# [ 5-5. 현금흐름 구현 ] ¶

```
In [1]: #pandas DataFrame 화면상 출력 한도 설정
import pandas as pd
pd.set_option('display.max_row', 500)
pd.set_option('display.max_columns', None)
pd.set_option('display.width', 200)
```

# 1. 한단계씩 현금흐름 추적하기

```
In [2]: from practice.astn0_overview import overview, idx, acc
    from practice.astn1_sales import sales
    from practice.astn2_cost import cost
    from practice.astn3_equity import equity
    from practice.astn4_loan import loan
```

```
In [3]: idxno = idx[0]
        #운영계좌 잔액 확인
        = acc.oprtq.bal strt[idxno]
        acc.tmp.addamt(idxno, , note="월초 잔액")
        #자기자본 인출
        _ = equity.withdraw_equity_amount(idxno, acc.oprtg)
        acc.tmp.addamt(idxno, , note="자기자본 납입")
        #사업비 추정
        oprtg estmtd = cost.estimate cost amt(idxno)
        lncst estmtd = 0
        for ln in loan.getloan(reverse=True):
            lncst estmtd += ln.estimate fee amt(idxno)
            lncst estmtd += ln.estimate IR amt(idxno)
        cst_estmtd = oprtg_estmtd + lncst_estmtd
        acc.tmp.subscd(idxno, cst estmtd, note="추정 사업비")
        #분양매출 인식
        for sls in sales.dct.values():
            = sls.get salesamt(acc.oprtg, idxno)
            acc.tmp.addamt(idxno, , note=f"분양매출({sls.name})")
        #대출원금 인출
        for ln in loan.getloan(reverse=True):
            ln.set loan withdrawable(idxno)
```

```
_ = ln.withdraw_ntnl fixed(acc.oprtg, idxno)
   acc.tmp.addamt(idxno, , note=f"일시대출금({ln.name})")
for ln in loan.getloan(reverse=True):
   _ = ln.withdraw_ntnl_flexible(acc.tmp, acc.oprtg, idxno)
   acc.tmp.addamt(idxno, _, note=f"한도대출금({ln.name})")
#금융비용 지출
for ln in loan.getloan(reverse=False):
   fee = ln.pay fee amt(acc.oprtg, idxno)
   IR = ln.pay IR amt(acc.oprtg, idxno)
   acc.tmp.subamt(idxno, fee, note=f"수수료({ln.name})")
   acc.tmp.subamt(idxno, IR, note=f"0|자({ln.name})")
#일반사업비 지출
= cost.pay cost amt(acc.oprtg, idxno)
acc.tmp.subamt(idxno, , note="일반사업비")
#대출원금 상환
for ln in loan.getloan(reverse=False):
   amtrpy = ln.repay ntnl amt(acc.oprtg, idxno)
   acc.tmp.subamt(idxno, amtrpy, note=f"대출금상환({ln.name})")
   ln.setback loan unwithdrawable(idxno)
#임시계좌 현금 조정
acc.tmp.subamt(idxno, acc.tmp.bal end[idxno], note="임시계좌 잔액 조정")
```

In [4]: acc.tmp.jnlscd

#### Out[4]:

	amt_in	amt_out	rcvfrm	payto	note
2023-01-31	0	0.0	None	None	추정 사업비

In [5]: acc.tmp.jnl

#### Out[5]:

	amt_in	amt_out	rcvfrm	payto	note
2023-01-31	5000	0	None	None	자기자본 납입
2023-01-31	0	5000.0	None	None	임시계좌 잔액 조정

In [6]: acc.oprtg.df

Out[6]:

