



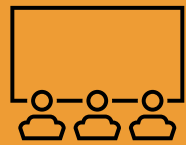
Quant Finance Modelling

value of the portfolio

Gustavo B. Cruz & Jakob

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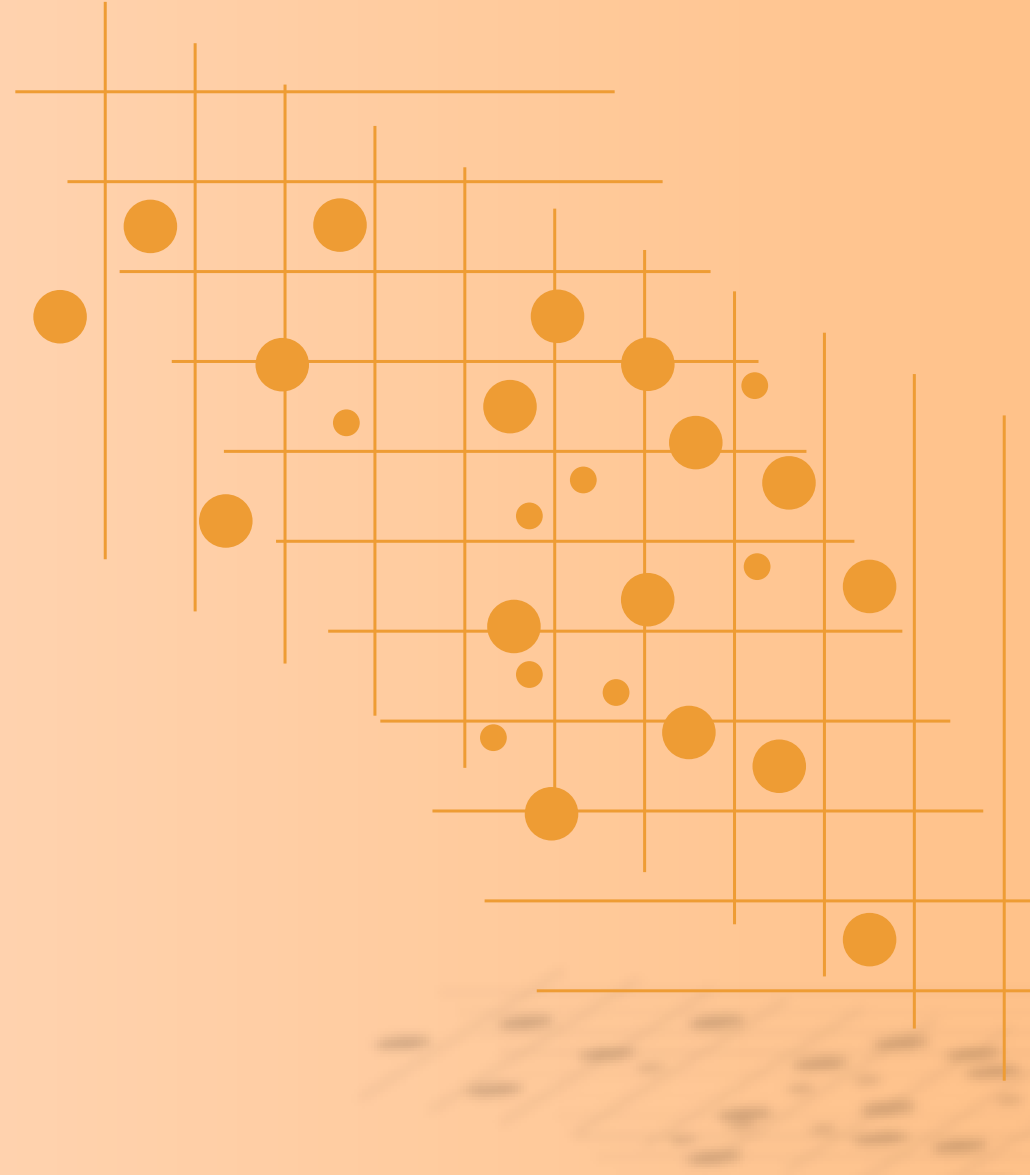
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Overview

This presentation aims to provide a comprehensive overview and assessment of our customer portfolio. The data utilized spans from June 2019 to December 2020.

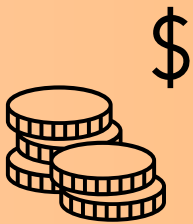
Through our analytical process, we successfully forecasted cash flows, offering valuable insights into future financial trends.



Historical Repayment Percentages

In computing the Historical Repayment Percentages, we based our calculations on the Original Amount associated with the monthly payments.

