balance sheets

June 17, 2022

```
[]: import yahoo_fin.stock_info as si
     import pandas as pd
     import concurrent.futures
     balance sheets = {}
     stock_list = ['AMZN']
     stock_list.extend(si.tickers_dow())
     print(stock_list)
    ['AMZN', 'AAPL', 'AMGN', 'AXP', 'BA', 'CAT', 'CRM', 'CSCO', 'CVX', 'DIS', 'DOW',
    'GS', 'HD', 'HON', 'IBM', 'INTC', 'JNJ', 'JPM', 'KO', 'MCD', 'MMM', 'MRK',
    'MSFT', 'NKE', 'PG', 'TRV', 'UNH', 'V', 'VZ', 'WBA', 'WMT']
[]: income_statements = {}
     with concurrent.futures.ProcessPoolExecutor() as executor:
         for ticker in stock_list:
             balance_sheets[ticker] = executor.submit(si.get_balance_sheet,ticker)
               print(ticker)
     print('done')
     for ticker in stock list:
         balance_sheets[ticker] = balance_sheets[ticker].result()
           print(ticker + '2')
     print('done2')
    done
    done2
[]: recent_sheets = {ticker : sheet.iloc[:,:1] for ticker, sheet in balance_sheets.
     →items()}
     for ticker in recent_sheets.keys():
         recent sheets[ticker].columns = ['Recent']
     combined_sheets = pd.concat(recent_sheets)
     combined_sheets = combined_sheets.reset_index()
     combined_sheets.columns = ['Ticker', 'Breakdown', 'Recent']
```

```
[]: income_statements = {}
     with concurrent.futures.ProcessPoolExecutor() as executor:
         for ticker in stock_list:
             income_statements[ticker] = executor.submit(si.

¬get_income_statement,ticker)
               print(ticker)
     print('done')
     for ticker in stock_list:
         income_statements[ticker] = income_statements[ticker].result()
           print(ticker + '2')
     print('done2')
    done
    done2
[]: recent_income_statements = {ticker : sheet.iloc[:,:1] for ticker, sheet in_
      →income_statements.items()}
     for ticker in recent_income_statements.keys():
         recent_income_statements[ticker].columns = ['Recent']
     combined_income = pd.concat(recent_income_statements)
     combined_income = combined_income.reset_index()
     combined_income.columns = ['Ticker', 'Breakdown', 'Recent']
[ ]: cash_flow_statements = {}
     with concurrent.futures.ProcessPoolExecutor() as executor:
         for ticker in stock list:
             cash_flow_statements[ticker] = executor.submit(si.get_cash_flow,ticker)
               print(ticker)
     print('done')
     for ticker in stock_list:
         cash_flow_statements[ticker] = cash_flow_statements[ticker].result()
           print(ticker + '2')
     print('done2')
    done
    done2
[]: recent_cash_flow_statements = {ticker : sheet.iloc[:,:1] for ticker, sheet in_
      →income_statements.items()}
     for ticker in recent_cash_flow_statements.keys():
         recent_cash_flow_statements[ticker].columns = ['Recent']
     combined_cash_flow = pd.concat(recent_cash_flow_statements)
```

```
combined_cash_flow = combined_cash_flow.reset_index()
    combined_cash_flow.columns = ['Ticker', 'Breakdown', 'Recent']
[]: frames = [combined_sheets, combined_income, combined_cash_flow]
     combined_df = pd.concat(frames)
    combined_df = combined_df.reset_index()
[]: pivot_df = combined_df.pivot_table(index='Ticker', columns='Breakdown',__
      ⇔values='Recent', aggfunc='sum')
[]: pivot_df.query("Ticker == 'AMZN'")
[]: Breakdown accountsPayable capitalSurplus
                                                        cash commonStock \
    Ticker
    AM7.N
                  7.866400e+10
                                  5.553800e+10 3.622000e+10
                                                                5000000.0
    Breakdown costOfRevenue deferredLongTermAssetCharges deferredLongTermLiab \
    Ticker
    AM7.N
                5.446880e+11
                                                       NaN
                                                                             NaN
    Breakdown discontinuedOperations
                                              ebit effectOfAccountingCharges \