	bal_strt	amt_in	amt_out	bal_end
2023-01-31	0.0	5000.0	0.0	5000.0
2023-02-28	5000.0	0.0	0.0	5000.0
2023-03-31	5000.0	0.0	0.0	5000.0
2023-04-30	5000.0	0.0	0.0	5000.0
2023-05-31	5000.0	0.0	0.0	5000.0
2023-06-30	5000.0	0.0	0.0	5000.0
2023-07-31	5000.0	0.0	0.0	5000.0
2023-08-31	5000.0	0.0	0.0	5000.0
2023-09-30	5000.0	0.0	0.0	5000.0
2023-10-31	5000.0	0.0	0.0	5000.0
2023-11-30	5000.0	0.0	0.0	5000.0
2023-12-31	5000.0	0.0	0.0	5000.0
2024-01-31	5000.0	0.0	0.0	5000.0
2024-02-29	5000.0	0.0	0.0	5000.0
2024-03-31	5000.0	0.0	0.0	5000.0
2024-04-30	5000.0	0.0	0.0	5000.0
2024-05-31	5000.0	0.0	0.0	5000.0
2024-06-30	5000.0	0.0	0.0	5000.0
2024-07-31	5000.0	0.0	0.0	5000.0
2024-08-31	5000.0	0.0	0.0	5000.0
2024-09-30	5000.0	0.0	0.0	5000.0
2024-10-31	5000.0	0.0	0.0	5000.0
2024-11-30	5000.0	0.0	0.0	5000.0
2024-12-31	5000.0	0.0	0.0	5000.0
2025-01-31	5000.0	0.0	0.0	5000.0
2025-02-28	5000.0	0.0	0.0	5000.0
2025-03-31	5000.0	0.0	0.0	5000.0
2025-04-30	5000.0	0.0	0.0	5000.0
2025-05-31	5000.0	0.0	0.0	5000.0
2025-06-30	5000.0	0.0	0.0	5000.0

## 2. For문을 통해 일괄적으로 현금흐름 추적하기

```
In [9]: from practice.astn0 overview import overview, idx, acc
         from practice.astn1 sales import sales
         from practice.astn2 cost import cost
         from practice.astn3 equity import equity
         from practice.astn4 loan import loan
In [10]: for idxno in idx:
             #운영계좌 잔액 확인
             _ = acc.oprtg.bal_strt[idxno]
             acc.tmp.addamt(idxno, _, note="월초 잔액")
             #자기자본 인출
             _ = equity.withdraw_equity_amount(idxno, acc.oprtg)
             acc.tmp.addamt(idxno, , note="자기자본 납입")
             #사업비 추정
             oprtg_estmtd = cost.estimate_cost_amt(idxno)
             lncst estmtd = 0
             for ln in loan.getloan(reverse=True):
                 lncst estmtd += ln.estimate fee amt(idxno)
                 lncst estmtd += ln.estimate IR amt(idxno)
             cst estmtd = oprtg estmtd + lncst estmtd
             acc.tmp.subscd(idxno, cst estmtd, note="추정 사업비")
             #분양매출 인식
             for sls in sales.dct.values():
                 _ = sls.get_salesamt(acc.oprtg, idxno)
                 acc.tmp.addamt(idxno, _, note=f"분양매출({sls.name})")
             #대출원금 인출
             for ln in loan.getloan(reverse=True):
                 ln.set loan withdrawable(idxno)
                 _ = ln.withdraw_ntnl_fixed(acc.oprtg, idxno)
                 acc.tmp.addamt(idxno, _, note=f"일시대출금({ln.name})")
             for ln in loan.getloan(reverse=True):
```

```
_ = ln.withdraw_ntnl_flexible(acc.tmp, acc.oprtg, idxno)
       acc.tmp.addamt(idxno, , note=f"한도대출금({ln.name})")
   #금융비용 지출
   for ln in loan.getloan(reverse=False):
       fee = ln.pay_fee_amt(acc.oprtg, idxno)
       IR = ln.pay IR amt(acc.oprtg, idxno)
       acc.tmp.subamt(idxno, fee, note=f"수수료({ln.name})")
       acc.tmp.subamt(idxno, IR, note=f"0|자({ln.name})")
   #일반사업비 지출
    = cost.pay_cost_amt(acc.oprtg, idxno)
   acc.tmp.subamt(idxno, _, note="일반사업비")
   #대출원금 상환
   for ln in loan.getloan(reverse=False):
       amtrpy = ln.repay ntnl amt(acc.oprtg, idxno)
       acc.tmp.subamt(idxno, amtrpy, note=f"대출금상환({ln.name})")
       ln.setback loan unwithdrawable(idxno)
   #임시계좌 현금 조정
   acc.tmp.subamt(idxno, acc.tmp.bal end[idxno], note="임시계좌 잔액
조정")
```

