The Missing Wealth of Nations: Evidence From Switzerland, 1945-2008

Gabriel Zucman, PSE

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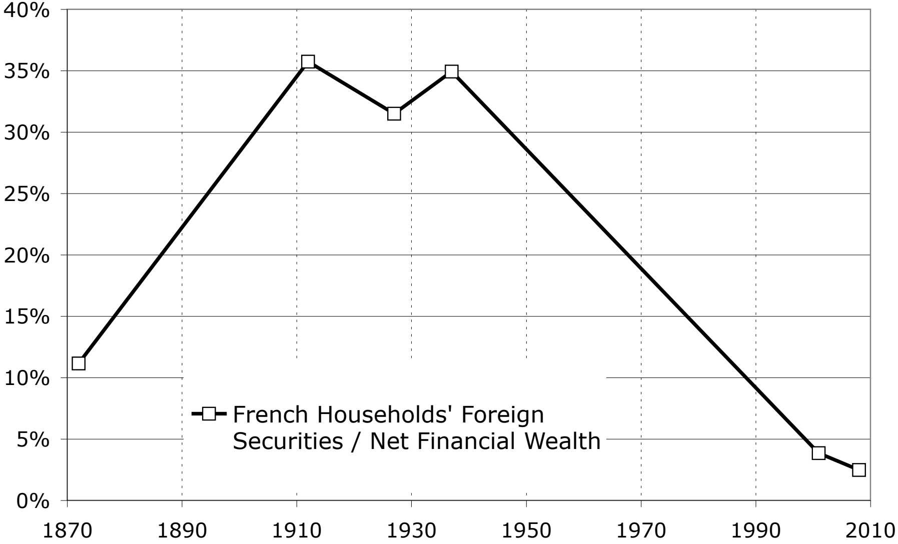
Share of Foreign Assets in Household Wealth

		2001	2008
		Panel A: Equities, bonds, mutual funds	
[2]	Households' foreign portfolio assets	39,8	27,7
[9]	Total (domestic + foreign) households' portfolio assets	706,0	828,0
[10]	*Share Foreign [2]/[9]*	*5,6%*	*3,3%*
		Panel B: Bank Deposits	
[11]	Households' foreign bank deposits	27,0	28,0
[12]	Housholds' total (domestic + foreign) bank deposits	834,8	1 071,8
[13]	*Share foreign [11]/[12]*	*3,2%*	*2,6%*
		Panel C: Total Financial Assets	
[15]	Households' other financial assets (mainly life-insurance)	911,5	1 554,9
[16]	Households' gross financial assets [9]+[12]+[15]	2 452,4	3 454,7
[17]	Households' financial liabilities	718,0	1 212,8
[18]	*Foreign assets in households' net financial wealth ([2]+[11])/([16]-[17])*	***3,9%***	***2,5%***

Source: France's Financial Accounts, Banque de France; Unpublished "Qui A Qui" Financial Accounts; CPIS.
All figures in bn of euros unless otherwise stated.

Observed Dynamics of Foreign Assets



Question

- Has cross-border banking made foreign financial wealth unobservable and untaxable?

What This Paper Does

Presents two different measures of unrecorded offshore wealth:

1. In Switzerland (1945-2008), using detailed Swiss banks data, broken down by country
2. At the global level (2000s), using discrepancies in the balance of payments / international investment positions

Results

Both measures show that households' financial wealth is significantly under-estimated:

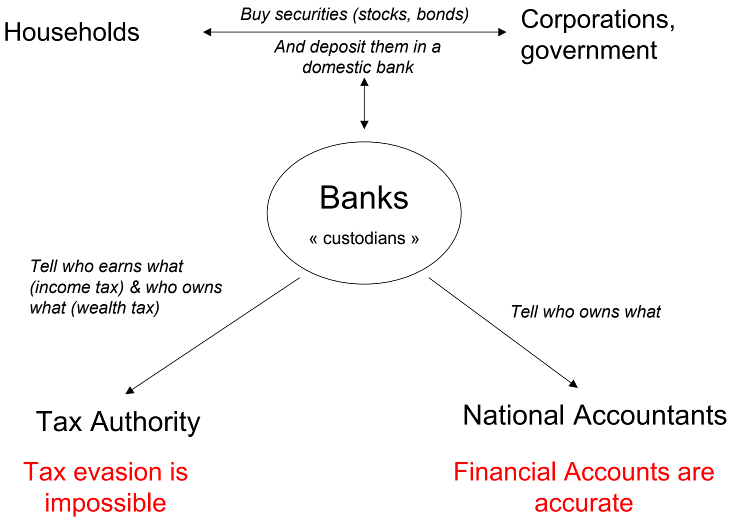
1. Globally in 2008, around 6% of households' financial wealth is missing from national accts
2. Ex: French households' unrecorded wealth in Switz. $\approx$ 7% of their total financial assets