    Ticker
    AMZN
                                  0.0 4.975800e+10
                                                                           0.0
    Breakdown ... shortTermInvestments totalAssets totalCurrentAssets \
    Ticker
                          5.982900e+10 4.205490e+11
    AMZN
                                                            1.615800e+11
    Breakdown totalCurrentLiabilities totalLiab totalOperatingExpenses \
    Ticker
    AM7.N
                          1.422660e+11 2.823040e+11
                                                                8.898860e+11
    {\tt Breakdown totalOtherIncomeExpenseNet totalRevenue totalStockholderEquity} \ \setminus \\
    Ticker
    AMZN
                             2.655200e+10 9.396440e+11
                                                                   1.382450e+11
    Breakdown treasuryStock
    Ticker
    AMZN
               -3.213000e+09
    [1 rows x 50 columns]
[ ]: pivot_df.query("ebit >= 0")
[]: Breakdown accountsPayable capitalSurplus
                                                        cash
                                                               commonStock \
    Ticker
    AAPL
                  5.476300e+10
                                           NaN 3.494000e+10 5.736500e+10
```

AMGN	1.366000e+09	NaN	7.989000e+09	3.209600e+10	
AMZN	7.866400e+10	5.553800e+10	3.622000e+10	5.000000e+06	
AXP	9.495600e+10	1.149500e+10	2.104000e+10	1.530000e+08	
CAT	8.154000e+09	NaN	8.428000e+09	6.398000e+09	
CRM	2.956000e+09	5.091900e+10	5.464000e+09	1.000000e+06	
CSCO	2.513000e+09	NaN	9.175000e+09	4.234600e+10	
CVX	1.645400e+10	1.728200e+10	5.640000e+09	1.832000e+09	
DIS	1.567900e+10	NaN	1.595900e+10	5.547100e+10	
DOW	8.416000e+09	8.151000e+09	2.988000e+09	8.000000e+06	
GS	2.519310e+11	5.639600e+10	2.610360e+11	9.000000e+06	
HD	1.346200e+10	1.213200e+10	2.343000e+09	9.000000e+07	
HON	6.484000e+09	8.141000e+09	1.095900e+10	9.580000e+08	
IBM	3.955000e+09	NaN	6.650000e+09	5.731900e+10	
INTC	5.747000e+09	NaN	4.827000e+09	2.800600e+10	
JNJ	1.105500e+10	NaN	1.448700e+10	3.120000e+09	
JPM	2.529897e+12	8.841500e+10	7.212010e+11	4.105000e+09	
KO	4.602000e+09	1.811600e+10	9.684000e+09	1.760000e+09	
MCD	1.006800e+09	8.231600e+09	4.709200e+09	1.660000e+07	
MMM	2.994000e+09	6.429000e+09	4.564000e+09	9.000000e+06	
MRK	5.989000e+09	4.423800e+10	8.096000e+09	1.788000e+09	
MSFT	1.516300e+10	NaN	1.422400e+10	8.311100e+10	
NKE	2.836000e+09	9.965000e+09	9.889000e+09	3.000000e+06	
PG	1.372000e+10	6.484800e+10	1.028800e+10	4.009000e+09	
TRV	5.736000e+10	NaN	7.610000e+08	2.415400e+10	
UNH	4.912600e+10	0.000000e+00	2.137500e+10	1.000000e+07	
V	2.660000e+08	1.885500e+10	1.648700e+10	NaN	
VZ	8.040000e+09	1.386100e+10	2.921000e+09	4.290000e+08	
WBA	1.113600e+10	1.098800e+10	1.193000e+09	1.200000e+07	
WMT	5.526100e+10	4.839000e+09	1.476000e+10	2.760000e+08	
WIII	0.020100010	4.0000000100	1.470000010	2.70000000	
Breakdown	costOfRevenue de	ferredLongTermA	ssetCharges o	deferredLongTermLiab	\
Ticker		O	O	3	
AAPL	4.259620e+11		NaN	NaN	
AMGN	1.290800e+10		NaN	NaN	
AMZN	5.446880e+11		NaN	NaN	
AXP	2.600000e+10	2	.385000e+09	NaN	
CAT	7.556400e+10		.669000e+09	NaN	
CRM	1.405200e+10		.544000e+09		
				2.421000e+09	
CSCO	3.584800e+10		.360000e+09	NaN	
CVX	1.787440e+11	5	.659000e+09	2.235000e+09	
DIS	9.026200e+10		NaN	NaN	
DOW	8.838200e+10	1	.358000e+09	1.395000e+09	
GS	1.256600e+10		NaN	NaN	
HD	2.006500e+11		.440000e+08	NaN	
HON	4.678800e+10		.890000e+08	NaN	
IBM	5.173000e+10	7	.370000e+09	9.240000e+08	
INTC	7.041800e+10	8	.740000e+08	NaN	

JNJ	5.951000e+10	1.0223	00e+10	NaN
JPM	0.000000e+00		NaN	NaN
KO	3.071400e+10	2.1290	00e+09	NaN
MCD	2.128540e+10	2.3570	00e+09	NaN
MMM	3.755200e+10	5.8100	00e+08	NaN
MRK	2.648200e+10	6.9200	00e+08	NaN
MSFT	1.044640e+11	7.1810	00e+09	NaN
NKE	4.907400e+10	2.6130	00e+09	NaN
PG	7.394800e+10		NaN	NaN
TRV	5.068200e+10	0.0000	00e+00	NaN
UNH	4.358900e+11		NaN	NaN
V	1.460000e+09	8.0000	00e+07	NaN