### In [11]: acc.tmp.jnl

#### Out[11]:

	amt_in	amt_out	rcvfrm	payto	note
2023-01-31	5000	0	None	None	자기자본 납입
2023-01-31	0	5000.0	None	None	임시계좌 잔액 조정
2023-01-31	5000	0	None	None	자기자본 납입
2023-01-31	0	5000.0	None	None	임시계좌 잔액 조정
2023-02-28	10000.0	0	None	None	월초 잔액
2023-02-28	0	10000.0	None	None	임시계좌 잔액 조정
2023-03-31	10000.0	0	None	None	월초 잔액
2023-03-31	5000	0	None	None	일시대출금(trb)
2023-03-31	5000	0	None	None	일시대출금(tra)
2023-03-31	4700.0	0	None	None	한도대출금(tra)
2023-03-31	0	800.0	None	None	수수료(tra)
2023-03-31	0	300.0	None	None	수수료(trb)
2023-03-31	0	23516.407407	None	None	일반사업비
2023-03-31	0	83.592593	None	None	임시계좌 잔액 조정
2023-04-30	83.592593	0	None	None	월초 잔액
2023-04-30	1303.2	0	None	None	분양매출(오피)

2023-04-30	700.0	0	None	None	한도대출금(tra)
2023-04-30	0	48.5	None	None	이자(tra)
2023-04-30	0	37.5	None	None	이자(trb)
2023-04-30	0	1959.164907	None	None	일반사업비
2023-04-30	0	41.627685	None	None	임시계좌 잔액 조정
2023-05-31	41.627685	0	None	None	월초 잔액
2023-05-31	600.0	0	None	None	한도대출금(tra)
2023-05-31	0	52.0	None	None	이자(tra)
2023-05-31	0	37.5	None	None	이자(trb)
2023-05-31	0	498.135907	None	None	일반사업비
2023-05-31	0	53.991778	None	None	임시계좌 잔액 조정
2023-06-30	53.991778	0	None	None	월초 잔액
2023-06-30	700.0	0	None	None	한도대출금(tra)
2023-06-30	0	55.0	None	None	이자(tra)
2023-06-30	0	37.5	None	None	이자(trb)
2023-06-30	0	563.030407	None	None	일반사업비
2023-06-30	0	98.46137	None	None	임시계좌 잔액 조정
2023-07-31	98.46137	0	None	None	월초 잔액
2023-07-31	500.0	0	None	None	한도대출금(tra)
2023-07-31	0	58.5	None	None	이자(tra)
2023-07-31	0	37.5	None	None	이자(trb)
2023-07-31	0	454.872907	None	None	일반사업비
2023-07-31	0	47.588463	None	None	임시계좌 잔액 조정
2023-08-31	47.588463	0	None	None	월초 잔액
2023-08-31	600.0	0	None	None	한도대출금(tra)
2023-08-31	0	61.0	None	None	이자(tra)
2023-08-31	0	37.5	None	None	이자(trb)
2023-08-31	0	519.767407	None	None	일반사업비
2023-08-31	0	29.321056	None	None	임시계좌 잔액 조정
2023-09-30	29.321056	0	None	None	월초 잔액
2023-09-30	1303.2	0	None	None	분양매출(오피)
2023-09-30	0	64.0	None	None	이자(tra)
2023-09-30	0	37.5	None	None	이자(trb)
2023-09-30	0	671.187907	None	None	일반사업비

2023-09-30	0	559.833148	None	None	임시계좌 잔액 조정
2023-10-31	559.833148	0	None	None	월초 잔액
2023-10-31	2606.4	0	None	None	분양매출(오피)
2023-10-31	0	64.0	None	None	이자(tra)
2023-10-31	0	37.5	None	None	이자(trb)
2023-10-31	0	1474.208407	None	None	일반사업비
2023-10-31	0	1590.524741	None	None	임시계좌 잔액 조정
2023-11-30	1590.524741	0	None	None	월초 잔액
2023-11-30	0	64.0	None	None	이자(tra)
2023-11-30	0	37.5	None	None	이자(trb)
2023-11-30	0	909.134407	None	None	일반사업비
2023-11-30	0	579.890333	None	None	임시계좌 잔액 조정
2023-12-31	579.890333	0	None	None	월초 잔액
2023-12-31	400.0	0	None	None	한도대출금(tra)
2023-12-31	0	64.0	None	None	이자(tra)
2023-12-31	0	37.5	None	None	이자(trb)
2023-12-31	0	844.239907	None	None	일반사업비
2023-12-31	0	34.150426	None	None	임시계좌 잔액 조정
2024-01-31	34.150426	0	None	None	월초 잔액
2024-01-31	900.0	0	None	None	한도대출금(tra)
2024-01-31	0	66.0	None	None	이자(tra)
2024-01-31	0	37.5	None	None	이자(trb)
2024-01-31	0	822.608407	None	None	일반사업비
2024-01-31	0	8.042019	None	None	임시계좌 잔액 조정
2024-02-29	8.042019	0	None	None	월초 잔액
2024-02-29	2606.4	0	None	None	분양매출(오피)
2024-02-29	0	70.5	None	None	이자(tra)
2024-02-29	0	37.5	None	None	이자(trb)
2024-02-29	0	822.608407	None	None	일반사업비
2024-02-29	0	1683.833611	None	None	임시계좌 잔액 조정
2024-03-31	1683.833611	0	None	None	월초 잔액
2024-03-31	0	70.5	None	None	이자(tra)
2024-03-31	0	37.5	None	None	이자(trb)
2024-03-31	0	952.397407	None	None	일반사업비

0	623.436204	None	None	임시계좌 잔액 조정
623.436204	0	None	None	월초 잔액
3909.6	0	None	None	분양매출(오피)
0	70.5	None	None	이자(tra)
0	37.5	None	None	이자(trb)
0	1798.680907	None	None	일반사업비
0	2626.355296	None	None	임시계좌 잔액 조정
2626.355296	0	None	None	월초 잔액
0	70.5	None	None	이자(tra)
0	37.5	None	None	이자(trb)
0	1406.658907	None	None	일반사업비
0	1111.696389	None	None	임시계좌 잔액 조정
1111.696389	0	None	None	월초 잔액
700.0	0	None	None	한도대출금(tra)
	70.5	None	None	이자(tra)
0	. 0.0			
0	37.5	None	None	이자(trb)
		None None	None None	이자(trb) 일반사업비
0	37.5			, ,
0	37.5 1666.236907	None	None	일반사업비
0 0 0	37.5 1666.236907 37.459481	None None	None None	일반사업비 임시계좌 잔액 조정
0 0 0 37.459481	37.5 1666.236907 37.459481 0	None None	None None None	일반사업비 임시계좌 잔액 조정 월초 잔액
0 0 0 37.459481 3909.6	37.5 1666.236907 37.459481 0	None None None	None None None	일반사업비 임시계좌 잔액 조정 월초 잔액 분양매출(오피)
0 0 0 37.459481 3909.6	37.5 1666.236907 37.459481 0 0 74.0	None None None None	None None None None	일반사업비 임시계좌 잔액 조정 월초 잔액 분양매출(오피) 이자(tra)
0 0 0 37.459481 3909.6 0	37.5 1666.236907 37.459481 0 0 74.0 37.5	None None None None	None None None None	일반사업비 임시계좌 잔액 조정 월초 잔액 분양매출(오피) 이자(tra) 이자(trb)
0 0 0 37.459481 3909.6 0 0	37.5 1666.236907 37.459481 0 0 74.0 37.5 1817.657407	None None None None None None	None None None None None	일반사업비 임시계좌 잔액 조정 월초 잔액 분양매출(오피) 이자(tra) 이자(trb)
0 0 0 37.459481 3909.6 0 0	37.5 1666.236907 37.459481 0 0 74.0 37.5 1817.657407 2017.902074	None None None None None None	None None None None None None	일반사업비 임시계좌 잔액 조정 월초 잔액 분양매출(오피) 이자(tra) 이자(trb) 일반사업비
0 0 0 37.459481 3909.6 0 0 0	37.5 1666.236907 37.459481 0 0 74.0 37.5 1817.657407 2017.902074 0	None None None None None None None	None None None None None None None	일반사업비 임시계좌 잔액 조정 월초 잔액 분양매출(오피) 이자(tra) 이자(trb) 일반사업비 임시계좌 잔액 조정 월초 잔액
0 0 0 37.459481 3909.6 0 0 0 2017.902074	37.5 1666.236907 37.459481 0 0 74.0 37.5 1817.657407 2017.902074 0 74.0	None None None None None None None None	None None None None None None None None	일반사업비 임시계좌 잔액 조정 월초 잔액 분양매출(오피) 이자(tra) 이자(trb) 일반사업비 임시계좌 잔액 조정 월초 잔액 이자(tra)
0 0 0 37.459481 3909.6 0 0 0 2017.902074 0	37.5 1666.236907 37.459481 0 0 74.0 37.5 1817.657407 2017.902074 0 74.0 37.5	None None None None None None None None	None None None None None None None None	일반사업비 임시계좌 잔액 조정 월초 잔액 분양매출(오피) 이자(tra) 이자(trb) 일반사업비 임시계좌 잔액 조정 월초 잔액 이자(tra)
0 0 0 37.459481 3909.6 0 0 0 2017.902074 0 0	37.5 1666.236907 37.459481 0 0 74.0 37.5 1817.657407 2017.902074 0 74.0 37.5 1904.183407	None None None None None None None None	None None None None None None None None	일반사업비 임시계좌 잔액 조정 월초 잔액 분양매출(오피) 이자(tra) 이자(trb) 일반사업비 임시계좌 잔액 조정 월초 잔액 이자(tra) 이자(tra)
0 0 0 37.459481 3909.6 0 0 0 2017.902074 0 0	37.5 1666.236907 37.459481 0 0 74.0 37.5 1817.657407 2017.902074 0 74.0 37.5 1904.183407 2.218667	None None None None None None None None	None None None None None None None None	일반사업비 임시계좌 잔액 조정 월초 잔액 분양매출(오피) 이자(tra) 이자(trb) 일반사업비 임시계좌 잔액 조정 원초 잔액 이자(tra) 이자(tra) 이자(trb)
0 0 37.459481 3909.6 0 0 0 2017.902074 0 0 0 2.218667	37.5 1666.236907 37.459481 0 0 74.0 37.5 1817.657407 2017.902074 0 74.0 37.5 1904.183407 2.218667 0	None None None None None None None None	None None None None None None None None	일반사업비 임시계좌 잔액 조정 월초 잔액 분양매출(오피) 이자(tra) 이자(trb) 일반사업비 임시계좌 잔액 조정 이자(tra) 이자(tra) 이자(tra)
0 0 37.459481 3909.6 0 0 0 2017.902074 0 0 0 2.218667 2000.0	37.5 1666.236907 37.459481 0 0 74.0 37.5 1817.657407 2017.902074 0 74.0 37.5 1904.183407 2.218667 0 0	None None None None None None None None	None None None None None None None None	일반사업비 임시계좌 잔액 조정 월초 잔액 분양매출(오피) 이자(tra) 이자(trb) 일반사업비 임시계좌 잔액 조정 원초 잔액 이자(tra) 이자(trb) 일반사업비 임시계좌 잔액 조정 일반사업비 임시계좌 잔액 조정 일반사업비 임시계좌 잔액 조정 일반사업비 임시계좌 잔액 조정
	623.436204 3909.6 0 0 0 2626.355296 0 0 0 1111.696389	623.436204 0 3909.6 0 70.5 0 70.5 0 37.5 1798.680907 0 2626.355296 2626.355296 0 70.5 0 70.5 0 37.5 0 1406.658907 0 1111.696389	623.436204       0       None         3909.6       0       None         0       70.5       None         0       37.5       None         0       1798.680907       None         0       2626.355296       None         2626.355296       0       None         0       70.5       None         0       37.5       None         0       1406.658907       None         1111.696389       None       None	623.436204       0       None       None         3909.6       0       None       None         0       70.5       None       None         0       37.5       None       None         0       1798.680907       None       None         0       2626.355296       None       None         0       70.5       None       None         0       37.5       None       None         0       1406.658907       None       None         0       1111.696389       None       None         1111.696389       0       None       None

2024-09-30	0	51.429759	None	None	임시계좌 잔액 조정
2024-10-31	51.429759	0	None	None	월초 잔액
2024-10-31	5212.8	0	None	None	분양매출(오피)
2024-10-31	0	84.0	None	None	이자(tra)
2024-10-31	0	37.5	None	None	이자(trb)
2024-10-31	0	2404.362907	None	None	일반사업비
2024-10-31	0	2738.366852	None	None	임시계좌 잔액 조정
2024-11-30	2738.366852	0	None	None	월초 잔액
2024-11-30	0	84.0	None	None	이자(tra)
2024-11-30	0	37.5	None	None	이자(trb)
2024-11-30	0	1644.605407	None	None	일반사업비
2024-11-30	0	972.261444	None	None	임시계좌 잔액 조정
2024-12-31	972.261444	0	None	None	월초 잔액
2024-12-31	5212.8	0	None	None	분양매출(오피)
2024-12-31	0	84.0	None	None	이자(tra)
2024-12-31	0	37.5	None	None	이자(trb)
2024-12-31	0	1514.816407	None	None	일반사업비
2024-12-31	0	4548.745037	None	None	임시계좌 잔액 조정
2025-01-31	4548.745037	0	None	None	월초 잔액
2025-01-31	0	84.0	None	None	이자(tra)
2025-01-31	0	37.5	None	None	이자(trb)
2025-01-31	0	1320.132907	None	None	일반사업비
2025-01-31	0	3107.11213	None	None	임시계좌 잔액 조정
2025-02-28	3107.11213	0	None	None	월초 잔액
2025-02-28	0	84.0	None	None	이자(tra)
2025-02-28	0	37.5	None	None	이자(trb)
2025-02-28	0	1017.291907	None	None	일반사업비
2025-02-28	0	1968.320222	None	None	임시계좌 잔액 조정
2025-03-31	1968.320222	0	None	None	월초 잔액
2025-03-31	0	84.0	None	None	이자(tra)
2025-03-31	0	37.5	None	None	이자(trb)
2025-03-31	0	1299.534465	None	None	일반사업비
2025-03-31	0	547.285757	None	None	임시계좌 잔액 조정
2025-04-30	547.285757	0	None	None	월초 잔액

2025-04-30	39096.0	0	None	None	분양매출(오피)
2025-04-30	5600.0	0	None	None	분양매출(근생)
2025-04-30	0	84.0	None	None	이자(tra)
2025-04-30	0	37.5	None	None	이자(trb)
2025-04-30	0	1258.263407	None	None	일반사업비
2025-04-30	0	43863.522349	None	None	임시계좌 잔액 조정
2025-05-31	43863.522349	0	None	None	월초 잔액
2025-05-31	0	84.0	None	None	이자(tra)
2025-05-31	0	37.5	None	None	이자(trb)
2025-05-31	0	26.207407	None	None	일반사업비
2025-05-31	0	40000.0	None	None	대출금상환(tra)
2025-05-31	0	5000.0	None	None	대출금상환(trb)
2025-05-31	0	-1284.185058	None	None	임시계좌 잔액 조정
2025-06-30	-1284.185058	0	None	None	월초 잔액
2025-06-30	0	-1284.185058	None	None	임시계좌 잔액 조정

In [12]: acc.oprtg.jnl

## Out[12]:

	amt_in	amt_out	rcvfrm	payto	note
2023-01-31	5000	0	보통주	None	자기자본 납입
2023-01-31	5000	0	보통주	None	자기자본 납입
2023-03-31	5000	0	ntnl	None	일시대출금(trb)
2023-03-31	5000	0	ntnl	None	일시대출금(tra)
2023-03-31	4700.0	0	ntnl	None	한도대출금(tra)
2025-05-31	0	84.0	None	IR	이자(tra)
2025-05-31	0	37.5	None	IR	이자(trb)
2025-05-31	0	26.207407	None	예비비	예비비
2025-05-31	0	40000.0	None	ntnl	대출금상환(tra)
2025-05-31	0	5000.0	None	ntnl	대출금상환(trb)

247 rows × 5 columns

In [13]: acc.oprtg.df

Out[13]:

	bal_strt	amt_in	amt_out	bal_end
2023-01-31	0.000000	10000.0	0.000000	10000.000000
2023-02-28	10000.000000	0.0	0.000000	10000.000000
2023-03-31	10000.000000	14700.0	24616.407407	83.592593
2023-04-30	83.592593	2003.2	2045.164907	41.627685
2023-05-31	41.627685	600.0	587.635907	53.991778
2023-06-30	53.991778	700.0	655.530407	98.461370
2023-07-31	98.461370	500.0	550.872907	47.588463
2023-08-31	47.588463	600.0	618.267407	29.321056
2023-09-30	29.321056	1303.2	772.687907	559.833148
2023-10-31	559.833148	2606.4	1575.708407	1590.524741
2023-11-30	1590.524741	0.0	1010.634407	579.890333
2023-12-31	579.890333	400.0	945.739907	34.150426
2024-01-31	34.150426	900.0	926.108407	8.042019
2024-02-29	8.042019	2606.4	930.608407	1683.833611
2024-03-31	1683.833611	0.0	1060.397407	623.436204
2024-04-30	623.436204	3909.6	1906.680907	2626.355296
2024-05-31	2626.355296	0.0	1514.658907	1111.696389
2024-06-30	1111.696389	700.0	1774.236907	37.459481
2024-07-31	37.459481	3909.6	1929.157407	2017.902074
2024-08-31	2017.902074	0.0	2015.683407	2.218667
2024-09-30	2.218667	2000.0	1950.788907	51.429759
2024-10-31	51.429759	5212.8	2525.862907	2738.366852
2024-11-30	2738.366852	0.0	1766.105407	972.261444
2024-12-31	972.261444	5212.8	1636.316407	4548.745037
2025-01-31	4548.745037	0.0	1441.632907	3107.112130
2025-02-28	3107.112130	0.0	1138.791907	1968.320222
2025-03-31	1968.320222	0.0	1421.034465	547.285757
2025-04-30	547.285757	44696.0	1379.763407	43863.522349
2025-05-31	43863.522349	0.0	45147.707407	-1284.185058
2025-06-30	-1284.185058	0.0	0.000000	-1284.185058

In [14]: sales.오피.dfall

Out[14]:

	scd_in	scd_in_cum	scd_out	scd_out_cum	bal_strt	amt_in	amt_in_cum	amt_out
2023- 01-31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2023- 02-28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2023- 03-31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2023- 04-30	0.0	0.0	1303.2	1303.2	0.0	0.0	0.0	1303.2
2023- 05-31	0.0	0.0	0.0	1303.2	-1303.2	0.0	0.0	0.0
2023- 06-30	0.0	0.0	0.0	1303.2	-1303.2	0.0	0.0	0.0
2023- 07-31	0.0	0.0	0.0	1303.2	-1303.2	0.0	0.0	0.0
2023- 08-31	0.0	0.0	0.0	1303.2	-1303.2	0.0	0.0	0.0
2023- 09-30	0.0	0.0	1303.2	2606.4	-1303.2	0.0	0.0	1303.2
2023- 10-31	0.0	0.0	2606.4	5212.8	-2606.4	0.0	0.0	2606.4
2023- 11-30	0.0	0.0	0.0	5212.8	-5212.8	0.0	0.0	0.0
2023- 12-31	0.0	0.0	0.0	5212.8	-5212.8	0.0	0.0	0.0
2024- 01-31	0.0	0.0	0.0	5212.8	-5212.8	0.0	0.0	0.0
2024- 02-29	0.0	0.0	2606.4	7819.2	-5212.8	0.0	0.0	2606.4
2024- 03-31	0.0	0.0	0.0	7819.2	-7819.2	0.0	0.0	0.0
2024- 04-30	0.0	0.0	3909.6	11728.8	-7819.2	0.0	0.0	3909.6
2024- 05-31	0.0	0.0	0.0	11728.8	-11728.8	0.0	0.0	0.0
2024- 06-30	0.0	0.0	0.0	11728.8	-11728.8	0.0	0.0	0.0
2024- 07-31	0.0	0.0	3909.6	15638.4	-11728.8	0.0	0.0	3909.6
2024- 08-31	0.0	0.0	0.0	15638.4	-15638.4	0.0	0.0	0.0
2024- 09-30	0.0	0.0	0.0	15638.4	-15638.4	0.0	0.0	0.0

2024- 10-31	0.0	0.0	5212.8	20851.2	-15638.4	0.0	0.0	5212.8
2024- 11-30	0.0	0.0	0.0	20851.2	-20851.2	0.0	0.0	0.0
2024- 12-31	0.0	0.0	5212.8	26064.0	-20851.2	0.0	0.0	5212.8
2025- 01-31	0.0	0.0	0.0	26064.0	-26064.0	0.0	0.0	0.0
2025- 02-28	0.0	0.0	0.0	26064.0	-26064.0	0.0	0.0	0.0
2025- 03-31	0.0	0.0	0.0	26064.0	-26064.0	0.0	0.0	0.0
2025- 04-30	0.0	0.0	39096.0	65160.0	-26064.0	0.0	0.0	39096.0
2025- 05-31	0.0	0.0	0.0	65160.0	-65160.0	0.0	0.0	0.0
2025- 06-30	0.0	0.0	0.0	65160.0	-65160.0	0.0	0.0	0.0