Applications and Related Literature

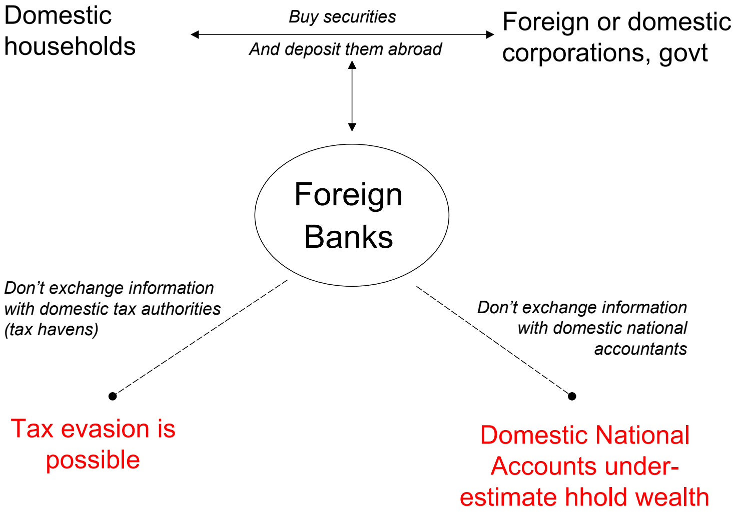
1. Effect of undeclared wealth on top income/wealth shares dynamics: Dell, Piketty & Saez (2007)
2. Tax evasion in the absence of third-party reporting: Huizinga & Nicodeme (2004)
3. Efficiency of the EU savings directive: Johannesen (2010)
4. Empirics of external wealth and global imbalances: Lane & Milesi-Ferretti (2007)

I - The Problem

Direct Finance with Domestic Custody



Direct Finance with Cross-Border Custody



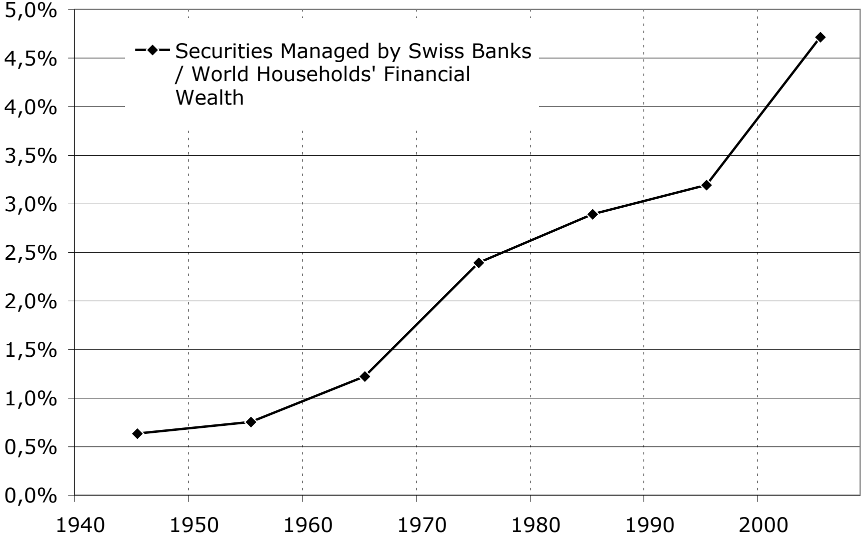
Consequences of Cross-Border Custody

In countries where taxpayers have their wealth managed offshore:

- National accounts under-estimate households' financial wealth
- International investment positions under-estimate net foreign asset position
- Tax data under-estimate top income/wealth shares