	31.05.2019	30.06.2019	31.07.2019	31.08.2019	30.09.2019	31.10.2019	30.11.2019	31.12.2019	31.01.2020	29.02.2020	31.03.2020	30.04.2020	31.05.2020	30.06.2020	31.07.2020	31.08.2020	30.09.2020	31.10.2020	30.11.2020
31.05.2019	14.40%	33.26%	13.26%	9.26%	7.35%	5.38%	4.27%	3.24%	2.37%	1.68%	1.16%	0.93%	0.63%	0.53%	0.37%	0.30%	0.24%	0.18%	0.17%
30.06.2019		12.81%		11.39%	8.93%	8.21%	6.15%	4.65%	3.86%	3.03%	2.35%	1.83%	1.49%	1.27%	0.85%	0.73%	0.58%	0.48%	0.40%
31.07.2019			14.33%	27.71%	11.26%	8.19%	6.62%	6.13%	4.69%	3.94%	2.82%	2.41%	1.79%	1.58%	1.19%	1.03%	0.84%	0.60%	0.57%
31.08.2019				12.88%	32.50%	11.05%	9.93%	7.06%	5.53%	4.55%	3.32%	2.68%	2.02%	1.59%	1.21%	0.88%	0.72%	0.56%	0.42%
30.09.2019					13.73%	27.10%	9.61%	8.47%	6.48%	5.54%	4.33%	4.07%	3.15%	2.23%	1.99%	1.65%	1.33%	1.18%	0.98%
31.10.2019						14.63%	29.91%	10.60%	7.45%	6.25%	4.88%	4.75%	3.57%	2.95%	2.29%	1.80%	1.54%	1.17%	0.93%
30.11.2019							14.31%	30.70%	10.43%	7.58%	6.16%	4.62%	4.42%	3.63%	2.57%	2.05%	1.88%	1.43%	1.23%
31.12.2019								14.13%	29.10%	8.96%	7.32%	6.57%	4.73%	4.26%	3.21%	2.70%	2.32%	1.96%	1.69%
31.01.2020									14.90%	27.97%	8.96%	7.04%	5.69%	5.04%	4.07%	3.34%	2.79%	2.08%	1.84%
29.02.2020										14.75%	31.97%	9.54%	6.85%	5.77%	4.78%	3.75%	3.06%	2.60%	1.93%
31.03.2020											13.15%	28.80%	7.33%	6.59%	5.14%	4.42%	3.77%	3.17%	2.98%
30.04.2020												14.92%	29.00%	7.82%	6.36%	4.80%	4.38%	3.74%	2.76%
31.05.2020													15.97%	34.10%	6.89%	6.15%	5.31%	3.97%	3.02%
30.06.2020														15.18%	36.41%	6.70%	6.13%	4.70%	3.83%
31.07.2020															13.62%	31.52%	6.33%	5.33%	4.63%
31.08.2020																13.56%	32.36%	6.04%	5.26%
30.09.2020																	15.36%	27.29%	5.35%
31.10.2020																		13.24%	31.60%
30.11.2020																			14.68%
31.12.2020																			

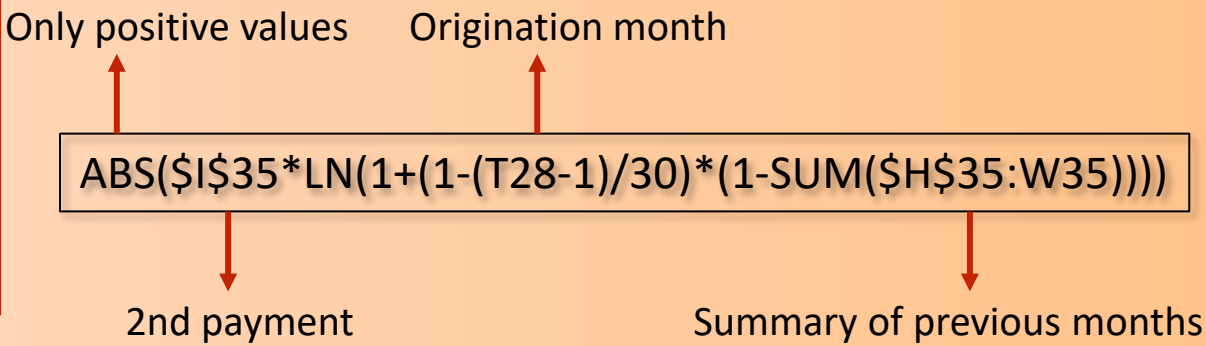


Expected Repayment Percentages

In determining the anticipated repayment percentages, we leveraged a financial equation to guide our calculations:

$$p_i = \max \left\{ p_2 * \ln \left(1 + \left(1 - \frac{i - 1}{30} \right) \left(1 - \sum_{j=1}^{i-1} p_j \right) \right); 0 \right\}$$

For implementation in Excel, we applied the following formula:



- important considerations were taken into account.:
- Paid back over a period of 30 months;
 - Origination month between 3 and 30

Expected Repayment Percentages

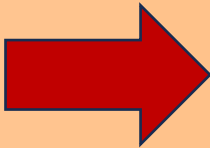
The expectations are described below:

Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23
0.10%	0.08%	0.06%	0.05%	0.04%	0.03%	0.02%	0.02%	0.01%	0.01%																			
0.29%	0.24%	0.20%	0.16%	0.13%	0.10%	0.08%	0.06%	0.05%	0.03%	0.01%																		
0.44%	0.36%	0.29%	0.24%	0.20%	0.16%	0.13%	0.10%	0.08%	0.06%	0.04%	0.02%																	
0.38%	0.30%	0.24%	0.19%	0.16%	0.13%	0.10%	0.08%	0.06%	0.05%	0.03%	0.02%	0.01%																
0.91%	0.75%	0.61%	0.50%	0.41%	0.34%	0.28%	0.22%	0.18%	0.14%	0.11%	0.08%	0.05%	0.03%															
0.96%	0.77%	0.62%	0.50%	0.40%	0.33%	0.26%	0.21%	0.17%	0.14%	0.11%	0.08%	0.06%	0.04%	0.02%														
1.29%	1.02%	0.81%	0.65%	0.52%	0.42%	0.34%	0.28%	0.22%	0.18%	0.14%	0.11%	0.08%	0.06%		0.02%													
1.88%	1.50%	1.20%	0.96%	0.78%	0.63%	0.51%	0.42%	0.34%	0.28%	0.22%	0.18%	0.14%	0.11%	0.08%	0.05%	0.02%												
2.36%	1.89%	1.51%	1.22%	0.99%	0.80%	0.65%	0.53%	0.44%	0.36%	0.29%	0.24%	0.19%	0.15%	0.11%	0.08%	0.05%	0.03%											
2.62%	2.02%	1.56%	1.22%	0.95%	0.75%	0.60%	0.48%	0.38%	0.31%	0.25%	0.20%	0.16%	0.13%	0.10%	0.07%	0.05%	0.03%	0.02%										
3.99%	3.16%	2.50%	1.99%	1.59%	1.28%	1.03%	0.83%	0.67%	0.55%	0.45%	0.37%	0.30%	0.24%	0.19%	0.15%	0.12%	0.08%	0.05%	0.03%									
4.46%	3.51%	2.76%	2.18%	1.73%	1.38%	1.10%	0.88%	0.71%	0.58%	0.47%	0.38%	0.31%	0.25%	0.21%	0.16%	0.13%	0.10%	0.07%	0.05%	0.02%								
5.06%	3.78%	2.83%	2.12%	1.60%	1.22%	0.93%	0.72%	0.56%	0.44%	0.35%	0.27%	0.22%	0.17%	0.14%	0.11%	0.09%	0.07%	0.05%	0.04%	0.02%	0.01%							
6.15%	4.48%	3.26%	2.38%	1.74%	1.29%	0.96%	0.72%	0.55%	0.42%	0.32%	0.25%	0.20%	0.16%	0.12%	0.10%	0.08%	0.06%	0.05%	0.04%	0.03%	0.02%	0.01%						
7.75%	5.95%	4.55%	3.47%	2.65%	2.03%	1.56%	1.21%	0.94%	0.74%	0.58%	0.46%	0.37%	0.30%	0.24%	0.19%	0.16%	0.13%	0.10%	0.08%	0.06%	0.04%	0.03%	0.01%					
9.01%	6.86%	5.18%	3.90%	2.94%	2.22%	1.68%	1.28%	0.99%	0.76%	0.59%	0.47%	0.37%	0.29%	0.23%	0.19%	0.15%	0.12%	0.10%	0.08%	0.06%	0.05%	0.03%	0.02%	0.01%				
9.44%	7.55%	5.99%	4.73%	3.73%	2.94%	2.32%	1.84%	1.46%	1.16%	0.93%	0.75%	0.61%	0.50%	0.40%	0.33%	0.27%	0.22%	0.18%	0.15%	0.12%	0.09%	0.07%	0.05%	0.03%	0.02%			
11.69%	9.00%	6.85%	5.16%	3.88%	2.91%	2.19%	1.65%	1.26%	0.96%	0.74%	0.58%	0.45%	0.35%	0.28%	0.22%	0.18%	0.14%	0.12%	0.09%	0.08%	0.06%	0.05%	0.04%	0.03%	0.02%	0.01%		
12.02%	9.59%	7.56%	5.90%	4.59%	3.55%	2.75%	2.14%	1.66%	1.30%	1.02%	0.81%	0.65%	0.52%	0.42%	0.34%	0.27%	0.22%	0.18%	0.15%	0.12%	0.10%	0.08%	0.06%	0.05%	0.03%	0.02%	0.01%	
28.70%	12.23%	9.71%	7.61%	5.90%	4.56%	3.51%	2.70%	2.08%	1.61%	1.25%	0.98%	0.77%	0.61%	0.49%	0.39%	0.32%	0.26%	0.21%	0.17%	0.14%	0.11%	0.09%	0.07%	0.06%	0.04%	0.03%	0.02%	0.01%

Forecasted cash flows

In projecting cash flows, we employed a straightforward approach by multiplying the repayment percentages with the original amount. The detailed are described below:"

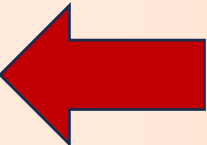
	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22
31.05.2019	10,007.24 CHF	8,011.90 CHF	6,413.49 CHF	5,115.55 CHF	4,045.39 CHF	3,147.47 CHF	2,378.74 CHF	1,705.14 CHF	1,099.06 CHF	537.39 CHF									
30.06.2019	31,963.35 CHF	26,145.91 CHF	21,383.97 CHF	17,444.72 CHF	14,147.13 CHF	11,349.13 CHF	8,937.99 CHF	6,823.02 CHF	4,929.94 CHF	3,196.54 CHF	1,569.18 CHF								
31.07.2019	47,199.45 CHF	38,598.70 CHF	31,610.25 CHF	25,879.13 CHF	21,130.21 CHF	17,148.80 CHF	13,765.93 CHF	10,847.18 CHF	8,284.14 CHF	5,987.82 CHF	3,883.54 CHF	1,906.82 CHF							
31.08.2019	47,865.33 CHF	38,042.47 CHF	30,388.01 CHF	24,363.31 CHF	19,569.89 CHF	15,710.71 CHF	12,562.49 CHF	9,955.64 CHF	7,759.79 CHF	5,873.22 CHF	4,215.01 CHF	2,719.21 CHF	1,330.38 CHF						
30.09.2019	132,675.98 CHF	108,219.58 CHF	88,548.25 CHF	72,617.69 CHF	59,616.20 CHF	48,911.69 CHF	40,010.07 CHF	32,522.98 CHF	26,142.80 CHF	20,623.43 CHF	15,765.33 CHF	11,403.99 CHF	7,400.72 CHF	3,635.32 CHF					
31.10.2019	150,338.31 CHF	120,053.64 CHF	96,359.46 CHF	77,690.81 CHF	62,865.40 CHF	50,988.68 CHF	41,381.43 CHF	33,525.23 CHF	27,021.72 CHF	21,562.08 CHF	16,904.29 CHF	12,855.98 CHF	9,261.50 CHF	5,991.91 CHF	2,937.21 CHF				
30.11.2019	195,486.27 CHF	154,576.08 CHF	122,915.07 CHF	98,262.48 CHF	78,930.38 CHF	63,649.05 CHF	51,462.17 CHF	41,647.03 CHF	33,654.66 CHF	27,065.20 CHF	21,554.73 CHF	16,870.56 CHF	12,812.80 CHF	9,220.39 CHF	5,960.51 CHF	2,920.26 CHF			
31.12.2019	320,105.08 CHF	254,881.42 CHF	203,873.86 CHF	163,831.76 CHF	132,236.63 CHF	107,151.28 CHF	87,090.68 CHF	70,916.85 CHF	57,756.08 CHF	46,934.92 CHF	37,931.21 CHF	30,336.89 CHF	23,829.77 CHF	18,151.98 CHF	13,093.49 CHF	8,479.30 CHF	4,159.30 CHF		
31.01.2020	396,642.01 CHF	317,071.27 CHF	254,413.03 CHF	204,975.62 CHF	165,832.11 CHF	134,690.45 CHF	109,769.10 CHF	89,688.49 CHF	73,381.10 CHF	60,019.69 CHF	48,960.88 CHF	39,701.54 CHF	31,845.24 CHF	25,076.44 CHF	19,140.66 CHF	13,829.09 CHF	8,966.58 CHF	4,401.92 CHF	
29.02.2020	503,195.76 CHF	387,770.30 CHF	300,330.57 CHF	233,973.47 CHF	183,419.61 CHF	144,694.19 CHF	114,831.03 CHF	91,625.46 CHF	73,439.57 CHF	59,054.01 CHF	47,557.22 CHF	38,263.86 CHF	30,654.79 CHF	24,333.14 CHF	18,992.07 CHF	14,390.84 CHF	10,337.06 CHF	6,673.26 CHF	3,266.47 CHF
31.03.2020	862,984.87 CHF	683,085.11 CHF	541,671.90 CHF	430,837.79 CHF	343,998.77 CHF	275,839.17 CHF	222,156.05 CHF	179,671.01 CHF	145,847.71 CHF	118,731.93 CHF	96,819.55 CHF	78,951.22 CHF	64,230.16 CHF	51,958.86 CHF	41,590.65 CHF	32,692.68 CHF	24,917.68 CHF	17,982.13 CHF	11,649.27 CHF
30.04.2020	996,658.70 CHF	784,035.87 CHF	617,423.37 CHF	487,483.24 CHF	386,317.31 CHF	307,496.23 CHF	245,921.00 CHF	197,616.78 CHF	159,518.18 CHF	129,275.32 CHF	105,091.19 CHF	85,591.19 CHF	69,721.21 CHF	56,669.45 CHF	45,806.83 CHF	36,641.86 CHF	28,786.56 CHF	21,930.39 CHF	15,820.43 CHF
31.05.2020	1,132,125.88 CHF	845,971.55 CHF	632,717.31 CHF	474,942.50 CHF	358,499.23 CHF	272,455.20 CHF	208,625.59 CHF	160,998.76 CHF	125,205.45 CHF	98,084.61 CHF	77,350.26 CHF	61,345.19 CHF	48,862.60 CHF	39,018.27 CHF	31,159.54 CHF	24,800.44 CHF	19,575.38 CHF	15,205.93 CHF	11,476.80 CHF
30.06.2020	1,517,643.52 CHF	1,105,346.58 CHF	803,944.05 CHF	586,252.00 CHF	429,863.01 CHF	317,543.76 CHF	236,599.92 CHF	177,918.33 CHF	135,047.94 CHF	103,450.44 CHF	79,936.11 CHF	62,257.25 CHF	48,822.14 CHF	38,496.07 CHF	30,463.79 CHF	24,134.34 CHF	19,075.11 CHF	14,965.82 CHF	11,566.20 CHF
31.07.2020	1,975,781.40 CHF	1,516,639.03 CHF	1,158,472.56 CHF	883,534.61 CHF	674,698.80 CHF	516,979.81 CHF	398,084.23 CHF	308,349.39 CHF	240,389.40 CHF	188,656.36 CHF	149,024.67 CHF	118,441.14 CHF	94,648.70 CHF	75,976.10 CHF	61,181.39 CHF	49,336.83 CHF	39,744.85 CHF	31,876.73 CHF	25,327.88 CHF
31.08.2020	2,331,453.37 CHF	1,775,095.50 CHF	1,341,135.88 CHF	1,009,624.90 CHF	759,988.95 CHF	573,607.76 CHF	434,973.56 CHF	331,855.06 CHF	254,939.81 CHF	197,292.75 CHF	153,815.66 CHF	120,785.06 CHF	95,487.06 CHF	75,941.48 CHF	60,698.67 CHF	48,692.08 CHF	39,132.06 CHF	31,429.67 CHF	25,141.77 CHF
30.09.2020	2,444,006.15 CHF	1,954,653.41 CHF	1,551,413.56 CHF	1,225,332.50 CHF	965,498.35 CHF	760,635.50 CHF	600,212.50 CHF	475,037.12 CHF	377,452.45 CHF	301,283.16 CHF	241,656.90 CHF	194,784.29 CHF	157,744.25 CHF	128,295.67 CHF	104,722.10 CHF	85,708.11 CHF	70,243.09 CHF	57,547.57 CHF	47,017.05 CHF
31.10.2020	3,237,634.39 CHF	2,494,207.98 CHF	1,896,881.88 CHF	1,430,369.12 CHF	1,073,952.58 CHF	805,820.32 CHF	606,000.94 CHF	457,752.28 CHF	347,825.56 CHF	266,121.99 CHF	205,123.29 CHF	159,309.85 CHF	124,658.61 CHF	98,244.84 CHF	77,940.78 CHF	62,193.82 CHF	49,865.82 CHF	40,117.55 CHF	32,325.91 CHF
30.11.2020	3,589,362.77 CHF	2,863,782.34 CHF	2,257,596.05 CHF	1,763,917.46 CHF	1,370,337.67 CHF	1,061,689.66 CHF	822,456.00 CHF	638,378.42 CHF	497,254.69 CHF	389,134.38 CHF	306,164.28 CHF	242,279.05 CHF	192,858.04 CHF	154,409.19 CHF	124,303.48 CHF	100,563.34 CHF	81,699.15 CHF	66,585.42 CHF	54,368.08 CHF
31.12.2020	8,747,661.94 CHF	3,729,110.68 CHF	2,958,898.78 CHF	2,318,321.09 CHF	1,799,577.53 CHF	1,388,696.49 CHF	1,068,734.61 CHF	822,518.65 CHF	634,429.35 CHF	491,239.23 CHF	382,272.69 CHF	299,187.23 CHF	235,599.56 CHF	186,688.93 CHF	148,841.42 CHF	119,356.59 CHF	96,217.22 CHF	77,913.59 CHF	63,311.92 CHF



Forecasted cash flows

In projecting cash flows, we employed a straightforward approach by multiplying the repayment percentages with the original amount. The detailed are described below:"

	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23
IF	1,099.06 CHF	537.39 CHF																			
IF	4,929.94 CHF	3,196.54 CHF	1,569.18 CHF																		
IF	8,284.14 CHF	5,987.82 CHF	3,883.54 CHF	1,906.82 CHF																	
IF	7,759.79 CHF	5,873.22 CHF	4,215.01 CHF	2,719.21 CHF	1,330.38 CHF																
IF	26,142.80 CHF	20,623.43 CHF	15,765.33 CHF	11,403.99 CHF	7,400.72 CHF	3,635.32 CHF															
IF	27,021.72 CHF	21,562.08 CHF	16,904.29 CHF	12,855.98 CHF	9,261.50 CHF	5,991.91 CHF	2,937.21 CHF														
IF	33,654.66 CHF	27,065.20 CHF	21,554.73 CHF	16,870.56 CHF	12,812.80 CHF	9,220.39 CHF	5,960.51 CHF	2,920.26 CHF													
IF	57,756.08 CHF	46,934.92 CHF	37,931.21 CHF	30,336.89 CHF	23,829.77 CHF	18,151.98 CHF	13,093.49 CHF	8,479.30 CHF	4,159.30 CHF												
IF	73,381.10 CHF	60,019.69 CHF	48,960.88 CHF	39,701.54 CHF	31,845.24 CHF	25,076.44 CHF	19,140.66 CHF	13,829.09 CHF	8,966.58 CHF	4,401.92 CHF											
IF	73,439.57 CHF	59,054.01 CHF	47,557.22 CHF	38,263.86 CHF	30,654.79 CHF	24,333.14 CHF	18,992.07 CHF	14,390.84 CHF	10,337.06 CHF	6,673.26 CHF	3,266.47 CHF										
IF	145,847.71 CHF	118,731.93 CHF	96,819.55 CHF	78,951.22 CHF	64,230.16 CHF	51,958.86 CHF	41,590.65 CHF	32,692.68 CHF	24,917.68 CHF	17,982.13 CHF	11,649.27 CHF	5,715.64 CHF									
IF	159,518.18 CHF	129,275.32 CHF	105,091.19 CHF	85,591.19 CHF	69,721.21 CHF	56,669.45 CHF	45,806.83 CHF	36,641.86 CHF	28,786.56 CHF	21,930.39 CHF	15,820.43 CHF	10,245.92 CHF	5,026.03 CHF								
IF	125,205.45 CHF	98,084.61 CHF	77,350.26 CHF	61,345.19 CHF	48,862.60 CHF	39,018.27 CHF	31,159.54 CHF	24,800.44 CHF	19,575.38 CHF	15,205.93 CHF	11,476.80 CHF	8,218.24 CHF	5,293.09 CHF	2,586.85 CHF							
IF	135,047.94 CHF	103,450.44 CHF	79,936.11 CHF	62,257.25 CHF	48,822.14 CHF	38,496.07 CHF	30,463.79 CHF	24,134.34 CHF	19,075.11 CHF	14,965.82 CHF	11,566.20 CHF	8,693.16 CHF	6,204.34 CHF	3,986.16 CHF	1,944.93 CHF						
IF	240,389.40 CHF	188,656.36 CHF	149,024.67 CHF	118,441.14 CHF	94,648.70 CHF	75,976.10 CHF	61,181.39 CHF	49,336.83 CHF	39,744.85 CHF	31,876.73 CHF	25,327.88 CHF	19,785.04 CHF	15,002.09 CHF	10,782.02 CHF	6,963.27 CHF	3,409.27 CHF					
IF	254,939.81 CHF	197,292.75 CHF	153,815.66 CHF	120,785.06 CHF	95,487.06 CHF	75,941.48 CHF	60,698.67 CHF	48,692.08 CHF	39,132.06 CHF	31,429.67 CHF	25,141.77 CHF	19,931.61 CHF	15,540.08 CHF	11,764.86 CHF	8,444.89 CHF	5,448.81 CHF	2,666.10 CHF				
IF	377,452.45 CHF	301,283.16 CHF	241,656.90 CHF	194,784.29 CHF	157,744.25 CHF	128,295.67 CHF	104,722.10 CHF	85,708.11 CHF	70,243.09 CHF	57,547.57 CHF	47,017.05 CHF	38,179.51 CHF	30,663.14 CHF	24,171.92 CHF	18,466.85 CHF	13,351.61 CHF	8,661.24 CHF	4,253.20 CHF			
IF	347,825.56 CHF	266,121.99 CHF	205,123.29 CHF	159,309.85 CHF	124,658.61 CHF	98,244.84 CHF	77,940.78 CHF	62,193.82 CHF	49,865.82 CHF	40,117.55 CHF	32,325.91 CHF	26,024.66 CHF	20,861.78 CHF	16,568.75 CHF	12,938.22 CHF	9,807.62 CHF	7,047.09 CHF	4,550.32 CHF	2,227.54 CHF		
IF	497,254.69 CHF	389,134.38 CHF	306,164.28 CHF	242,279.05 CHF	192,858.04 CHF	154,409.19 CHF	124,303.48 CHF	100,563.34 CHF	81,699.15 CHF	66,585.42 CHF	54,368.08 CHF	44,395.44 CHF	36,166.93 CHF	29,295.01 CHF	23,476.86 CHF	18,473.08 CHF	14,091.71 CHF	10,176.05 CHF	6,595.18 CHF	3,236.57 CHF	
IF	634,429.35 CHF	491,239.23 CHF	382,272.69 CHF	299,187.23 CHF	235,599.56 CHF	186,688.93 CHF	148,841.42 CHF	119,356.59 CHF	96,217.22 CHF	77,913.59 CHF	63,311.92 CHF	51,556.67 CHF	41,998.48 CHF	34,141.10 CHF	27,602.18 CHF	22,084.28 CHF	17,353.34 CHF	13,222.47 CHF	9,539.71 CHF	6,178.58 CHF	3,030.76 CHF



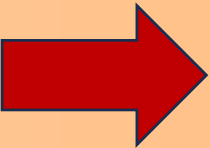
Present value of the forecasted cash flows

Knowing that the annual rate is 2.5%, the monthly rate is equal to 0.21%. Where:

$$Monthly\ rate = (1 + Annual\ rate)^{1/12} - 1$$

Discounting this rate each month, in the way that:

$$Monthly\ cash\ flow = \frac{Forecasted\ cash\ flow}{(1 + monthly\ rate)^{Time\ period}}$$



	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22
31.05.2019	9,584.01 CHF	7,657.29 CHF	6,117.02 CHF	4,869.06 CHF	3,842.54 CHF	2,983.50 CHF	2,250.18 CHF	1,609.67 CHF	1,035.39 CHF	45,574.34 CHF						
30.06.2019	30,674.62 CHF	25,040.16 CHF	20,437.50 CHF	16,638.34 CHF	13,465.44 CHF	10,780.06 CHF	8,472.36 CHF	6,454.28 CHF	4,653.93 CHF	3,011.37 CHF	1,475.24 CHF					
31.07.2019	45,389.72 CHF	37,042.44 CHF	30,273.40 CHF	24,733.71 CHF	20,153.46 CHF	16,322.48 CHF	13,075.68 CHF	10,282.10 CHF	7,836.44 CHF	5,652.58 CHF	3,658.58 CHF					
31.08.2019	46,124.88 CHF	36,583.84 CHF	29,162.79 CHF	23,332.95 CHF	18,703.72 CHF	14,984.49 CHF	11,957.16 CHF	9,456.44 CHF	7,355.55 CHF	5,555.81 CHF	3,979.02 CHF	2,561.69 CHF	1,250.74 CHF			
30.09.2019	132,674.39 CHF	108,218.51 CHF	88,547.52 CHF	72,617.18 CHF	59,615.84 CHF	48,911.44 CHF	40,009.91 CHF	32,522.87 CHF	26,142.73 CHF	20,623.38 CHF	15,765.30 CHF	11,403.97 CHF	7,400.71 CHF	3,635.32 CHF		
31.10.2019	150,335.14 CHF	120,051.57 CHF	96,358.26 CHF	77,689.89 CHF	62,864.80 CHF	50,988.22 CHF	41,381.12 CHF	33,525.03 CHF	27,021.59 CHF	21,561.99 CHF	16,904.23 CHF	12,855.95 CHF	9,261.48 CHF	5,991.90 CHF	2,937.20 CHF	
30.11.2019	195,481.40 CHF	154,573.29 CHF	122,913.25 CHF	98,261.34 CHF	78,929.69 CHF	63,648.56 CHF	51,461.77 CHF	41,646.77 CHF	33,654.49 CHF	27,065.09 CHF	21,554.66 CHF	16,870.52 CHF	12,812.77 CHF	9,220.38 CHF	5,960.51 CHF	2,920.26 CHF
31.12.2019	320,090.37 CHF	254,871.00 CHF	203,866.93 CHF	163,827.29 CHF	132,233.41 CHF	107,149.12 CHF	87,089.24 CHF	70,915.51 CHF	57,755.19 CHF	46,934.33 CHF	37,930.81 CHF	30,336.63 CHF	23,829.61 CHF	18,151.88 CHF	13,093.43 CHF	8,479.27 CHF
31.01.2020	396,612.91 CHF	317,052.02 CHF	254,401.03 CHF	204,968.03 CHF	165,826.84 CHF	134,687.21 CHF	109,767.01 CHF	89,687.08 CHF	73,379.65 CHF	60,018.74 CHF	48,960.26 CHF	39,701.13 CHF	31,844.98 CHF	25,076.27 CHF	19,140.55 CHF	13,829.03 CHF
29.02.2020	503,147.96 CHF	387,735.06 CHF	300,308.17 CHF	233,961.11 CHF	183,411.88 CHF	144,688.60 CHF	114,827.66 CHF	91,623.14 CHF	73,438.16 CHF	59,052.43 CHF	47,556.22 CHF	38,263.22 CHF	30,654.38 CHF	24,332.88 CHF	18,991.90 CHF	14,390.74 CHF
31.03.2020	862,854.82 CHF	682,992.83 CHF	541,619.23 CHF	430,800.00 CHF	343,976.07 CHF	275,823.86 CHF	222,145.46 CHF	179,663.76 CHF	145,842.65 CHF	118,728.82 CHF	96,815.80 CHF	78,948.78 CHF	64,228.58 CHF	51,957.83 CHF	41,589.98 CHF	32,692.26 CHF
30.04.2020	996,085.30 CHF	783,891.26 CHF	617,333.88 CHF	487,426.16 CHF	386,277.27 CHF	307,470.49 CHF	245,904.11 CHF	197,605.44 CHF	159,511.36 CHF	129,270.41 CHF	105,087.75 CHF	85,587.03 CHF	69,718.50 CHF	56,667.69 CHF	45,805.68 CHF	36,641.12 CHF
31.05.2020	1,132,125.88 CHF	845,714.89 CHF	632,301.27 CHF	474,849.26 CHF	358,448.68 CHF	272,422.87 CHF	208,605.08 CHF	160,986.35 CHF	125,197.58 CHF	98,079.37 CHF	77,347.18 CHF	61,343.25 CHF	48,859.97 CHF	39,016.65 CHF	31,158.54 CHF	24,799.82 CHF
30.06.2020	1,517,643.52 CHF	1,105,346.58 CHF	803,944.05 CHF	586,093.43 CHF	429,608.36 CHF	317,495.87 CHF	236,567.84 CHF	177,899.52 CHF	135,035.65 CHF	103,442.41 CHF	79,930.90 CHF	62,253.43 CHF	48,819.77 CHF	38,492.91 CHF	30,461.81 CHF	24,133.10 CHF
31.07.2020	1,975,781.40 CHF	1,516,639.03 CHF	1,158,472.56 CHF	883,534.61 CHF	674,698.80 CHF	516,821.10 CHF	397,846.78 CHF	308,299.75 CHF	240,357.97 CHF	188,637.73 CHF	149,011.25 CHF	118,432.02 CHF	94,643.32 CHF	75,972.27 CHF	61,175.77 CHF	49,333.26 CHF
31.08.2020	2,331,453.37 CHF	1,775,095.50 CHF	1,341,135.88 CHF	1,009,624.90 CHF	759,988.95 CHF	573,607.76 CHF	434,973.56 CHF	331,746.03 CHF	254,760.96 CHF	197,264.78 CHF	153,796.20 CHF	120,771.85 CHF	95,479.26 CHF	75,936.76 CHF	60,695.18 CHF	48,687.01 CHF
30.09.2020	2,444,006.15 CHF	1,954,653.41 CHF	1,551,413.56 CHF	1,225,332.50 CHF	965,498.35 CHF	760,635.50 CHF	600,212.50 CHF	475,037.12 CHF	377,452.45 CHF	301,189.04 CHF	241,475.90 CHF	194,757.43 CHF	157,724.34 CHF	128,283.25 CHF	104,713.85 CHF	85,702.77 CHF
31.10.2020	3,237,634.39 CHF	2,494,207.98 CHF	1,896,881.88 CHF	1,430,369.12 CHF	1,073,952.58 CHF	805,820.32 CHF	606,000.94 CHF	457,752.28 CHF	347,825.56 CHF	266,121.99 CHF	205,123.29 CHF	159,265.20 CHF	124,577.79 CHF	98,232.05 CHF	77,932.23 CHF	62,187.90 CHF
30.11.2020	3,589,362.77 CHF	2,863,782.34 CHF	2,257,596.05 CHF	1,763,917.46 CHF	1,370,337.67 CHF	1,061,689.66 CHF	822,456.00 CHF	638,378.42 CHF	497,254.69 CHF	389,134.38 CHF	306,164.28 CHF	242,279.05 CHF	192,858.04 CHF	154,366.10 CHF	124,220.74 CHF	100,550.83 CHF
31.12.2020	8,747,661.94 CHF	3,729,110.68 CHF	2,958,898.78 CHF	2,318,321.09 CHF	1,799,577.53 CHF	1,388,696.49 CHF	1,068,734.61 CHF	822,518.65 CHF	634,429.35 CHF	491,239.23 CHF	382,272.69 CHF	299,187.23 CHF	235,599.56 CHF	186,688.93 CHF	148,841.42 CHF	119,318.87 CHF

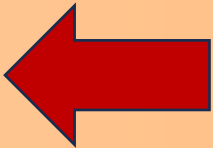
Present value of the forecasted cash flows

Knowing that the annual rate is 2.5%, the monthly rate is equal to 0.21%. Where:

$$\text{Monthly rate} = (1 + \text{Annual rate})^{1/12} - 1$$

Discounting this rate each month, in the way that:

$$\text{Monthly cash flow} = \frac{\text{Forecasted cash flow}}{(1 + \text{monthly rate})^{\text{Time period}}}$$



Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23
1,792.67 CHF																	
2,561.69 CHF	1,250.74 CHF																
11,403.97 CHF	7,400.71 CHF	3,635.32 CHF															
12,855.95 CHF	9,261.48 CHF	5,991.90 CHF	2,937.20 CHF														
16,870.52 CHF	12,812.77 CHF	9,220.38 CHF	5,960.51 CHF	2,920.26 CHF													
30,336.63 CHF	23,829.61 CHF	18,151.88 CHF	13,093.43 CHF	8,479.27 CHF	4,159.29 CHF												
39,701.13 CHF	31,844.98 CHF	25,076.27 CHF	19,140.55 CHF	13,829.03 CHF	8,966.55 CHF	4,401.91 CHF											
38,263.22 CHF	30,654.38 CHF	24,332.88 CHF	18,991.90 CHF	14,390.74 CHF	10,337.01 CHF	6,673.23 CHF	3,266.46 CHF										
78,948.78 CHF	64,228.58 CHF	51,957.83 CHF	41,589.98 CHF	32,692.26 CHF	24,917.42 CHF	17,981.97 CHF	11,649.19 CHF	5,715.61 CHF									
85,587.03 CHF	69,718.50 CHF	56,667.69 CHF	45,805.68 CHF	36,641.12 CHF	28,786.08 CHF	21,930.10 CHF	15,820.26 CHF	10,245.82 CHF	5,025.99 CHF								
61,343.25 CHF	48,859.97 CHF	39,016.65 CHF	31,158.54 CHF	24,799.82 CHF	19,575.00 CHF	15,205.70 CHF	11,476.66 CHF	8,218.16 CHF	5,293.05 CHF	2,586.84 CHF							
62,253.43 CHF	48,819.77 CHF	38,492.91 CHF	30,461.81 CHF	24,133.10 CHF	19,074.33 CHF	14,965.33 CHF	11,565.90 CHF	8,692.98 CHF	6,204.23 CHF	3,986.10 CHF	1,944.90 CHF						
118,432.02 CHF	94,643.32 CHF	75,972.27 CHF	61,175.77 CHF	49,333.26 CHF	39,742.58 CHF	31,875.30 CHF	25,326.98 CHF	19,784.48 CHF	15,001.75 CHF	10,781.82 CHF	6,963.17 CHF	3,409.23 CHF					
120,771.85 CHF	95,479.26 CHF	75,936.76 CHF	60,695.18 CHF	48,687.01 CHF	39,129.02 CHF	31,427.84 CHF	25,140.68 CHF	19,930.95 CHF	15,539.69 CHF	11,764.63 CHF	8,444.76 CHF	5,448.75 CHF	2,666.07 CHF				
194,757.43 CHF	157,724.34 CHF	128,283.25 CHF	104,713.85 CHF	85,702.77 CHF	70,234.20 CHF	57,542.27 CHF	47,013.90 CHF	38,177.64 CHF	30,662.04 CHF	24,171.28 CHF	18,466.49 CHF	13,351.41 CHF	8,661.14 CHF	4,253.16 CHF			
159,265.20 CHF	124,577.79 CHF	98,232.05 CHF	77,932.23 CHF	62,187.90 CHF	49,862.01 CHF	40,111.15 CHF	32,321.95 CHF	26,022.22 CHF	20,860.29 CHF	16,567.85 CHF	12,937.67 CHF	9,807.31 CHF	7,046.92 CHF	4,550.23 CHF	2,227.51 CHF		
242,279.05 CHF	192,858.04 CHF	154,366.10 CHF	124,220.74 CHF	100,550.83 CHF	81,690.30 CHF	66,579.60 CHF	54,358.01 CHF	44,389.18 CHF	36,163.07 CHF	29,292.66 CHF	23,475.44 CHF	18,472.23 CHF	14,091.22 CHF	10,175.78 CHF	6,595.05 CHF	3,236.52 CHF	
299,187.23 CHF	235,599.56 CHF	186,688.93 CHF	148,841.42 CHF	119,318.87 CHF	96,163.19 CHF	77,905.01 CHF	63,306.31 CHF	51,546.66 CHF	41,991.96 CHF	34,136.89 CHF	27,599.49 CHF	22,082.59 CHF	17,352.30 CHF	13,221.84 CHF	9,539.35 CHF	6,178.40 CHF	3,030.68 CHF

Present value of the forecasted portfolio




With these calculations, we can infer that the portfolio is valued at **6,084,964.39 CHF**. This conclusion underscores that the valuation is 14 times lower than our customer's expected value.




Thank you for your attention!

Gustavo B. Cruz & Jakob

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