In [15]: sales.근생.dfall

### Out[15]:

	scd_in	scd_in_cum	scd_out	scd_out_cum	bal_strt	amt_in	amt_in_cum	amt_out
2023- 01-31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2023- 02-28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2023- 03-31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2023- 04-30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2023- 05-31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2023- 06-30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2023- 07-31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2023- 08-31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2023- 09-30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2023- 10-31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2023-								

11-30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2023- 12-31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2024- 01-31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2024- 02-29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2024- 03-31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2024- 04-30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2024- 05-31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2024- 06-30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2024- 07-31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2024- 08-31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2024- 09-30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2024- 10-31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2024- 11-30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2024- 12-31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2025- 01-31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2025- 02-28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2025- 03-31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2025- 04-30	0.0	0.0	5600.0	5600.0	0.0	0.0	0.0	5600.0
2025- 05-31	0.0	0.0	0.0	5600.0	-5600.0	0.0	0.0	0.0
2025- 06-30	0.0	0.0	0.0	5600.0	-5600.0	0.0	0.0	0.0

In [16]: loan.tra.ntnl.dfall

Out[16]:

	scd_in	scd_in_cum	scd_out	scd_out_cum	bal_strt	amt_in	amt_in_cum	amt_o
2023- 01-31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
2023- 02-28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
2023- 03-31	0.0	0.0	40000.0	40000.0	0.0	0.0	0.0	9700
2023- 04-30	0.0	0.0	0.0	40000.0	-9700.0	0.0	0.0	700
2023- 05-31	0.0	0.0	0.0	40000.0	-10400.0	0.0	0.0	600
2023- 06-30	0.0	0.0	0.0	40000.0	-11000.0	0.0	0.0	700
2023- 07-31	0.0	0.0	0.0	40000.0	-11700.0	0.0	0.0	500
2023- 08-31	0.0	0.0	0.0	40000.0	-12200.0	0.0	0.0	600
2023- 09-30	0.0	0.0	0.0	40000.0	-12800.0	0.0	0.0	0
2023- 10-31	0.0	0.0	0.0	40000.0	-12800.0	0.0	0.0	0
2023- 11-30	0.0	0.0	0.0	40000.0	-12800.0	0.0	0.0	0
2023- 12-31	0.0	0.0	0.0	40000.0	-12800.0	0.0	0.0	400
2024- 01-31	0.0	0.0	0.0	40000.0	-13200.0	0.0	0.0	900
2024- 02-29	0.0	0.0	0.0	40000.0	-14100.0	0.0	0.0	0
2024- 03-31	0.0	0.0	0.0	40000.0	-14100.0	0.0	0.0	0
2024- 04-30	0.0	0.0	0.0	40000.0	-14100.0	0.0	0.0	0
2024- 05-31	0.0	0.0	0.0	40000.0	-14100.0	0.0	0.0	0
2024- 06-30	0.0	0.0	0.0	40000.0	-14100.0	0.0	0.0	700
2024- 07-31	0.0	0.0	0.0	40000.0	-14800.0	0.0	0.0	0
2024- 08-31	0.0	0.0	0.0	40000.0	-14800.0	0.0	0.0	0
2024- 09-30	0.0	0.0	0.0	40000.0	-14800.0	0.0	0.0	2000

2024- 10-31	0.0	0.0	0.0	40000.0	-16800.0	0.0	0.0	0
2024- 11-30	0.0	0.0	0.0	40000.0	-16800.0	0.0	0.0	0
2024- 12-31	0.0	0.0	0.0	40000.0	-16800.0	0.0	0.0	0
2025- 01-31	0.0	0.0	0.0	40000.0	-16800.0	0.0	0.0	0
2025- 02-28	0.0	0.0	0.0	40000.0	-16800.0	0.0	0.0	0
2025- 03-31	0.0	0.0	0.0	40000.0	-16800.0	0.0	0.0	0
2025- 04-30	0.0	0.0	0.0	40000.0	-16800.0	0.0	0.0	0
2025- 05-31	40000.0	40000.0	0.0	40000.0	-16800.0	40000.0	40000.0	0
2025- 06-30	0.0	40000.0	0.0	40000.0	23200.0	0.0	40000.0	0

In [ ]: