GLOBAL FINANCIAL INTEGRITY

Privately Held, Non-Resident Deposits in Secrecy Jurisdictions

Ann Hollingshead — March 2010

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ABSTRACT

Over the last two years offshore banking has come under increased scrutiny worldwide by the media, lawmakers, and the general population. Despite this attention, there are few sources which estimate private, non-resident deposits into offshore financial centers. In light of this lack of data, this paper develops a proxy measure which uses data from the Bank of International Settlements, the International Monetary Fund, and the central banks of offshore financial centers to estimate non-resident deposits in secrecy jurisdictions held by individuals and corporations. In the context of this paper, the term "secrecy jurisdiction" comprises a broader array of countries than the traditional definition of an offshore financial center.

The paper finds that these deposits have been increasing markedly since meaningful data collection efforts began in the early 1990s, with current totals standing just under US$10 trillion. Even when adjusted for inflation, this expansion has dramatically outstripped the growth rate of recorded world wealth. The three jurisdictions holding the largest amount of non-resident deposits are the United States, the United Kingdom, and the Cayman Islands, each of which holds over US$1.5 trillion in private, foreign deposits.

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Combating Tax Evasion and Illicit Financial Flows: The Case for Transparency

In continuation of Global Financial Integrity's program focusing on cross-border illicit financial flows and their impact on the world economy, we are pleased to present our report, "Privately Held, Non-Resident Deposits in Secrecy Jurisdictions."

We find that such deposits are currently approaching US$10 trillion, with the United States, the United Kingdom, and the Cayman Islands each holding more than US$1.5 trillion. Our data sources include the Bank for International Settlements, the International Monetary Fund, the private company Datamonitor, and the central banks of each secrecy jurisdiction. Furthermore, we find that such deposits have been growing at a compound rate of 9 percent annually over the last 13 years, far faster than the growth in world GDP at 3.9 percent per year.

Illicit money is money that is illegally earned, transferred, or utilized. If it breaks laws in its origin, movement, or use it merits the label. Obviously, not all money deposited in offshore secrecy jurisdictions is illicit in origin, but a considerable portion of it does stem from commercial tax evasion, criminal activities, and bribery and theft by government officials. It is for the purpose of concealing its origin that much of it is directed into secrecy jurisdictions. We do not attempt to estimate the percentage that may be entirely legitimate in origin, though we regard this percentage as very much the smaller part of total deposits in secrecy jurisdictions.

The Bank for International Settlements reports data on privately held deposits in banks by citizens outside their countries of origin. This does not include deposits in custodial accounts, for example in most private banks. Thus, the figures we are analyzing here are conservative, substantially understating such cross-border deposits.

While the Bank for International Settlements collects data on each country where such cross-border deposits are held, it releases this data only aggregated for all deposits emanating from each country. Thus, we can determine the total of privately held, non-resident deposits from Nigeria, for example, but we cannot determine where such deposits are held.

The combination of rapid growth in offshore deposits and growing opacity in the global financial system hampers tax collection efforts and worsens budget deficits for nearly every country. The beginning point in addressing this key global issue is the release of data currently collected but not made available, enabling the origin and direction of privately held deposits to be measured and monitored.

Global Financial Integrity thanks Ann Hollingshead for her outstanding work in compiling this report.

Raymond W. Baker
Director
Global Financial Integrity
March 2010

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Executive Summary:

Privately Held, Non-Resident Deposits in Secrecy Jurisdictions

Private, non-resident deposits are highly correlated with tax evading offshore deposits. As part of our work measuring illicit financial flows—of which tax evading monies comprise a significant component—Global Financial Integrity has developed a method to measure these private deposits into offshore financial centers by year and on a center-by-center basis.

1. Findings:

- Current total deposits by non-residents in offshore and secrecy jurisdictions are just under US$10 trillion;
- The United States, the United Kingdom, and the Cayman Islands top the list of jurisdictions, with the United States out in front with a total of US $2 trillion;
- Contrary to expectations of perceived favorability for deposits, Asia only accounts for approximately 6 percent of worldwide offshore deposits, although Hong Kong is the tenth largest secrecy jurisdiction by deposits in this report;
- Case studies of selected jurisdictions show measurable fluctuations in financial deposits correlated to events in which financial secrecy or overall market solvency were threatened. This study looks specifically at Iceland and Switzerland which both experienced significant events in the range of years examined for this study;
- The rate of growth of offshore deposit holdings in secrecy jurisdictions has expanded at an average of 9 percent per annum; outpacing the rise of world wealth in the last decade. This is likely a result of the increases in illicit financial flows from developing countries and tax evasion by residents of developed countries.

Table 5. Private, Non-Resident Deposits in Top Ten Secrecy Jurisdictions
in millions U.S. dollars

Rank	Secrecy Jurisdiction	Mar.2008	Jun.2008	Sep.2008	Dec.2008	Mar.2009	Jun.2009
1	United States	2,898,534.87	2,549,092.88	2,404,989.86	2,114,545.84	2,164,805.09	2,182,790.93
2	Cayman Islands	1,736,494.86	1,515,102.93	1,483,148.13	1,684,780.21	1,457,701.97	1,549,753.87
3	United Kingdom	2,231,576.78	1,795,558.25	1,836,245.10	1,433,925.61	1,459,580.28	1,533,574.20
4	Luxembourg	588,157.56	587,777.99	567,321.25	456,132.60	379,289.72	435,425.86
5	Germany	578,016.37	494,497.32	472,165.19	427,781.91	409,710.67	425,643.57
6	Jersey	512,129.27	544,082.58	474,577.60	367,103.26	367,715.64	393,221.52
7	Netherlands	436,626.68	413,026.92	373,464.71	347,574.79	349,324.10	315,947.91
8	Ireland	295,018.56	273,390.41	263,708.06	286,066.87	285,165.40	276,409.52
9	Switzerland	311,338.38	289,407.31	328,829.94	235,166.23	255,419.23	273,973.39
10	Hong Kong	329,275.49	325,140.86	405,018.48	315,974.16	310,859.98	267,993.97

2. Methodology:

Using multiple data sources, including the Bank for International Settlements (BIS) and the International Monetary Fund (IMF), which provide statistics on bank deposits worldwide, this report designs and em ploys a proxy method to estimate country-specific private, non-resident deposits, by both year and quarterly. This paper then analyzes the data on worldwide, regional, and individual levels.

3. Terminology:

Tax Haven: The most widely recognized definition of a tax haven was developed by the Organization for Economic Cooperation and Development (OECD) in 1998 which considers a jurisdiction to be a tax haven if it satisfies the following conditions: 1) no or nominal tax on income; 2) lack of effective exchange of tax and income information; 3) lack of financial transparency; and 4) no substantial business activities.

Offshore Financial Center (OFC): The terms "offshore financial center" and "tax haven" are significantly related, as all tax havens (with the exception of Liberia) are also offshore financial centers, although not all offshore financial centers are tax havens. According to the official definition maintained by the IMF, OFCs include jurisdictions that 1) have relatively large numbers of financial institutions in business with non-residents; 2) have financial systems with external assets and liabilities out of proportion to domestic economies 3) have low or zero taxation, moderate or light financial regulation, and banking secrecy and anonymity.

Secrecy Jurisdiction: This report uses the term "secrecy jurisdiction," as defined by the Tax Justice Network (TJN): Places that intentionally create regulation for the primary benefit and use of those not resident in their geographical domain. That regulation is designed to undermine the legislation or regulation of another jurisdiction. To facilitate its use, secrecy jurisdictions also create a deliberate, legally backed veil of secrecy that ensures that those from outside the jurisdiction making use of its regulation cannot be identified to be doing so.

Private, Non-Resident Deposits: Deposits belonging to either private individuals who reside, or corporations which are organized, outside the jurisdiction.

4. Recommendations:

It is the recommendation of this report that greater transparency be introduced into the offshore financial market to curtail tax evasion and illicit financial flows.

As the Bank for International Settlements already collects detailed data on offshore deposits from member countries we recommend that the BIS provide breakdowns of private non-resident deposits **by country of origin**. Secondly, we recommend that the BIS provide a disaggregation of these deposits into privately and publicly held funds.

Privately Held, Non-Resident Deposits in Secrecy Jurisdictions

Ann Hollingshead - March 2010

INTRODUCTION

Over the last two years, offshore banking has come under increased scrutiny worldwide by the media, lawmakers, and the public. During this period, the Swiss banking giant, UBS, was involved in highly visible criminal and civil cases with the United States for enabling U.S. citizens to evade taxes on about US$20 billion in offshore accounts. In May 2008, the U.S. Government Accountability Office (GAO) found that of the 100 largest U.S. corporations, 83 had subsidiaries in tax havens. The report also estimated that in 2004, U.S. multinationals paid an effective tax rate of only 2.3 percent on US$700 billion in active earnings. Less than a year later, in April 2009, the Group of 20 (G20), in conjunction with the Organization for Economic Cooperation and Development (OECD), announced a "naming and shaming" campaign, which placed countries in categories based on each country's compliance with international tax laws and then publicized a blacklist of tax havens (OECD). Despite intense public pressure for more financial transparency, combined with vocal criticisms from global leaders, and unrelenting focus from international media, few country-specific estimates of private, foreign deposits in offshore financial centers exist. This is surprising given that an estimate of these deposits would include the bulk of illicit offshore funds—including those deposits that are tax evading.[1]

Given the lack of comprehensive data on offshore holdings, this report attempts to quantify deposits held offshore by private entities on a country-by-country basis. The report then examines the changes in these deposits in their historic and economic context. As there are no sources which provide comprehensive data on private, non-resident deposits, our analysis uses a variety of proxy measures to estimate these figures by jurisdiction. These results are analyzed on the global, regional, and individual levels.

The analysis is divided into three sections. First, we estimate country-specific private, non-resident deposits by year using a comprehensive measure of deposits that is based on one primary source and three supplementary sources. Second, we estimate private, non-resident deposits by quarter with a dataset limited to one source. We also track the growth of the offshore market with a 23-year time series, examine the largest receivers of foreign private deposits, and analyze the regional distribution of these deposits. Finally, we present two case studies, Iceland and Switzerland, in the context of the expansion of the offshore market, the 2008 financial crisis, and several significant economic events unique to these countries.

This paper finds that private, non-resident deposits in secrecy jurisdictions have been growing markedly since meaningful data collection efforts began in the 1990s, with totals currently standing just under US$10 trillion. Over that period, these deposits rose at a compound annual rate of 11.4 percent in nominal terms and 9 percent in real terms (adjusted for inflation using the U.S. Consumer Price Index). Even at the adjusted rate, this expansion has significantly outstripped world growth of wealth, which over this period grew at a compound annual rate of 5.3 percent in real terms. This finding may be further evidence of growing illicit financial flows among developing countries and

1. While the bulk of private, non-resident deposits in OFCs may be tax evading, as shown in a forthcoming paper on the absorption of illicit financial flows, the bulk of illicit funds out of developing countries are held in developed country banks.

tax evasion among developed countries. It may also imply that the offshore market is becoming an increasingly popular destination of the assets of wealthy individuals worldwide. The three jurisdictions holding the largest amount of non-resident deposits are: the United States, the United Kingdom, and the Cayman Islands, each of which holds over US$1.5 trillion in private, foreign deposits. The United States is the largest holder, with over US$2 trillion.

DEFINITIONS

Tax Haven, Offshore Financial Center, and Secrecy Jurisdiction

The literature widely uses two terms to describe locations that accept large quantities of deposits from foreigners, engage in banking secrecy, and avoid sharing information: "offshore financial center" and "tax haven." These terms are significantly related, as all tax havens (with the exception of Liberia) are also offshore financial centers, although not all offshore financial centers are tax havens. The most widely recognized definition of a tax haven was developed by the OECD in 1998 and it is based on four factors. These factors are: 1) no or nominal tax on the relevant income; 2) lack of effective exchange of information; 3) lack of transparency; and 4) no substantial activities ("Countering Offshore Tax Evasion" OECD).

The International Monetary Fund (IMF) developed a similar definition of what it calls an offshore financial center (OFC). The IMF uses three criteria, which include:

> *[1] Jurisdictions that have relatively large numbers of financial institutions engaged primarily in business with non-residents; [2] financial systems with external assets and liabilities out of proportion to domestic financial intermediation designed to finance domestic economies; and [3] more popularly, centers which provide some or all of the following services: low or zero taxation; moderate or light financial regulation; banking secrecy and anonymity.* ("Offshore Financial Centers: IMF Background Paper")

Both the IMF and OECD classifications fail to adequately reflect the nature of offshore financial centers in their definitions. According to both the IMF and OECD definitions, the size of a jurisdiction's domestic economy plays a role in whether or not the sources will consider it an offshore financial center or tax haven. The IMF's classification requires that the center's foreign deposits be proportionally high compared to its total deposits, while the OECD definition requires that the majority of the entities domiciled within the jurisdiction have no substantial economic activities. Yet these classifications fail to adequately reflect the scope of offshore economic activity because they exclude centers such as the United Kingdom, United States, Germany, and Russia. Such countries have a lack of transparency, prevalent banking secrecy and anonymity, and substantial offshore activities, but also robust domestic economies, which outweigh the impact of international capital flows. Since the presence of a mature domestic economy has no impact on the operations of a jurisdiction's offshore market, such economies could be equally complicit in the tax avoidance and evasion of foreigners, but would not be included in the definition of either the OECD or the IMF.

It is for this reason that this paper uses the term "secrecy jurisdiction," as defined by the Tax Justice Network (TJN). TJN is an independent organization that conducts research, analysis, and advocacy in the field of tax and regulation. In addition to the traditionally defined offshore financial centers, secrecy jurisdictions include a few developed countries, some of which are classified by the IMF as "international financial centers"[2] or "regional

2. For example, the IMF has categorized the United Kingdom as an international financial center in several reports.

financial centers." By defining them as such, the IMF recognizes that these jurisdictions play a role in the offshore banking industry, but does not go the additional step to formally identify these countries as offshore centers. The definition of secrecy jurisdiction is therefore broader than that of tax haven or offshore financial center; it does not require that the center have a limited domestic economy. Secrecy jurisdictions are defined by the Tax Justice Network as:

> *Places that intentionally create regulation for the primary benefit and use of those not resident in their geographical domain. That regulation is designed to undermine the legislation or regulation of another jurisdiction. To facilitate its use, secrecy jurisdictions also create a deliberate, legally backed veil of secrecy that ensures that those from outside the jurisdiction making use of its regulation cannot be identified to be doing so.*

The complete list of secrecy jurisdictions, as referred to in this paper, is presented in Table 1. We derived this list from the 2007 Tax Justice Network paper titled *Identifying Tax Havens and Offshore Finance Centers*.

Table 1. Secrecy Jurisdictions

Andorra	Dominica	Liechtenstein	Palau	Switzerland
Anguilla	Germany	Luxembourg	Panama	Taiwan
Antigua and Barbuda	Gibraltar	Macao	Portugal	Tonga
Aruba	Grenada	Malaysia	Russia	Turks and Caicos
Australia*	Guernsey	Maldives	Samoa	Islands
The Bahamas	Hong Kong	Malta	San Marino	United Arab Emirates
Bahrain	Hungary	Marshall Islands	Sao Tome e Principe	United Kingdom
Barbados	Iceland	Mauritius	Seychelles	United States
Belgium	Ireland	Monaco	Saint Lucia	United States
Belize	Isle of Man	Montserrat	Saint Kitts and Nevis	Virgin Islands
Bermuda	Israel	Nauru	Saint Vincent	Uruguay
British Virgin Islands	Italy	Netherlands	and the Grenadines	Vanuatu
Cayman Islands	Japan*	Netherlands Antilles	Singapore	
Cook Islands	Jersey	Niue	Somalia	
Costa Rica	Lebanon	Northern Mariana	South Africa	
Cyprus	Liberia	Islands	Spain	

*Australia and Japan are not Secrecy Jurisdictions according to TJN, however since they are both used in the forthcoming GFI Report: *The Absorption of Illicit Financial Outflows from Developing Countries*, we include estimates of their non-resident deposits in this study.
Source: Tax Justice Network, 2007, *Identifying Tax Havens and Offshore Finance Centers*

For the purposes of this report, we use the entire list of secrecy jurisdictions as defined by TJN. This list is not exhaustive. Other centers, such as Mainland China and Japan, have opaque banking industries and fail to report data on their offshore businesses, but are not included in the list above. As a result, we include an additional center, Japan, because this country is defined as an international financial center by the IMF and a forthcoming Global Financial Integrity (GFI) report identifies Japan as a point of absorption of illicit funds.

Private, Non-Resident Deposits

In this report, we estimate deposits in secrecy jurisdictions belonging to private individuals who reside or corporations which are organized outside that jurisdiction. We label these deposits *private, non-resident deposits*. "Private" indicates that these figures include only deposits of individuals and corporations and do not include those deposits of banks or governments. Ideally, this information would also include deposits of mutual funds and trusts, but, as explained in the section on data sources, it is not possible to include these depositors. "Non-resident" means the country of origin of the individual or entity holding the deposit is not a resident of the jurisdiction in which the deposit is held.

We estimate deposits into banking institutions, defined by the Bank for International Settlements (BIS) in its *Guidelines to the International Locational Banking Statistics*, as "domestic and foreign-owned institutions located in each reporting country whose business it is to receive deposits and/or close substitutes for deposits and to grant credits or invest in securities on their own account" (BIS 4). This definition is in line with the IMF's definition of banking in the *Balance of Payments Manual, Sixth Edition* (BPM6). The community of reporting institutions to the BIS includes: commercial banks, savings banks, savings and loan associations, credit unions, cooperative credit banks, building societies, post office giro institutions, and other financial institutions if they "take deposits or issue close substitutes for deposits."

The BIS defines deposits as "all claims reflecting evidence of deposit—including non-negotiable certificates of deposit (CDs)—which are not represented by negotiable securities." In addition to deposits, it would also be appropriate to include collective investment schemes, such as mutual funds and money market funds. The inclusion of this data is limited, however, because the only centers which report the balances of money market funds to the BIS are Belgium and Austria and only France and the Cayman Islands report the assets and liabilities of mutual funds. This paper furthermore cannot break down deposits by commercial versus non-commercial because it is not possible to attain that level of detail.

Due to the limitations on available data, this paper also cannot comment on the legality of the deposits which are estimated below or on the portion of those deposits which are, or are likely to be, illicit, illegal or tax evading. While we cannot estimate the amount of these deposits which are illicit or illegal, we have, however, selected the "private, non-resident" level of detail in our data because it is the narrowest definition that includes the greater part of offshore deposits that are tax evading or illicit. It would be ideal to furthermore disaggregate each center's deposits by country of origin. This level of detail, however, is impossible to attain with the currently available data on international banking.

BACKGROUND ON DATA COLLECTION AMONG OFFSHORE FINANCIAL CENTERS

There are few reports that comprehensively estimate deposits in offshore financial centers or secrecy jurisdictions. This is largely because few countries or centers choose to publish figures on their non-resident deposit holdings. The IMF collects this type of data on a voluntary basis from some OFCs through its Offshore Financial Sector Assessment Program, but the institution cannot require these jurisdictions to disclose their holdings because most OFCs are not members of the IMF and do not need to provide data required under its Articles of Agreement. Some countries voluntarily report private, non-resident deposits, by country of origin to the BIS, a level of detail which would be ideal for offshore analysis. Member countries' desire for privacy, however, precludes the BIS from making this level of detail public in its banking statistics at the present time.

The most detailed reports on offshore financial centers have been written by the IMF, which provides "Assessments of Financial Sector Supervision and Regulation" on a variety of individual offshore financial centers, as well as a number of working papers written by staff members on the topic. The IMF Assessment papers provide background information "on the business of OFCs and on a number of initiatives taking place in various international fora concerning OFCs" (IMF Offshore Financial Center Staff Assessment). These reports include limited data on private sector deposits in OFCs in the "Information Framework Initiative," which documents the size of the major financial sectors and allows for comparisons of the magnitude of activities across jurisdictions. As of the Assessment of January 2006 (the most recent report), 16 OFCs had submitted data to the Information Framework. Some of these, however, did not provide data on the breakdown of external assets/liabilities to total assets/liabilities (IMF). Moreover, the reporting of individual banks to the monetary authority within OFCs fluctuates so that the comprehensiveness of the banking data varies from one jurisdiction to the next.

DATA SOURCES: BANKING STATISTICS

The primary source for this report is the BIS, an organization which fosters "international monetary and financial cooperation and serves as a bank for central banks" (BIS). The BIS provides banking statistics, including the deposit figures of member countries into most countries worldwide, which enables a breakdown of deposits into both offshore financial centers and developed countries. These data are found in its "locational banking statistics."

The BIS states that the purpose of the locational statistics is to "provide an insight into the aggregate international claims and liabilities of all banks resident in [...] reporting countries broken down by instrument, currency, sector, country of residence of counterparty, and nationality of reporting bank" (BIS). Forty-two countries report locational banking statistics to the BIS, which are listed in Table 2. Although worldwide statistics would be ideal, the BIS notes that its sample of countries accounts for over 90 percent of the world's total deposits.

Table 2. Countries which Report Locational Banking Statistics

Australia	France	Malaysia
Austria	Germany	Mexico
The Bahamas	Greece	Netherlands
Bahrain	Guernsey	Netherlands Antilles
Belgium	Hong Kong	Norway
Bermuda	India	Panama
Brazil	Ireland	Portugal
Canada	Isle of Man	Singapore
Cayman Islands	Italy	Spain
Chile	Japan	Sweden
Chinese Taipei	Jersey	Switzerland
Cyprus	Korea	Turkey
Denmark	Luxembourg	United Kingdom
Finland	Macao	United States

Source: Bank for International Settlements, *Guidelines to the International Locational Banking Statistics*

The appropriate deposit data for this study can be found in Table 7 of the BIS' locational banking statistics, which includes external loans and deposits of reporting countries vis-à-vis individual countries. Table 7 comprises two sub components: Table 7A, which provides deposits for all sectors and Table 7B, which reports deposits vis-à-vis the non-bank sector. While useful, the disaggregation between bank and non-bank deposits is not the appropriate level of detail for this study because estimates of non-bank deposits can also include deposits of foreign governments.

