Offshore financial centers in the Caribbean: How do U.S. banks benefit?

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Motivation (I)

- The **decision of a country** not to tax financial transactions, or to attract other forms of businesses by **favorable taxation** schemes and milder **regulation**, is a **legitimate policy choice**.

- **Supporters**: tax competition is vital for the global economy by providing companies an **alternative to high-tax/high-spending regimes**: governments compete with each other to attract businesses and individuals by offering them different combinations of regulation, taxation and the provision of public goods and services.

- **Opponents**: it can be **harmful**, when favorable taxation and regulatory schemes are coupled with **strict secrecy provisions** & the **unwillingness of an offshore center to cooperate** with governments in the identification of fraudulent transactions.

Motivation (II)

- Onshore governments appear to **tolerate** the use of offshore centers, although tax policies are against the use of tax havens and offshore centers.
- This is a result of a **tax policy ambivalence** which aims at
    - Minimizing tax evasion/unjustifiable tax avoidance
    - Maintaining the international competitiveness of domestic corporations
    - Attracting foreign investment
    - Preserving tax equity of investments at home and abroad, …

Outline

- **Offshore financial centers**

  - **Identification**
  - **Stylized facts**

- **How do banks that are headquartered in the U.S. benefit?**

  - **The microeconomic effects of round-tripping on bank profits, tax payments and credit supply**

Identification, definition

Historical background

- **Tax competition and ‘offshore’ financial centers is nothing new…**

  – City of **London** attracted Hanseatic traders
  – **American colonies** shifted trade to LAC
  – During the cold war, **the Eurodollar market** emerged

  – In the Caribbean, the **Bahamas** established the first offshore center in 1936
  – Soon, the **Cayman Islands** and the **British Virgin Islands** followed this strategy

Characteristics

- **Offshore financial centers (OFCs)** and **tax havens** are closely related, but they are **not necessarily the same**. OFCs are characterized by:
  - Business-friendly **taxation** & **regulation**
  - Bank **secrecy** and strong property rights
  - Important financial activity
  - Modern business and communication infrastructure
  - …, political and economic stability, geographical location, presence of professional advisors for multilateral tax planning, …

- **Offshore financial centers** and **tax havens** offer an alternative to highly regulated & high-spending/high-tax jurisdictions

Types of “havens”

- **International financial centers:** provide financial services to international investors with favorable tax and regulatory treatment (London, New York)

- **Regional financial centers:** provide low taxes, offshore banking and other services such as fund and trust administration, insurance and tax planning (Hong Kong, Singapore, Ireland, Luxembourg, Switzerland, …)

- **Offshore financial centers (OFCs): small and specialized jurisdictions**; offer low or no direct taxes, moderate regulation and strict bank secrecy (Bahamas, Bermuda, Cayman Islands, BVI, Cyprus, Channel Islands, Liechtenstein, …)

Types of "havens" (II)

- **'Tax havens':** low corporate taxes; bank secrecy; tax treaties; tax exemptions …
  - **Base havens:** OFCs with no/low corporate taxes, no withholding taxes, few tax treaties (Antigua, Bahamas, Belize, Bermuda, BVI, Cayman Islands, Dubai, **Gibraltar**, **Guernsey**, Hong Kong, **Isle of Man**, **Jersey**, **Liechtenstein**, **Monaco**, Panama, Uruguay …)
  - **Treaty havens:** OFCs that allow 'treaty shopping' or flow-through income (Barbados, **Cyprus**, Delaware, Labuan, Madeira, Malta, Mauritius, Neth. Antilles, Seychelles …)
  - **Special concession havens**: onshore economies that allow treaty shopping and/or preferential tax regimes (exemptions and reliefs) to non-residents (Australia, **Austria**, **Belgium**, Denmark, **France**, Germany, Greece, Hungary, Iceland, Ireland, Japan, Korea, **Luxembourg**, Netherlands, New Zealand, Portugal, Spain, Switzerland, UK, US; China, India, Israel, Malaysia, Singapore …)

Stylized facts

Measuring offshore financial activity

- **International Monetary Fund**
  - Balance of Payments statistics
  - Coordinated portfolio investment survey

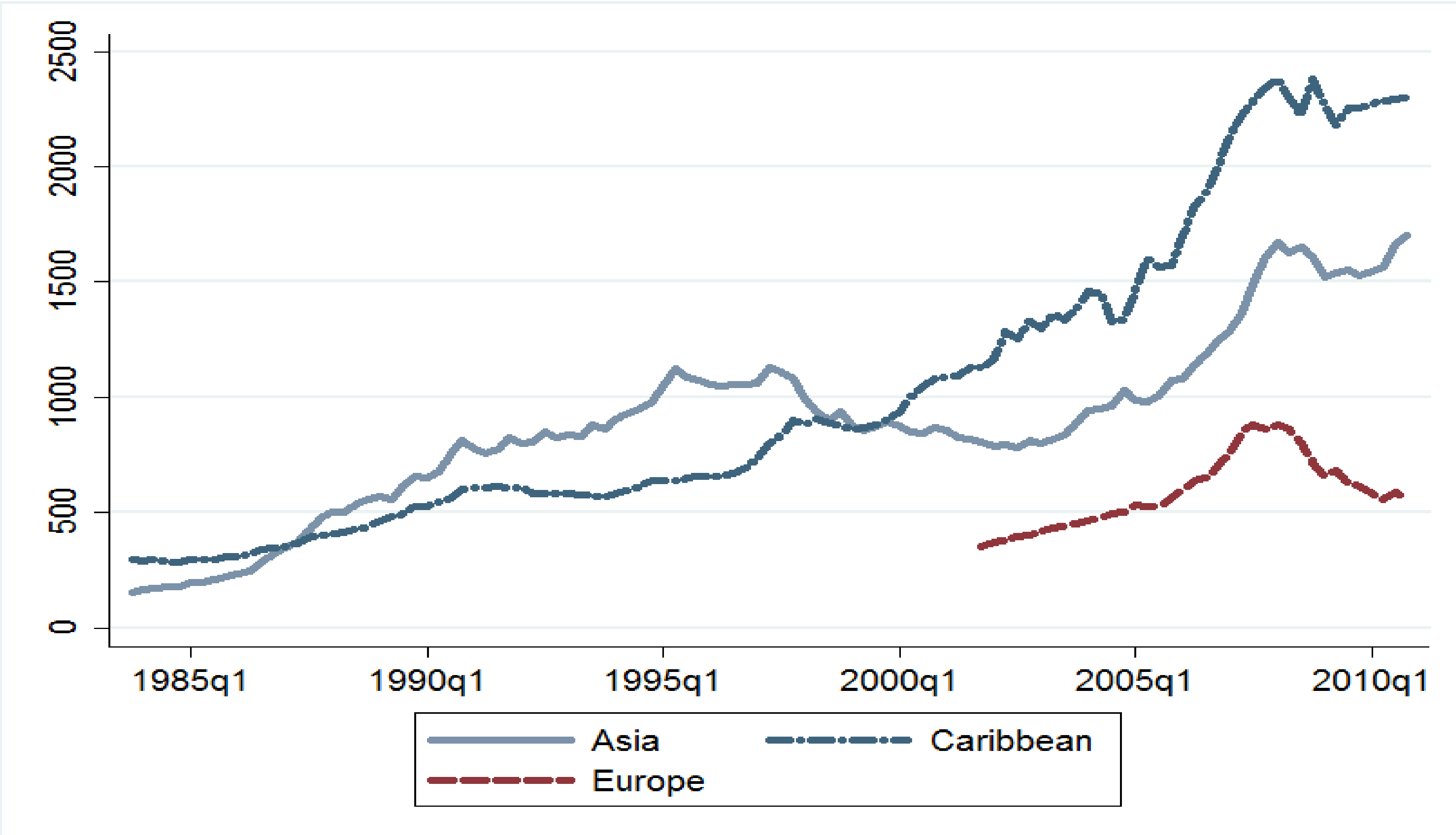
- **Bank for International Settlements**
  - International banking statistics (locational vs consolidated concept)

BIS locational banking statistics: International bank claims, end-2010

		billion $	percent
1	United Kingdom	4729	20,3
2	United States	3498	15,0
3	France	1727	7,4
4	Cayman Islands	1693	7,3
5	Germany	1292	5,5
6	Japan	1169	5,0
7	Switzerland	827	3,5
8	Netherlands	819	3,5
9	Singapore	763	3,3
10	Spain	671	2,9
11	Italy	587	2,5
12	Ireland	582	2,5
13	Hong Kong	563	2,4
14	Belgium	551	2,4
15	Luxembourg	528	2,3
16	Bahamas	510	2,2
17	Canada	340	1,5
18	Denmark	205	0,9
19	Sweden	197	0,8
20	Portugal	173	0,7
21	Bahrain	171	0,7
22	Austria	171	0,7

		billion $	percent
23	Jersey	164	0,7
24	Finland	149	0,6
25	Australia	135	0,6
26	Guernsey	133	0,6
27	Norway	123	0,5
28	South Korea	117	0,5
29	Greece	110	0,5
30	Chinese Taipei	95	0,4
31	Turkey	81	0,3
32	Cyprus	81	0,3
33	Brazil	81	0,3
34	India	74	0,3
35	Isle of Man	55	0,2
36	Malaysia	35	0,2
37	Macao	28	0,1
38	South Africa	21	0,1
39	Panama	21	0,1
40	Mexico	18	0,1
41	Curacao	18	0,1
42	Indonesia	10	0,0
43	Chile	9	0,0
44	Bermuda	3	0,0

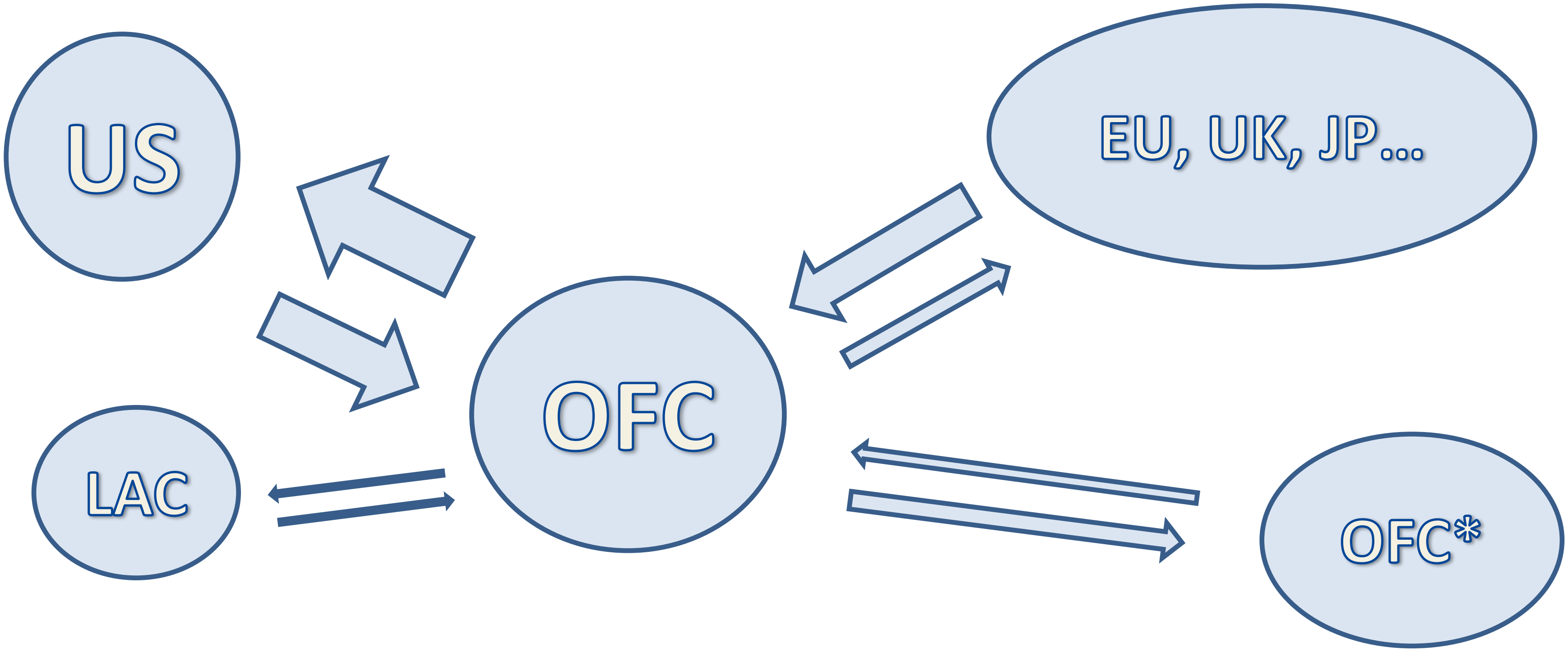
BIS bank claims in offshore financial centers, billion $



Caribbean: Bahamas, Bermuda, Cayman Islands, Netherlands Antilles, Panama; **Asia**: Hong Kong, Macao, Singapore; **Europe**: Guernsey, Isle of Man, Jersey.

Caribbean OFCs - Bilateral perspective

- Caribbean OFCs host \$2.2 trillion of funds. **Where do the funds come from and where do they go**?



Three types of transfers: **round-tripping, flow-through funds, and inter-offshore tripping**

The effect of round-tripping on banks from the U.S.?

Round-tripping

- A process during which funds from one country are sent abroad to be subsequently re-invested in the same country.

- This process is typically 100% legal, but it needs an exchange of information between onshore and offshore tax authorities

- Reasons: differences in regulation (eg banks can transfer overnight excess liquidity to offshore financial centers); different time zone…

Onshore economies

The **potential costs** of the use of offshore centers

- possible erosion of income taxes (dividends, interests, royalties)
- financial stability, inequality…

have to be counterweighted against the **potential benefits**

- higher after-tax profits
- business-friendly conditions
- larger pool of investors
- cheaper and more bank credits at home, …

Data description (I)

Bank-level financial data on U.S. deposit-taking institutions

- **Source**: Website of the Federal Reserve Bank of Chicago
- **Period**: 1995Q1 - 2010Q4
- **Content**: Reports of condition and income (call reports)
    - detailed information from the **income statement** & **balance sheet** & **off-balance sheet** for > 10.000 commercial banks
    - information on **mergers and acquisitions**
    - information on the **bank holding company**

Data description (II)

