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Western Hemisphere Department

How Might a Disorderly Resolution of Global Imbalances Affect Global Wealth?

Prepared by Francis E. Warnock[1]

Authorized for distribution by Tamim Bayoumi

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Abstract

Partly reflecting structural advantages such a liquidity and strong investor protection, foreigners have built up extremely large positions in U.S. (as well as other dollar-denominated) financial assets. This paper describes the impact on global wealth of an unanticipated shock to U.S. financial markets. For every 10 percent decline in the dollar, U.S. equity markets, and U.S. bond markets, total wealth losses to foreigners could amount to about 5 percentage points of foreign GDP. Four stylized facts emerge: (i) foreign countries, particularly emerging markets, are more exposed to U.S. bonds than U.S. equities; (ii) U.S. exposure has increased for most countries; (iii) on average, U.S. asset holdings of developed countries and emerging markets (scaled by GDP) are very similar; and (iv) based on their reserve positions, wealth losses of emerging market governments could, on average, amount to about 2¾ percentage points of their GDP.

JEL Classification Numbers: F31, F32, F34, F37

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Author(s) E-Mail Address: warnockf@darden.virginia.edu

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[1] Darden Business School (University of Virginia), the Institute for International Integration Studies IIIS, and National Bureau of Economic Research (NBER). The paper was written while the author was a consultant with IMF. The author thanks Tamim Bayoumi, Philip Lane, and Charlie Thomas for helpful comments.

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I. INTRODUCTION

The widening U.S. current account deficit and the associated large positions that foreigners are amassing in U.S. securities have garnered much attention from academics (Clarida, 2006), policymakers (Bernanke, 2005; IMF, 2005), practitioners, and the financial press (*Economist* 2005a, 2005b). There are many structural reasons for this accumulation of positions in U.S. securities. For portfolio equity investors, there are few countries in the world that protect the rights of outside investors more vigorously (Kho, Stulz, and Warnock, 2006). For fixed income investors, U.S. bond markets offer unparalleled depth and liquidity (Burger and Warnock, 2006). Notwithstanding the benefits, these large positions leave foreigners exposed to fluctuations in U.S. asset prices. In this paper I address this aspect of foreigners' U.S. positions by answering one narrow but interesting question: How could a rapid decline in U.S. financial market prices impact foreigners across a wide range of countries? Such a decline has been seen as a key risk associated with a "disorderly" unwinding of global imbalances, and it would appear important to see which countries and regions would be most affected.

Foreigners have accumulated large positions in U.S. bonds and equities—roughly $5 trillion by mid-2004—but there is considerable variation across countries. I trace out the composition of exposure to U.S. securities markets and investigate its potential implications by studying the impact on wealth (in dollar terms and as a share of investor-country GDP) of simultaneous negative shocks to U.S. financial markets. The particular scenario I study, which is supposed to capture the potential effect of a generalized negative shock to U.S. financial markets, is an unexpected 10 percent decrease in U.S. bond and equity prices as well as in the value of the U.S. dollar against other currencies.

Taking into account the currency composition of foreigners' U.S. holdings, I find that for every 10 percent drop in U.S. bond markets and in the exchange value of the dollar, foreigners' wealth losses would amount to 2.5 percentage points of foreign GDP. If, in addition, U.S. equity markets also declined by 10 percent, foreigners would incur another 1.5 percentage points of GDP in wealth losses. Thus, for every 10 percent decline in the dollar, U.S. equity markets, and U.S. bond markets, foreign wealth losses would amount to 4 percentage points of foreign GDP. Foreigners are also exposed through their positions in dollar-denominated bonds issued by foreign countries; bringing these holdings into the analysis puts the total wealth loss at nearly 5 percentage points of GDP.[2]

An investigation of the impact across more than 50 countries reveals that over the past decade, exposure to U.S. securities markets has increased (as a share of GDP) for almost every country in the sample. Moreover, while foreign countries, and especially emerging markets, are more exposed to U.S. bonds than to U.S. equities, on average the overall exposure of developed countries and emerging markets relative to GDP is very similar.

[2] Issuing dollar-denominated bonds, to the extent they are held by investors from other countries, reduces a country's exposure to dollar depreciation, in the sense that its liabilities are reduced. I focus instead on the exposure of portfolio assets.

Based solely on their reserves positions, I find that emerging market governments could lose wealth equivalent to about 2¾ percentage points of their GDP.

Because no single data source is appropriate for this study, I utilize two datasets. The first, analyzed in Section II, measures foreign holdings of U.S. securities as reported in the June 2004 comprehensive U.S. benchmark liabilities survey (U.S. Department of the Treasury and others, 2005). The U.S. benchmark liabilities data are of extremely high quality, as they are collected at the security-level and thoroughly checked and cross-checked. They also include, at the country level, the holdings of all foreigners, be they foreign official or private investors. However, as described in Griever, Lee, and Warnock (2001), liabilities are subject to a custodial center bias that owes to the use of third-country custodians. If, for example, a German resident holds a U.S. corporate bond through a custodian in Luxembourg, the U.S. survey will attribute the holdings to Luxembourg. This is due to the fact that the U.S. survey can see only the first foreign address, which will not necessarily coincide with the address of the ultimate holder.

The second data source, analyzed in Section III, is the IMF's December 2004 Coordinated Portfolio Investment Survey (CPIS). The CPIS data do not match the U.S. data in terms of overall quality—very few countries carry out the full-blown benchmark surveys that are necessary to accurately measure cross-border holdings. However, the CPIS compiles results from individual country's *asset* surveys, which should, by design, suffer less from the custodial center bias. Unfortunately, only 4 of 63 countries followed best practices in 2001, defined as conducting mandated surveys of both custodians and end users at both the security and, for cross-checking purposes, aggregate levels.[3] That said, the CPIS data are an enormously useful resource, particularly as more and more countries should follow best practices over time.

I utilize the CPIS data to compute implied U.S. liabilities (the amount of U.S. securities residents of each country are reported to own).[4] These CPIS-based implied liabilities are not directly comparable with the U.S. liabilities data for two reasons: CPIS data report foreign official positions only in aggregate, not at the country level, and not all countries submit data (China and Taiwan Province of China are two important omissions). But in broad terms the CPIS data can be used to supplement the analysis conducted using U.S. benchmark data.

The reader should note that I am not taking a position on whether the scenario I study—an unanticipated 10 percent decline in the dollar and prices of U.S. bonds and equities—is (or is not) likely to occur, or whether it is a realistic assessment of the asset market losses associated with a "disorderly" resolution of global imbalances. Rather, I am asking the question what the first-order ramifications on foreign wealth would be if it *were* to occur. One can obviously take issue with various aspects of this particular scenario, and software

[3] The countries that followed best practices as I have defined them were Hong Kong, SAR, Israel, Poland, and the United States. It is likely that other countries also submitted high-quality data.

[4] Lane and Milesi-Ferretti (2005) also use CPIS data to compute implied liabilities.

available on the author’s website makes it easy to study the consequences of different assumptions:[5]

- For example, it can be argued that a symmetric, broad-based decline in the dollar is highly unlikely, as exchange rates around the world are not uniformly flexible.

- Similarly, a simultaneous decline in the dollar and U.S. stock and bond markets may appear improbable (Gagnon, 2005). The United States is different from other countries, however. Foreigners have a sizable impact on U.S. bond markets (Warnock and Warnock, 2005), and a scenario in which foreigners exit their large U.S. bond positions could well produce a simultaneous increase in U.S. yields and a decline in the U.S. dollar.

- In addition, even a 20 percent fall in the value of dollar bonds and equities in foreign currency may be seen as a conservative view of the potential market consequences of a “disorderly” unwinding of global imbalances.

- Finally, the paper abstracts from any impact this scenario might have on foreign markets.[6]

II. Exposure to Long-term U.S. Securities

This section uses data from the June 2004 comprehensive benchmark survey of foreign holdings of U.S. securities (U.S. Department of the Treasury and others, 2005) to quantify foreign exposure to U.S. securities and estimate the impact of a sudden fall in U.S. asset values.[7] Survey data for 1994 and 2000 are utilized to depict how foreign exposure to the United States has evolved in recent years. Finally, the section incorporates data on foreign bonds denominated in dollars to ascertain foreigners’ dollar exposure through third countries.

A. Foreign Positions in U.S. Securities in 2004

As of June 2004, foreigners held an estimated $5.1 trillion in U.S. long-term securities (bonds of greater than one year in original maturity and equities; Table 1).[8] Foreigners are relatively more exposed to U.S. bonds ($3.2 trillion in holdings; 63 percent of total) than

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[5] All effects in this paper are linear, so the reader can scale my estimates to reflect any desired scenario. Detailed spreadsheets corresponding to all tables in this paper are available at *http://faculty.darden.virginia.edu/warnockf/research.htm*.

[6] Co-movements of major international markets are studied by Goetzmann, Li, and Rouwenhorst (2005) and Brooks and del Negro (2004, 2006), among others.

[7] I focus on long-term securities (that is, bonds and equities) and do not include other foreign investment such as foreign direct investment or banking positions.

[8] The sum of foreign holdings over all countries listed in Table 1 is equal to $5,056 billion. Total foreign holdings amount to $5,418 billion. The difference owes to the holdings of “Country Unknown” ($224 billion in holdings of bearer bonds by unknown foreigners), International Organizations ($53 billion), and $85 billion spread out over many small countries.

equities ($1.9 trillion). Bond holdings are spread out over securities issued by the Treasury ($1.4 trillion), U.S. agencies ($0.6 trillion), and U.S. corporations ($1.2 trillion).

The slant toward bonds owes importantly to large foreign official positions, given that foreign governments tend to hold neither equities nor corporate bonds. As seen at the bottom of Table 1, country-level holdings include a total of $1.32 trillion in foreign exchange reserves, 90 percent of which are in debt securities.[9] If we omit the one developed country with large foreign official positions (Japan), developed country holdings of equities and bonds are about equal. In contrast, the vast majority of holdings by emerging market economies is in bonds (77 percent for Latin America, and 97 percent for emerging Asia).

The largest bond positions are held by Japan ($736 billion), China ($320 billion), the financial centers of the Caribbean ($388 billion), Belgium ($285 billion), Luxembourg ($230 billion), and the United Kingdom ($221 billion). The largest equity positions are held by the United Kingdom ($250 billion), the Caribbean financial centers ($240 billion), and Canada ($210 billion). In nominal terms, Japan is the country by far the most exposed to U.S. long-term securities.

B. Impact of Declines in the Dollar and U.S. Asset Prices

The results of a simple exercise in which the dollar, U.S. equity prices, and U.S. bond prices all fall by 10 percent can be inferred from Table 1. The reader should note two things about such an exercise. First, it assumes that positions are not hedged against currency risk, and the estimates should therefore be considered an upper bound. Second, the impact of the dollar decline is mitigated by the fact that 23 percent of foreigners' holdings of U.S. agency bonds and U.S corporate bonds were denominated in foreign currencies as of 2004.

Based on these assumptions, the decline in the dollar and U.S. asset prices would reduce financial wealth outside the United States by a local currency value equivalent to about $1 trillion. Of this, about $250 billion would fall to losses on foreign exchange reserve positions. Japan stands to suffer the biggest nominal loss on account of its large bond holdings.

Table 2 relates the losses caused by the scenario to investors' home-country GDP.[10] Japan's wealth loss (estimated at about 4 percentage points of GDP) is still higher than the average for countries without a financial center, but does not appear exorbitant. Other nonfinancial center countries with large U.S. exposures and include Ireland (wealth losses of 14.5 percentage points of GDP); Taiwan Province of China and the Netherlands (8 percentage points); and Canada, Norway, and Sweden (5–6 percentage points).[11] China's

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[9] I cannot analyze country-level foreign official positions because country-level U.S. data on the positions of foreign governments are not publicly available.

[10] It would also be interesting to express the loss in terms of scale factors other than GDP. Scaling by financial wealth would appear most appropriate, but I do not have access to such data across a wide range of countries. For other purposes, one could also scale by the size of the trade balance.

[11] Ireland has elements of a financial center (see Lane and Ruane, 2006).

estimated wealth losses (4¼ percentage points of GDP) are comparable to Japan's, and the average exposures of emerging markets and developed countries are also quite similar. Aggregated over all countries, the loss to foreign wealth would amount to 4 percentage points of GDP, with 1.1 percentage points accruing to losses on reserves positions.

The simulated market shocks would also impact the United States, of course. At the end of 2004, U.S. investors owned roughly $12.7 trillion in U.S. securities.[12] An unexpected 10 percent decrease in equity and bond markets would reduce domestic wealth by $1.3 trillion (almost 11 percentage points of GDP). Partially offsetting this—under the unlikely assumption that foreign markets would not be affected by the shocks to U.S. financial markets—would be a $250 billion gain from the currency appreciation on $2.5 trillion worth in foreign equity holdings implying a net wealth loss of 9 percentage points of GDP.[13] U.S. holdings of foreign-currency-denominated bonds are equivalent to only 10 percent of foreign equity holdings, a negligible amount (Burger and Warnock, 2004).

C. Evolution of Exposure: 1994 to 2004

U.S. liabilities data are also available for earlier years, including 1994 and 2000. For those two years, the tables in Appendices I and II provide the same information as Tables 1–2 for the year 2004. That is, information on foreign holdings of U.S. securities in these two years has been used to simulate the impact of a simultaneous 10 percent decline in the dollar and U.S. equity and bond markets as it would have been then.

The changes in the exposure of foreign countries to U.S. assets between 1994 and 2004 are summarized in Table 3. Overall, foreigners increased their holdings of U.S. securities by $4 trillion over the ten-year period, with developed countries comprising roughly two-thirds of that increase and emerging markets the rest. Reserves positions increased by $1 trillion over the decade. By country, the emergence of Belgium and Luxembourg as major custodial centers is evident by their combined $628 billion increase in U.S. positions. In emerging markets, China's ascension as a major holder of U.S. securities is also evident (reflecting a $305 billion increase from its $18 billion position in 1994). In dollar terms, the largest increases are attributable to Japan ($668 billion) and the Caribbean financial centers ($536 billion).

The change in the potential impact of U.S. financial market shocks between 1994 and 2004 is shown in Figures 1 and 2 for developed countries and emerging markets, respectively. Each graph compares the wealth loss based on data for 2004 with the outcome based on 1994 exposures, scaled by the level of home-country GDP in the respective years. Figure 3

[12] These are the holdings of the U.S. Personal Sector, defined as households, nonfarm, noncorporate business, and farm business (Source: U.S. Federal Reserve, Flow of Funds Table L.10). Some foreign securities are included in the figure, so this should be considered an upper bound estimate.

[13] The increase in U.S. foreign assets, and concomitant improvement in the U.S. net foreign asset position, has been analyzed by Tille (2003). For evidence on the co-movements of major international markets, see Goetzmann, Li, and Rouwenhorst (2005) and Brooks and del Negro (2004, 2006).

includes the main outliers (Luxembourg, Hong Kong, SAR, Singapore, and Middle East oil exporters). The figures correspond to values in Tables 2 and B2.

Figure 1 shows that the exposure to U.S. security markets of almost every developed country has increased over the past decade; that is, almost every point lies above the 45 degree line. To take one country as an example, 10 percent declines in the dollar and U.S. bond and equity prices in 2004 would lead to wealth losses for Canadian investors of 6¼ percentage points of Canadian GDP, whereas in 1994—when Canadian positions were smaller relative to GDP—the impact on Canada's wealth would have been only 2 percentage points of GDP.

The evidence for emerging markets is similar (Figure 2). Almost every country has increased its exposure to U.S. security markets. For example, the simulated shocks would lead to wealth losses for Chinese investors (including the Chinese government) of over 4 percentage points of GDP, whereas in 1994 the impact would have been less than ¾ of a percentage point of GDP.

D. Exposure to Dollar Bonds Issued by Third Countries

The exercise is completed by quantifying foreigners' U.S. dollar exposure as a result of holding dollar-denominated bonds issued by third countries. Table 4 shows the amount of dollar-denominated bonds outstanding by the *country of issuer* as of December 2003. Unfortunately, I do not have data that would allow us to disentangle exposure by country of investor. However, Table 4 indicates that dollar-denominated bonds issued by non-U.S. entities account for about the outstanding $1.5 trillion, of which $0.5 trillion is held by U.S. investors.[14] The remaining $1 trillion can be added to the $3.2 trillion in foreign countries' exposure to U.S. bond markets (as depicted in Table 1). In the simulations, this implies that non-U.S. investors would take an additional $200 billion wealth loss if the price of dollar-denominated bonds and the dollar each fall by 10 percent.

III. ANOTHER VIEW OF EXPOSURE IN 2004: U.S. LIABILITIES IMPLIED BY CPIS DATA

In this section I turn to another prominent data source, the IMF's Coordinated Portfolio Investment Survey (CPIS) data.[15] After discussing important characteristics of the CPIS data, I present implied U.S. liabilities positions and utilize them to form a second set of estimates of the impact of a disorderly resolution of global imbalances.

A. CPIS Data

As noted in the introduction, the CPIS data differs from U.S. benchmark liabilities data along a number of dimensions. First, the CPIS is the IMF's compilation of *asset* surveys for the year 2004 contributed by 71 countries. For our purposes, this is a good attribute. Asset

[14] A broader study of country exposure might include both assets and liabilities. In such a study, the $464 billion in dollar bonds that foreigners have sold to U.S. residents would reduce exposure in that it would reduce the value of a country's liabilities.

[15] Recent work using the CPIS data include Lane (2006) and Lane and Milesi-Ferretti (2005).

surveys are more informative than liabilities surveys in that they should not suffer from a custodial center bias. However, because few countries actually conduct full-blown benchmark surveys to compile the data submitted to the IMF, the quality of CPIS data is largely unknown. Considering the substantial errors in early attempts to create bilateral U.S. positions—see Warnock (2001) revisiting of the well-cited Tesar and Werner (1995) results—there is reason to suspect that data errors might be substantial for countries that are measuring bilateral holdings for the first time and not following best practices.

Caveats aside, the CPIS data are an excellent new resource whose quality will surely improve over time. CPIS data can be used to compute implied U.S. liabilities by summing the amount of U.S. securities owned by residents and reported by each participating country. However, CPIS-based implied liabilities are not directly comparable with the U.S. liabilities data:

- Country-level CPIS data should include only the positions of private foreigners, given that foreign official positions are reported in aggregate and not on a country-level basis. In contrast, U.S. benchmark surveys include foreign official holdings with the holdings of private investors in the country-level data, but do not break them out separately at the country level. Thus, at the individual country level, CPIS data should include only private investors, while U.S. data will include both private and foreign officials.

- For most developed countries, the CPIS and U.S. data should be comparable since their international reserves are not large relative to residents' holdings, with Japan being the notable exception. Developing countries have larger reserves positions, almost exclusively in bonds. For these countries, CPIS-reported bond holdings can vary substantially from data reported by U.S. liabilities surveys.

CPIS data first became available as of the end of 1997. However, only 29 countries participated, so the 1997 data are not appropriate to construct implied liabilities. The next CPIS, in 2001, included 63 countries, and in 2004 the number increased to 71. In what follows I use only the December 2004 CPIS data and compare it to the June 2004 U.S. data.

B. CPIS Data: Implied U.S. Liabilities and Impact of U.S. Financial Market Shocks

The result of the CPIS exercise are presented in Table 5. I make one modification to the CPIS data since China and Taiwan Province of China, who had the second and third largest international reserves positions in 2004 (ECB, 2006), did not participate in the CPIS. I have added the estimated positions in U.S. securities ($562.1 billion) of these two countries to the "Reserves" amount for emerging markets.[16]

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[16] China's and Taiwan Province of China's positions were estimated as follows. At the end of 2004, according to ECB (2006) they had international reserves of $851.6 billion ($609.9 billion for China and $241.7 billion for Taiwan Province of China) and 66.0 percent of all countries' reserves were in dollar assets. Assuming China and Taiwan Province of China had a similar currency composition, and that all of their dollar reserves were in debt securities (although some are likely in bank deposits), I added 0.660 x $851.6 billion, or $562.1 billion, to the value of emerging market's reserves.

The total amount of positions derived from the CPIS data are remarkably similar to those in Table 1. Overall CPIS-reported foreign positions in U.S. securities amount to $4,875 billion as of December 2004, compared to $5,056 billion in Table 1 (as of June 2004). CPIS-reported reserves (with my additions of China and Taiwan POC) amount to $1.44 trillion, comparable to the $1.32 trillion reported in the U.S. data.[17] The country-level data are also comparable if one recalls that reserves are not included in the country-level data in Table 5. Notable exceptions are the Caribbean, where amounts reported by the CPIS are much smaller (as expected, since the CPIS does not suffer from such a severe custodial center bias), and Ireland, where CPIS amounts are surprisingly much greater than the U.S. data.[18]

The CPIS data allows us to separate out and focus on international reserves. Reserves are reported in the CPIS only in aggregate, but I have estimated the portions attributable to emerging markets and developed countries.[19] Based on my calculations, emerging markets hold $1,031 billion of the $1,444 billion in reserve positions in U.S. securities.

Not surprisingly, given that the CPIS and U.S. benchmark amounts are similar, the calculated impact on wealth of shocks to U.S. financial markets on the basis of CPIS data is of a similar magnitude. The loss in wealth amounts to less than $1 trillion in foreign currency terms or 3.9 percentage points of foreign GDP (Table 6).[20] A comparison of Tables 2 and 6 indicates that custodial center bias is largely absent from the CPIS data, although the impact on Luxembourg is still implausibly large, and Ireland's impact is actually larger using the CPIS data. Overall, the CPIS data confirm that foreign wealth would decrease by roughly 4 percentage points of foreign GDP in a simulation exercise using only their U.S. securities holdings. Adding holdings of third-country dollar-denominated bonds also brings the total amount to roughly 5 percentage points of GDP. Based just on their reserves positions, emerging market governments stand to lose wealth equivalent to 2.7 percentage points of GDP in such a scenario (Table 6).

IV. CONCLUSION

Using two complementary datasets, this paper documents foreign countries' exposure to U.S. securities markets. The analysis suggests that were we to witness a simultaneous, unexpected 10 percent decrease in the U.S. dollar, U.S. equity markets, and dollar-denominated bonds, foreigners would, in sum, lose roughly $1.2 trillion in foreign currency terms of financial wealth, an amount equivalent to almost 5 percentage points of non-U.S. GDP. I present four stylized facts concerning exposure to U.S. securities markets: (i) foreign countries,

[17] The difference likely owes to the 6-month separation in the survey dates.

[18] This could owe to Ireland including foreigners' sizeable positions through Irish unit trusts in their CPIS data, although presumably this would impact U.S. benchmark data as well.

[19] I calculate Japanese reserves as Japan's holdings of U.S. bonds from Table 1 less its holdings of U.S. bonds from Table 6. I then, using proportions from the IMF's reserves template, scale this up by 80 percent to get an estimate of developed countries' reserves positions in U.S. securities. Emerging markets' position are then calculated as a residual.

[20] Based on U.S. data (Table 1), I assume that 90.6 percent of foreigners' positions in U.S. bonds are dollar denominated.

particularly emerging markets, are more exposed to U.S. bonds than U.S. equities; (ii) over the past decade, U.S. exposure relative to GDP has increased significantly for most countries; (iii) on average, U.S. asset holdings of developed countries and emerging markets (scaled by GDP) are very similar; and (iv) based on their reserve positions, the wealth losses for emerging market governments could, on average, amount to 2¾ percentage points of GDP.

There are many useful extensions to this work. For example, scaling exposure by wealth instead of GDP is a worthwhile endeavor. Similarly, for certain purposes, one might want to scale by a country's trade balance. A more thorough analysis would include the impact of U.S. financial shocks on investment income streams, as a dollar depreciation would also impact dividends and coupon payments. Finally, folding into the analysis other types of positions—such as banking positions and foreign direct investment—could be worthwhile.

Table 1. Foreign Positions in U.S. Long-Term Securities, June 2004 1/

	Foreign Holdings of U.S. Long-term Securities (million U.S. dollars)						
	Total Holdings	Equities	Bonds				Share of Bonds (In percent)
			Total	Treasury	Agency	Corporate	
Developed countries	**3,443,553**	**1,416,156**	**2,027,397**	**843,511**	**303,814**	**880,072**	**59**
Euro Area	**1,367,630**	**526,284**	**841,346**	**155,645**	**140,917**	**544,784**	**62**
Austria	17,685	10,226	7,459	1,447	2,511	3,501	42
Belgium	302,679	18,089	284,590	13,979	48,959	221,652	94
Finland	7,486	4,505	2,981	876	505	1,600	40
France	102,330	61,627	40,703	14,305	1,753	24,645	40
Germany	182,773	75,551	107,222	42,108	20,508	44,606	59
Greece	2,256	1,237	1,019	742	29	248	45
Ireland	117,971	52,440	65,531	8,823	15,452	41,256	56
Italy	54,555	34,639	19,916	11,585	2,700	5,631	37
Luxumbourg	360,243	130,038	230,205	35,049	30,963	164,193	64
Netherlands	197,431	127,468	69,963	21,767	16,021	32,175	35
Portugal	4,946	2,436	2,510	1,206	602	702	51
Spain	17,275	8,028	9,247	3,758	914	4,575	54
Other Europe	**826,685**	**465,506**	**361,179**	**113,484**	**47,517**	**200,178**	**44**
Denmark	36,401	19,897	16,504	6,278	4,307	5,919	45
Iceland	815	640	175	42	57	76	21
Norway	57,549	28,569	28,980	14,709	3,497	10,774	50
Sweden	72,100	46,475	25,625	13,791	4,189	7,645	36
Switzerland	188,472	119,980	68,492	32,824	12,339	23,329	36
United Kingdom	471,348	249,945	221,403	45,840	23,128	152,435	47
Other developed	**1,249,238**	**424,366**	**824,872**	**574,382**	**115,380**	**135,110**	**66**
Australia	67,766	46,619	21,147	4,932	9,207	7,008	31
Canada	276,206	209,518	66,688	16,676	6,080	43,932	24
Japan	898,100	162,408	735,692	552,118	99,845	83,729	82
New Zealand	7,166	5,821	1,345	656	248	441	19
Emerging markets	**1,612,565**	**447,201**	**1,165,364**	**569,914**	**298,099**	**297,351**	**72**
Latin America	**87,922**	**20,311**	**67,611**	**50,515**	**7,319**	**9,777**	**77**
Argentina	6,807	2,418	4,389	1,623	1,298	1,468	64
Brazil	15,377	1,091	14,286	13,170	396	720	93
Chile	8,848	3,248	5,600	3,748	1,061	791	63
Colombia	6,668	778	5,890	3,637	1,061	1,192	88
Mexico	39,577	9,340	30,237	24,920	1,611	3,706	76
Peru	1,018	551	467	114	168	185	46
Venezuela	5,924	1,867	4,057	1,884	961	1,212	68
Uruguay	3,703	1,018	2,685	1,419	763	503	73
Emerging Asia	**566,038**	**15,806**	**550,232**	**328,142**	**192,707**	**29,383**	**97**
China	322,810	2,523	320,287	189,181	114,903	16,203	99
India	12,717	456	12,261	12,185	15	61	96
Indonesia	8,380	322	8,058	5,129	2,793	136	96
Korea	81,787	941	80,846	43,119	33,858	3,869	99
Malaysia	10,074	1,269	8,805	7,408	1,274	123	87
Pakistan	0	0	0	0	0	0	0
Philippines	5,190	919	4,271	3,143	839	289	82
Thailand	3,508	310	3,198	2,981	49	168	91
Taiwan POC	121,572	9,066	112,506	64,996	38,976	8,534	93
Financial centers	**807,427**	**333,778**	**473,649**	**144,143**	**80,296**	**249,210**	**59**
Hong Kong SAR	65,984	22,499	43,485	27,645	10,518	5,322	66
Singapore	113,703	71,536	42,167	24,667	4,615	12,885	37
Caribbean financial centers 2/	627,740	239,743	387,997	91,831	65,163	231,003	62
Emerging Europe	**29,766**	**952**	**28,814**	**20,029**	**8,295**	**490**	**97**
Czech	2,950	332	2,618	1,423	1,064	131	89
Hungary	959	72	887	491	108	288	92
Poland	8,431	153	8,278	7,438	820	20	98
Russia	8,706	213	8,493	2,186	6,289	18	98
Turkey	8,720	182	8,538	8,491	14	33	98
Other emerging	**121,412**	**76,354**	**45,058**	**27,085**	**9,482**	**8,491**	**37**
Israel	15,163	5,020	10,143	6,401	1,441	2,301	67
Morocco	0	0	0	0	0	0	
South Africa	2,192	1,917	275	150	22	103	13
African oil exporters 3/	1,301	768	533	333	159	41	41
Middle East oil exporters 4/	102,756	68,649	34,107	20,201	7,860	6,046	33
World	**5,056,118**	**1,863,357**	**3,192,761**	**1,413,425**	**601,913**	**1,177,423**	**63**
Of which: Reserves	1,320,000	134,000	1,186,000	923,000	216,000	47,000	90

Source: Author's calculations based on datasets described in the text.

1/ Aggregates include only those countries listed individually.
2/ Bahamas, Bermuda, British Virgin Islands, Cayman Islands, Netherlands Antilles, and Panama.
3/ Algeria, Gabon, Libya, and Nigeria.
4/ Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates.

Table 2. Impact on Wealth of Unanticipated Shocks, 2004 1/

(In percent of GDP)