II - Foreign Wealth in Switzerland

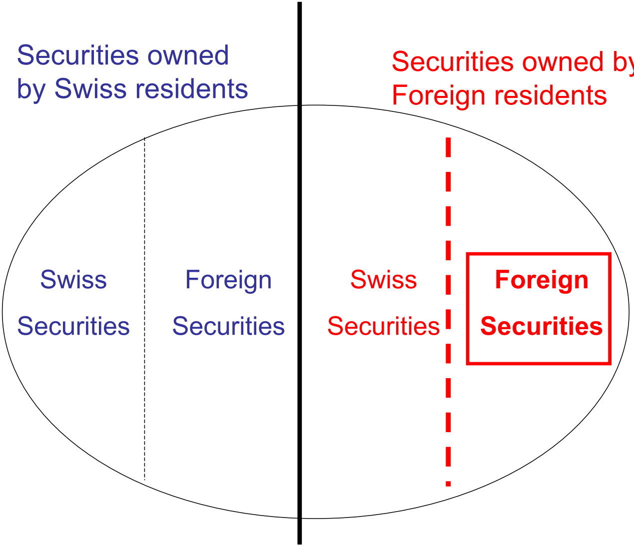
Portfolio Wealth Managed by Swiss Banks



Data sources

1. Swiss National Bank public data:
   - Custody survey (1998-)
   - "Banks in Switzerland" (1907-); e.g. commission and fee income, by category of bank
   - Capital market statistics (bond and stock market capitalizations)
2. Swiss Banks' private archives:
   - Paul Volcker's commission: comprehensive data for 1945
   - Pierre Bergier's commission: securities deposits in 6 of the 7 big banks of the twentieth century (1919-1971)
3. Global household wealth
   - Davies et al. (2009)
   - Ongoing work on the world distribution of wealth

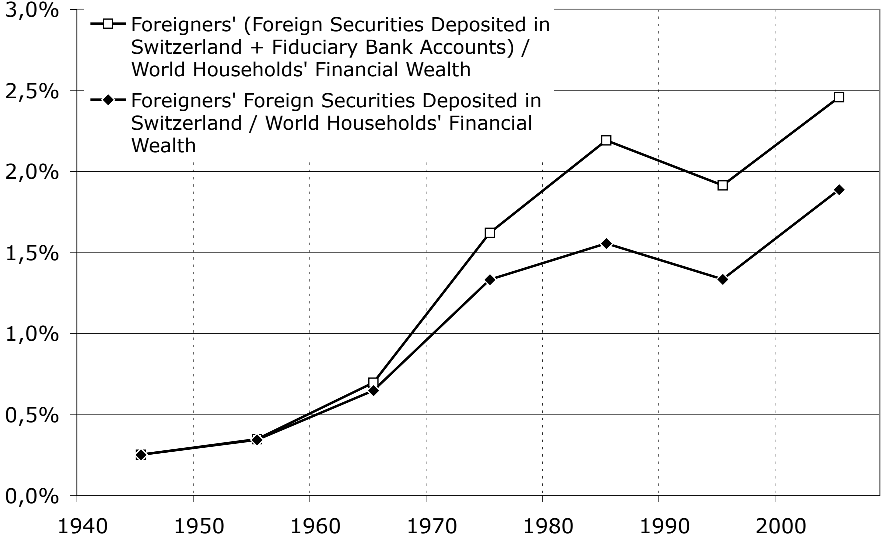
What's in Swiss Banks?



What's Potentially Missing?

- All Swiss securities are subject to a 35% advance tax, difficult to avoid
- So potential missing wealth = mostly foreign securities held by foreigners
- Also, special kind of untaxed bank-accounts: "Fiduciary Deposits"

