

AlphaRank_DE

February 12, 2025

```
[321]: import requests
import json
import requests
import pandas as pd

from bs4 import BeautifulSoup
from datetime import datetime
from IPython import get_ipython
```

0.0.1 Check Data Lastest Date

```
[ ]: # Get the needed API endpoint

summary_url = "https://banks.data.fdic.gov/api/summary?
↳fields=STNAME%2CYEAR%2CINTINC%2CEINTEXP%2CNIM%2CNONII%2CNONIX%2CELNATR%2CITAXR%2CIGLSEC%2CI

location_url = "https://banks.data.fdic.gov/api/locations?
↳fields=NAME%2CUNINUM%2CFI_UNINUM%2CCITY%2CSTNAME%2CZIP%2CCOUNTY&sort_by=NAME&sort_order=ASC

institution_url = "https://banks.data.fdic.gov/api/institutions?
↳filters=ACTIVE%3A1&fields=UNINUM%2CZIP%2CCITY%2CCOUNTY%2CSTNAME%2CSTALP%2CNAME%2CACTIVE%2CA

[ ]: # Get request to the API

response_summary = requests.get(summary_url)
response_location = requests.get(location_url)
response_institution = requests.get(institution_url) # Active flag is 1

[ ]: # Check if the requests are successful and parse the dates

for i in [response_summary, response_location, response_institution]:
    if i.status_code == 200:
        data = i.json()
        create_timestamp = data["meta"]["index"]["createTimestamp"]
        print(f"Successfully fetched the data for the date {create_timestamp}")
    else:
```

```
print(f"Failed to fetch data.")
```

```
[335]: last_processed_date = datetime(2025, 2, 12)

location_date = datetime.strptime(response_location.
    ↳ json()["meta"]["index"]["createTimestamp"], "%Y-%m-%dT%H:%M:%SZ")
institution_date = datetime.strptime(response_institution.
    ↳ json()["meta"]["index"]["createTimestamp"], "%Y-%m-%dT%H:%M:%SZ")
```

0.0.2 Extract Banks Data

```
[318]: def fetch_all_data(api_url, params, limit=10000):

    all_data = []
    params["limit"] = limit
    params["offset"] = 0

    while True:
        # Make the request
        response = requests.get(api_url, params=params)
        response.raise_for_status() # Raise an error if the request fails

        data = response.json()

        # Check if there are records in the response
        if "data" in data and data["data"]:
            all_data.extend(data["data"]) # Append the new data
            print(f"Retrieved {len(data['data'])} records. Total so far:↳
↳ {len(all_data)}")

            # Break the loop if fewer than the limit of records were returned
            if len(data["data"]) < limit:
                break

            # Increment the offset for the next batch
            params["offset"] += limit
        else:
            print("No more data to fetch.")
            break

    # Convert the list of JSON data to a pandas DataFrame
    df = pd.json_normalize(all_data, sep="_")
    return df
```

Locations

```
[ ]: # If last processed date falls behind, need to re-fetch the data
```

```
if (location_date > last_processed_date) or (institution_date >
↳last_processed_date):
    print("Running all cells below...")
    shell = get_ipython()
    shell.run_line_magic("run", "-i AllCellsBelow")
```

```
[319]: # API
```

```
api_url = "https://banks.data.fdic.gov/api/locations"
params = {
    "fields": "NAME,UNINUM,FI_UNINUM,CITY,STNAME,ZIP,COUNTY",
    "sort_by": "NAME",
    "sort_order": "ASC",
    "format": "json"
}
```

```
# Fetch all data and convert to DataFrame
```

```
df_locations = fetch_all_data(api_url, params)
```

```
# Display the first few rows of the DataFrame
```

```
print(df_locations.shape)
df_locations.head()
```

```
Retrieved 10000 records. Total so far: 10000
Retrieved 10000 records. Total so far: 20000
Retrieved 10000 records. Total so far: 30000
Retrieved 10000 records. Total so far: 40000
Retrieved 10000 records. Total so far: 50000
Retrieved 10000 records. Total so far: 60000
Retrieved 10000 records. Total so far: 70000
Retrieved 8872 records. Total so far: 78872
(78872, 9)
```

```
[319]:
```

	score	data_ZIP	data_CITY	data_FI_UNINUM	data_STNAME	data_COUNTY	\
0	1	62230	Breese	9231	Illinois	Clinton	
1	1	62231	Carlyle	9231	Illinois	Clinton	
2	1	62216	Aviston	9231	Illinois	Clinton	
3	1	62231	Carlyle	9231	Illinois	Clinton	
4	1	63376	Saint Peters	429739	Missouri	St. Charles	

0	1	62230	Breese	9231	Illinois	Clinton
1	1	62231	Carlyle	9231	Illinois	Clinton
2	1	62216	Aviston	9231	Illinois	Clinton
3	1	62231	Carlyle	9231	Illinois	Clinton
4	1	63376	Saint Peters	429739	Missouri	St. Charles

		data_NAME	data_UNINUM	data_ID
0		1NB Bank	223055	223055
1		1NB Bank	232078	232078
2		1NB Bank	466427	466427
3		1NB Bank	9231	9231
4	1st Advantage Bank		429739	429739

Institution

```
[362]: # API parameters for the new API
api_url = "https://banks.data.fdic.gov/api/institutions"
params = {
    "filters": "ACTIVE:1",
    "fields": "\
    ↪UNINUM,REPDTE,ZIP,CITY,COUNTY,STNAME,STALP,NAME,ACTIVE,ASSET,DEP",
    "sort_by": "REPDTE",
    "sort_order": "DESC",
    "format": "json"
}

# Fetch all data and convert to DataFrame
df_institutions = fetch_all_data(api_url, params)

# df_institutions["UNINUM"] = df_institutions["UNINUM"].astype(int)

# Display the first few rows of the DataFrame
print(df_institutions.shape)
df_institutions.head()
```

Retrieved 4490 records. Total so far: 4490
(4490, 13)

```
[362]:
```

	score	data_ZIP	data_CITY	data_ACTIVE	data_REPDTE	data_STNAME	\
0	0	53946	Markesan	1	09/30/2024	Wisconsin	
1	0	53566	Monroe	1	09/30/2024	Wisconsin	
2	0	54909	Almond	1	09/30/2024	Wisconsin	
3	0	54757	New Auburn	1	09/30/2024	Wisconsin	
4	0	54935	Fond Du Lac	1	09/30/2024	Wisconsin	

	data_ASSET	data_STALP	data_DEP	data_COUNTY	\
0	242674.0	WI	202952.0	Green Lake	
1	452264.0	WI	344870.0	Green	
2	210139.0	WI	173856.0	Portage	
3	204089.0	WI	172964.0	Chippewa	
4	2865827.0	WI	2323421.0	Fond Du Lac	

	data_NAME	data_UNINUM	data_ID
0	Ergo Bank	6394	10004
1	Woodford State Bank	6400	10011
2	The Portage County Bank	6401	10012
3	Security Bank	6404	10015
4	National Exchange Bank and Trust	6419	10044

```
[316]: print(df_summary.shape)
df_summary.head()
```

(7865, 14)

```
[316]:
```

	ITAX	EINTEXP	EXTRA	ELNATR	STNAME	INTINC	NETINC	\
0	32827.0	102349.0	0.0	4206.0	Alaska	412965.0	103186	
1	727856.0	2498542.0	0.0	644948.0	Alabama	9955600.0	3012921	
2	432747.0	2902779.0	0.0	366774.0	Arkansas	8343451.0	1898949	
3	0.0	0.0	0.0	0.0	American Samoa	0.0	0	
4	212045.0	1707821.0	0.0	65783.0	Arizona	4178894.0	710148	

	NONIX	NIM	YEAR	ITAXR	IGLSEC	NONII	ID
0	227489.0	310616.0	2023	136536	-523.0	57615.0	CB_2023_AK
1	5563262.0	7457058.0	2023	3745419	-4642.0	2496571.0	CB_2023_AL
2	4321038.0	5440672.0	2023	2346191	-14473.0	1593331.0	CB_2023_AR
3	0.0	0.0	2023	0	0.0	0.0	CB_2023_AS
4	1793633.0	2471073.0	2023	964990	-42796.0	353333.0	CB_2023_AZ

```
[315]: print(df_location.shape)
df_location.head()
```

(10000, 8)

```
[315]:
```

	ZIP	CITY	FI_UNINUM	STNAME	COUNTY	NAME	\
0	62230	Breese	9231	Illinois	Clinton	1NB Bank	
1	62231	Carlyle	9231	Illinois	Clinton	1NB Bank	
2	62216	Aviston	9231	Illinois	Clinton	1NB Bank	
3	62231	Carlyle	9231	Illinois	Clinton	1NB Bank	
4	63376	Saint Peters	429739	Missouri	St. Charles	1st Advantage Bank	

	UNINUM	ID
0	223055	223055
1	232078	232078
2	466427	466427
3	9231	9231
4	429739	429739

```
[359]: df_institution["UNINUM"] = df_institution["UNINUM"].astype(int)
# df_institution["ID"] = df_institution["ID"].astype(int)

print(df_institution.shape)
df_institution.head()
```

(4490, 11)

```
[359]:
```

	ZIP	CITY	ACTIVE	STNAME	ASSET	STALP	DEP	\
0	62231	Carlyle	1	Illinois	301003.0	IL	254473.0	
1	63376	Saint Peters	1	Missouri	181448.0	MO	162837.0	
2	74035	Hominy	1	Oklahoma	47473.0	OK	44326.0	
3	08243	Sea Isle City	1	New Jersey	301759.0	NJ	219399.0	

4	85364	Yuma	1	Arizona	577947.0	AZ	518166.0
---	-------	------	---	---------	----------	----	----------

	COUNTY	NAME	UNINUM	ID
0	Clinton	1NB Bank	9231	14761
1	St. Charles	1st Advantage Bank	429739	57899
2	Osage	1st Bank in Hominy	2688	4122
3	Cape May	1st Bank of Sea Isle City	43201	30367
4	Yuma	1st Bank Yuma	360755	57298

```
[311]: # Merge three dataframes
merged_bank_0 = pd.merge(df_institution, df_location, left_on="UNINUM",
    right_on="FI_UNINUM", how="inner")

# Add a column to flag "Bank"
merged_bank_0["Type"] = "Bank"

print(merged_bank_0.shape)
merged_bank_0.head()
```

(10000, 20)

```
[311]: ZIP_x      CITY_x  ACTIVE  STNAME_x      ASSET  STALP      DEP  \
0  62231      Carlyle      1  Illinois  301003.0    IL  254473.0
1  62231      Carlyle      1  Illinois  301003.0    IL  254473.0
2  62231      Carlyle      1  Illinois  301003.0    IL  254473.0
3  62231      Carlyle      1  Illinois  301003.0    IL  254473.0
4  63376  Saint Peters      1  Missouri  181448.0    MO  162837.0

COUNTY_x      NAME_x  UNINUM_x  ID_x  ZIP_y      CITY_y  \
0  Clinton      1NB Bank      9231  14761  62230      Breese
1  Clinton      1NB Bank      9231  14761  62231      Carlyle
2  Clinton      1NB Bank      9231  14761  62216      Aviston
3  Clinton      1NB Bank      9231  14761  62231      Carlyle
4  St. Charles  1st Advantage Bank  429739  57899  63376  Saint Peters

FI_UNINUM  STNAME_y      COUNTY_y      NAME_y  UNINUM_y  ID_y  \
0      9231  Illinois      Clinton      1NB Bank  223055  223055
1      9231  Illinois      Clinton      1NB Bank  232078  232078
2      9231  Illinois      Clinton      1NB Bank  466427  466427
3      9231  Illinois      Clinton      1NB Bank      9231      9231
4  429739  Missouri  St. Charles  1st Advantage Bank  429739  429739

Type
0  Bank
1  Bank
2  Bank
3  Bank
```

0.0.3 Extract Credit Union Data

```
[55]: ## Mar 2024

# Define file path
file_path = "515_Mar2024.xlsx"

# Read specific sheets and specific columns
sheet_1 = "Total Accounts"
sheet_2 = "Shares and Deposits"
sheet_3 = "ProfileGenInfo"
columns_to_read_1 = ["Charter", "010"]
columns_to_read_2 = ["Charter", "018"]
columns_to_read_3 = ["CUNumber", "CUName", "City", "State"]

# Read the data into a DataFrame
df_1 = pd.read_excel(file_path, sheet_name=sheet_1, usecols=columns_to_read_1)
df_2 = pd.read_excel(file_path, sheet_name=sheet_2, usecols=columns_to_read_2)
df_3 = pd.read_excel(file_path, sheet_name=sheet_3, usecols=columns_to_read_3)

# Rename the columns
ndf_1 = df_1.rename(columns={"010": "Total Assets"})
ndf_2 = df_2.rename(columns={"018": "Total Shares and Deposits"})

# Merge three dataframes
merged_df_0 = pd.merge(ndf_1, ndf_2, on="Charter", how="inner")
merged_df = pd.merge(merged_df_0, df_3, left_on="Charter", right_on="CUNumber",
                    how="inner")

# Add a column to flag "CU"
merged_df['Type'] = 'CU'

print(merged_df.head())
```

	Charter	Total Assets	Total Shares and Deposits	CUNumber \
0	566	3319681727	2557819422	566
1	594	419766565	380120801	594
2	1034	64727010	50306580	1034
3	1074	1540312535	1274446370	1074
4	1204	109996148	101806576	1204

	CUName	City	State	Type
0	NUVISION	HUNTINGTON BEAC	CA	CU

1	PASADENA	Pasadena	CA	CU
2	OLIVE VIEW EMPLOYEES	SYLMAR	CA	CU
3	FARMERS INSURANCE	Burbank	CA	CU
4	RANCHO	DOWNEY	CA	CU

[381]: `## June 2024`

```

# Define file path
file_path = "585_Jun2024.xlsx"

# Read specific sheets and specific columns
sheet_1 = "Total Accounts"
sheet_2 = "Shares and Deposits"
sheet_3 = "ProfileGenInfo"
columns_to_read_1 = ["Charter", "010"]
columns_to_read_2 = ["Charter", "018"]
columns_to_read_3 = ["CUNumber", "CUName", "City", "State"]

# Read the data into a DataFrame
df_1 = pd.read_excel(file_path, sheet_name=sheet_1, usecols=columns_to_read_1)
df_2 = pd.read_excel(file_path, sheet_name=sheet_2, usecols=columns_to_read_2)
df_3 = pd.read_excel(file_path, sheet_name=sheet_3, usecols=columns_to_read_3)

# Rename the columns
ndf_1 = df_1.rename(columns={"010": "Total Assets"})
ndf_2 = df_2.rename(columns={"018": "Total Shares and Deposits"})

# Merge three dataframes
merged_df_0 = pd.merge(ndf_1, ndf_2, on="Charter", how="inner")
merged_df_june = pd.merge(merged_df_0, df_3, left_on="Charter",
    right_on="CUNumber", how="inner")

# Add a column to flag "CU"
merged_df_june['Type'] = 'CU'

print(merged_df_june.head())

```

	Charter	Total Assets	Total Shares and Deposits	CUNumber	\
0	1	11109125	9758484	1	
1	6	274014841	239261238	6	
2	12	60169418	55132588	12	
3	13	1074739920	926710410	13	
4	16	9617599	8334581	16	

	CUName	State	City	Type
0	MORRIS SHEPPARD	TEXARKANA	TX	TEXARKANA CU
1	THE NEW ORLEANS FIREMEN'S	LA	Metairie	CU

2	FRANKLIN TRUST	CT	Hartford	CU
3	EFCU FINANCIAL	LA	Baton Rouge	CU
4	WOODMEN	NE	OMAHA	CU

```
[382]: ## Sep 2024

# Define file path
file_path = "566_Sep2024.xlsx"

# Read specific sheets and specific columns
sheet_1 = "Total Accounts"
sheet_2 = "Shares and Deposits"
sheet_3 = "ProfileGenInfo"
columns_to_read_1 = ["Charter", "010"]
columns_to_read_2 = ["Charter", "018"]
columns_to_read_3 = ["CUNumber", "CUName", "City", "State"]

# Read the data into a DataFrame
df_1 = pd.read_excel(file_path, sheet_name=sheet_1, usecols=columns_to_read_1)
df_2 = pd.read_excel(file_path, sheet_name=sheet_2, usecols=columns_to_read_2)
df_3 = pd.read_excel(file_path, sheet_name=sheet_3, usecols=columns_to_read_3)

# Rename the columns
ndf_1 = df_1.rename(columns={"010": "Total Assets"})
ndf_2 = df_2.rename(columns={"018": "Total Shares and Deposits"})

# Merge three dataframes
merged_df_0 = pd.merge(ndf_1, ndf_2, on="Charter", how="inner")
merged_df_sep = pd.merge(merged_df_0, df_3, left_on="Charter",
    right_on="CUNumber", how="inner")

# Add a column to flag "CU"
merged_df_sep['Type'] = 'CU'

print(merged_df_sep.head())
```

	Charter	Total Assets	Total Shares and Deposits	CUNumber	\
0	566	3469113230	2731790560	566	
1	594	364712289	324358927	594	
2	1034	63443173	48931060	1034	
3	1074	1461148571	1229322187	1074	
4	1204	108016124	99260328	1204	

	CUName	City	State	Type
0	NUVISION	HUNTINGTON BEAC	CA	CU
1	PASADENA	Pasadena	CA	CU
2	OLIVE VIEW EMPLOYEES	SYLMAR	CA	CU

```

3     FARMERS INSURANCE      Burbank    CA    CU
4           RANCHO           DOWNEY     CA    CU

```

[383]: # Merge and compare the change over last 2 quarters

```

merged_df_dep = pd.merge(merged_df_june, merged_df_sep, on="CUNumber",
    how="inner")
merged_df_dep

```

```

[383]:      Charter_x  Total Assets_x  Total Shares and Deposits_x  CUNumber \
0           566      3442694640                2714094872      566
1           594      374754091                334915398      594
2          1034      63640761                49291011      1034
3          1074     1503029445                1256306639      1074
4          1204     107666139                99193332      1204
..          ...          ...          ...          ...
238        68549      37038781                31548662      68549
239        68579     9586191891                8063704676      68579
240        68668      834000401                684989575      68668
241        68712     3885613740                3340557844      68712
242        68741     1140455731                1001307225      68741

```

```

      CUName_x State_x      City_x Type_x  Charter_y \
0      NUVISION     CA  HUNTINGTON BEAC     CU      566
1      PASADENA     CA      Pasadena     CU      594
2  OLIVE VIEW EMPLOYEES     CA      SYLMAR     CU     1034
3    FARMERS INSURANCE     CA      Burbank     CU     1074
4      RANCHO       CA      DOWNEY     CU     1204
..          ...          ...          ...          ...
238      MEDIA CITY     CA      BURBANK     CU     68549
239      PATELCO      CA      Dublin     CU     68579
240  1ST NORTHERN CALIFORNIA     CA      Martinez     CU     68668
241      VALLEY STRONG     CA  BAKERSFIELD     CU     68712
242      SESLOC      CA  SAN LUIS OBISPO     CU     68741

```

```

      Total Assets_y  Total Shares and Deposits_y      CUName_y \
0      3469113230                2731790560      NUVISION
1      364712289                324358927      PASADENA
2      63443173                48931060  OLIVE VIEW EMPLOYEES
3      1461148571                1229322187    FARMERS INSURANCE
4      108016124                99260328      RANCHO
..          ...          ...          ...
238      38649552                32401070      MEDIA CITY
239      9525458343                7848994798      PATELCO
240      823837786                674249910  1ST NORTHERN CALIFORNIA
241      3925605060                3415504790      VALLEY STRONG
242      1132016926                1014397150      SESLOC

```

	City_y	State_y	Type_y
0	HUNTINGTON BEAC	CA	CU
1	Pasadena	CA	CU
2	SYLMAR	CA	CU
3	Burbank	CA	CU
4	DOWNEY	CA	CU
..
238	BURBANK	CA	CU
239	Dublin	CA	CU
240	Martinez	CA	CU
241	BAKERSFIELD	CA	CU
242	SAN LUIS OBISPO	CA	CU

[243 rows x 15 columns]

[]:

0.0.4 1. How many banks and credit unions are active by asset tier (between \$500 M and \$1B)

[337]: df_institutions.head()

[337]:	score	data_ZIP	data_CITY	data_ACTIVE	data_STNAME	data_ASSET	\
0	0	62231	Carlyle	1	Illinois	301003.0	
1	0	63376	Saint Peters	1	Missouri	181448.0	
2	0	74035	Hominy	1	Oklahoma	47473.0	
3	0	08243	Sea Isle City	1	New Jersey	301759.0	
4	0	85364	Yuma	1	Arizona	577947.0	

	data_STALP	data_DEP	data_COUNTY	data_NAME	data_UNINUM	\
0	IL	254473.0	Clinton	1NB Bank	9231	
1	MO	162837.0	St. Charles	1st Advantage Bank	429739	
2	OK	44326.0	Osage	1st Bank in Hominy	2688	
3	NJ	219399.0	Cape May	1st Bank of Sea Isle City	43201	
4	AZ	518166.0	Yuma	1st Bank Yuma	360755	

	data_ID
0	14761
1	57899
2	4122
3	30367
4	57298

```
[344]: # Bank Count

filtered_institutions = df_institutions[(df_institutions['data_ASSET'] >= 500000000) &
    (df_institutions['data_ASSET'] <= 1000000000)]
num_banks = filtered_institutions['data_UNINUM'].nunique()

# Credit Union Count

filtered_cu = merged_df[(merged_df['Total Assets'] >= 500000000) &
    (merged_df['Total Assets'] <= 1000000000)]
num_cu = filtered_cu['CUNumber'].nunique()

print(f"Number of Active Banks That Have Total Assets Between $500M and $1B Is: {num_banks}")
print(f"Number of Active Credit Unions That Have Total Assets Between $500M and $1B Is: {num_cu}")
```

Number of Active Banks That Have Total Assets Between \$500M and \$1B Is: 4
 Number of Active Credit Unions That Have Total Assets Between \$500M and \$1B Is: 24

0.0.5 2. Which banks and credit unions experienced >5% decline in deposits last quarter?

```
[391]: merged_df_dep = pd.merge(merged_df_june, merged_df_sep, on="CUNumber",
    how="inner")

merged_df_dep = merged_df_dep.rename(columns={"Total Shares and Deposits_x":
    "TotDep_June", "Total Shares and Deposits_y": "TotDep_Sep",})

merged_df_dep["Diff_TotDep"] = merged_df_dep["TotDep_Sep"] -
    merged_df_dep["TotDep_June"]

merged_df_dep["%_Diff"] = 100 * round((merged_df_dep["Diff_TotDep"] /
    merged_df_dep["TotDep_June"]), 2)
```

```
[392]: merged_df_dep["%_Diff"] < -5.0
```

```
[392]:
```

	Charter_x	Total Assets_x	TotDep_June	CUNumber	\
0	566	3442694640	2714094872	566	
1	594	374754091	334915398	594	
2	1034	63640761	49291011	1034	
3	1074	1503029445	1256306639	1074	
4	1204	107666139	99193332	1204	
..	
238	68549	37038781	31548662	68549	

239	68579	9586191891	8063704676	68579
240	68668	834000401	684989575	68668
241	68712	3885613740	3340557844	68712
242	68741	1140455731	1001307225	68741

	CUName_x	State_x	City_x	Type_x	Charter_y \
0	NUVISION	CA	HUNTINGTON BEAC	CU	566
1	PASADENA	CA	Pasadena	CU	594
2	OLIVE VIEW EMPLOYEES	CA	SYLMAR	CU	1034
3	FARMERS INSURANCE	CA	Burbank	CU	1074
4	RANCHO	CA	DOWNEY	CU	1204
..
238	MEDIA CITY	CA	BURBANK	CU	68549
239	PATELCO	CA	Dublin	CU	68579
240	1ST NORTHERN CALIFORNIA	CA	Martinez	CU	68668
241	VALLEY STRONG	CA	BAKERSFIELD	CU	68712
242	SESLOC	CA	SAN LUIS OBISPO	CU	68741

	Total Assets_y	TotDep_Sep	CUName_y	City_y \
0	3469113230	2731790560	NUVISION	HUNTINGTON BEAC
1	364712289	324358927	PASADENA	Pasadena
2	63443173	48931060	OLIVE VIEW EMPLOYEES	SYLMAR
3	1461148571	1229322187	FARMERS INSURANCE	Burbank
4	108016124	99260328	RANCHO	DOWNEY
..
238	38649552	32401070	MEDIA CITY	BURBANK
239	9525458343	7848994798	PATELCO	Dublin
240	823837786	674249910	1ST NORTHERN CALIFORNIA	Martinez
241	3925605060	3415504790	VALLEY STRONG	BAKERSFIELD
242	1132016926	1014397150	SESLOC	SAN LUIS OBISPO

	State_y	Type_y	Diff_TotDep	%_Diff
0	CA	CU	17695688	1.0
1	CA	CU	-10556471	-3.0
2	CA	CU	-359951	-1.0
3	CA	CU	-26984452	-2.0
4	CA	CU	66996	0.0
..
238	CA	CU	852408	3.0
239	CA	CU	-214709878	-3.0
240	CA	CU	-10739665	-2.0
241	CA	CU	74946946	2.0
242	CA	CU	13089925	1.0

[243 rows x 17 columns]

```
[395]: print(f"Banks and Credit Unions that have experienced > 5% decline in deposits_
↳last quarter are")

merged_df_dep[(merged_df_dep["_Diff"] < -5.0)][["CUName_x", "City_x",
↳"State_x"]]
```

Banks and Credit Unions that have experienced > 5% decline in deposits last quarter are

```
[395]:
```

	CUName_x	City_x	State_x
33	SKYONE	Hawthorne	CA
43	MATTEL	El Segundo	CA
72	SANTA MARIA ASSOCIATED EMPLOYEES	Santa Maria	CA
80	ANTIOCH COMMUNITY	Antioch	CA
106	BOURNS EMPLOYEES	Riverside	CA
116	DELANCEY STREET	SAN FRANCISCO	CA
151	BLUPEAK	San Diego	CA
171	VISION ONE	Sacramento	CA
188	JONES METHODIST CHURCH	SAN FRANCISCO	CA
235	FRONTWAVE	Oceanside	CA

```
[ ]:
```