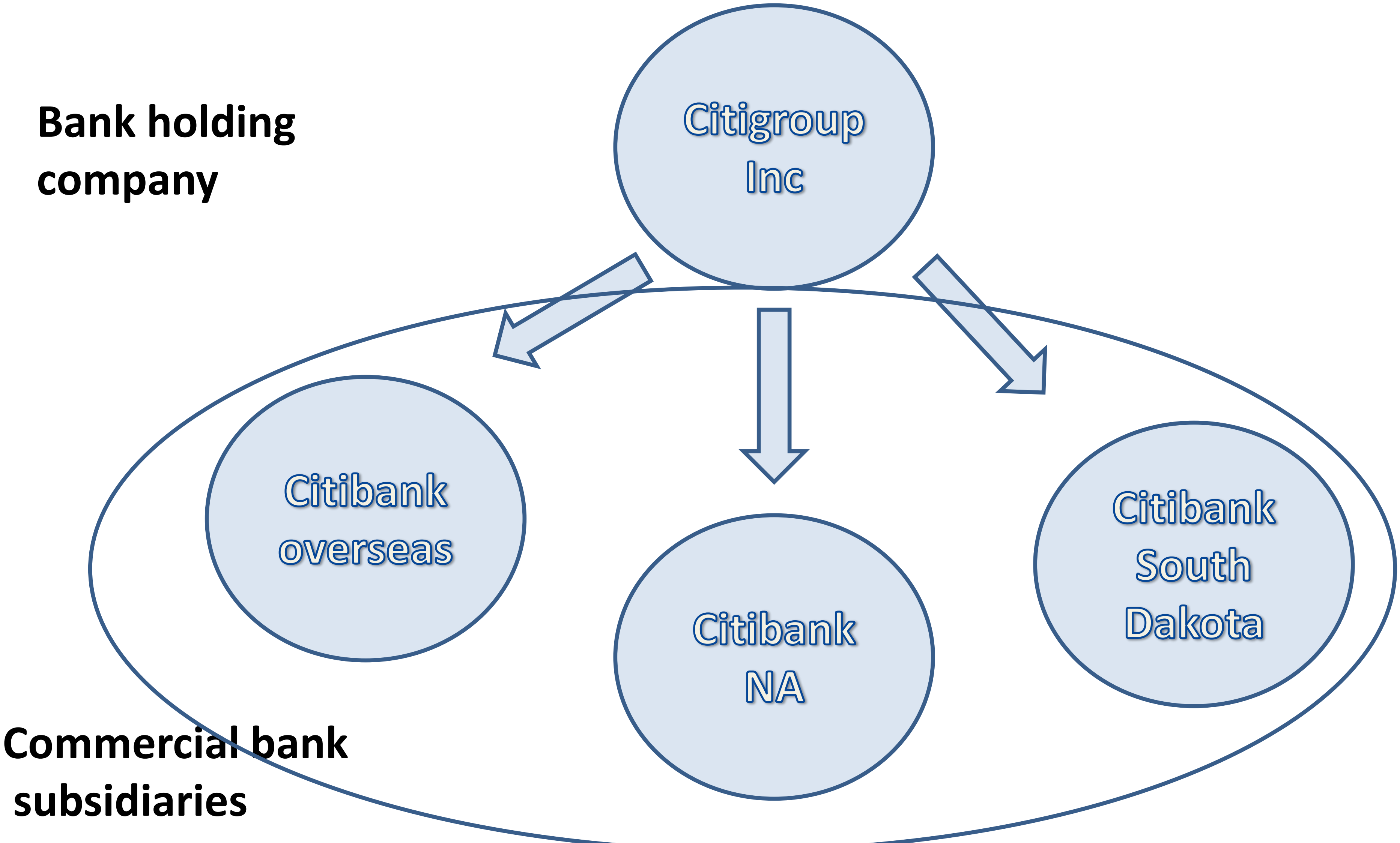


Figure 1: Total assets and number of banks

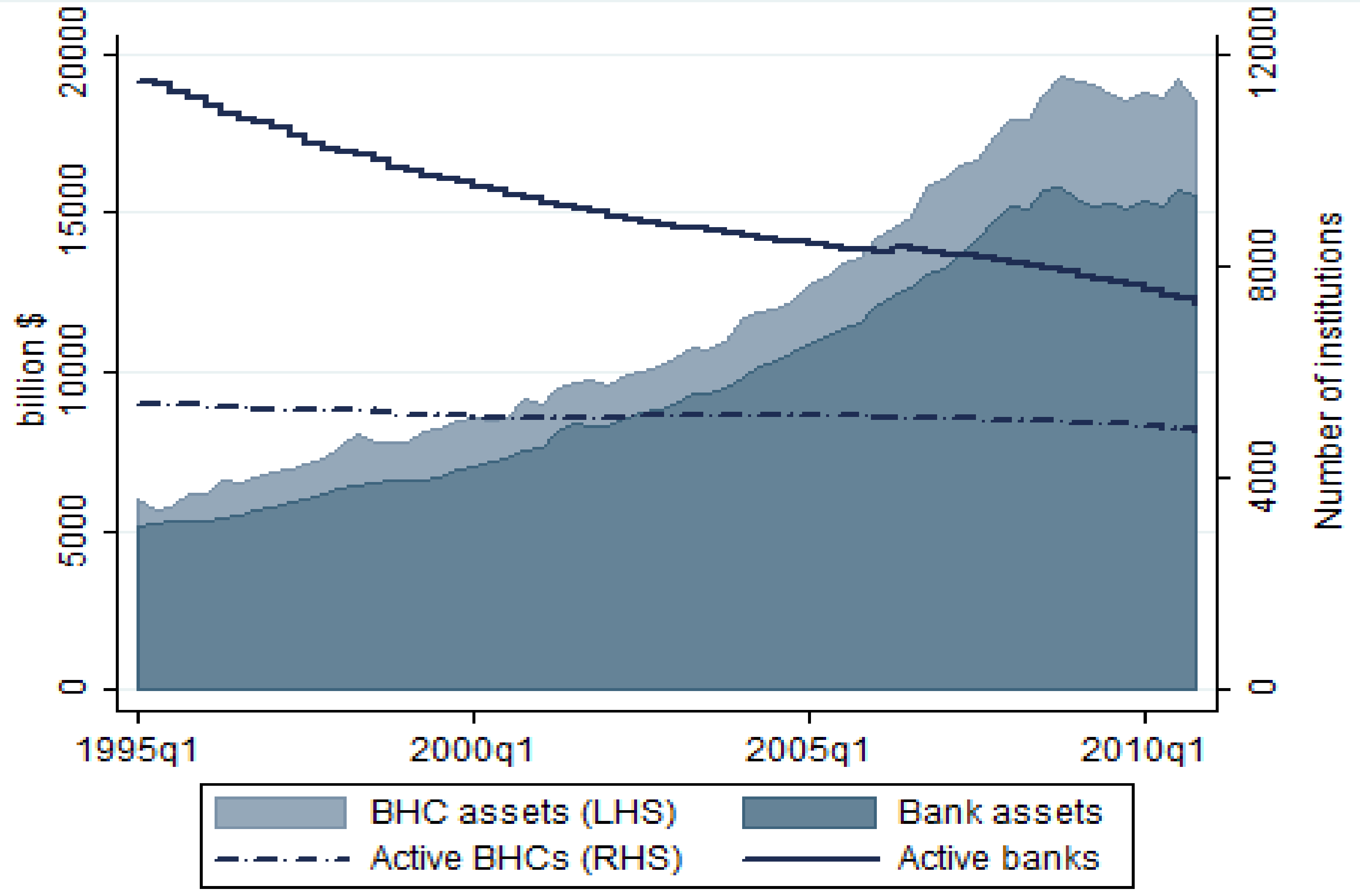
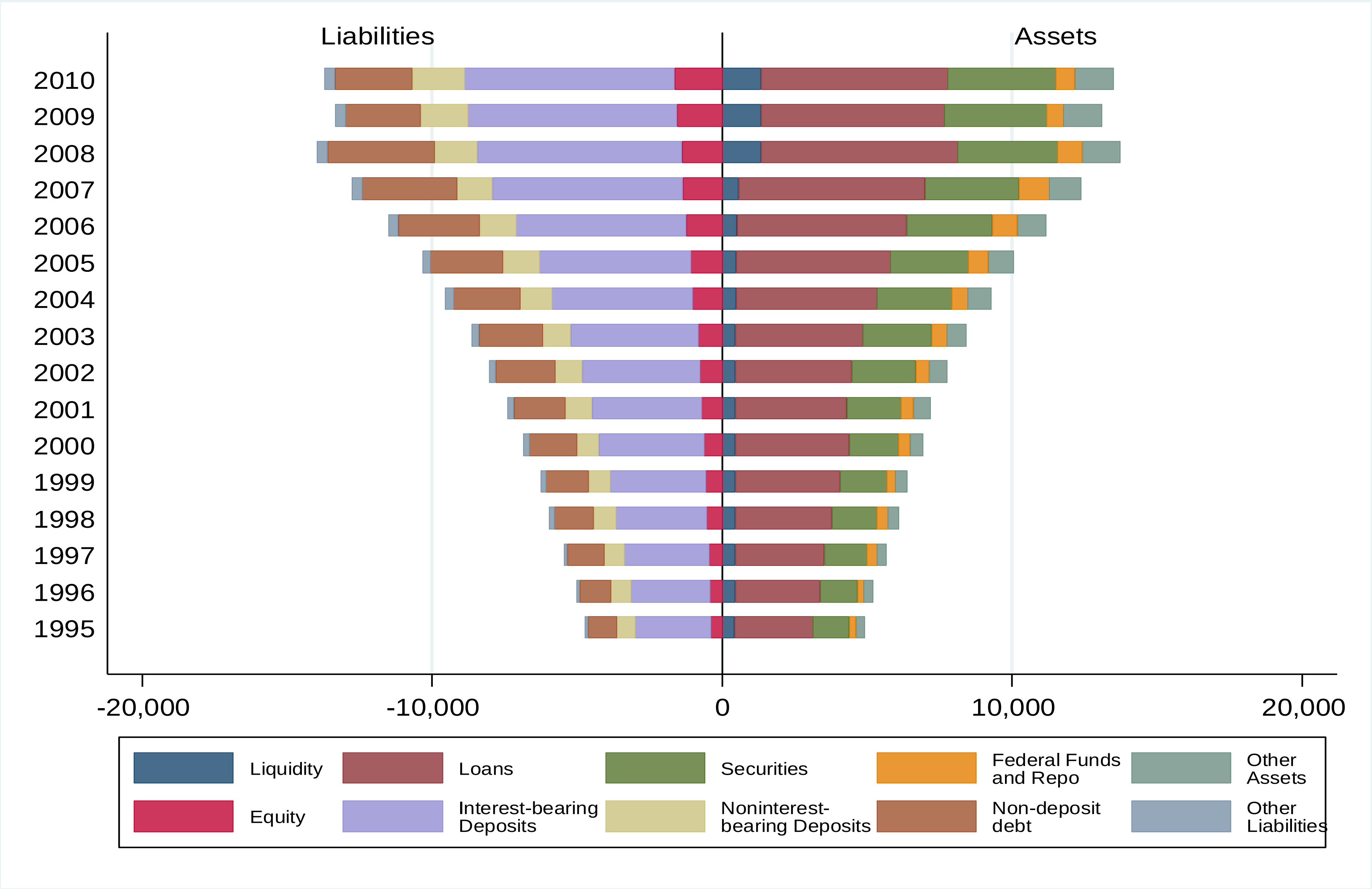


Figure 2: The aggregated balance sheet of the U.S. banking system



Model specification (I)

Impact of **offshore funds** sent from the US to the Caribbean (in the same quarter & after a year)

on the **bank-level**

- **Y: income taxes, after-tax profits, interest income & expenses, non-interest income & expenses, customer credits**

$$Y_{it} = \beta_0 * Y_{it-4} + \beta_1 * X_{it-4} + \gamma^* OFC_{ft-i} +$$
$$\gamma^L * OFC_{ft-i} * D_{LARGE} + \gamma^M * OFC_{ft-i} * D_{MEDIUM} + u_i + \varepsilon_{it}$$

Model specification (II)

Control variables in vector X

- **Net interest margin, net non-interested margin, size, mortgages, loan growth, other real estate owned, ABS & MBS, capital ratio, age, short-term funding (all variables are expressed as a ratio over total assets)**

Methodology: OLS fixed-effects + S-GMM

- **Short-run effect**

$$\partial Y_{it} / \partial OFC_{ft-i} = \gamma^{*} + \gamma^{L} * D_{LARGE} + \gamma^{M} * D_{MEDIUM}$$

	ROA		TAXES	
Y_{t-4}	0.17***	0.02	0.087***	0.03
Net interest margin $_{t-4}$	0.06***	0.02	0.01*	0.006
Net non-interest margin $_{t-4}$	0.02	0.014	0.02*	0.008
Size $_{t-4}$	-0.27***	0.02	-0.02	0.01
Mortgages $_{t-4}$	0.002***	0.001	0.0003	0.0004
Loan growth $_{t-4}$	0.001***	0.0002	-0.0002**	0.0001
OREO $_{t-4}$	-0.30***	0.02	-0.05***	0.01
ABS & MBS $_{t-4}$	0.004***	0.001	0.001***	0.0003
Equity $_{t-4}$	-0.01**	0.006	-0.01**	0.003
Age $_{t}$	-0.004	0.004	0.0004	0.001
Short-term borrowing $_{t-4}$	-0.005***	0.002	-0.002**	0.001
OFC funds growth $_{t}$	0.03	0.03	0.002	0.02
OFC funds growth $_{t}$ *dummy LARGE	0.007***	0.001	0.001***	0.0004
OFC funds growth $_{t}$ *dummy MEDIUM	0.002***	0.001	0.0002	0.0002
Constant	3.96***	0.47	0.53**	0.21
Time-fixed effects	YES		YES	
Observations	435117		435117	
Banks	11875		11875	
R^2	0.10		0.12	

	ROA		TAXES	
Y_{t-4}	0.17***	0.015	0.083***	0.028
Net interest margin $_{t-4}$	0.065***	0.017	0.012*	0.006
Net non-interest margin $_{t-4}$	0.021	0.014	0.015*	0.009
Size $_{t-4}$	-0.26***	0.024	-0.017	0.012
Mortgages $_{t-4}$	0.002**	0.001	0.0003	0.0004
Loan growth $_{t-4}$	0.001***	0.0002	-0.0002**	0.0001
OREO $_{t-4}$	-0.31***	0.018	-0.043***	0.006
ABS & MBS $_{t-4}$	0.004***	0.001	0.0012***	0.0003
Equity $_{t-4}$	-0.012*	0.006	-0.007**	0.003
Age $_{t}$	-0.0037	0.004	0.0004	0.001
Short-term borrowing $_{t-4}$	-0.005***	0.002	-0.002**	0.001
OFC funds growth $_{t-4}$	-0.003*	0.002	-0.003***	0.001
OFC funds growth $_{t-4}$*dummy LARGE	0.002***	0.0007	0.001***	0.0003
OFC funds growth $_{t-4}$*dummy MEDIUM	0.003***	0.0005	0.001***	0.0002
Constant	3.68***	0.41	0.61***	0.17
Time-fixed effects	YES		YES	
Observations	435117		435117	
Banks	11875		11875	
R^2	0.10		0.12	

Preliminary results

ROA: profits at home + repatriated profits abroad (profits = interest income – interest expense + non-interest income – non-interest expense – taxes)

Profits increase in t for large and medium-sized banks & decrease for small and large banks in t+4

Income taxes: (profits at home + repatriated profits abroad)*tax rate

Taxes increase in t for large banks & decrease in t+4 for all banks

Explained by **higher interest income which is partly offset by higher non-interest expenses**

Conclusions

- Offering **tax advantages & strict bank secrecy** can be a dangerous cocktail without an **efficient cooperation** between onshore and offshore economies
  - Corporations and individuals might be tempted to e.g. **non-report** completely legal income
  - Offshore centers might be misused for **money laundering**

- The results are very preliminary and need further elaboration

Thank you!