Two limitations on BIS data are likely to cause understatement on this estimate. First, there is no reporting of business managed off the balance sheet. As the International Monetary Fund notes in the *Offshore Financial Centers IMF Background Paper*, "anecdotal evidence suggests [off-balance sheet activity] can be several times higher than on-balance sheet activity" (IMF). Second, BIS data do not include information on assets held by mutual funds or private trusts and companies, the beneficial owners of which do not need to be reported. An example of the latter is the International Business Corporation (IBC), which is a limited liability vehicle used to own and operate businesses, issue shares or bonds, or raise capital. IBCs are often established with no local tax liability in offshore centers in exchange for the payment of fixed annual fees to the jurisdiction and an agreement not to conduct business within the jurisdiction. They are sometimes set up with bearer share certificates, which means that the beneficial owner is often unknown and assets of the company are difficult to track.

We obtained supplementary data for non-resident deposits from three sources: the Offshore Financial Sector Assessment Program, Datamonitor, and the central bank websites of each secrecy jurisdiction. The Offshore Financial Sector Assessment Program (FSAP) is an ongoing study conducted by the IMF.[3] In addition to providing information on the business of OFCs and a background on initiatives concerning OFCs, the FSAP also surveys banking statistics in a variety of offshore financial centers. This includes information on liabilities and deposits in a number of these centers. The surveys note that many centers did not participate or disclosed only limited statistics.

Datamonitor is an independent, private company which has developed a limited database on OFCs. Datamonitor constructed its exclusive database from an extensive study of secondary information from each of the governing bodies of eleven offshore financial centers: The Bahamas, Bermuda, Cayman Islands, Hong Kong, Guernsey, Jersey, Isle of Man, Dublin,[4] Luxembourg, Singapore and Switzerland. The quantification of information on deposits, mutual funds, and insurance contracts written in each OFC is based on data provided by the governing bodies within each offshore location. In cases where Datamonitor could not acquire specific data on deposits or other financial instruments, the organization made estimates using proxy data obtained from the regulators.

The third source is a set of information we collected from the central bank websites of each secrecy jurisdiction. These sources, however, often contain little to no data and, in the overwhelming majority of cases, do not break down deposit data to the level of detail necessary for this report. Approximately half of the websites publish banking statistics and only a handful provided details on non-bank or non-resident deposits. The most transparent of these sites is that of Jersey, which provides a regional breakdown of banking deposits in time series. These sources were only used when we could not obtain adequate data from BIS, IMF, or Datamonitor.

Table 3 shows which sources this paper used for each secrecy jurisdiction. In some cases these data were available in private sector deposits, but most refer to all sectors or non-bank deposits.[5]

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3. In 2008 this program was integrated with the Financial Sector Assessment Program (FSAP). The data we use for this study, however, refers to the studies which were published while the survey was still part of the Offshore Financial Centers Assessment Program.
4. Datamonitor provides information only on the city of Dublin, not on the entire country of Ireland. We do not consider these statistics comparable to BIS statistics on Ireland as a whole.
5. Central bank data in Table 3 represent only websites used in this study, although many other central bank websites do have banking statistics available.

Table 3. Sources of Data for Banking Statistics

Secrecy Jurisdiction	BIS	IMF	Central Bank	DM
Andorra	x	x		
Anguilla			x	
Antigua and Barbuda			x	
Aruba	x	x	x	
Australia	x			
The Bahamas	x		x	x
Bahrain	x	x		
Barbados	x			
Belgium	x			
Belize	x		x	
Bermuda	x	x		x
British Virgin Islands				
Cayman Islands	x	x		x
Cook Islands				
Costa Rica	x			
Cyprus	x	x		
Dominica	x	x	x	
Germany	x			
Gibraltar	x	x		
Grenada	x		x	
Guernsey	x	x		x
Hong Kong	x			x
Hungary	x			
Iceland	x			
Ireland	x			x
Isle of Man	x	x		x
Israel	x			
Italy	x			
Japan	x			
Jersey	x	x		x
Lebanon	x			
Liberia	x		x	
Liechtenstein	x			
Luxembourg	x			x
Macao	x			
Malaysia	x			
Maldives	x			
Malta	x			
Marshall Islands	x		x	
Mauritius	x	x		
Monaco			x	
Montserrat			x	
Nauru	x			
Netherlands	x			
Netherlands Antilles	x	x	x	
Niue			x	
Northern Mariana Islands				
Palau	x			
Panama	x	x		
Portugal	x			
Russia	x			
Samoa	x	x		
San Marino				
Sao Tome e Principe				
Seychelles	x	x		
Saint Lucia	x	x	x	
Saint Kitts and Nevis			x	
Saint Vincent and the Grenadines	x			
Singapore	x	x		x
Somalia				
South Africa	x			
Spain	x			
Switzerland	x			x
Taiwan	x			
Tonga				
Turks and Caicos Islands				
United Arab Emirates	x			
United Kingdom	x			
United States	x			
Uruguay	x			
US Virgin Islands				
Vanuatu	x	x		

Central Bank data refers only to those countries for which data was used for this study, many other countries do provide data through central bank websites.

DATA SOURCES: PRIVATE SECTOR SPLITS

Given that most sources do not provide data on private holdings by foreigners, but rather only total non-resident holdings, we must employ a proxy measure to estimate the quantity of private non-resident deposits in these jurisdictions. As a result, for countries which have only total deposits statistics available, we reduce the total by an estimated percentage which is likely to be private (i.e. non-bank and non-government). To obtain these percentages, we use two sources: BIS' consolidated banking statistics and Datamonitor.

The BIS' consolidated statistics "report banks' on-balance sheet financial claims on the rest of the world and thereby provide a measure of the risk exposures of lenders' national banking systems" (BIS). Table 9A of the consolidated statistics reports each country's claims on the rest of the world. BIS' banking statistics break down these data from total international claims to (i) claims on banks (Table 9A:F), (ii) on the public sector (Table 9A:G), and (iii) on the non-bank, private sector (Table 9A:H).[6] We can use the ratio of "non-bank private sector claims" to "total international claims" as a proxy for the split between private deposits and total non-resident deposits contained within each center. This logic assumes that the split between private and total claims by each center will be consistent with the split between private and total deposits in each center.[7] Each of these splits can be applied on a country-by-country, and quarter specific, basis to the total deposits contained within the center.

Datamonitor also provides data on the private portion of total deposits for a few OFCs, which include the deposits of commercial entities, individuals, mutual funds, and trusts. These data are preferred to BIS' consolidated statistics, because they show splits in deposits, rather than claims, and also include statistics on mutual funds. Datamonitor is limited, however, because it only covers five jurisdictions in this degree of detail (Dublin, Guernsey, Jersey, Isle of Man, and Switzerland) and only provides annual, rather than quarterly data. Accordingly, this analysis predominantly uses BIS data. It would have been most useful to analyze these statistics for congruence, but unfortunately these statistics are not comparable because Datamonitor includes a measure of mutual funds and trusts in their private banking statistics and the BIS does not.

RESULTS: PRIVATE NON-RESIDENT DEPOSITS IN SECRECY JURISDICTIONS (YEARLY)

Table 4 displays the results of this analysis. It shows the non-resident, private deposits in secrecy jurisdictions worldwide over the years 2002-2008, ranked by magnitude of deposits in 2007, the last year for which complete data are available. As noted earlier, these results are likely understated because the BIS' data include neither off-balance sheet activities nor the assets of mutual funds or trusts. Table 4 displays end-of-period figures.

The United States is the largest holder in private, non-resident deposits, followed closely by the United Kingdom and the Cayman Islands. This is not a surprising result. The United States has the largest economy in the world, where both U.S. citizens and foreigners alike have the assurance of the Federal Deposit Insurance Corporation (FDIC) on deposits. If necessary, the FDIC will reimburse each depositor up to US$100,000, which is the standard maximum deposit insurance amount (SMDIA), on all types of deposits in any insured bank.[8] The United States also ranks the highest on the Financial Secrecy Index, which "identifies the jurisdictions which are most aggressive in providing secrecy in international finance and which most actively shun co-operation with

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6. These tables are available online: BIS Banking Statistics, http://www.bis.org/statistics/bankstats.htm

7. This methodology was suggested by Swapan Pradhan, a banking statistics specialist at the BIS.

8. In response to the 2008 financial crisis, the SMDIA was temporarily raised on October 3, 2008 to US$250,000 and this policy will stay in effect until January 1, 2014, when the amount will return to US$100,000.

other jurisdictions" (TJN). The Cayman Islands ranks fourth on the Financial Secrecy Index and the United Kingdom ranks fifth.

Table 4. Private, Non-Resident Deposits in Secrecy Jurisdictions
in millions of US dollars

Rank	Secrecy Jurisdiction	2002	2003	2004	2005	2006	2007	2008*
1	United States	1,248,069	1,242,742	1,411,348	1,603,469	2,033,727	2,599,837	2,114,546
2	United Kingdom	692,745	769,367	998,932	1,033,344	1,419,931	1,938,743	1,433,926
3	Cayman Islands	533,204	754,002	962,317	898,190	1,264,978	1,341,012	1,684,780
4	Switzerland	176,151	219,580	196,954	199,125	301,777	543,136	235,166
5	Luxembourg	185,012	269,053	325,563	305,213	355,656	500,104	456,133
6	Germany	175,003	190,016	198,574	191,257	299,013	490,843	427,782
7	Jersey	185,067	224,551	251,724	264,075	350,463	408,174	367,103
8	Netherlands	184,164	233,837	226,506	214,685	330,643	398,342	347,575
9	Hong Kong	158,065	175,893	221,804	214,021	259,064	343,262	315,974
10	The Bahamas	165,089	176,366	236,842	242,855	268,035	261,354	367,369
11	Singapore	100,612	100,557	123,249	120,623	161,271	210,783	210,055
12	Russia	23,371	32,978	48,597	90,662	124,818	185,299	653
13	Japan†	77,113	93,865	130,394	92,193	114,888	182,215	…
14	Guernsey	53,512	72,571	77,835	99,944	124,660	129,240	147,677
15	Spain	39,571	50,177	45,138	52,430	86,885	117,979	71,714
16	Netherlands Antilles	67,373	73,336	74,803	81,444	93,993	107,376	107,143
17	Belgium	45,600	55,360	62,180	51,077	76,653	90,021	72,055
18	Panama	36,538	39,726	50,346	56,047	69,100	85,198	96,786
19	Ireland	19,170	30,796	36,726	45,003	63,617	73,841	286,067
20	Bermuda	31,647	41,952	90,367	55,946	72,348	71,447	41,275
21	Isle of Man	27,367	35,326	40,611	41,204	58,972	66,994	76,490
22	Taiwan	33,624	44,333	52,045	48,208	51,340	65,394	65,091
23	Italy	52,988	42,986	49,762	38,225	56,554	57,307	32,337
24	United Arab Emirates	29,739	29,193	29,193	37,899	61,908	54,364	47,530
25	Australia†	15,050	19,797	30,510	35,286	41,650	53,211	…
26	Portugal	12,671	15,601	15,634	17,281	30,129	34,497	19,982
27	Cyprus	7,258	9,695	18,173	18,576	22,871	32,860	37,192
28	Israel	12,348	14,817	17,124	19,814	29,040	29,610	16,649
29	Liechtenstein	17,670	18,534	19,137	19,242	23,980	28,064	25,508
30	South Africa	8,005	11,617	14,225	15,955	21,131	26,730	16,194
31	Malaysia	7,273	7,535	15,155	6,643	13,177	22,180	5,926
32	Lebanon	11,649	16,967	18,678	17,140	19,124	21,419	20,523
33	Monaco	15,414	15,414	15,414	14,495	20,500	20,500	…
34	Barbados	3,547	6,289	8,747	8,742	24,915	19,622	9,578
35	Liberia	6,951	8,946	18,097	14,433	16,152	17,692	17,968
36	Gibraltar	5,342	6,375	6,900	9,608	23,046	17,020	12,324
37	Mauritius	2,577	3,654	5,374	5,192	11,140	16,651	11,095
38	Macao	4,975	5,494	6,818	9,557	13,190	16,247	19,020

Table 4 (continued). Private, Non-Resident Deposits in Secrecy Jurisdictions
in millions of US dollars

Rank	Secrecy Jurisdiction	2002	2003	2004	2005	2006	2007	2008*
39	Uruguay	4,897	5,841	5,838	6,240	6,679	10,552	8,055
40	Marshall Islands	398	1,344	2,315	3,941	5,192	8,235	7,034
41	Malta	2,464	2,733	3,365	3,217	8,488	7,862	12,502
42	Dublin	6,554	6,429	7,697	9,282	6,861	7,821	...
43	Hungary	2,024	2,755	3,192	4,866	5,334	7,738	4,250
44	Belize	1,655	2,117	2,259	4,278	5,938	6,716	9,575
45	Antigua and Barbuda	1,497	2,421	3,344	4,267	5,190	6,113	...
46	Bahrain	1,735	3,002	6,135	4,051	6,358	5,427	4,674
47	Andorra	3,758	3,908	5,241	4,097	4,437	4,547	5,839
48	Costa Rica	2,593	1,177	1,643	1,773	4,059	4,456	3,460
49	Samoa	873	890	1,649	2,445	3,672	4,185	6,584
50	Iceland	259	475	707	1,609	4,672	3,565	-919
51	Saint Vincent and the Grenadines	932	839	1,336	1,446	3,803	3,246	3,089
52	Seychelles	198	301	432	1,315	2,000	2,721	4,330
53	Aruba	920	811	760	698	1,132	1,389	1,353
54	British Virgin Islands	3,357	2,937	2,517	2,097	1,677	1,257	...
55	Saint Kitts and Nevis	143	372	387	755	845	1,036	...
56	Montserrat	765	765	805	805	805	805	...
57	Vanuatu	1,196	565	588	675	725	800	296
58	Anguilla	146	178	209	241	273	304	...
59	Saint Lucia	71	56	314	217	278	291	468
60	Dominica	141	47	3	20	109	257	134
61	Turks and Caicos Islands	257	257	257	257	257	257	...
62	Maldives	39	31	54	58	100	123	88
63	Grenada	60	30	60	61	45	66	171
64	Niue	19	19	19	19	19	19	...
65	Cook Islands	19	19	19	19	19	19	...
66	Nauru	35	28	11	...	12	10	-5
67	Palau	1	0	0	1	7	6	...

Secrecy Jurisdictions for which no data was available: Northern Mariana Islands, San Marino, Sao Tome e Principe, Somalia, Tonga and US Virgin Islands

**Represents preliminary data, data unavailable for some secrecy jurisdictions*

†Australia and Japan are not defined as secrecy jurisdictions

These countries are ranked by magnitude of deposits in 2007

As a result of the previously discussed data limitations, this data is likely severely understated. Namely, these deposits do not include mutual funds, money market funds, or trusts. The assets of Switzerland, in particular, may be understated as BIS data do not include custodian accounts, which are financial institutions that safeguard a firm's or individual's assets and are particularly popular in Switzerland. For example, though the data in Table 4 show Switzerland held about US$500 billion in 2007, the Swiss Bankers Association reported that Switzerland had about US$2.7 trillion (3.1 CHF) in foreign assets under management (AUM).

RESULTS: PRIVATE, NON-RESIDENT DEPOSITS IN SECRECY JURISDICTIONS (QUARTERLY)

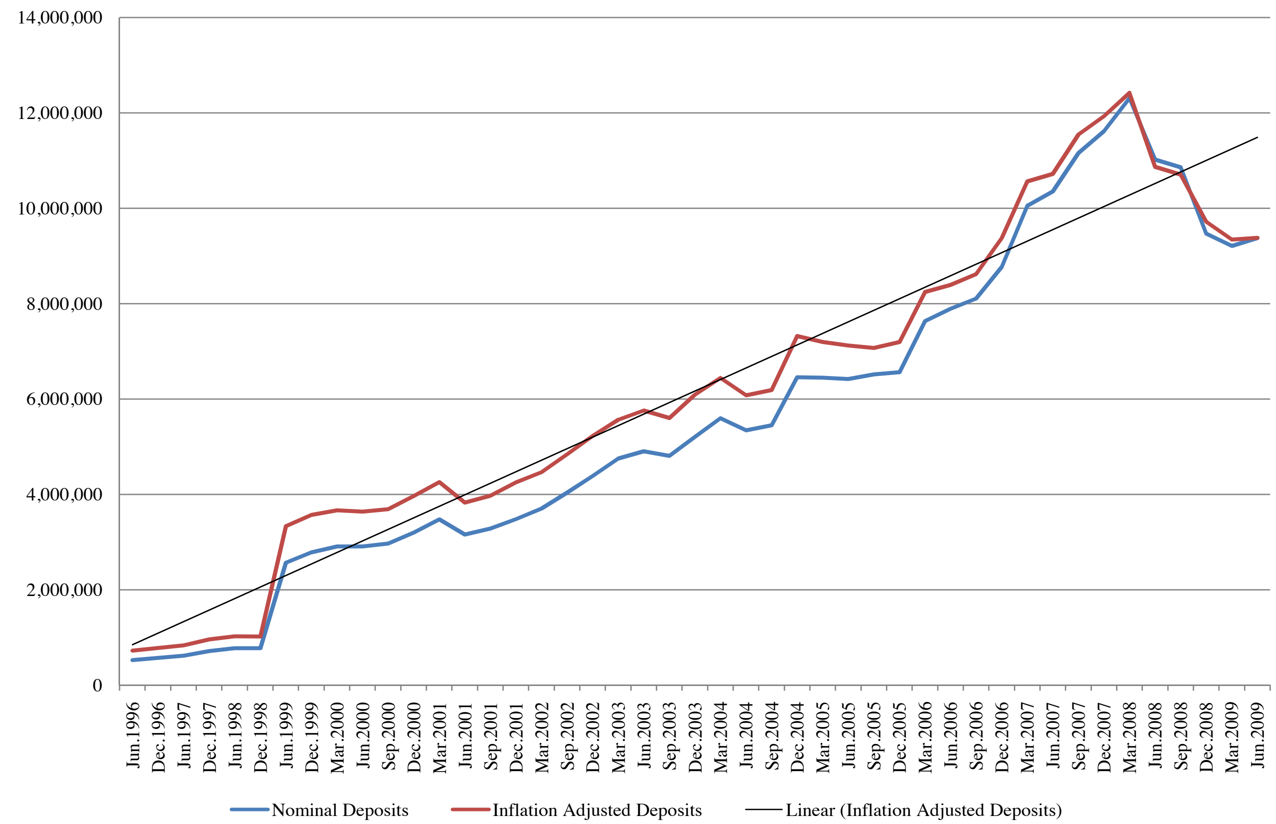
When examining quarterly data, we are limited to only the BIS dataset because the aforementioned supplementary sources all only publish yearly data. This reduces the number of countries we are able to include because the BIS does not cover every country in the list of secrecy jurisdictions from Table 1. It also limits the accuracy of our results as we do not have other sources from which we can cross-check our figures or obtain more accurate private/public sector splits. For these reasons, data in the quarterly estimations may not precisely match data from the yearly estimates, though in most cases the figures are close.

Chart 1 shows the cumulative sum of all private, non-resident deposits in all secrecy jurisdictions (by current definitions) from 1996—the first year for which locational statistics are available—until 2009. This chart is subject to the following caveat: OFC deposit data are not reported on a consolidated basis, which means that inter-company deposits are not netted out. As a result, this chart, which takes the simple arithmetic total of deposits into secrecy jurisdictions, may suffer from an upward bias due to double counting. However, to the extent that these statistics omit mutual funds, trusts, custodian accounts, and money market funds, this model may also simultaneously suffer from a severe downward bias. As noted previously, there are significant problems related to reliability, coverage, and consistency in offshore statistics.

There are data gaps for many countries for the first two years in which data is available, so the appreciable rise in deposits in December 1999 may be attributed to the improved collection and reporting of this data. Also note that between June 1996 and December 1999, this data was only available semi-annually. We use the U.S. Consumer Price Index (CPI), published by the Bureau of Labor Statistics, to estimate inflation-adjusted deposits.

Chart 1. Private, Non-Resident Deposits in all Secrecy Jurisdictions

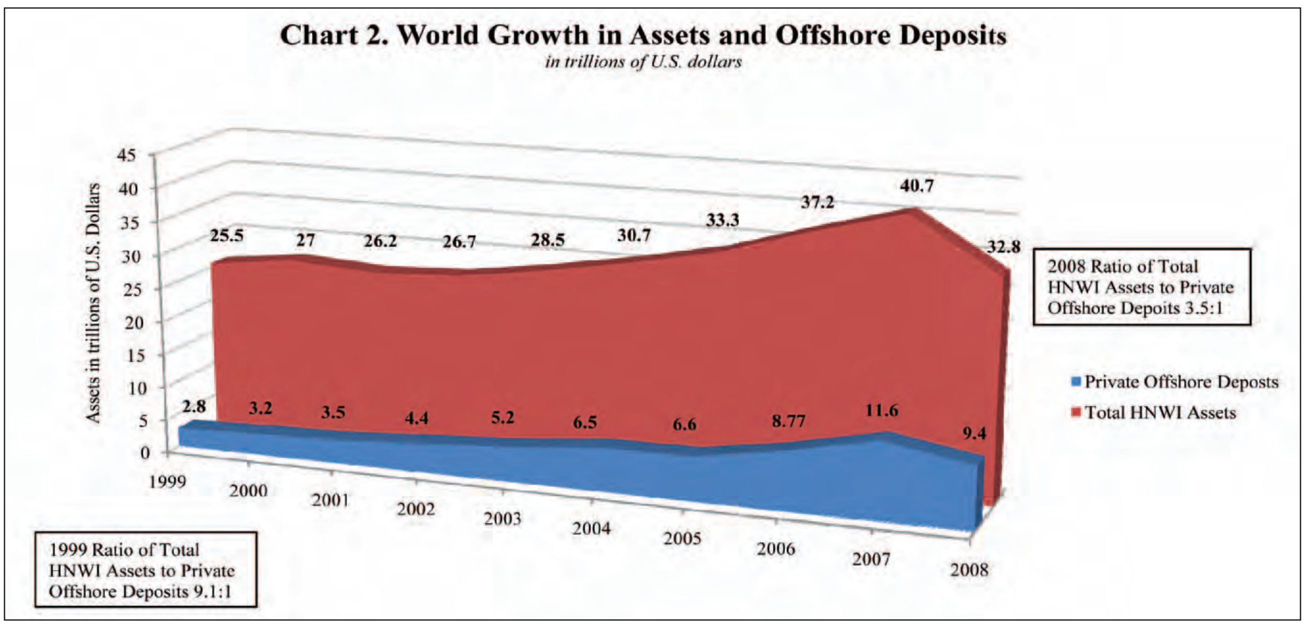
in millions of U.S. dollars



In Chart 1, both inflation-adjusted and nominal deposits show a substantial upward deviation from the predicted values of offshore deposits—as measured by the linear trend line—between June 2006 and March 2008. This may reflect expanding wealth among developed country residents, particularly those in the United States, whose wealth rose with the expansion of the housing bubble in 2006 and 2007, and the proliferation of financial instruments that were profitable in the short term but whose long-term consequences were poorly understood. The popularity of these instruments eventually fed into the bursting of the housing bubble and the financial crisis of 2008. This crisis is reflected in Chart 1, between June 2008 and March 2009, when offshore deposits worldwide dropped at an average rate of 4.2 percent. The 1.8 percent increase in June 2009 echoes the turnaround the world experienced in that period as the United States reported third quarter growth of 2.2 percent (Bureau of Economic Analysis) and both Japan and the Euro-area grew by about 3 percent (J.P. Morgan).

Chart 1 also shows there has been a noticeable increase in deposits over the analyzed period. The compound annual growth rate (CAGR) in nominal deposits between June 1996 and June 2009 is about 11.4 percent and the inflation-adjusted growth rate is similarly high at 9 percent. These figures are significantly higher than the CAGR of world income (measured in gross domestic product or GDP), which averaged 3.86 percent over this period (IMF World Economic Outlook).[9] Part of this discrepancy may be attributed to an understatement of world GDP, as the compilation of national accounting statistics does not include underground activities, while deposits in secrecy jurisdictions includes the proceeds of illicit and illegal activities.

This growth rate also exceeds the CAGR of the assets of High Net-Worth Individuals (HNWIs), which averaged 7.8 percent in nominal terms and 5.3 percent in real terms between 1996 and 2008 (Merrill Lynch/CapGemini). Chart 2 compares the absolute growth in HNWI assets with the absolute growth of private offshore deposits between 1999 and 2008.



During this period, total HNWI assets grew from US$25.5 trillion in 1999 to US$32.8 trillion in 2008, peaking in 2007 at US$40.7 trillion. Private, non-resident deposits over this period showed a similar growth pattern, increasing from US$2.8 trillion in 1999 to US$9.4 trillion in 2008, with a corresponding peak in 2007 at US$11.6 trillion. Furthermore, the ratio of total HNWI assets to private, non-resident deposits narrowed from 9.1:1 in 1999 to 3.5:1

9. Note that these statistics are not directly comparable because our data set is limited by the fact that BIS data only covers 90 percent of the world's wealth.

in 2008. Note that private, non-resident deposits are not a sub-component of HNWI assets because offshore deposits also include those deposits of corporations, while the data on HNWI assets only include the wealth of individuals.

Clearly, the growth rate of offshore deposit holdings has outpaced the rise of world wealth. There are several economic drivers which might explain this phenomenon. First, the amount of offshore deposits includes both licit and illicit capital, while the total of HNWI assets, which is estimated by a survey method, is likely to include mostly licit wealth.[10] In fact, illicit financial flows from developing countries increased substantially between 2002 and 2006. According to an estimate by Global Financial Integrity, these flows increased from US$400 billion in 2002 to about US$1 trillion in 2006 (Kar). It is therefore possible that the shrinking ratio between offshore deposits and HNWI wealth is the result of the growing discrepancy between recorded and unrecorded wealth among residents of developing countries.

Second, this chart might reflect not only increasing illicit financial flows from developing countries, but also increased tax evasion among residents of developed countries. If this is the case, the narrowing ratio would also reflect a growing discrepancy between recorded and unrecorded capital among developed country citizens. Third, more HNWI could be moving licit capital into the offshore sector, which would mean licit offshore deposits are increasing not only in absolute terms, but also in market share of HNWI assets. Fourth, as the HNWI wealth does not include corporate deposits, it is possible this chart reflects growing wealth among corporations.

Major Holders of Non-Resident Deposits

Table 5 ranks the top ten secrecy jurisdictions by their holdings of private, non-resident deposits in June 2009, the most recent period for which data are available. As with the yearly data, the three largest holders in this table are the United States, the United Kingdom and the Cayman Islands. These jurisdictions dominate the offshore market; each holds over US$1.5 trillion in private foreign deposits—and the United States holds more than US$2 trillion. The next largest jurisdiction by holdings is Luxembourg with US$435 billion.

It is interesting to note that though Switzerland suffered intense media attention and public pressure over its offshore banking sector in the last year, it ranks ninth in terms of largest private, non-resident deposit holdings, after Ireland and the Netherlands.

Table 5. Private, Non-Resident Deposits in Top Ten Secrecy Jurisdictions
in millions U.S. dollars

Rank	Secrecy Jurisdiction	Mar.2008	Jun.2008	Sep.2008	Dec.2008	Mar.2009	Jun.2009
1	United States	2,898,534.87	2,549,092.88	2,404,989.86	2,114,545.84	2,164,805.09	2,182,790.93
2	Cayman Islands	1,736,494.86	1,515,102.93	1,483,148.13	1,684,780.21	1,457,701.97	1,549,753.87
3	United Kingdom	2,231,576.78	1,795,558.25	1,836,245.10	1,433,925.61	1,459,580.28	1,533,574.20
4	Luxembourg	588,157.56	587,777.99	567,321.25	456,132.60	379,289.72	435,425.86
5	Germany	578,016.37	494,497.32	472,165.19	427,781.91	409,710.67	425,643.57
6	Jersey	512,129.27	544,082.58	474,577.60	367,103.26	367,715.64	393,221.52
7	Netherlands	436,626.68	413,026.92	373,464.71	347,574.79	349,324.10	315,947.91
8	Ireland	295,018.56	273,390.41	263,708.06	286,066.87	285,165.40	276,409.52
9	Switzerland	311,338.38	289,407.31	328,829.94	235,166.23	255,419.23	273,973.39
10	Hong Kong	329,275.49	325,140.86	405,018.48	315,974.16	310,859.98	267,993.97

10. Reported wealth is likely underreported, as individuals are wary to report illicit or tax evading wealth to surveyors. Some studies attempt to correct for discrepancies using data from national accounts, but to the extent that these data are understated as they do not include information on the informal or underground sectors, these estimates are likely to be understated as well.

Table 6 shows the same ten jurisdictions, but instead charts the changes in deposits over the period March 2008 to June 2009. Each of these jurisdictions exhibited massive losses in deposits over this period, a reduction which coincided with the 2008 financial crisis and was described by Chart 1 depicting global private, non-resident deposits.

There are four economic drivers which explain why a recession would reduce offshore deposit holdings. First, a recession diminishes (in absolute terms) wealth, household income and business profits. The recession of 2008 was indeed severe; according to a report in *Foreign Affairs*, Americans lost about a quarter of their net worth between June 2007 and November 2008 (Altman). Faced with such losses, depositors would likely use their liquid assets offshore to offset losses in other sectors, which would result in a drawdown in offshore assets. Second, deposits in foreign jurisdictions, particularly in those with limited banking oversight or lenient guidelines concerning leverage and capital adequacy ratios, are considered riskier assets. As a result, when economic conditions become less certain, holders of such deposits would wish to draw down risky assets by repatriating offshore deposits. Third, as central banks worldwide lower interest rates in order to encourage investment in contracting economies, depositors would move cash deposits into higher yield assets. Fourth, fiscal incentives by domestic governments, which are intended to encourage investment and production, may encourage residents to move offshore deposits into domestic assets. As is noted by Merrill Lynch/CapGemini in the *World Wealth Report 2008*, "government-driven fiscal incentives in Latin America, along with relatively high interest rates, have encouraged HNWIs to repatriate offshore investments" (Merrill Lynch/CapGemini).

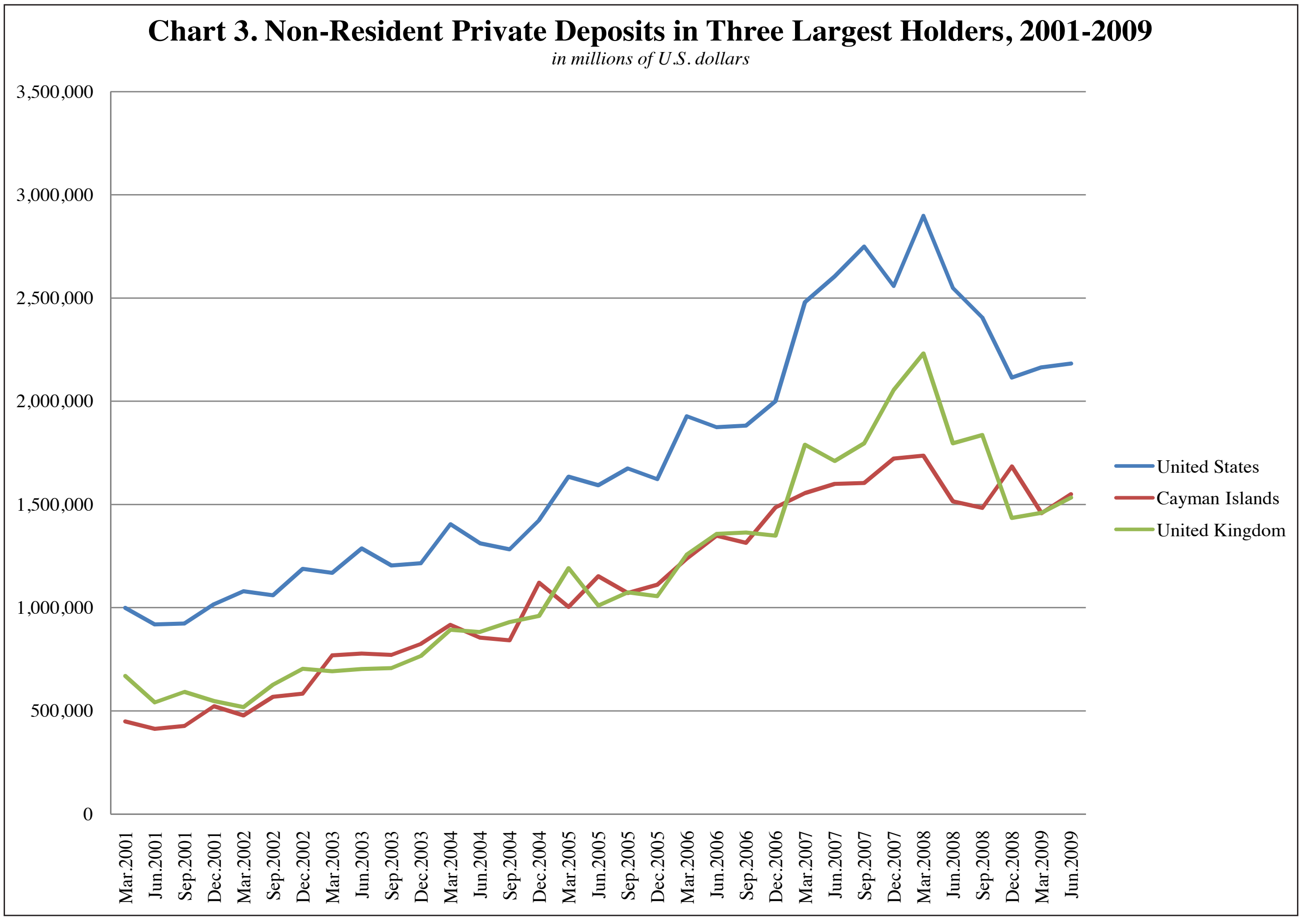
Table 6. Changes in Private, Non-Resident Deposits in Top Ten Secrecy Jurisdictions
in millions U.S. dollars

Rank	Secrecy Jurisdiction	Δ Mar. 2008	Δ Jun. 2008	Δ Sep. 2008	Δ Dec. 2008	Δ Mar. 2009	Δ Jun. 2009	Average Growth Rate
1	United States	340,036.9	-349,442.0	-144,103.0	-290,444.0	50,259.2	17,985.8	-5.32%
2	Cayman Islands	13,892.2	-221,391.9	-31,954.8	201,632.1	-227,078.2	92,051.9	-1.69%
3	United Kingdom	176,523.8	-436,018.5	40,686.9	-402,319.5	25,654.7	73,993.9	-6.46%
4	Luxembourg	60,367.5	-379.6	-20,456.7	-111,188.6	-76,842.9	56,136.1	-5.04%
5	Germany	76,503.2	-83,519.1	-22,332.1	-44,383.3	-18,071.2	15,932.9	-5.74%
6	Jersey	-10,694.0	31,953.3	-69,505.0	-107,474.3	612.4	25,505.9	-4.42%
7	Netherlands	-40,376.1	-23,599.8	-39,562.2	-25,889.9	1,749.3	-33,376.2	-6.19%
8	Ireland	45,343.7	-21,628.1	-9,682.4	22,358.8	-901.5	-8,755.9	-1.16%
9	Switzerland	-3,659.9	-21,931.1	39,422.6	-93,663.7	20,253.0	18,554.2	-1.21%
10	Hong Kong	-64,688.2	-4,134.6	79,877.6	-89,044.3	-5,114.2	-42,866.0	-2.82%

The largest losses of deposits among these top ten countries, expressed in average percent of change, were experienced by the developed countries: the United Kingdom (a -6.46 percent average growth rate), the Netherlands (-6.19 percent), Germany (-5.74 percent), and the United States (-5.32 percent). The traditional offshore centers—the Cayman Islands (-1.69 percent), Switzerland (-1.21 percent), and Ireland (-1.16 percent)—did not face declines that were as substantial.

The Big Three: U.S., UK, and Cayman Islands

When we examine a longer series of the growth in deposits in the top three jurisdictions—the United States, the Cayman Islands, and the United Kingdom—we see an unambiguous growth in deposits until the early months of 2008, which is when the world began to witness a reduction in economic output (see Chart 3).



In Chart 3 above, the three jurisdictions show significant growth between 2001 and 2009. In particular, non-resident deposits climb at an extraordinary rate between September and December of 2006, particularly in the United States and the United Kingdom. As discussed, this may reflect the unstable growth in housing prices and assets, which led to massive accumulation of wealth and eventually led to the financial crisis. The expansion, and subsequent decline of the deposits, may also be a result of the policies of the central banks of the United States and the United Kingdom. Both of these central banks maintained high official interest rates prior to 2008 and then significantly reduced these rates during the early months of 2008.

To test this hypothesis, we set up a simple correlation between private, non-resident deposits in both the United Kingdom and the United States to the official interest rate[11] of each country's central bank. Although we expect these interest rates to be positively correlated with deposits, they will likely be a leading indicator because deposits would move in response to changes in the interest rate. Chart 4 plots private, foreign deposits into the United States with the Federal Funds rate over time, between June 2003 and June 2009.

11. In the U.S. this is the Federal Funds Rate; in the UK this is the Official Bank Rate.

Chart 4. Total Private, Non-Resident Deposits versus Federal Funds Rate (United States)

in millions of U.S. dollars

Period	Correlation	P > |t|
June '03 - June '09	0.38	0.063
Interest Rate with One Period Lead	0.57	0.003
Interest Rate with Two Period Lead	0.74	0.000

Chart 4 shows a strong correlation between the Federal Funds Rate and private, offshore deposits (correlation of 0.38, significant at the 10 percent level). There is a stronger correlation when the interest rate variable leads; the variables have a correlation of 0.57 with one-period lead and 0.74 with a two-period lead, both are significant at the 1 percent level. This correlation is likely overstating the actual effect because this simple equation suffers from significant omitted variable bias. Interest rates and offshore deposits, as previously suggested, are also both pro-cyclical (positively correlated with economic growth). As the economy contracts and drives down offshore deposit holdings, a central bank would also lower interest rates in response to the economic contraction. As a result, these estimates are not to be read as pure cause and effect. Instead they show empirically that a relationship likely exists between economic output, interest rates, and offshore deposits. The same relationship holds true in the United Kingdom (see Chart 5).

Chart 5. Total Private, Non-Resident Deposits versus Official Bank Rate (United Kingdom)

in millions of U.S. dollars

Period	Correlation	P > |t|
June '03 - June '09	0.21	0.309
Interest Rate with One Period Lead	0.35	0.089
Interest Rate with Two Period Lead	0.59	0.002

As with the United States, there is a positive correlation between private, non-resident deposits and the Official Bank Rate in the United Kingdom. This correlation is stronger and more significant with each of the period-lead correlations; there is a correlation of 0.35 with a one-period lead (significant at the 10 percent level) and a correlation of 0.59 with a two-period lead (significant at the 1 percent level).

Regional Distribution

Secrecy jurisdictions can be categorized into groups for a regional analysis of the deposits. Table 7 arranges the 55 jurisdictions for which the BIS provides quarterly data into seven categories, based on geographic location and level of development. The "Developed" category includes all those secrecy jurisdictions which Global Financial Integrity defines as developed in the 2008 report *Illicit Financial Flows from Developing Countries, 2002-2006*. The classification "Offshore – Caribbean" includes those centers which are located in the Caribbean or Central America and the IMF defines as offshore or the OECD calls a tax haven. The same logic applies to the following categories: Offshore - Europe, Offshore - Asia, Offshore - MENA[12] and Africa, and Offshore - Oceania. Note that while Switzerland and Ireland are developed countries, the IMF defines these countries as offshore so we categorize them as Offshore - European. Emerging Markets are those countries which GFI does not define as developed, the IMF does not label offshore, and the OECD does not recognize as a tax haven, but TJN indentifies as a secrecy jurisdiction.

12. MENA: Middle East and North Africa

Table 7. Classification of Secrecy Jurisdictions

Developed	Emerging Market	Offshore - Asia	Offshore - Caribbean	Offshore - Europe	Offshore - MENA and Africa	Offshore - Oceania
Belgium	Hungary	Hong Kong	Aruba	Andorra	Bahrain	Maldives
Germany	Russia	Macao	The Bahamas	Gibraltar	Cyprus	Marshall Islands
Iceland	South Africa	Malaysia	Barbados	Grenada	Lebanon	Nauru
Israel	Uruguay	Singapore	Belize	Guernsey	Liberia	Samoa
Italy		Taiwan	Bermuda	Ireland	Mauritius	Vanuatu
Japan*			Cayman Islands	Isle of Man	Seychelles	
Netherlands			Costa Rica	Jersey	United Arab Emirates	
Portugal			Dominica	Liechtenstein		
Spain			Netherlands Antilles	Luxembourg		
United Kingdom			Panama	Malta		
United States			Saint Lucia	Switzerland		
			Saint Vincent and the Grenadines			

**Japan is not defined as a secrecy jurisdiction*

Chart 6 shows the regional distribution of private, non-resident deposits in June 2009, the most recent quarter for which data is available.

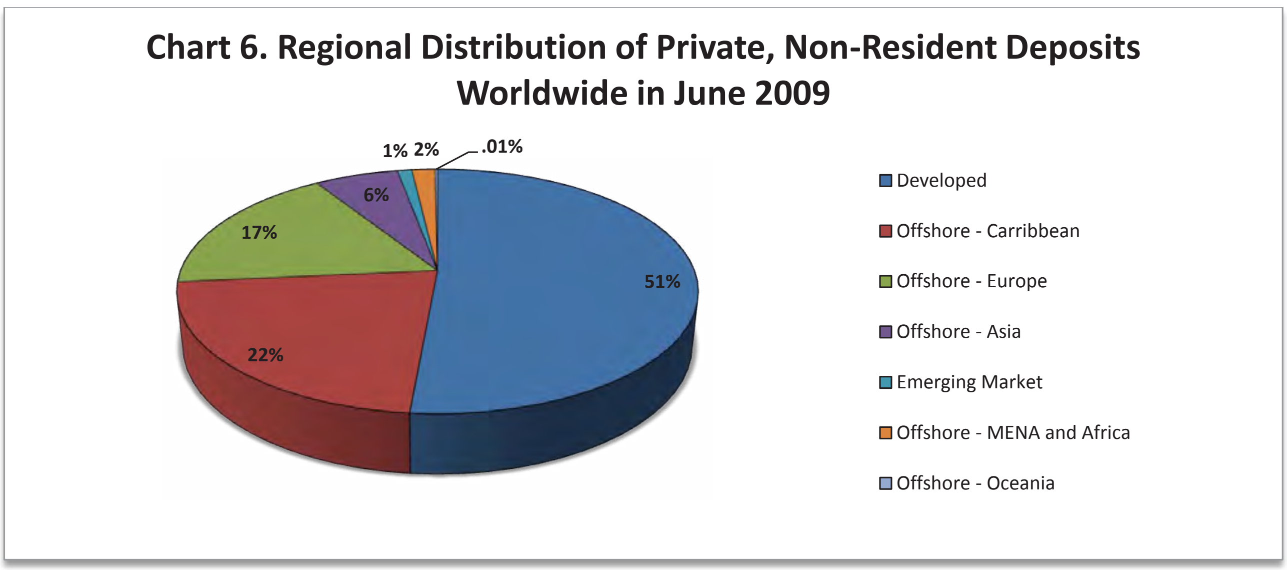
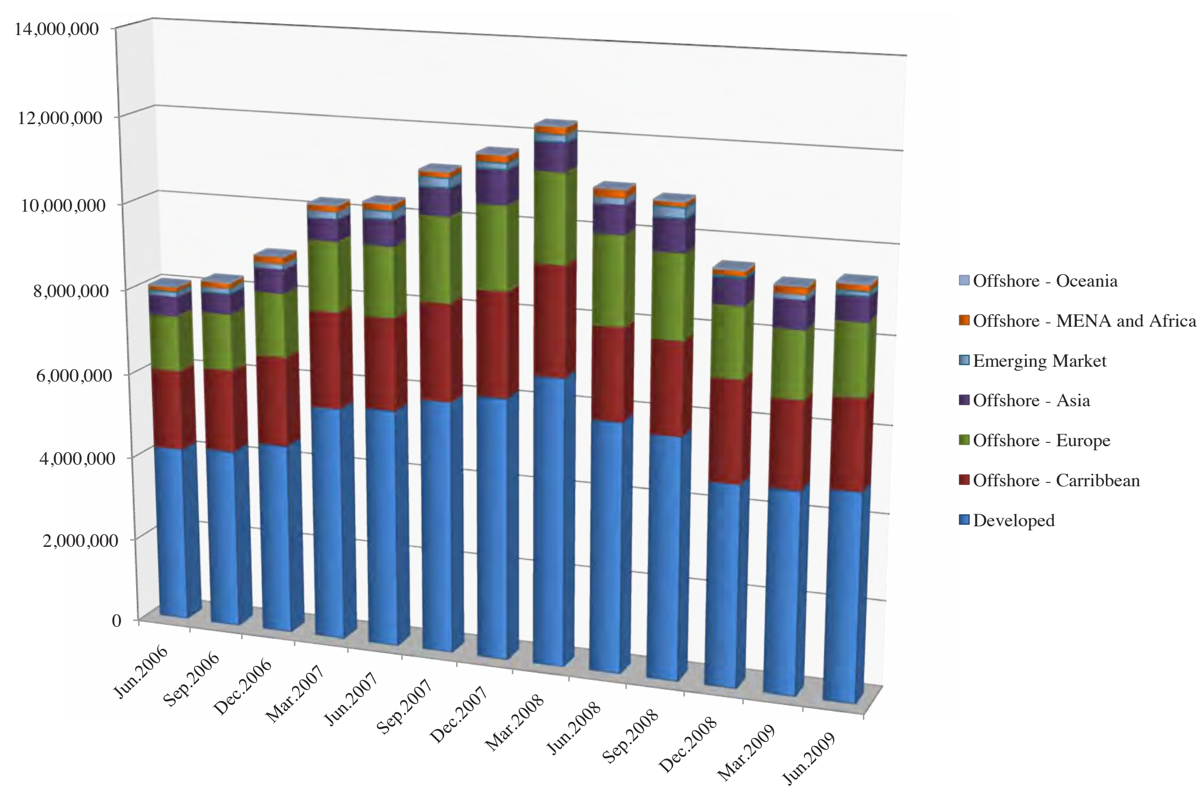


Chart 6 clearly shows that developed countries, including the United States and United Kingdom, dominated private, non-resident deposits in 2009. The Caribbean offshore category holds second place, a regional share driven by deposits into the Cayman Islands. The European offshore center category—including Switzerland, Luxembourg, Ireland, and Jersey—ranks a close third. As shown in Chart 7, this regional distribution has largely remained constant over the last three years.

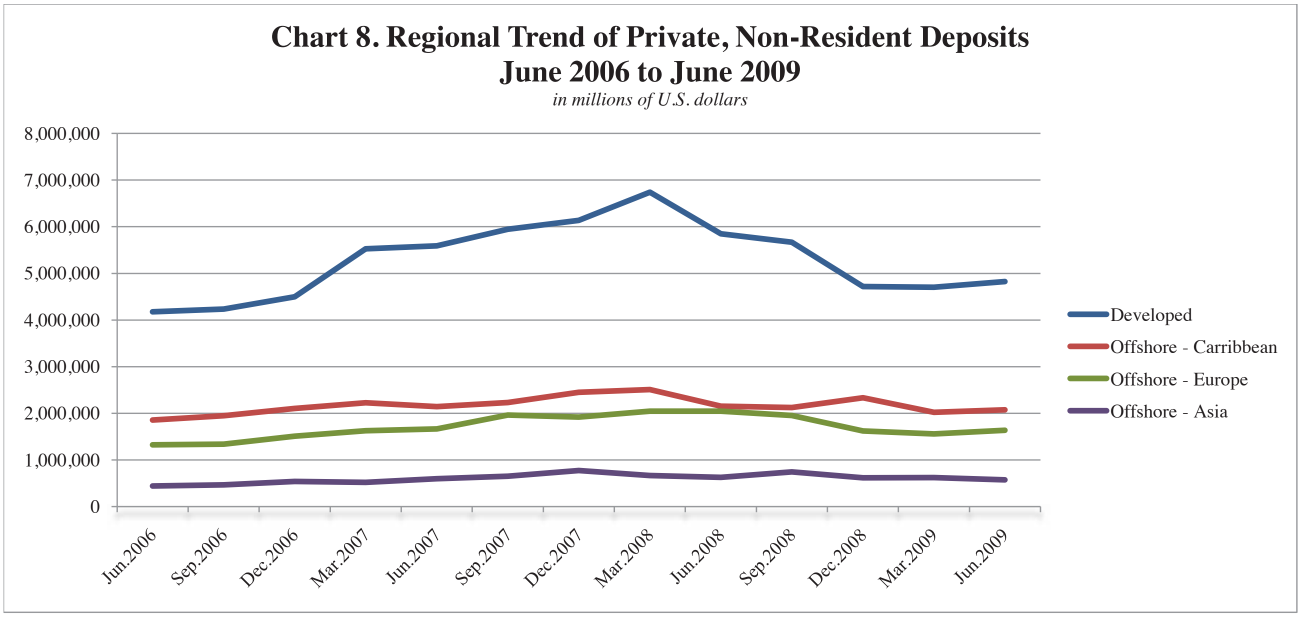
Chart 7. Regional Distribution of Private, Non-Resident Deposits

(in millions of U.S. dollars)



As discussed previously, total private deposits worldwide peaked in March 2008 with US$12.3 trillion in private, non-resident deposits, before dropping over US$1.3 trillion between March and June 2008. This decline can be in large part attributed to drops in the United Kingdom, the United States and the Cayman Islands, whose combined losses total slightly over US$1 trillion.

Many investors and economists believe there is a trend in offshore deposits toward Asian financial centers, such as Singapore, Taiwan, and Hong Kong. For example, Merrill Lynch/CapGemini Ernst & Young recently published the 2009 Asia-Pacific World Wealth Report, which notes that "wealthy Europeans are increasingly looking at Singapore and Hong Kong as offshore investment centers." The European Union Commission has also taken note; the Commission has recently declared it will focus on Asian jurisdictions in its efforts to target citizens with offshore savings (Forbes). While these centers may have gained in absolute terms, it is unlikely they are gaining a significant market share at the expense of traditional offshore centers and international financial centers. It is true, however, that the Asian centers did not experience as steep of a decline in offshore deposits during the financial crisis as that witnessed by the developed countries and European offshore centers (see Chart 8). As a result, Asian centers have increased their market share slightly from 5.4 percent in March 2008 to 6.1 percent in June of 2009.



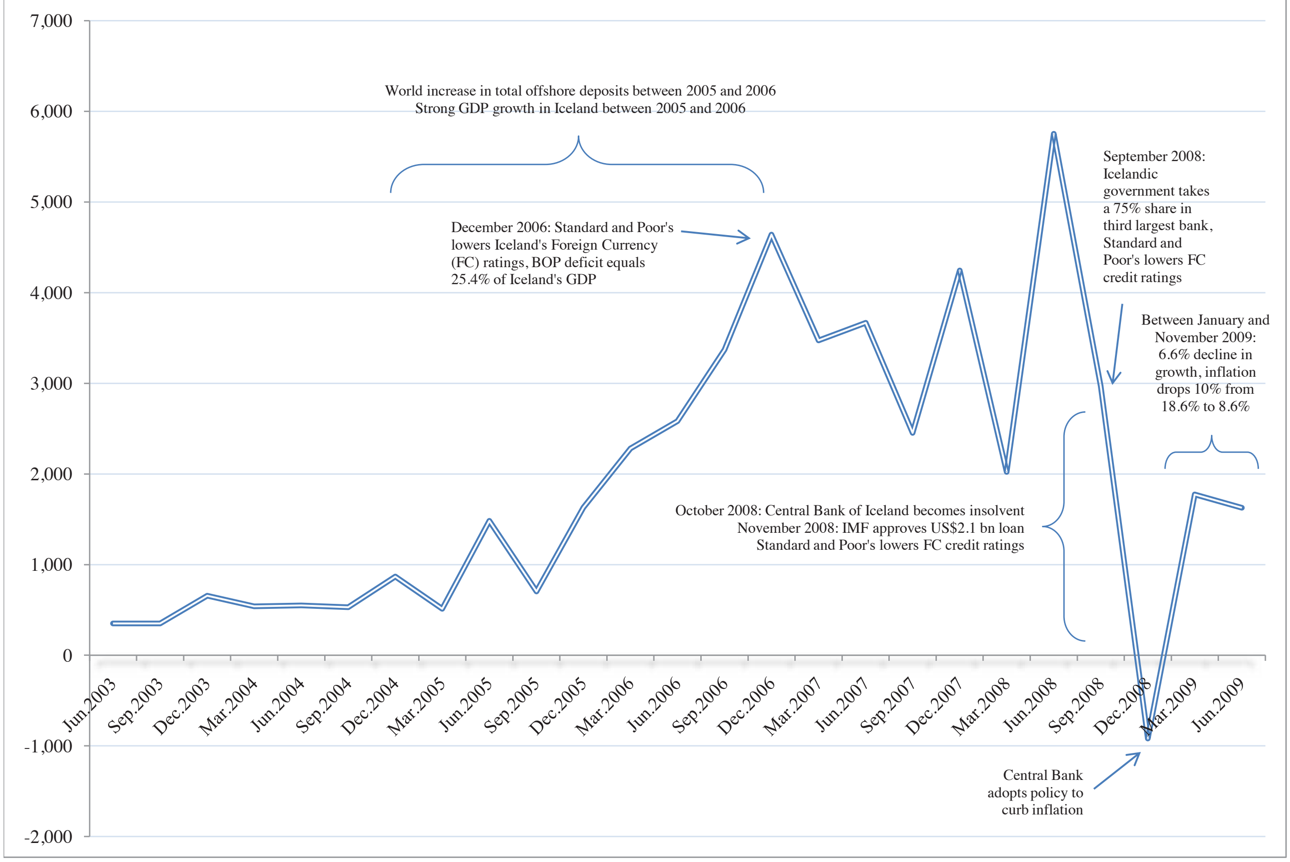
These data also provide an opportunity to understand how private, non-resident deposits behave in response to certain economic shocks, such as changes in the public's trust in a particular country's secrecy protections or in response to an economic crisis. The clear choices to use for such studies are Iceland, which over the last three years has suffered from one of the most severe financial crisis of any OECD member country, and Switzerland, which has maintained banking secrecy laws for decades, but recently faced significant scrutiny for the dealings of its largest bank, UBS.

Case studies: Iceland

In 1994 Iceland joined the European Economic Area (EEA). In accordance with EEA policies, Iceland adopted structural reforms that focused on liberalizing cross-border capital flows and privatizing state-owned businesses, which led to a period of high GDP growth and increased foreign investment. By 2004, foreign indebtedness among Icelandic banks had risen to 138 percent of GDP, up from 6 percent in 1995 (Central Bank of Iceland).

Chart 9. Private, Non-Resident Deposits in Iceland, 2003-2009

in millions of U.S. dollars



Despite these imbalances, the country continued to post strong GDP growth spurred by capital spending, high levels of consumption, and the country's reputation as a stable offshore financial center. Icelandic companies began acquiring UK companies at an annual rate that outpaced acquisitions over the previous forty years. A strong economy, proximity to European markets, and low corporate taxes provided incentives for many corporations to change their base of operations to Iceland. As a result, growth in private, non-resident deposits in Iceland between September 2005 and December 2006 averaged an astonishing 17 percent (see Chart 9).

Continued growth of Iceland's economy, however, led to macroeconomic imbalances. By December 2006, Iceland had the greatest balance of payment deficit as a share of GDP ever recorded by an OECD country, at 25.4 percent of GDP (Economist Intelligence Unit). In response to these macroeconomic imbalances, Standard and Poor's lowered Iceland's long- and short-term foreign currency sovereign credit ratings one level from AA- to A+, and from A-1+ to A-1, respectively. After this pronouncement, non-resident deposits in Iceland dropped over 33 percent between December 2006 and March 2007.

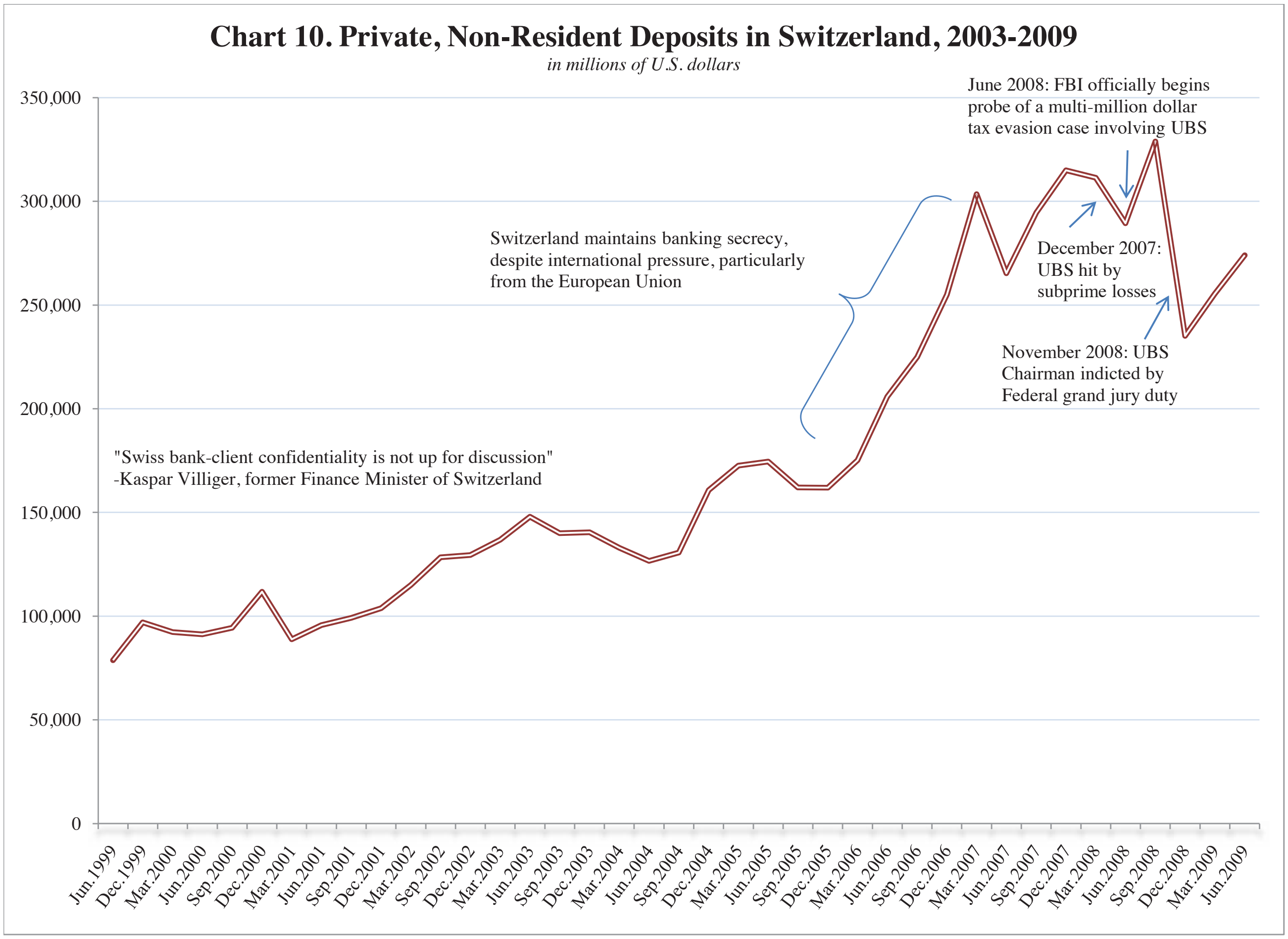
The situation came to a head in late 2008. Icelandic banks owed approximately six times the country's GDP in loans. With the entrance of the 2008 global financial crisis, capital dried up and Icelandic banks were unable to refinance their loans. In response to a liquidity crisis in September 2008, the government of Iceland took a 75 percent share in the country's third-largest bank and a month later the Central Bank of Iceland declared itself insolvent. In October 2008, media agencies covering the financial crisis in Iceland reported that depositors in Iceland may not recover all of their assets (BBC). In the two quarters between June and December 2008, private, non-resident deposits in Iceland dropped from US$5.8 billion to negative US $919 million. Deposits dropped below zero as a result of the coupled effect of massive withdrawals by alarmed depositors and exchange rate adjustments as the króna plummeted in value and trading on the foreign exchange market was suspended.

Using an IMF loan of US$2.1 billion, the central bank of Iceland adopted a financial stabilization plan in late October 2008. Under the plan, which Iceland implemented at the end of 2008, inflation fell 10 percent in 2009, dropping from 18.6 percent in January to 8.6 percent in November, indicating a stabilization of the financial system (EIU 2010). The króna also steadied on the foreign exchange market, and erratic drops against the Euro and dollar leveled out. This stabilization pulled Iceland's net private deposits above zero as exchange rate adjustments no longer exceeded total deposits.

Case studies: Switzerland

Switzerland experienced an erosion of public trust in its offshore market when Swiss banking secrecy came under question following a lawsuit and criminal charges against its largest bank, UBS. This country has been an internationally respected offshore financial center for decades. Switzerland's position as an OFC stems from the interwar period during the 1920s and 1930s, when the country's stable currency and neutrality attracted deposits. In 1934, after a Swiss banking office was raided and the identities of several depositors were made public, Switzerland passed a banking law which enforced secrecy and made revealing the identity of depositors illegal.

Switzerland's secrecy laws have traditionally made the country an appealing place for individuals to deposit funds to which they do not want to be linked, either because of the illegality of these deposits or to evade taxes. The Swiss have amended their secrecy laws over time to expose money laundering and criminal activity, but other governments' attempts to revise the law to reveal the identities of tax evading depositors in Switzerland, where tax evasion is not a criminal offense, have remained ineffective. As a result of these policies, between March 2001 and March 2008 deposits grew by 250 percent (see Chart 10).



In 2008, the tide began to change as Switzerland faced intense scrutiny as a result of the activities of its largest bank–UBS–which the U.S. accused of aiding American citizens in evading taxes. The role of UBS in tax evasion surfaced in June 2008 when a former employer of UBS revealed that the bank was complicit in billions of dollars worth of tax evasion. Later that month, the Federal Bureau of Investigation (FBI) formally requested of Switzerland the ability to conduct an investigation of UBS on Swiss soil. The FBI investigation came with a request from the U.S. Department of Justice in hand, designed to force UBS to hand over the names of American clients thought to have secret accounts in Switzerland. In November of that year, Raoul Weil, head of UBS' wealth management business, was charged with helping thousands of Americans hide US$20 billion of assets from tax authorities.

Facing the possibility of having their identities revealed, depositors began pulling their assets out of Switzerland. As a result, years of uninterrupted growth in deposits were reversed by a massive series of drops. Between September and December of 2008, the months that the UBS case was mired in uncertainty and the public spoke of the "end of Swiss bank secrecy," deposits fell by 28.5 percent. The situation stabilized in February 2009 when UBS, the Swiss government, and the U.S. finalized a settlement stating that UBS would hand to the IRS the names of 300 wealthy Americans who held secret accounts with the Swiss bank and pay US$780 million (Wall Street Journal). With the conditions calming, and the 2008 financial crisis coming to a close, non-resident deposits in Switzerland grew once again between March and June 2009. This may indicate that the response to the UBS case was temporary and will not have a lasting effect on Swiss banking. As the BIS releases future estimates of data, we will be able to track whether this hypothesis holds.

CONCLUSION

This paper shows that private, non-resident deposits, which are highly correlated with tax evading offshore deposits, grew at a compound annual rate of 9 percent (in real terms) between June 1996 and June 2009. This staggering growth rate has outstripped the compound annual growth in wealth, either when measured in GDP (3.86 percent) or when measured in real terms (adjusted for inflation) of wealth of the world's High Net-Worth Individuals (5.3 percent). This may be further evidence of a growing discrepancy between recorded and unrecorded wealth worldwide, as data show illicit financial flows from developing countries have been increasing markedly between 2002 and 2006. We also find that the top three offshore deposit holders are the United States, the United Kingdom, and the Cayman Islands. Furthermore, in both the United States and the United Kingdom, offshore deposits have a positive relationship with interest rates, which likely indicates they are pro-cyclical.

A lack of data limited the accuracy of this paper and prevented us from analyzing offshore deposits by country of origin. GFI recommends that the international community improve data collection by implementing the following changes. First, the BIS should publish the locational banking statistics vis-à-vis the non-bank, non-government sector (that is, private sector deposits) in the same manner it publishes the consolidated banking statistics. Were this data available, this paper would not have needed to create a proxy system to estimate the private share of total deposits and our analysis would have been more accurate.

Second, we recommend that the BIS further break down private non-resident deposits by country of origin. Specifically, a researcher should be able find the amount of holdings, for example, of Nigerian residents in Switzerland. These changes would drastically improve data on the offshore industry, helping researchers to better understand the market and would inform policy makers in decision making as they pursue tax evaders and improve collection. Without this data, researchers cannot estimate or understand the offshore industry with a high degree of accuracy and policy makers cannot make informed decisions on improved tax collection efforts.

The staggering growth of these deposits—a rate that is significantly higher than the growth rate of global wealth—is of concern, as it represents a trend toward opacity within the international banking system. This development, coupled with substantial data gaps and a lack of transparency in banking statistics among secrecy jurisdictions, is particularly worrying for researchers and policymakers. The combination of rapid growth and increased opacity is a dangerous combination, hampering tax collection efforts and, by extension, worsening budget deficits in developed and developing countries alike. Policy makers and researchers alike will require considerably enhanced data collection and reporting in order to effectively regulate offshore banking in the immediate years ahead.

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