VZ	1.126020e+11		NaN	2.259000e+09
WBA	2.088840e+11		NaN	NaN
WMT	8.580000e+11	1.4730	00e+09	NaN
Breakdown	${\tt discontinued0perations}$	ebit	effectOfAcc	$\operatorname{cuntingCharges} \setminus$
Ticker				
AAPL	0.00000e+00	2.178980e+11		0.0
AMGN	0.00000e+00	1.867600e+10		0.0
AMZN	0.00000e+00	4.975800e+10		0.0
AXP	0.00000e+00	0.000000e+00		0.0
CAT	0.00000e+00	1.654800e+10		0.0
CRM	0.00000e+00	1.204000e+09		0.0
CSCO	0.00000e+00	2.753000e+10		0.0
CVX	0.00000e+00	3.172000e+10		0.0
DIS	-5.800000e+07	6.984000e+09		0.0
DOW	0.00000e+00	1.643800e+10		0.0
GS	0.00000e+00	0.000000e+00		0.0
HD	0.00000e+00	4.660400e+10		0.0
HON	0.00000e+00	1.494600e+10		0.0
IBM	2.060000e+09	1.154400e+10		0.0
INTC	0.00000e+00	4.416400e+10		0.0
JNJ	0.00000e+00	5.049400e+10		0.0
JPM	0.00000e+00	0.000000e+00		0.0
KO	0.00000e+00	2.264200e+10		0.0
MCD	0.00000e+00	1.974620e+10		0.0
MMM	0.00000e+00	1.558000e+10		0.0
MRK	1.408000e+09	3.171400e+10		0.0
MSFT	0.000000e+00	1.398320e+11		0.0
NKE	0.00000e+00	1.446200e+10		0.0
PG	0.00000e+00	3.758600e+10		0.0
TRV	0.00000e+00	9.596000e+09		0.0
UNH	0.00000e+00	4.794000e+10		0.0
V	0.00000e+00	3.170200e+10		0.0
VZ	0.00000e+00	5.819000e+10		0.0
WBA	1.096000e+09	7.328000e+09		0.0

Breakdown	•••	shortTermInvestments	totalAssets	totalCurrentAssets \	
Ticker	•••				
AAPL	•••	2.769900e+10	3.510020e+11	1.348360e+11	
AMGN	•••	4.800000e+07	6.116500e+10	1.938500e+10	
AMZN	•••	5.982900e+10	4.205490e+11	1.615800e+11	
AXP	•••	4.630000e+08	1.885480e+11	1.640180e+11	
CAT	•••	9.640000e+08	8.279300e+10	4.345500e+10	
CRM	•••	5.073000e+09	9.520900e+10	2.285000e+10	
CSCO	•••	1.534300e+10	9.749700e+10	3.911200e+10	
CVX	•••	3.500000e+07	2.395350e+11	3.373800e+10	
DIS	•••	NaN	2.036090e+11	3.365700e+10	
DOW	•••	2.450000e+08	6.299000e+10	2.084800e+10	
GS	•••	3.844740e+11	1.463988e+12	1.349466e+12	
HD		NaN	7.187600e+10	2.905500e+10	
HON		5.640000e+08	6.447000e+10	2.537200e+10	
IBM		6.000000e+08	1.320010e+11	2.953900e+10	
INTC		2.103000e+09	1.684060e+11	5.771800e+10	
JNJ		1.712100e+10	1.820180e+11	6.097900e+10	
JPM		2.616310e+11	3.743567e+12	1.693889e+12	
KO		2.941000e+09	9.435400e+10	2.254500e+10	
MCD		NaN	5.385430e+10	7.148500e+09	
MMM		2.010000e+08	4.707200e+10	1.540300e+10	
MRK		0.00000e+00	1.056940e+11	3.026600e+10	
MSFT		1.160320e+11	3.337790e+11	1.844060e+11	
NKE		3.587000e+09	3.774000e+10	2.629100e+10	
PG		0.00000e+00	1.193070e+11	2.309100e+10	
TRV		3.836000e+09	1.204660e+11	2.563900e+10	
UNH		2.532000e+09	2.122060e+11	5.730900e+10	
V		2.025000e+09	8.289600e+10	2.760700e+10	
VZ		NaN	3.665960e+11	3.672800e+10	
WBA		NaN	8.128500e+10	1.581400e+10	
WMT		NaN	2.448600e+11	8.107000e+10	
Breakdown	to	talCurrentLiabilities	totalLiab	totalOperatingExpenses	\
Ticker				1 3 1	·
AAPL		1.254810e+11	2.879120e+11	5.137360e+11	
AMGN		1.218400e+10	5.446500e+10	3.328200e+10	
AMZN		1.422660e+11	2.823040e+11	8.898860e+11	
AXP		1.058250e+11	1.663710e+11	6.726000e+10	
CAT		2.984700e+10	6.627700e+10	8.539400e+10	
CRM		2.178800e+10	3.707800e+10	5.178000e+10	
CSCO		2.625700e+10	5.622200e+10	7.210600e+10	
CVX		2.679100e+10	9.959500e+10	2.794920e+11	
DIS		3.107700e+10	1.013850e+11	1.278520e+11	
		1.322600e+10			
DOW		1.322600e+10	4.425100e+10	9.349800e+10	

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GS
                       8.041480e+11
                                     1.353222e+12
                                                               6.280800e+10
HD
                       2.869300e+10
                                      7.357200e+10
                                                               2.557100e+11
HON
                       1.950800e+10
                                      4.522100e+10
                                                               5.383800e+10
IBM
                       3.361900e+10
                                      1.130050e+11
                                                               1.031580e+11
INTC
                       2.746200e+10
                                      7.301500e+10
                                                               1.138840e+11
JNJ
                       4.522600e+10
                                      1.079950e+11
                                                               1.370560e+11
JPM
                       3.151444e+12
                                                               1.418200e+11
                                      3.449440e+12
ΚO
                       1.995000e+10
                                      6.949400e+10
                                                               5.466800e+10
MCD
                       4.020000e+09
                                      5.845530e+10
                                                               2.669960e+10
MMM
                       9.035000e+09
                                      3.195500e+10
                                                               5.513000e+10
MRK
                       2.387200e+10
                                      6.743700e+10
                                                               6.569400e+10
MSFT
                       8.865700e+10
                                      1.917910e+11
                                                               1.963440e+11
NKE
                       9.674000e+09
                                      2.497300e+10
                                                               7.461400e+10
PG
                       3.313200e+10
                                      7.265300e+10
                                                               1.146500e+11
TRV
                       7.526500e+10
                                      9.157900e+10
                                                               6.003600e+10
UNH
                       7.829200e+10
                                      1.357270e+11
                                                               5.272540e+11
٧
                                                               1.650800e+10
                                      4.530700e+10
                       1.573900e+10
٧Z
                       4.716000e+10
                                      2.833960e+11
                                                               2.090360e+11
WBA
                       2.205400e+10
                                      5.714500e+10
                                                               2.576900e+11
WMT
                       8.737900e+10
                                      1.529690e+11
                                                               1.093624e+12
           totalOtherIncomeExpenseNet
                                                       totalStockholderEquity
                                        totalRevenue
Breakdown
Ticker
AAPL
                          5.160000e+08
                                         7.316340e+11
                                                                  6.309000e+10
AMGN
                                                                  6.700000e+09
                         -5.274000e+09
                                         5.195800e+10
AMZN
                          2.655200e+10
                                         9.396440e+11
                                                                  1.382450e+11
                                         8.759800e+10
AXP
                          1.040000e+09
                                                                  2.217700e+10
CAT
                         -7.800000e+07
                                         1.019420e+11
                                                                  1.648400e+10
CRM
                          1.860000e+09
                                         5.298400e+10
                                                                  5.813100e+10
CSCO
                         -1.006000e+09
                                         9.963600e+10
