

# Bank Financial Statement analysis

August 17, 2021

## 1 Bank Financial Statement analysis

```
[2]: revenue = [14574.49, 7606.46, 8611.41, 9175.41, 8058.65, 8105.44, 11496.28,
↪9766.09, 10305.32, 14379.96, 10713.97, 15433.50]
expenses = [12051.82, 5695.07, 12319.20, 12089.72, 8658.57, 840.20, 3285.73,
↪5821.12, 6976.93, 16618.61, 10054.37, 3803.96]
```

## 2 Calculate profit(revenue-expenses)

```
[12]: profit=[] # OR profit=list([])
for i in range(0,len(revenue)):
    profit.append(revenue[i]-expenses[i])
print(profit)
```

```
[2522.67, 1911.3900000000003, -3707.7900000000001, -2914.3099999999995,
-599.9200000000001, 7265.24, 8210.550000000001, 3944.9700000000003,
3328.3899999999994, -2238.6500000000015, 659.5999999999985, 11629.54]
```

## 3 Calculate tax (profit x 30%)

```
[15]: tax=[round(i*0.3,2) for i in profit]
print(tax)
```

```
[757, 573, -1112, -874, -180, 2180, 2463, 1183, 999, -672, 198, 3489]
```

## 4 Calculate profit after tax

```
[24]: profit_after_tax=[]
for i in range(0,len(profit)):
    profit_after_tax.append(profit[i]-tax[i])
print(profit_after_tax)
```

```
[1765.67, 1338.3900000000003, -2595.7900000000001, -2040.3099999999995,
-419.9200000000001, 5085.24, 5747.550000000001, 2761.9700000000003,
2329.3899999999994, -1566.6500000000015, 461.59999999999854, 8140.540000000001]
```

## 5 Calculate Profit Margin after tax

```
[26]: profit_margin=list([])
      for i in range(0,len(profit)):
          profit_margin.append(profit_after_tax[i]/revenue[i])
      profit_margin=[round((i*100),2) for i in profit_margin]
      print(profit_margin)
```

```
[12.11, 17.6, -30.14, -22.24, -5.21, 62.74, 49.99, 28.28, 22.6, -10.89, 4.31,
52.75]
```

## 6 Profit after tax Mean

```
[29]: mean_PAT=sum(profit_after_tax)/len(profit_after_tax)
      print(mean_PAT)
```

```
1750.64
```

## 7 Good Month

```
[32]: good_month=[]
      for i in range(0,len(profit)):
          good_month.append(profit_after_tax[i]>mean_PAT)
      print(good_month)
```

```
[True, False, False, False, False, True, True, True, True, False, False, True]
```

## 8 Bad Month

```
[34]: bad_month=[]
      for i in range(0,len(profit)):
          bad_month.append(profit_after_tax[i]<mean_PAT)
      print(bad_month)
```

```
[False, True, True, True, True, False, False, False, False, True, True, False]
```

## 9 Best Month

```
[36]: best_month=[]
      for i in range(0,len(profit)):
          best_month.append(profit_after_tax[i]==max(profit_after_tax))
      print(best_month)
```

```
[False, False, False, False, False, False, False, False, False, False, False,
True]
```

## 10 Worst Month

```
[40]: worst_month=[]
      for i in range(0,len(profit)):
          worst_month.append(profit_after_tax[i]==min(profit_after_tax))
      print(worst_month)
```

```
[False, False, True, False, False, False, False, False, False, False, False, False]
```

## 11 Convert all calculations to units of one thousand Dollars

```
[44]: revenue_1000= [round(i/1000,2) for i in revenue]
      expenses_1000=[round(i/1000,2)for i in expenses]
      profit_1000= [round(i/1000,2) for i in profit]
      profit_after_tax_1000=[round(i/1000,2) for i in profit_after_tax]

      revenue_1000=[int(i) for i in revenue_1000]
      expenses_1000=[int(i) for i in expenses_1000]
      profit_1000=[int(i) for i in profit_1000]
      profit_after_tax_1000=[int(i) for i in profit_after_tax_1000]
```

```
[46]: print("Revenue :")
      print(revenue_1000)
      print("Expenses :")
      print(expenses_1000)
      print("Profit :")
      print(profit_1000)
      print("Profit after Tax :")
      print(profit_after_tax_1000)
      print("Profit Margin :")
      print(profit_margin)
      print("Good Months :")
      print(good_month)
      print("Bad Months :")
      print(bad_month)
      print("Best Month :")
      print(best_month)
      print("Worst Month")
      print(worst_month)
```

```
Revenue :
[14, 7, 8, 9, 8, 8, 11, 9, 10, 14, 10, 15]
Expenses :
[12, 5, 12, 12, 8, 0, 3, 5, 6, 16, 10, 3]
Profit :
[2, 1, -3, -2, 0, 7, 8, 3, 3, -2, 0, 11]
Profit after Tax :
```

[1, 1, -2, -2, 0, 5, 5, 2, 2, -1, 0, 8]

Profit Margin :

[12.11, 17.6, -30.14, -22.24, -5.21, 62.74, 49.99, 28.28, 22.6, -10.89, 4.31, 52.75]

Good Months :

[True, False, False, False, False, True, True, True, True, False, False, True]

Bad Months :

[False, True, True, True, True, False, False, False, False, True, True, False]

Best Month :

[False, False, False, False, False, False, False, False, False, False, False, True]

Worst Month

[False, False, True, False, False, False, False, False, False, False, False, False]

[ ]: