	-741 100	-13 765 953
2	3 087 379	3 671 692	-584 313	-14 350 267
3	3 252 553	3 671 692	-419 139	-14 769 406
4	3 426 565	3 671 692	-245 127	-15 014 533
5	3 609 886	3 671 692	-61 806	-15 076 339
6	3 803 015	3 671 692	131 323	-14 945 016
7	4 006 476	3 671 692	47 232 818	32 287 802

Exit Value included in final cash flow

With your chosen growth %

NPV	12 613 538
IRR	18,47%
MIRR	18,13%
Cap Rate	9,00%
LTV	60%

Exit value at 7 years
or Balance Sheet value
or Change % in Input Sheet

46 898 033
Exit Value

Mortgage Calculator Below

Original Principal	19 537 280
Deposit	13 024 853
Loan Term (Years)	7
Annual Interest Rate	8,15%
No. Payments per year	12
Monthly Payments	305 974

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10 YEAR REPORT

Deposit, if any, (%)	40%
Annual Growth value %	5,35%

PROPPRO247.COM Calculated Results & Report:

Property Value based on Required Cap Rate	32 562 133
Net Monthly Income before vacancy %	274 400
Net Monthly Income after vacancy	244 216
Net Annual Income	2 930 592

Cash flow analysis and break even

Years	Income	Mortgage	Net Income	Balance
Deposits			-13 024 853	-13 024 853
1	2 930 592	2 863 110	67 482	-12 957 371
2	3 087 379	2 863 110	224 269	-12 733 102
3	3 252 553	2 863 110	389 444	-12 343 659
4	3 426 565	2 863 110	563 455	-11 780 203
5	3 609 886	2 863 110	746 776	-11 033 427
6	3 803 015	2 863 110	939 905	-10 093 521
7	4 006 476	2 863 110	1 143 367	-8 950 155
8	4 220 823	2 863 110	1 357 713	-7 592 441
9	4 446 637	2 863 110	1 583 527	-6 008 914
10	4 684 532	2 863 110	56 656 473	50 647 559

Exit Value included in final cash flow

With your chosen growth %

NPV	17 090 775
IRR	18,29%
MIRR	17,61%
Cap Rate	9,00%
LTV	60%

Exit value at 10 years
or Balance Sheet value
or Change % in Input Sheet

54 835 051
Exit Value

Mortgage Calculator Below	
Original Principal	19 537 280
Deposit	13 024 853
Loan Term (Years)	10
Annual Interest Rate	8,15%
No. Payments per year	12
Monthly Payments	238 592

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12 YEAR REPORT

Deposit, if any, (%)	40%
Annual Growth value %	5,35%

PROPPRO247.COM Calculated Results & Report:

Property Value based on Required Cap Rate	32 562 133
Net Monthly Income before vacancy %	274 400
Net Monthly Income after vacancy	244 216
Net Annual Income	2 930 592

Cash flow analysis and break even

Years	Income	Mortgage	Net Income	Balance
Deposits			-13 024 853	-13 024 853
1	2 930 592	2 557 104	373 488	-12 651 365
2	3 087 379	2 557 104	530 275	-12 121 090
3	3 252 553	2 557 104	695 450	-11 425 640
4	3 426 565	2 557 104	869 461	-10 556 179
5	3 609 886	2 557 104	1 052 783	-9 503 396
6	3 803 015	2 557 104	1 245 912	-8 257 484
7	4 006 476	2 557 104	1 449 373	-6 808 111
8	4 220 823	2 557 104	1 663 719	-5 144 392
9	4 446 637	2 557 104	1 889 533	-3 254 859
10	4 684 532	2 557 104	2 127 429	-1 127 430
11	4 935 155	2 557 104	2 378 051	1 250 621
12	5 199 185	2 557 104	63 501 435	64 752 056

Exit Value included in final cash flow

With your chosen growth %

NPV	19 886 358
IRR	18,27%
MIRR	16,84%
Cap Rate	9,00%
LTV	60%

Exit value at 12 years
or Balance Sheet value
or Change % in Input Sheet

60 859 353
Exit Value

Mortgage Calculator Below	
Original Principal	19 537 280
Deposit	13 024 853
Loan Term (Years)	12
Annual Interest Rate	8,15%
No. Payments per year	12
Monthly Payments	213 092

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15 YEAR REPORT

Deposit, if any, (%)	40%
Annual Growth value %	5,35%

PROPPRO247.COM Calculated Results & Report:

Property Value based on Required Cap Rate	32 562 133
Net Monthly Income before vacancy %	274 400
Net Monthly Income after vacancy	244 216
Net Annual Income	2 930 592

Cash flow analysis and break even

Years	Income	Mortgage	Net Income	Balance
Deposits			-13 024 853	-13 024 853
1	2 930 592	2 260 850	669 742	-12 355 111
2	3 087 379	2 260 850	826 529	-11 528 583
3	3 252 553	2 260 850	991 703	-10 536 880
4	3 426 565	2 260 850	1 165 715	-9 371 165
5	3 609 886	2 260 850	1 349 036	-8 022 129
6	3 803 015	2 260 850	1 542 165	-6 479 964
7	4 006 476	2 260 850	1 745 626	-4 734 337
8	4 220 823	2 260 850	1 959 973	-2 774 365
9	4 446 637	2 260 850	2 185 787	-588 578
10	4 684 532	2 260 850	2 423 682	1 835 104
11	4 935 155	2 260 850	2 674 304	4 509 409
12	5 199 185	2 260 850	2 938 335	7 447 744
13	5 477 342	2 260 850	3 216 492	10 664 235
15	5 923 745	2 260 850	74 822 077	85 486 313

With your chosen growth %

NPV	24 478 146
IRR	18,94%
MIRR	16,64%
Cap Rate	9,00%
LTV	60%

Exit value at 15 years
or Balance Sheet value
or Change % in Input Sheet

71 159 182
Exit Value

Mortgage Calculator Below	
Original Principal	19 537 280
Deposit	13 024 853
Loan Term (Years)	15
Annual Interest Rate	8,15%
No. Payments per year	12
Monthly Payments	188 404

Exit Value included in final cash flow

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20 YEAR REPORT

Deposit, if any, (%)	40%
Annual Growth value %	5,35%

PROPPRO247.COM Calculated Results & Report:

Property Value based on Required Cap Rate	32 562 133
Net Monthly Income before vacancy %	274 400
Net Monthly Income after vacancy	244 216
Net Annual Income	2 930 592

Cash flow analysis and break even

Years	Income	Mortgage	Net Income	Balance
Deposits			-13 024 853	-13 024 853
1	2 930 592	1 982 955	947 637	-12 077 216
2	3 087 379	1 982 955	1 104 424	-10 972 792
3	3 252 553	1 982 955	1 269 599	-9 703 193
4	3 426 565	1 982 955	1 443 611	-8 259 582
5	3 609 886	1 982 955	1 626 932	-6 632 650
6	3 803 015	1 982 955	1 820 061	-4 812 590
7	4 006 476	1 982 955	2 023 522	-2 789 068
8	4 220 823	1 982 955	2 237 868	-551 199
9	4 446 637	1 982 955	2 463 683	1 912 483
10	4 684 532	1 982 955	2 701 578	4 614 061
11	4 935 155	1 982 955	2 952 200	7 566 261
12	5 199 185	1 982 955	3 216 231	10 782 492
13	5 477 342	1 982 955	3 494 387	14 276 879
14	5 770 380	1 982 955	3 787 425	18 064 304
15	6 079 095	1 982 955	4 096 140	22 160 444
16	6 404 326	1 982 955	4 421 372	26 581 816
17	6 746 958	1 982 955	4 764 003	31 345 820
18	7 107 920	1 982 955	5 124 966	36 470 785
19	7 488 194	1 982 955	5 505 239	41 976 024
20	7 888 812	1 982 955	98 248 787	140 224 812

With your chosen growth %

NPV	29 717 175
IRR	18,40%
MIRR	14,77%
Cap Rate	9,00%
LTV	60%

Exit value at 20 years
or Balance Sheet value
or Change % in Input Sheet

92 342 930
Exit Value

Mortgage Calculator Below

Original Principal	19 537 280
Deposit	13 024 853
Loan Term (Years)	20
Annual Interest Rate	8,15%
No. Payments per year	12
Monthly Payments	165 246

Exit Value included in final cash flow