                                                                  4.127500e+10
CVX
                          1.155800e+10
                                         3.112120e+11
                                                                  1.390670e+11
DIS
                         -1.862000e+09
                                         1.348360e+11
                                                                  8.855300e+10
DOW
                         -1.480000e+08
                                         1.099360e+11
                                                                  1.816500e+10
GS
                         -1.068000e+09
                                         1.179640e+11
                                                                  9.922300e+10
HD
                         -3.130000e+09
                                         3.023140e+11
                                                                 -1.696000e+09
HON
                         -4.760000e+08
                                         6.878400e+10
                                                                  1.856900e+10
IBM
                         -1.870000e+09
                                         1.147020e+11
                                                                  1.890100e+10
INTC
                         -7.580000e+08
                                         1.580480e+11
                                                                  9.539100e+10
JNJ
                         -4.942000e+09
                                         1.875500e+11
                                                                  7.402300e+10
                                         2.617960e+11
JPM
                         -8.520000e+08
                                                                  2.592890e+11
ΚO
                          2.208000e+09
                                         7.731000e+10
                                                                  2.299900e+10
MCD
                         -1.490400e+09
                                         4.644580e+10
                                                                 -4.601000e+09
                                                                  1.504600e+10
MMM
                                         7.071000e+10
                         -1.152000e+09
MRK
                         -3.956000e+09
                                         9.740800e+10
                                                                  3.818400e+10
MSFT
                          2.372000e+09
                                         3.361760e+11
                                                                  1.419880e+11
NKE
                         -1.140000e+09
                                         8.907600e+10
                                                                  1.276700e+10
PG
                         -2.356000e+09
                                         1.522360e+11
                                                                  4.550800e+10
```

TRV	-6.800000e+08	6.963200e+10	2.888700e+10
UNH	-3.320000e+09	5.751940e+11	7.176000e+10
V	4.240000e+08	4.821000e+10	3.450900e+10
VZ	6.500000e+08	2.672260e+11	8.179000e+10
WBA	-2.084000e+09	2.650180e+11	2.341900e+10
WMT	-1.449200e+10	1.145508e+12	8.325300e+10

Breakdown	treasuryStock
Ticker	or cabary brock
AAPL	1.630000e+08
AMGN	-7.960000e+08
AMZN	-3.213000e+09
AXP	-2.945000e+09
CAT	-2.919600e+10
CRM	-1.660000e+08
CSCO	-4.170000e+08
CVX	-4.559300e+10
DIS	-7.347000e+09
DOW	-1.061700e+10
GS	-8.899300e+10
HD	-8.149800e+10
HON	-3.335700e+10
IBM	-1.926270e+11
INTC	-8.800000e+08
JNJ	-5.215700e+10
JPM	-1.054990e+11
KO	-6.597100e+10
MCD	-7.038390e+10
MMM	-3.721300e+10
MRK	-6.153800e+10
MSFT	1.822000e+09
NKE	-3.800000e+08
PG	-1.297230e+11
TRV	-3.682200e+10
UNH	-5.384000e+09
V	3.030000e+08
VZ	-4.493000e+09
WBA	-2.270200e+10
WMT	-8.766000e+09

[30 rows x 50 columns]