Foreigners' Holdings of Foreign Assets



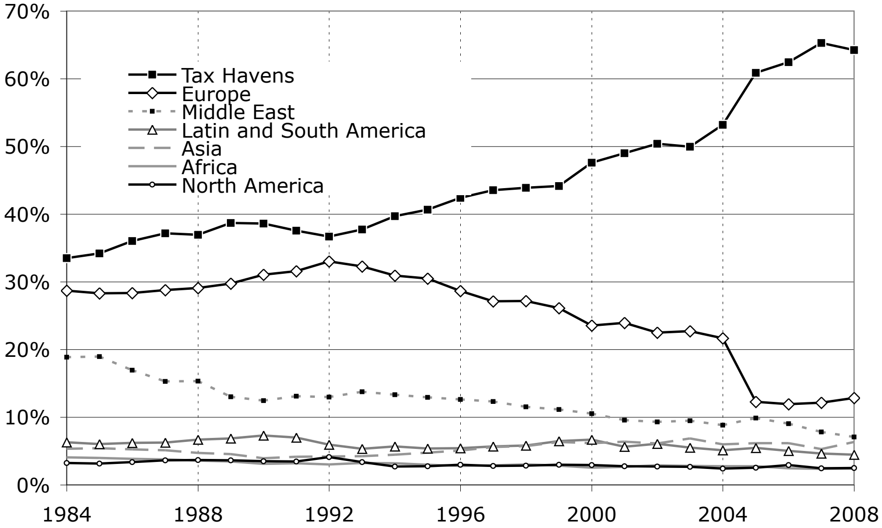
Country Breakdown

- 1945: Historical sources from Bergier's commission
- After: full geographical breakdown of fiduciary deposits since 1976
- However country breakdown are increasingly difficult to interpret
- Key factor of uncertainty: shell corporations set up in tax havens

Country Breakdown 1945 at Credit Suisse

	%
Swiss holdings	64,0%
Foreigners' holdings	36,0%
Europe	
France	*17,6%*
Italy	*3,2%*
Spain	*3,0%*
Germany and Austria	*1,9%*
Belgium	*1,4%*
Balkans	*1,0%*
Great-Britain	*0,8%*
Netherlands	*0,7%*
...	*...*
United States	*2,3%*
...	*...*
South America	*1,7%*
...	*...*
Other Countries	*2,4%*
Total Credit Suisse	100,0%
Memo: Credit Suisse / Total Swiss Banks	16,6%

Geographical Breakdown of Fiduciary Deps



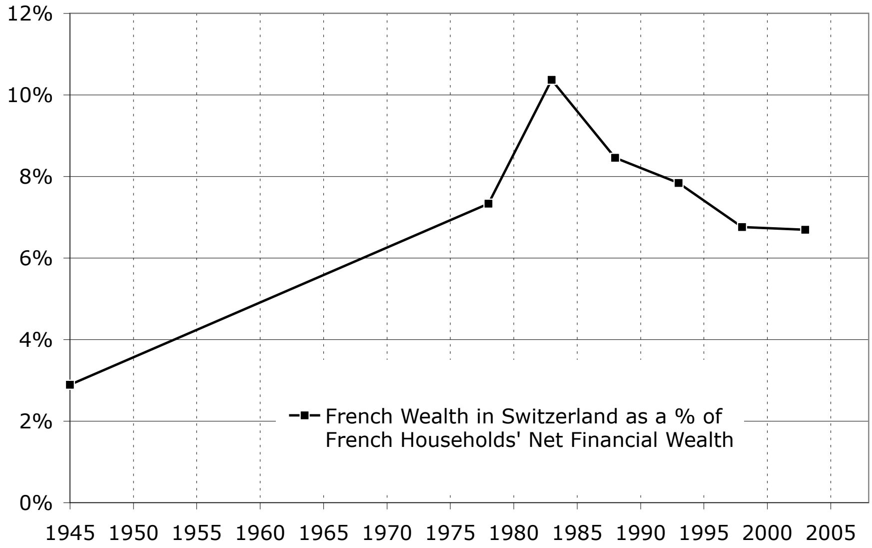
Strategy to Make Tax Havens Transparent

- Impossible to look through shell corporations/trusts
- But strong suspicion that this is mainly European wealth
- I attribute 100% of tax havens' deposits to European countries

Country Breakdown 1976 and 2000

	1976	2000
Europe	**69,8%**	**71,2%**
Italy	*26,2%*	*14,5%*
France	*14,2%*	*11,4%*
Germany	*5,6%*	*8,4%*
Belgium	*5,2%*	*6,3%*
United Kingdom (est.)	*4,9%*	*8,0%*
Spain	*2,7%*	*6,4%*
…	…	…
Middle East	**13,4%**	**10,1%**
…	…	…
Other countries	**16,8%**	**18,7%**
United States	*2,0%*	*2,2%*
Brazil	*n.a.*	*2,1%*
Turkey	*n.a.*	*1,5%*
Argentina	*1,1%*	*1,5%*
Israel	*1,0%*	*1,5%*
Canada	*0,9%*	*0,8%*
…	…	…
Total	100%	100%

Application to French Wealth



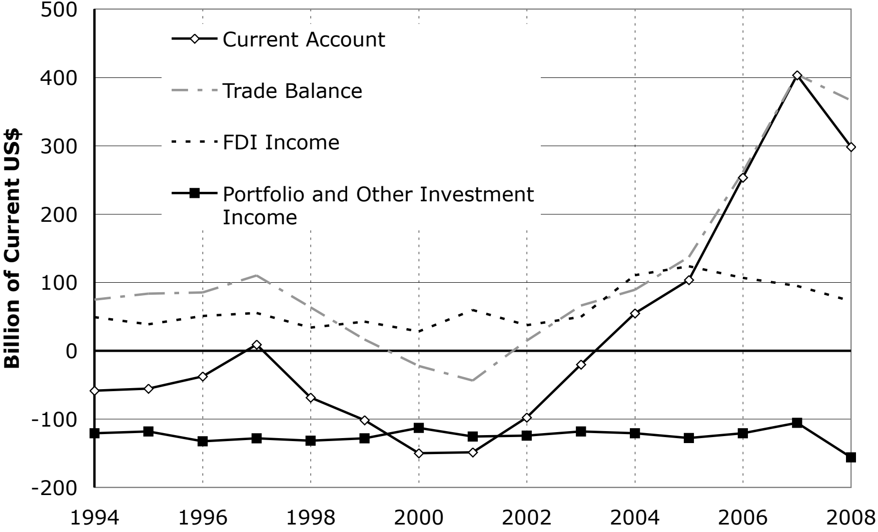
III - The Global Missing Wealth

Global Discrepancies in BoP/IIP

- Well-known discrepancies in world balance of payments
  - World current account < 0 until 2004, > 0 since
  - Consistently <0 net global portfolio income since 1970s (i.e apparently more dividends and interests paid than received)
- Similar global discrepancies in world IIP
- LMF database (2009 update) covering a set $\mathcal{I}$ of 178 countries:

$$\underbrace{\sum_{j\in\mathcal{I}} A_j}_{\text{Equity + Debt Assets}} + \underbrace{\sum_{j\in\mathcal{I}} R_j}_{\text{Reserve}} < \underbrace{\sum_{j\in\mathcal{I}} L_j}_{\text{Equity + Debt Liab}}$$

The World Current Account Discrepancy



Questions Raised by The Discrepancy

We focus on the portfolio income discrepancy (trade balance discrepancy = different issues)

1. Where does it come from?
2. Is it important, or just a statistical scoria?
3. How does it change our knowledge of global imbalances?

Our Answers

1. It comes mainly from cross-border wealth management: National accountants are unable to capture portfolio holdings of domestic households abroad
2. Assets managed offshore $\approx$ 6% of global household financial wealth
3. Consequence: Many NFAs might be underestimated

Offshore Wealth Managt Creates Discrep

If households from country A have their wealth managed by banks located in B and invest in C:

- C records a foreign liability / B
- A does not record any foreign asset (no asset survey of households)
- B does not record any cross-border position (third-party holdings)

Other Factors Causing the Discrepancy

- Partial coverage, data deficiencies, heterogeneity in compiling practices. How to sort those out?
- Use highest quality dataset on cross-border assets: IMF CPIS
  - Launched to bring answers to current account discrepancies
  - High level of harmonization
  - Extensive documentation, allowing to fill the gaps
- Supplemented by US TIC survey to estimate foreign assets of non-CPIS reporting countries

The CPIS

Basic fact: $\forall j \in \mathcal{I}$,

$$\underbrace{\sum_{i \in \mathcal{C}} A_{ij}}_{\text{Assets reported by CPIS}} + \underbrace{\sum_{i \in \mathcal{S}} R_{ij}}_{\text{SEFER}} < \underbrace{\sum_{i \in \mathcal{W}} L_{ij}}_{\text{Liabilities reported by } j}$$

New findings = inequality robust to:

- adding estimates of $\sum_{i \in \mathcal{W} \setminus \mathcal{C}} A_{ij}$ (Cayman Islands mutual funds, oil countries...)
- adding estimates of $\sum_{i \in \mathcal{W} \setminus \mathcal{S}} R_{ij}$ (China...)

The CPIS (2)

Conclusion: $\forall j \in \mathcal{I}$,

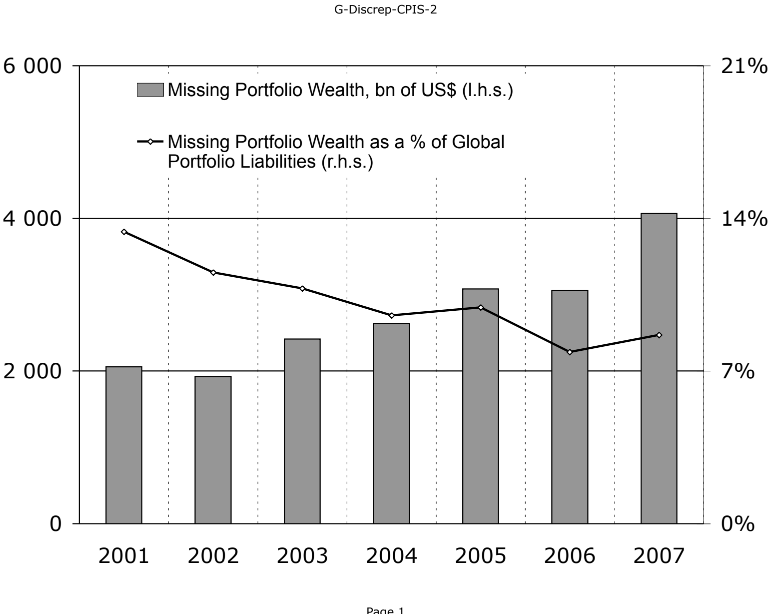
$$\sum_{i \in \mathcal{W}} A_{ij} + \sum_{i \in \mathcal{W}} R_{ij} < \sum_{i \in \mathcal{W}} L_{ij}$$

And consequently:

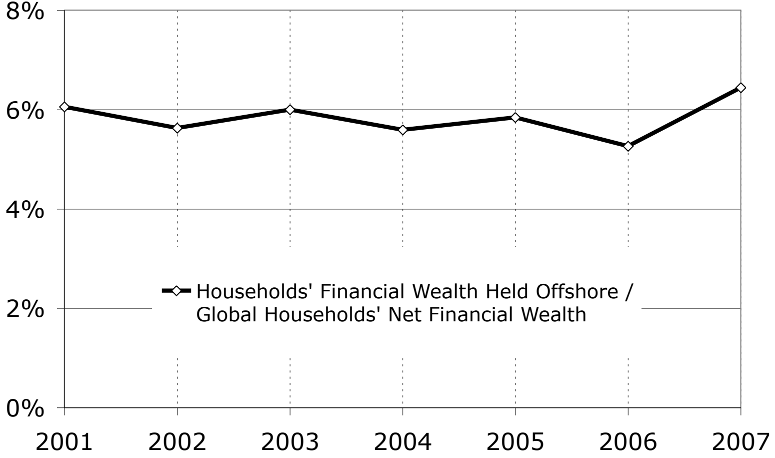
$$\sum_{j \in \mathcal{I}} \sum_{i \in \mathcal{W}} A_{ij} + \sum_{j \in \mathcal{I}} \sum_{i \in \mathcal{W}} R_{ij} < \sum_{j \in \mathcal{I}} \sum_{i \in \mathcal{W}} L_{ij}$$

Only remaining explanation of the gap = Inability to capture households' foreign holdings abroad

Global Portfolio Missing Wealth



Financial Wealth Held Offshore



Conclusion

- Around 6% of global household wealth managed offshore
- This explains the global portfolio income discrepancy
- For some EU countries, up to 10% of hholds' fin. wealth managed in Swiss banks
- Much bigger figure for some dev. and oil countries
- Offshore financial wealth = key challenge to financial accounts and distribution studies

These Figures Are Lower-Bounds

Not all missing wealth translates into world portfolio discrepancies or is recorded as foreign by Swiss banks:

- Fake addresses
- Shell corporations
- Use of other domestic intermediaries

Future Work

Why do rich individuals relocate their wealth abroad?

- Positive model of cross-border tax evasion
- To be tested with panel data on fiduciary bank accounts