	Impact on Foreign Holdings of U.S. Long-term Securities					
	Total Holdings	Equities	Bonds			
			Total	Treasury	Agency	Corporate
Developed countries	**-3.9**	**-1.7**	**-2.3**	**-1.0**	**-0.3**	**-0.9**
Euro Area	**-3.1**	**-1.3**	**-1.9**	**-0.4**	**-0.3**	**-1.2**
Austria	-1.3	-0.8	-0.5	-0.1	-0.2	-0.2
Belgium	-18.0	-1.2	-16.8	-0.9	-2.9	-13.0
Finland	-0.9	-0.6	-0.3	-0.1	-0.1	-0.2
France	-1.1	-0.7	-0.4	-0.2	0.0	-0.2
Germany	-1.5	-0.6	-0.8	-0.4	-0.2	-0.3
Greece	-0.3	-0.1	-0.1	-0.1	0.0	0.0
Ireland	-14.5	-6.8	-7.7	-1.1	-1.8	-4.8
Italy	-0.7	-0.5	-0.3	-0.2	0.0	-0.1
Luxumbourg	-255.3	-98.2	-157.2	-26.5	-20.7	-110.0
Netherlands	-7.5	-5.0	-2.5	-0.9	-0.6	-1.1
Portugal	-0.6	-0.3	-0.3	-0.2	-0.1	-0.1
Spain	-0.4	-0.2	-0.2	-0.1	0.0	-0.1
Other Europe	**-5.6**	**-3.3**	**-2.3**	**-0.8**	**-0.3**	**-1.2**
Denmark	-3.3	-1.9	-1.4	-0.6	-0.4	-0.5
Iceland	-1.5	-1.2	-0.3	-0.1	-0.1	-0.1
Norway	-5.1	-2.6	-2.5	-1.3	-0.3	-0.9
Sweden	-4.7	-3.1	-1.6	-0.9	-0.2	-0.4
Switzerland	-11.5	-7.5	-4.0	-2.1	-0.7	-1.3
United Kingdom	-5.0	-2.8	-2.2	-0.5	-0.2	-1.5
Other developed	**-4.2**	**-1.5**	**-2.8**	**-2.0**	**-0.4**	**-0.4**
Australia	-2.5	-1.8	-0.7	-0.2	-0.3	-0.2
Canada	-6.3	-4.9	-1.4	-0.4	-0.1	-0.9
Japan	-4.1	-0.8	-3.3	-2.6	-0.4	-0.3
New Zealand	-1.8	-1.5	-0.3	-0.2	-0.1	-0.1
Emerging markets	**-4.3**	**-1.2**	**-3.0**	**-1.6**	**-0.7**	**-0.7**
Latin America	**-1.1**	**-0.3**	**-0.8**	**-0.6**	**-0.1**	**-0.1**
Argentina	-1.0	-0.4	-0.6	-0.3	-0.2	-0.2
Brazil	-0.6	0.0	-0.6	-0.5	0.0	0.0
Chile	-2.4	-0.9	-1.5	-1.0	-0.3	-0.2
Colombia	-1.6	-0.2	-1.4	-0.9	-0.2	-0.3
Mexico	-1.2	-0.3	-0.9	-0.8	0.0	-0.1
Peru	-0.3	-0.2	-0.1	0.0	0.0	-0.1
Venezuela	-1.4	-0.4	-0.9	-0.5	-0.2	-0.3
Uruguay	-6.4	-1.8	-4.5	-2.5	-1.2	-0.8
Emerging Asia	**-3.1**	**-0.1**	**-3.0**	**-1.9**	**-1.0**	**-0.2**
China	-4.3	0.0	-4.3	-2.7	-1.4	-0.2
India	-0.4	0.0	-0.4	-0.4	0.0	0.0
Indonesia	-0.7	0.0	-0.6	-0.4	-0.2	0.0
Korea	-2.6	0.0	-2.5	-1.4	-1.0	-0.1
Malaysia	-1.9	-0.2	-1.7	-1.4	-0.2	0.0
Pakistan	0.0	0.0	0.0	0.0	0.0	0.0
Philippines	-1.3	-0.2	-1.0	-0.8	-0.2	-0.1
Thailand	-0.5	0.0	-0.4	-0.4	0.0	0.0
Taiwan POC	-8.1	-0.6	-7.5	-4.5	-2.4	-0.5
Financial centers	**-14.2**	**-7.6**	**-6.6**	**-11.6**	**-5.8**	**-17.9**
Hong Kong SAR	-8.3	-2.9	-5.4	-3.6	-1.2	-0.6
Singapore	-24.2	-15.5	-8.7	-5.3	-0.9	-2.5
Caribbean financial centers 2/	--	--	--	--	--	--
Emerging Europe	**-0.5**	**0.0**	**-0.5**	**-0.4**	**-0.1**	**0.0**
Czech	-0.6	-0.1	-0.5	-0.3	-0.2	0.0
Hungary	-0.2	0.0	-0.2	-0.1	0.0	-0.1
Poland	-0.8	0.0	-0.8	-0.7	-0.1	0.0
Russia	-0.4	0.0	-0.4	-0.1	-0.3	0.0
Turkey	-0.7	0.0	-0.7	-0.7	0.0	0.0
Other emerging	**-2.7**	**-1.7**	**-1.0**	**-0.6**	**-0.2**	**-0.2**
Israel	-2.7	-0.9	-1.8	-1.2	-0.2	-0.4
Morocco	0.0	0.0	0.0	0.0	0.0	0.0
South Africa	-0.3	-0.2	0.0	0.0	0.0	0.0
African oil exporters 3/	-0.2	-0.1	-0.1	0.0	0.0	0.0
Middle East oil exporters 4/	-4.6	-3.1	-1.5	-0.9	-0.3	-0.2
World	**-4.0**	**-1.5**	**-2.5**	**-1.2**	**-0.4**	**-0.9**
Of which: Reserves	-1.1	-0.1	-1.0	-0.8	-0.2	0.0

Source: Author's calculations based on datasets described in the text.

1/ The shock is based on a simultaneous and unanticipated 10 percent decline in the value of the dollar, 10 percent fall in equity prices, and 10 percent fall in bond prices. It is assumed that 77 percent of Agency and Corporate bond holdings are in U.S. dollars, with the rest in foreign currency. Aggregates include only those countries listed individually.
2/ Bahamas, Bermuda, British Virgin Islands, Cayman Islands, Netherlands Antilles, and Panama.
3/ Algeria, Gabon, Libya, and Nigeria.
4/ Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates.

Table 3. Change in Foreign Positions in U.S. Long-Term Securities, 1994–2004 1/

	Change in Foreign Holdings of U.S. Long-term Securities (million U.S. dollars)					
	Total Holdings	Equities	Bonds			
			Total	Treasury	Agency	Corporate
Developed countries	**2,701,919**	**1,117,414**	**1,584,505**	**549,027**	**241,625**	**793,853**
Euro Area	**1,166,817**	**453,070**	**713,747**	**61,548**	**129,559**	**522,640**
Austria	11,107	7,931	3,176	-863	1,895	2,144
Belgium	271,277	5,014	266,263	4,810	44,994	216,459
Finland	5,163	4,413	750	-296	-391	1,437
France	82,551	51,309	31,242	9,503	912	20,827
Germany	115,250	60,627	54,623	-3,984	18,529	40,078
Greece	1,428	829	599	362	26	211
Ireland	112,200	49,640	62,560	7,390	14,774	40,396
Italy	45,495	30,251	15,244	8,667	2,506	4,071
Luxumbourg	356,314	128,038	228,276	34,084	30,546	163,646
Netherlands	165,860	105,741	60,119	17,076	14,706	28,337
Portugal	3,840	2,318	1,522	500	386	636
Spain	-3,668	6,959	-10,627	-15,701	676	4,398
Other Europe	**586,643**	**328,204**	**258,439**	**52,060**	**36,107**	**170,272**
Denmark	33,243	18,168	15,075	5,636	3,883	5,556
Iceland	815	640	175	42	57	76
Norway	54,846	28,187	26,659	12,426	3,481	10,752
Sweden	65,287	43,030	22,257	10,806	3,971	7,480
Switzerland	130,987	80,020	50,967	22,603	11,832	16,532
United Kingdom	301,465	158,159	143,306	547	12,883	129,876
Other developed	**948,459**	**336,140**	**612,319**	**435,419**	**75,959**	**100,941**
Australia	57,365	39,655	17,710	2,138	9,065	6,507
Canada	218,040	163,060	54,980	9,022	5,590	40,368
Japan	667,888	128,604	539,284	424,434	61,089	53,761
New Zealand	5,166	4,821	345	-175	215	305
Emerging markets	**1,317,377**	**368,368**	**949,009**	**420,656**	**265,355**	**262,999**
Latin America	**69,733**	**14,647**	**55,086**	**40,330**	**6,581**	**8,175**
Argentina	2,764	1,504	1,260	-1,301	1,257	1,304
Brazil	14,237	247	13,990	13,066	313	611
Chile	7,432	2,815	4,617	2,966	1,021	630
Colombia	4,125	333	3,792	1,715	1,000	1,077
Mexico	33,679	7,462	26,217	21,824	1,300	3,093
Peru	795	378	417	98	153	166
Venezuela	2,998	890	2,108	543	774	791
Uruguay	3,703	1,018	2,685	1,419	763	503
Emerging Asia	**489,368**	**13,450**	**475,918**	**262,155**	**185,319**	**28,444**
China	304,629	2,388	302,241	171,937	114,415	15,889
India	11,698	167	11,531	11,504	12	15
Indonesia	6,465	174	6,291	3,376	2,789	126
Korea	76,039	796	75,243	38,595	32,968	3,680
Malaysia	4,365	1,136	3,229	1,901	1,271	57
Pakistan	0	0	0	0	0	0
Philippines	2,573	575	1,998	917	826	255
Thailand	-3,331	179	-3,510	-3,713	48	155
Taiwan POC	86,930	8,035	78,895	37,638	32,990	8,267
Financial centers	**659,941**	**283,371**	**376,570**	**93,908**	**60,226**	**222,436**
Hong Kong SAR	44,607	16,605	28,002	16,981	7,306	3,715
Singapore	79,613	63,402	16,211	3,939	2,123	10,149
Caribbean financial centers 2/	535,721	203,364	332,357	72,988	50,797	208,572
Emerging Europe	**25,764**	**763**	**25,001**	**16,321**	**8,261**	**419**
Czech	2,332	324	2,008	813	1,064	131
Hungary	829	55	774	379	108	287
Poland	5,496	119	5,377	4,582	820	-25
Russia	8,500	160	8,340	2,071	6,260	9
Turkey	8,607	105	8,502	8,476	9	17
Other emerging	**72,571**	**56,137**	**16,434**	**7,942**	**4,968**	**3,525**
Israel	11,404	3,874	7,530	5,054	1,166	1,310
Morocco	0	0	0	0	0	0
South Africa	2,110	1,846	264	145	19	100
African oil exporters 3/	1,301	768	533	333	159	41
Middle East oil exporters 4/	57,756	49,649	8,107	2,410	3,624	2,074
World	**4,019,296**	**1,485,782**	**2,533,514**	**969,682**	**506,980**	**1,056,852**
Of which: Reserves	1,011,000	101,000	910,000	663,000	205,000	42,000

Source: Author's calculations based on datasets described in the text.

1/ Aggregates include only those countries listed individually.
2/ Bahamas, Bermuda, British Virgin Islands, Cayman Islands, Netherlands Antilles, and Panama.
3/ Algeria, Gabon, Libya, and Nigeria.
4/ Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates.

Table 4. Stock of U.S. Dollar-Denominated Debt Issued by Foreign Entities, December 2003 1/

	Total Outstanding	Held by U.S. Investors	Held by Foreign Investors
Developed countries	**1,071,711**	**357,591**	**714,120**
Euro Area	**445,969**	**101,380**	**344,589**
Austria	25,969	3,185	22,784
Belgium	3,150	1,641	1,509
Finland	8,987	3,851	5,136
France	67,821	19,608	48,213
Germany	95,651	11,332	84,319
Greece	2,261	237	2,024
Ireland	15,844	3,316	12,528
Italy	47,831	10,301	37,530
Luxumbourg	31,359	11,377	19,982
Netherlands	127,713	35,090	92,623
Portugal	2,585	126	2,459
Spain	16,798	1,316	15,482
Other Europe	**342,235**	**121,328**	**220,907**
Denmark	6,771	1,760	5,011
Iceland	1,156	95	1,061
Norway	19,095	6,619	12,476
Sweden	22,305	6,177	16,128
Switzerland	3,054	532	2,522
United Kingdom	289,854	106,145	183,709
Other developed	**283,507**	**134,883**	**148,624**
Australia	85,882	22,609	63,273
Canada	159,489	108,249	51,240
Japan	34,603	2,488	32,115
New Zealand	3,533	1,537	1,996
Emerging markets	**447,401**	**106,487**	**340,914**
Latin America	**226,304**	**66,166**	**160,138**
Argentina	60,428	3,271	57,157
Brazil	73,000	17,925	55,075
Chile	12,399	7,507	4,892
Colombia	10,770	3,143	7,627
Mexico	46,451	26,211	20,240
Peru	5,012	2,912	2,100
Venezuela	14,837	4,666	10,171
Uruguay	3,407	531	2,876
Emerging Asia	**126,749**	**12,896**	**113,853**
China	9,682	632	9,050
India	3,390	181	3,209
Indonesia	2,995	480	2,515
Korea	46,315	3,888	42,427
Malaysia	18,115	3,717	14,398
Pakistan	0	0	0
Philippines	22,168	3,196	18,972
Thailand	5,114	652	4,462
Taiwan POC	18,970	150	18,820
Financial centers	**40,758**	**4,006**	**36,752**
Hong Kong SAR	25,797	1,301	24,496
Singapore	14,961	2,705	12,256
Caribbean financial centers 2/	0	0	0
Emerging Europe	**41,008**	**10,985**	**30,023**
Czech	700	10	690
Hungary	1,350	274	1,076
Poland	5,277	811	4,466
Russia	18,970	8,121	10,849
Turkey	14,711	1,769	12,942
Other emerging	**12,582**	**12,434**	**148**
Israel	8,439	11,121	-2,682
Morocco	0	0	0
South Africa	4,143	1,313	2,830
African oil exporters 3/	0	0	0
Middle East oil exporters 4/	0	0	0
World	**1,519,112**	**464,078**	**1,055,034**

Source: Author's calculations based on datasets described in the text.

1/ In million U.S. dollars. Aggregates include only those countries listed individually.
2/ Bahamas, Bermuda, British Virgin Islands, Cayman Islands, Netherlands Antilles, and Panama
3/ Algeria, Gabon, Libya, and Nigeria.
4/ Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates.

Table 5. CPIS-Reported Foreign Positions in U.S. Long-Term Securities, 2004 1/

(millions of U.S. dollars unless otherwise indicated)

	Total	Equities	Bonds	Share of Bonds (In percent)
Developed countries	**2,964,364**	**1,397,996**	**1,566,368**	**53**
Euro Area	**1,205,017**	**610,930**	**594,087**	**49**
Austria	23,025	8,865	14,160	62
Belgium	29,556	13,014	16,542	56
Finland	10,712	5,784	4,928	46
France	180,727	62,795	117,932	65
Germany	131,603	63,869	67,735	51
Greece	4,483	1,673	2,810	63
Ireland	172,616	91,809	80,807	47
Italy	98,293	35,233	63,060	64
Luxumbourg	250,273	144,168	106,105	42
Netherlands	254,239	171,583	82,656	33
Portugal	6,407	1,211	5,196	81
Spain	43,083	10,926	32,157	75
Other Europe	**780,665**	**372,273**	**408,392**	**52**
Denmark	35,946	17,490	18,456	51
Iceland	1,413	1,315	98	7
Norway	59,667	31,170	28,497	48
Sweden	74,061	53,887	20,174	27
Switzerland	96,354	54,902	41,452	43
United Kingdom	513,224	213,509	299,714	58
Other developed	**978,682**	**414,793**	**563,889**	**58**
Australia	83,132	64,071	19,061	23
Canada	201,768	166,758	35,010	17
Japan	681,979	176,190	505,789	74
New Zealand	11,803	7,775	4,028	34
Emerging markets	**362,268**	**73,341**	**288,927**	**80**
Latin America	**26,302**	**13,953**	**12,349**	**47**
Argentina	12,149	6,436	5,713	47
Brazil	1,111	837	274	25
Chile	4,674	4,232	442	9
Colombia	1,356	165	1,191	88
Mexico	3,530	2,186	1,344	38
Peru	0	0	0	0
Venezuela	2,944	19	2,925	99
Uruguay	539	78	461	85
Emerging Asia	**15,070**	**2,679**	**12,391**	**82**
China	--	--	--	--
India	0	0	0	0
Indonesia	198	1	197	100
Korea	12,560	2,417	10,143	81
Malaysia	478	92	385	81
Pakistan	0	0	0	0
Philippines	1,467	140	1,327	90
Thailand	367	28	339	92
Taiwan POC	--	--	--	--
Financial centers	**291,526**	**46,532**	**244,994**	**84**
Hong Kong SAR	55,867	12,737	43,130	77
Singapore	27,881	10,488	17,393	62
Caribbean financial centers 2/	207,778	23,307	184,471	89
Emerging Europe	**5,555**	**517**	**5,038**	**91**
Czech	847	218	629	74
Hungary	180	133	47	26
Poland	126	126	0	0
Russia	4,109	23	4,086	99
Turkey	293	17	276	94
Other emerging	**23,816**	**9,660**	**14,156**	**59**
Israel	10,524	2,977	7,547	72
Morocco	0	0	0	0
South Africa	6,549	5,885	664	10
African oil exporters 3/	--	--	--	--
Middle East oil exporters 4/	6,743	798	5,945	88
Other 5/	**103,023**	**22,792**	**80,230**	**78**
Reserves 6/	**1,444,939**	**0**	**1,444,939**	**100**
Developed Countries	413,825	0	413,825	100
Emerging Markets 6/	1,031,114	0	1,031,114	100
World	**4,874,593**	**1,494,129**	**3,380,464**	**69**

Source: Author's calculations based on IMF's *Coordinated Portfolio Investment Survey.*

1/ In million U.S. dollars. Aggregates include only those countries listed individually.
2/ Bahamas, Bermuda, British Virgin Islands, Cayman Islands, Netherlands Antilles, and Panama.
3/ Algeria, Gabon, Libya, and Nigeria.
4/ Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates.
5/ Other includes all CPIS participants that are not listed above.
6/ Includes author's estimates for China and Taiwan POC as described in footnote 16.

Table 6. CPIS Data: Impact on Wealth of Unanticipated Shocks, 2004 1/

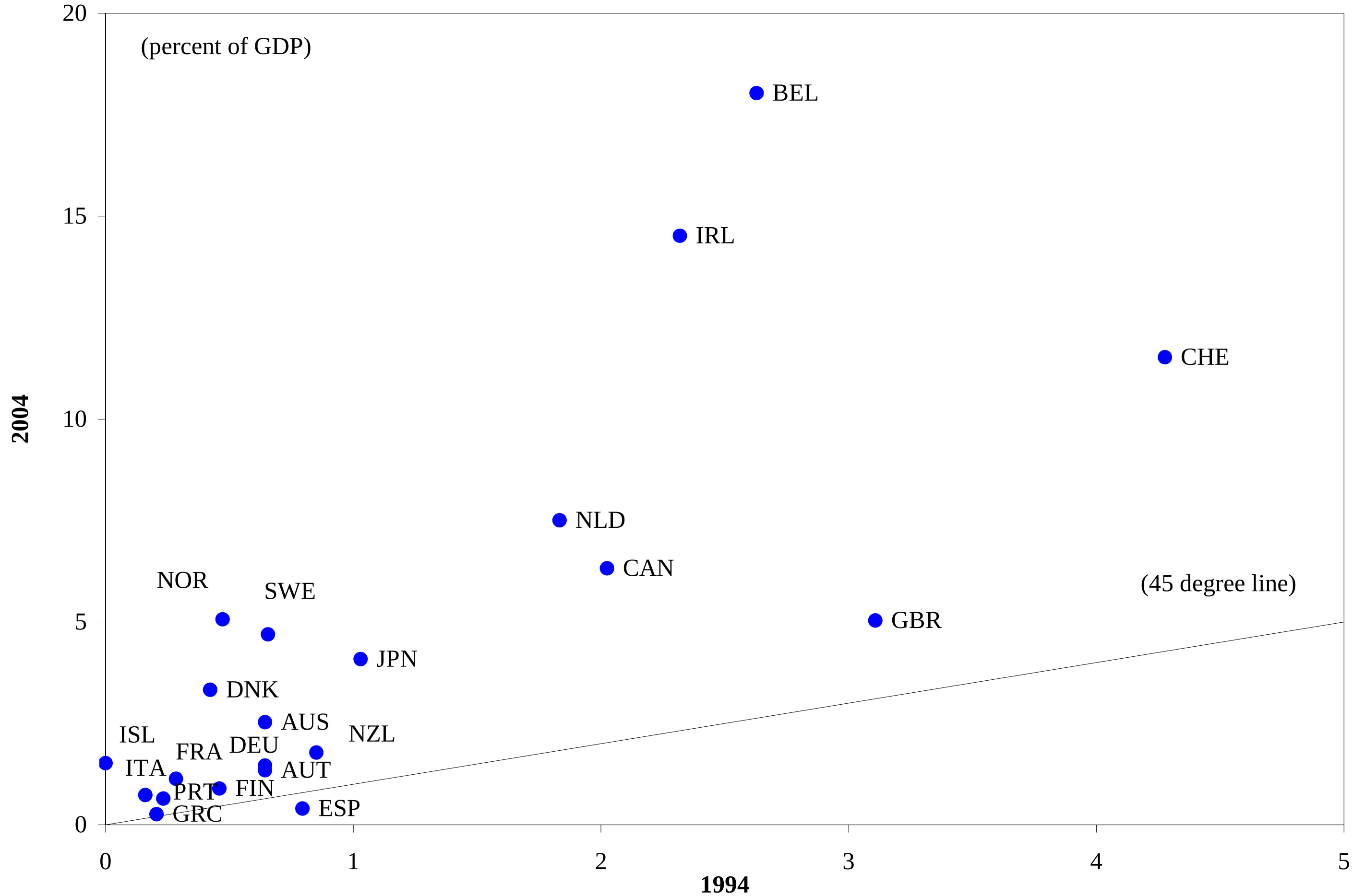
(In percent of GDP)

	Impact on Foreign Holdings of U.S. Long-term Securities		
	Total Holdings	**Equities**	**Bonds**
Developed countries	**-3.4**	**-1.7**	**-1.8**
Euro Area	**-2.9**	**-1.5**	**-1.4**
Austria	-1.8	-0.7	-1.1
Belgium	-1.9	-0.9	-1.0
Finland	-1.3	-0.7	-0.6
France	-2.0	-0.7	-1.3
Germany	-1.1	-0.5	-0.5
Greece	-0.5	-0.2	-0.3
Ireland	-22.0	-11.9	-10.0
Italy	-1.3	-0.5	-0.8
Luxumbourg	-185.1	-108.8	-76.3
Netherlands	-9.8	-6.7	-3.1
Portugal	-0.8	-0.2	-0.7
Spain	-1.0	-0.3	-0.7
Other Europe	**-5.3**	**-2.6**	**-2.7**
Denmark	-3.3	-1.7	-1.7
Iceland	-2.7	-2.5	-0.2
Norway	-5.3	-2.8	-2.5
Sweden	-4.8	-3.6	-1.3
Switzerland	-5.9	-3.4	-2.5
United Kingdom	-5.6	-2.4	-3.2
Other developed	**-3.3**	**-1.4**	**-1.9**
Australia	-3.1	-2.5	-0.7
Canada	-4.7	-3.9	-0.8
Japan	-3.1	-0.8	-2.2
New Zealand	-2.9	-2.0	-1.0
Emerging markets	**-1.0**	**-0.2**	**-0.8**
Latin America	**-0.3**	**-0.2**	**-0.1**
Argentina	-1.8	-1.0	-0.8
Brazil	0.0	0.0	0.0
Chile	-1.3	-1.2	-0.1
Colombia	-0.3	0.0	-0.3
Mexico	-0.1	-0.1	0.0
Peru	0.0	0.0	0.0
Venezuela	-0.7	0.0	-0.7
Uruguay	-0.9	-0.1	-0.8
Emerging Asia	**-0.1**	**0.0**	**-0.1**
China	--	--	--
India	0.0	0.0	0.0
Indonesia	0.0	0.0	0.0
Korea	-0.4	-0.1	-0.3
Malaysia	-0.1	0.0	-0.1
Pakistan	0.0	0.0	0.0
Philippines	-0.4	0.0	-0.3
Thailand	0.0	0.0	0.0
Taiwan POC	--	--	--
Financial centers	**-6.5**	**-1.9**	**-4.7**
Hong Kong SAR	-6.9	-1.6	-5.3
Singapore	-5.9	-2.3	-3.6
Caribbean financial centers 2/	--	--	--
Emerging Europe	**-0.1**	**0.0**	**-0.1**
Czech	-0.2	0.0	-0.1
Hungary	0.0	0.0	0.0
Poland	0.0	0.0 .	
Russia	-0.2	0.0	-0.2
Turkey	0.0	0.0	0.0
Other emerging	**-0.5**	**-0.2**	**-0.3**
Israel	-1.8	-0.5	-1.3
Morocco	0.0	0.0	0.0
South Africa	-0.8	-0.7	-0.1
African oil exporters 3/	--	--	--
Middle East oil exporters 4/	-0.3	0.0	-0.3
Other 5/	--	--	--
Reserves 6/	**-1.1**	**0.0**	**-1.1**
Developed Countries	-0.5	0.0	-0.5
Emerging Markets 6/	-2.7	0.0	-2.7
World	**-3.9**	**-1.2**	**-2.7**

Source: Author's calculations based on IMF's *Coordinated Portfolio Investment Survey*.

1/ The shock is based on a simultaneous and unanticipated 10 percent decline in the value of the dollar, 10 percent fall in equity prices, and 10 percent fall in bond prices. It is assumed that all equity holdings and 90.6 percent of bond holdings are in U.S. dollars, with the rest in foreign currency. Aggregates include only those countries listed individually.
2/ Bahamas, Bermuda, British Virgin Islands, Cayman Islands, Netherlands Antilles, and Panama.
3/ Algeria, Gabon, Libya, and Nigeria.
4/ Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates.
5/ Other includes all CPIS participants that are not listed above.
6/ Includes author's estimates for China and Taiwan POC as described in footnote 16.

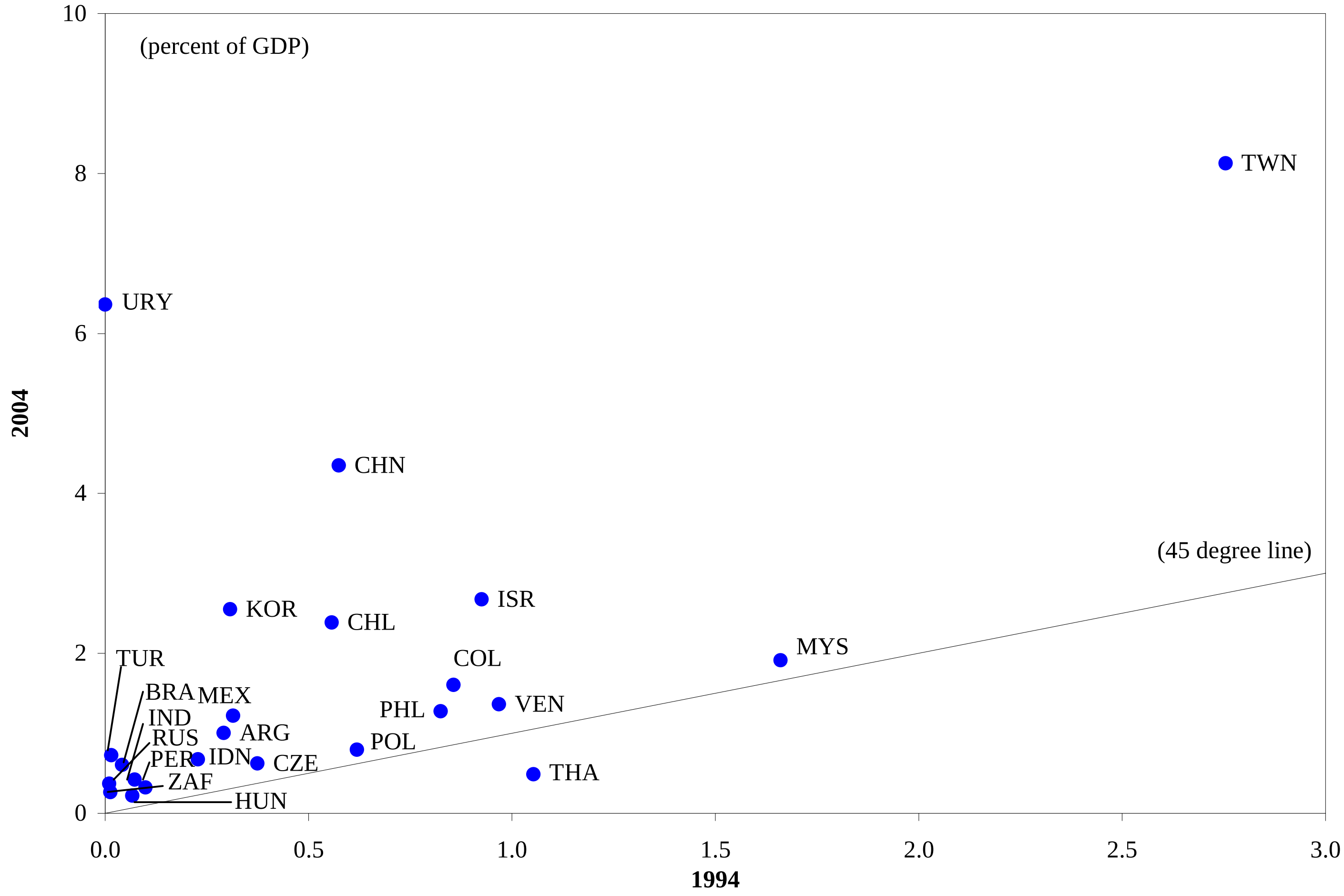
Figure 1. The Impact on Wealth of Shocks to U.S. Financial Markets on Developed Countries 1/



Source: Author's calculations based on datasets described in the text.

1/ The figures show the estimated effects of a simultaneous and unanticipated 10 percent decline in the value of the dollar, 10 percent fall in equity prices, and 10 percent fall in bond prices in 1994 and 2004. For example, the occurrence of such a scenario in 2004 would have led to losses of 6.3 percent of GDP for Canadian investors; the impact in 1994 would have been 2.0 percent of GDP. Data points above the 45 degree line indicate that exposure to the United States has increased over time.

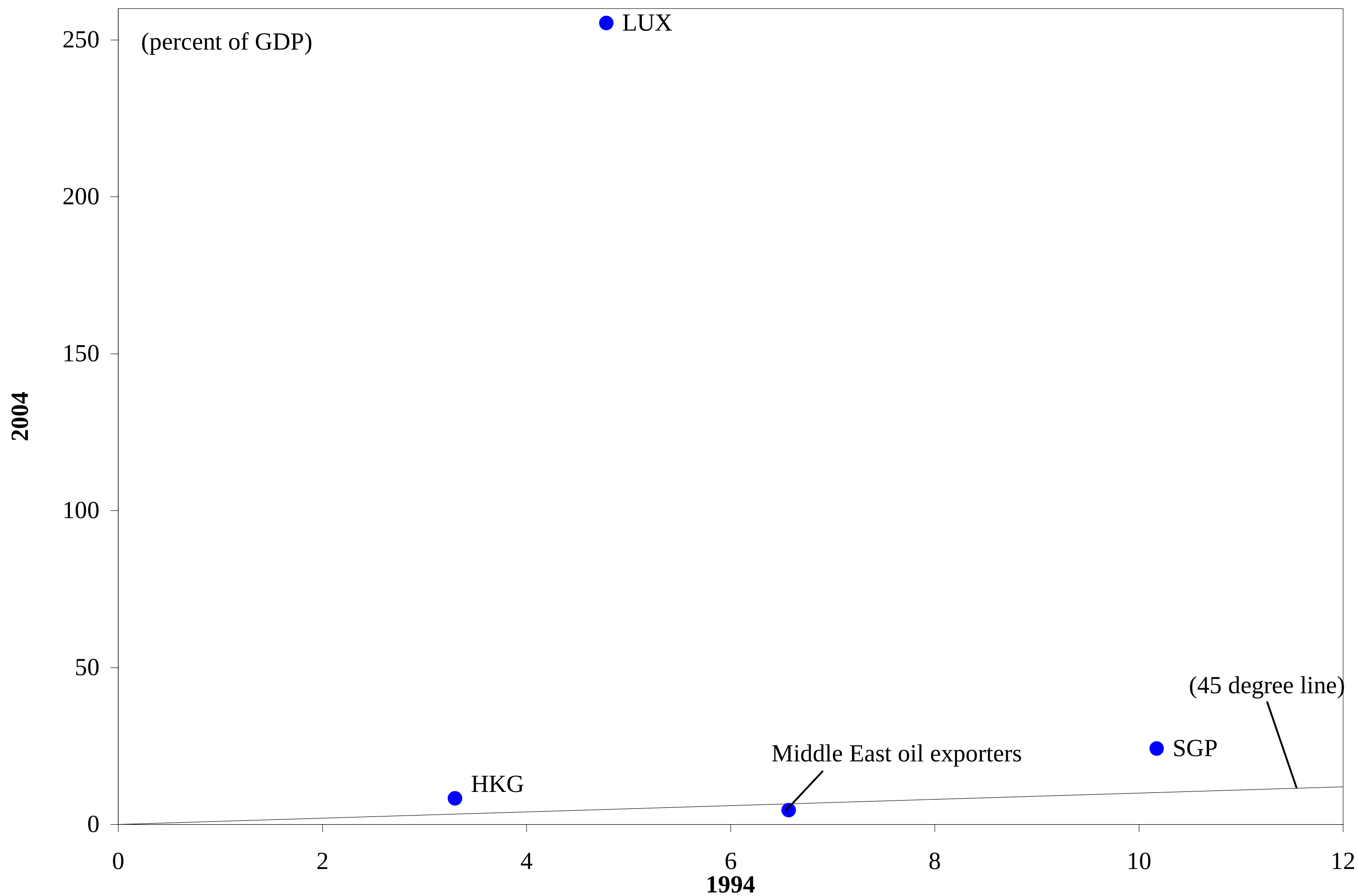
Figure 2. The Impact on Wealth of Shocks to U.S. Financial Markets on Emerging Markets 1/



Source: Author's calculations based on datasets described in the text.

1/ The figures show the estimated effects of a simultaneous and unanticipated 10 percent decline in the value of the dollar, 10 percent fall in equity prices, and 10 percent fall in bond prices in 1994 and 2004. For example, the occurrence of such a scenario in 2004 would have led to losses of 4.3 percent of GDP for Chinese investors; the impact in 1994 would have been 0.6 percent of GDP. Data points above the 45 degree line indicate that exposure to the United States has increased over time.

Figure 3. The Impact on Wealth of Shocks to U.S. Financial Markets on Financial Centers and Middle East Oil Exporters 1/



Source: Author's calculations based on datasets described in the text.

1/ The figures show the estimated effects of a simultaneous and unanticipated 10 percent decline in the value of the dollar, 10 percent fall in equity prices, and 10 percent fall in bond prices in 1994 and 2004. For example, the occurrence of such a scenario in 2004 would have led to losses of 24.2 percent of GDP for Singaporean investors; the impact in 1994 would have been 10.2 percent of GDP. Data points above the 45 degree line indicate that exposure to the United States has increased over time.

Table A1. Foreign Positions in U.S. Long-Term Securities, March 2000 1/

	Foreign Holdings of U.S. Long-term Securities (million U.S. dollars)						Share of Bonds (In percent)
	Total Holdings	Equities	Bonds				
			Total	Treasury	Agency	Corporate	
Developed countries	**2,220,560**	**1,311,486**	**909,074**	**493,687**	**133,619**	**281,768**	**41**
Euro Area	**760,435**	**454,251**	**306,184**	**149,089**	**41,853**	**115,242**	**40**
Austria	15,419	7,860	7,559	4,359	1,984	1,216	49
Belgium	61,264	27,716	33,548	7,151	3,923	22,474	55
Finland	4,038	2,128	1,910	1,308	174	428	47
France	74,958	52,954	22,004	10,320	1,609	10,075	29
Germany	206,787	109,110	97,677	54,990	8,050	34,637	47
Greece	2,976	1,383	1,593	1,395	107	91	54
Ireland	47,403	28,106	19,297	5,474	4,907	8,916	41
Italy	61,055	38,148	22,907	18,551	1,920	2,436	38
Luxumbourg	107,341	69,021	38,320	13,779	4,030	20,511	36
Netherlands	139,568	106,078	33,490	12,723	9,765	11,002	24
Portugal	3,721	1,524	2,197	1,062	292	843	59
Spain	35,905	10,223	25,682	17,977	5,092	2,613	72
Other Europe	**787,630**	**517,054**	**270,576**	**102,592**	**39,091**	**128,893**	**34**
Denmark	17,725	13,482	4,243	2,478	891	874	24
Iceland	546	526	20	6	4	10	
Norway	9,196	6,918	2,278	1,925	103	250	25
Sweden	39,059	26,933	12,126	7,119	2,922	2,085	31
Switzerland	187,372	147,709	39,663	17,656	5,204	16,803	21
United Kingdom	533,732	321,486	212,246	73,408	29,967	108,871	40
Other developed	**672,495**	**340,181**	**332,314**	**242,006**	**52,675**	**37,633**	**49**
Australia	28,145	20,087	8,058	4,603	1,308	2,147	29
Canada	209,439	173,739	35,700	14,133	8,641	12,926	17
Japan	430,589	144,468	286,121	221,246	42,646	22,229	66
New Zealand	4,322	1,887	2,435	2,024	80	331	56
Emerging markets	**899,372**	**316,092**	**583,280**	**344,064**	**108,444**	**130,772**	**65**
Latin America	**56,391**	**13,384**	**43,007**	**30,818**	**9,612**	**2,577**	**76**
Argentina	10,348	2,398	7,950	5,795	1,643	512	77
Brazil	9,503	1,634	7,869	7,377	194	298	83
Chile	4,787	1,262	3,525	3,126	158	241	74
Colombia	5,085	921	4,164	3,328	397	439	82
Mexico	16,061	3,279	12,782	7,627	4,782	373	80
Peru	325	262	63	12	30	21	19
Venezuela	7,162	2,489	4,673	2,366	1,904	403	65
Uruguay	3,120	1,139	1,981	1,187	504	290	
Emerging Asia	**217,741**	**11,847**	**205,894**	**163,895**	**40,516**	**1,483**	**95**
China	92,231	1,398	90,833	71,056	19,622	155	98
India	4,005	644	3,361	3,304	5	52	84
Indonesia	10,021	519	9,502	8,959	13	530	95
Korea	39,068	580	38,488	23,772	14,618	98	99
Malaysia	3,012	510	2,502	2,398	2	102	83
Pakistan	286	272	14	8	3	3	
Philippines	5,630	912	4,718	3,043	1,537	138	84
Thailand	11,424	427	10,997	10,974	9	14	96
Taiwan POC	52,064	6,585	45,479	40,381	4,707	391	87
Financial centers	**510,821**	**233,464**	**277,357**	**109,183**	**47,101**	**121,073**	**54**
Hong Kong SAR	76,282	18,312	57,970	38,160	17,691	2,119	76
Singapore	82,207	37,341	44,866	34,194	4,594	6,078	55
Caribbean financial centers 2/	352,332	177,811	174,521	36,829	24,816	112,876	50
Emerging Europe	**21,470**	**1,730**	**19,740**	**14,384**	**5,326**	**30**	**92**
Czech	199	127	72	44	18	10	36
Hungary	973	125	848	500	345	3	87
Poland	11,279	93	11,186	9,725	1,457	4	99
Russia	7,146	336	6,810	3,298	3,502	10	95
Turkey	1,873	1,049	824	817	4	3	44
Other emerging	**92,949**	**55,667**	**37,282**	**25,784**	**5,889**	**5,609**	**40**
Israel	12,383	4,556	7,827	5,589	1,179	1,059	63
Morocco	0	0	0	0	0	0	
South Africa	8,704	8,083	621	487	16	118	7
African oil exporters 3/	510	474	36	2	2	32	
Middle East oil exporters 4/	71,352	42,554	28,798	19,706	4,692	4,400	40
World	**3,119,932**	**1,627,578**	**1,492,354**	**837,751**	**242,063**	**412,540**	**48**
Of which: Reserves	691,000	96,000	595,000	492,000	91,000	12,000	86

Source: Author's calculations based on datasets described in the text.

1/ Aggregates include only those countries listed individually.
2/ Bahamas, Bermuda, British Virgin Islands, Cayman Islands, Netherlands Antilles, and Panama.
3/ Algeria, Gabon, Libya, and Nigeria.
4/ Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates.

Table A2. Impact on Wealth of Unanticipated Shocks, 2000 1/

(In percent of GDP)

	Impact on Foreign Holdings of U.S. Long-term Securities					
	Total Holdings	Equities	Bonds			
			Total	Treasury	Agency	Corporate
Developed countries	**-3.0**	**-1.8**	**-1.2**	**-0.7**	**-0.2**	**-0.3**
Euro Area	**-2.3**	**-1.4**	**-0.9**	**-0.5**	**-0.1**	**-0.3**
Austria	-1.5	-0.8	-0.7	-0.4	-0.2	-0.1
Belgium	-4.6	-2.2	-2.4	-0.6	-0.3	-1.6
Finland	-0.6	-0.3	-0.3	-0.2	0.0	-0.1
France	-1.0	-0.7	-0.3	-0.1	0.0	-0.1
Germany	-2.0	-1.1	-0.9	-0.5	-0.1	-0.3
Greece	-0.5	-0.2	-0.2	-0.2	0.0	0.0
Ireland	-10.7	-6.5	-4.1	-1.3	-1.0	-1.8
Italy	-1.0	-0.7	-0.4	-0.3	0.0	0.0
Luxumbourg	-113.4	-74.9	-38.6	-14.9	-3.9	-19.7
Netherlands	-6.9	-5.3	-1.6	-0.6	-0.4	-0.5
Portugal	-0.6	-0.3	-0.4	-0.2	0.0	-0.1
Spain	-1.2	-0.3	-0.8	-0.6	-0.2	-0.1
Other Europe	**-6.7**	**-4.5**	**-2.2**	**-0.9**	**-0.3**	**-1.0**
Denmark	-2.0	-1.6	-0.5	-0.3	-0.1	-0.1
Iceland	-1.3	-1.2	0.0	0.0	0.0	0.0
Norway	-1.2	-0.9	-0.3	-0.2	0.0	0.0
Sweden	-3.2	-2.2	-1.0	-0.6	-0.2	-0.2
Switzerland	-13.5	-10.8	-2.7	-1.3	-0.3	-1.1
United Kingdom	-7.1	-4.4	-2.7	-1.0	-0.4	-1.3
Other developed	**-2.4**	**-1.2**	**-1.1**	**-0.9**	**-0.2**	**-0.1**
Australia	-1.4	-1.0	-0.4	-0.2	-0.1	-0.1
Canada	-6.4	-5.3	-1.0	-0.4	-0.2	-0.4
Japan	-1.9	-0.6	-1.2	-1.0	-0.2	-0.1
New Zealand	-1.7	-0.8	-1.0	-0.8	0.0	-0.1
Emerging markets	**-3.0**	**-1.1**	**-1.9**	**-1.2**	**-0.3**	**-0.4**
Latin America	**-0.6**	**-0.2**	**-0.5**	**-0.4**	**-0.1**	**0.0**
Argentina	-0.7	-0.2	-0.6	-0.4	-0.1	0.0
Brazil	-0.3	-0.1	-0.3	-0.2	0.0	0.0
Chile	-1.4	-0.4	-1.0	-0.9	0.0	-0.1
Colombia	-1.2	-0.2	-1.0	-0.8	-0.1	-0.1
Mexico	-0.6	-0.1	-0.5	-0.3	-0.2	0.0
Peru	-0.1	-0.1	0.0	0.0	0.0	0.0
Venezuela	-1.3	-0.5	-0.8	-0.5	-0.3	-0.1
Uruguay	-3.0	-1.1	-1.9	-1.2	-0.4	-0.3
Emerging Asia	**-1.6**	**-0.1**	**-1.5**	**-1.2**	**-0.3**	**0.0**
China	-1.7	0.0	-1.7	-1.3	-0.3	0.0
India	-0.2	0.0	-0.1	-0.1	0.0	0.0
Indonesia	-1.7	-0.1	-1.6	-1.5	0.0	-0.1
Korea	-1.8	0.0	-1.7	-1.1	-0.6	0.0
Malaysia	-0.8	-0.1	-0.6	-0.6	0.0	0.0
Pakistan						
Philippines	-1.4	-0.2	-1.1	-0.8	-0.3	0.0
Thailand	-1.9	-0.1	-1.8	-1.8	0.0	0.0
Taiwan POC	-3.8	-0.5	-3.3	-3.0	-0.3	0.0
Financial centers	**-35.7**	**-16.9**	**-18.8**	**-7.9**	**-3.0**	**-7.8**
Hong Kong SAR	-8.4	-2.1	-6.3	-4.3	-1.8	-0.2
Singapore	-16.3	-7.5	-8.8	-6.9	-0.8	-1.1
Caribbean financial centers 2/						
Emerging Europe	**-0.6**	**0.0**	**-0.5**	**-0.4**	**-0.1**	**0.0**
Czech	-0.1	0.0	0.0	0.0	0.0	0.0
Hungary	-0.4	-0.1	-0.3	-0.2	-0.1	0.0
Poland	-1.4	0.0	-1.4	-1.2	-0.2	0.0
Russia	-0.6	0.0	-0.5	-0.3	-0.3	0.0
Turkey	-0.2	-0.1	-0.1	-0.1	0.0	0.0
Other emerging	**-3.5**	**-2.1**	**-1.4**	**-1.0**	**-0.2**	**-0.2**
Israel	-2.3	-0.9	-1.5	-1.1	-0.2	-0.2
Morocco						
South Africa	-1.3	-1.3	-0.1	-0.1	0.0	0.0
African oil exporters 3/	-0.1	-0.1	0.0	0.0	0.0	0.0
Middle East oil exporters 4/	-8.3	-5.0	-3.3	-2.3	-0.5	-0.5
World	**-3.0**	**-1.6**	**-1.4**	**-0.8**	**-0.2**	**-0.4**
Of which: Reserves	-0.7	-0.1	-0.6	-0.5	-0.1	0.0

Source: Author's calculations based on datasets described in the text.

1/ The shock is based on a simultaneous and unanticipated 10 percent decline in the value of the dollar, 10 percent fall in equity prices, and 10 percent fall in bond prices. It is assumed that 77 percent of Agency and Corporate bond holdings are in U.S. dollars, with the rest in foreign currency. Aggregates include only those countries listed individually.
2/ Bahamas, Bermuda, British Virgin Islands, Cayman Islands, Netherlands Antilles, and Panama.
3/ Algeria, Gabon, Libya, and Nigeria.
4/ Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates.

Table B1. Foreign Positions in U.S. Long-Term Securities, December 1994 1/

	Foreign Holdings of U.S. Long-term Securities (million U.S. dollars)						
	Total Holdings	Equities	Bonds				Share of Bonds (In percent)
			Total	Treasury	Agency	Corporate	
Developed countries	**741,634**	**298,742**	**442,892**	**294,484**	**62,189**	**86,219**	**60**
Euro Area	**200,813**	**73,214**	**127,599**	**94,097**	**11,358**	**22,144**	**64**
Austria	6,578	2,295	4,283	2,310	616	1,357	65
Belgium	31,402	13,075	18,327	9,169	3,965	5,193	58
Finland	2,323	92	2,231	1,172	896	163	96
France	19,779	10,318	9,461	4,802	841	3,818	48
Germany	67,523	14,924	52,599	46,092	1,979	4,528	78
Greece	828	408	420	380	3	37	51
Ireland	5,771	2,800	2,971	1,433	678	860	51
Italy	9,060	4,388	4,672	2,918	194	1,560	52
Luxumbourg	3,929	2,000	1,929	965	417	547	49
Netherlands	31,571	21,727	9,844	4,691	1,315	3,838	31
Portugal	1,106	118	988	706	216	66	89
Spain	20,943	1,069	19,874	19,459	238	177	95
Other Europe	**240,042**	**137,302**	**102,740**	**61,424**	**11,410**	**29,906**	**43**
Denmark	3,158	1,729	1,429	642	424	363	45
Iceland	0	0	0	0	0	0	
Norway	2,703	382	2,321	2,283	16	22	86
Sweden	6,813	3,445	3,368	2,985	218	165	49
Switzerland	57,485	39,960	17,525	10,221	507	6,797	30
United Kingdom	169,883	91,786	78,097	45,293	10,245	22,559	46
Other developed	**300,779**	**88,226**	**212,553**	**138,963**	**39,421**	**34,169**	**71**
Australia	10,401	6,964	3,437	2,794	142	501	33
Canada	58,166	46,458	11,708	7,654	490	3,564	20
Japan	230,212	33,804	196,408	127,684	38,756	29,968	85
New Zealand	2,000	1,000	1,000	831	33	136	50
Emerging markets	**295,188**	**78,833**	**216,355**	**149,258**	**32,744**	**34,352**	**73**
Latin America	**18,189**	**5,664**	**12,525**	**10,185**	**738**	**1,602**	**69**
Argentina	4,043	914	3,129	2,924	41	164	77
Brazil	1,140	844	296	104	83	109	26
Chile	1,416	433	983	782	40	161	69
Colombia	2,543	445	2,098	1,922	61	115	83
Mexico	5,898	1,878	4,020	3,096	311	613	68
Peru	223	173	50	16	15	19	22
Venezuela	2,926	977	1,949	1,341	187	421	67
Uruguay	0	0	0	0	0	0	
Emerging Asia	**76,670**	**2,356**	**74,314**	**65,987**	**7,388**	**939**	**97**
China	18,181	135	18,046	17,244	488	314	99
India	1,019	289	730	681	3	46	72
Indonesia	1,915	148	1,767	1,753	4	10	92
Korea	5,748	145	5,603	4,524	890	189	97
Malaysia	5,709	133	5,576	5,507	3	66	98
Pakistan	0	0	0	0	0	0	
Philippines	2,617	344	2,273	2,226	13	34	87
Thailand	6,839	131	6,708	6,694	1	13	98
Taiwan POC	34,642	1,031	33,611	27,358	5,986	267	97
Financial centers	**147,486**	**50,407**	**97,079**	**50,235**	**20,070**	**26,774**	**66**
Hong Kong SAR	21,377	5,894	15,483	10,664	3,212	1,607	72
Singapore	34,090	8,134	25,956	20,728	2,492	2,736	76
Caribbean financial centers 2/	92,019	36,379	55,640	18,843	14,366	22,431	60
Emerging Europe	**4,002**	**189**	**3,813**	**3,708**	**34**	**71**	**95**
Czech	618	8	610	610	0	0	99
Hungary	130	17	113	112	0	1	87
Poland	2,935	34	2,901	2,856	0	45	99
Russia	206	53	153	115	29	9	74
Turkey	113	77	36	15	5	16	32
Other emerging	**48,841**	**20,217**	**28,624**	**19,143**	**4,514**	**4,966**	**59**
Israel	3,759	1,146	2,613	1,347	275	991	70
Morocco	0	0	0	0	0	0	
South Africa	82	71	11	5	3	3	13
African oil exporters 3/	0	0	0	0	0	0	
Middle East oil exporters 4/	45,000	19,000	26,000	17,791	4,236	3,972	58
World	**1,036,822**	**377,575**	**659,247**	**443,743**	**94,933**	**120,571**	**64**
Of which: Reserves	309,000	33,000	276,000	260,000	11,000	5,000	89

Source: Author's calculations based on datasets described in the text.

1/ Aggregates include only those countries listed individually.
2/ Bahamas, Bermuda, British Virgin Islands, Cayman Islands, Netherlands Antilles, and Panama.
3/ Algeria, Gabon, Libya, and Nigeria.
4/ Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates.

Table B2. Impact on Wealth of Unanticipated Shocks, 1994 1/

(In percent of GDP)

	Impact on Foreign Holdings of U.S. Long-term Securities					
	Total Holdings	Equities	Bonds			
			Total	Treasury	Agency	Corporate
Developed countries	**-1.1**	**-0.5**	**-0.6**	**-0.4**	**-0.1**	**-0.1**
Euro Area	**-0.6**	**-0.2**	**-0.4**	**-0.3**	**0.0**	**-0.1**
Austria	-0.6	-0.2	-0.4	-0.2	-0.1	-0.1
Belgium	-2.6	-1.1	-1.5	-0.8	-0.3	-0.4
Finland	-0.5	0.0	-0.4	-0.2	-0.2	0.0
France	-0.3	-0.2	-0.1	-0.1	0.0	-0.1
Germany	-0.6	-0.1	-0.5	-0.4	0.0	0.0
Greece	-0.2	-0.1	-0.1	-0.1	0.0	0.0
Ireland	-2.3	-1.2	-1.2	-0.6	-0.2	-0.3
Italy	-0.2	-0.1	-0.1	-0.1	0.0	0.0
Luxumbourg	-4.8	-2.5	-2.3	-1.2	-0.5	-0.6
Netherlands	-1.8	-1.3	-0.5	-0.3	-0.1	-0.2
Portugal	-0.2	0.0	-0.2	-0.2	0.0	0.0
Spain	-0.8	0.0	-0.8	-0.7	0.0	0.0
Other Europe	**-2.6**	**-1.5**	**-1.1**	**-0.7**	**-0.1**	**-0.3**
Denmark	-0.4	-0.2	-0.2	-0.1	-0.1	0.0
Iceland	0.0	0.0	0.0	0.0	0.0	0.0
Norway	-0.5	-0.1	-0.4	-0.4	0.0	0.0
Sweden	-0.7	-0.3	-0.3	-0.3	0.0	0.0
Switzerland	-4.3	-3.0	-1.3	-0.8	0.0	-0.5
United Kingdom	-3.1	-1.7	-1.4	-0.8	-0.2	-0.4
Other developed	**-1.1**	**-0.3**	**-0.8**	**-0.5**	**-0.1**	**-0.1**
Australia	-0.6	-0.4	-0.2	-0.2	0.0	0.0
Canada	-2.0	-1.6	-0.4	-0.3	0.0	-0.1
Japan	-1.0	-0.2	-0.9	-0.6	-0.2	-0.1
New Zealand	-0.9	-0.4	-0.4	-0.4	0.0	-0.1
Emerging markets	**-1.2**	**-0.3**	**-0.9**	**-0.6**	**-0.1**	**-0.1**
Latin America	**-0.3**	**-0.1**	**-0.2**	**-0.1**	**0.0**	**0.0**
Argentina	-0.3	-0.1	-0.2	-0.2	0.0	0.0
Brazil	0.0	0.0	0.0	0.0	0.0	0.0
Chile	-0.6	-0.2	-0.4	-0.3	0.0	-0.1
Colombia	-0.9	-0.2	-0.7	-0.7	0.0	0.0
Mexico	-0.3	-0.1	-0.2	-0.2	0.0	0.0
Peru	-0.1	-0.1	0.0	0.0	0.0	0.0
Venezuela	-1.0	-0.3	-0.6	-0.5	-0.1	-0.1
Uruguay	0.0	0.0	0.0	0.0	0.0	0.0
Emerging Asia	**-0.8**	**0.0**	**-0.7**	**-0.7**	**-0.1**	**0.0**
China	-0.6	0.0	-0.6	-0.5	0.0	0.0
India	-0.1	0.0	-0.1	0.0	0.0	0.0
Indonesia	-0.2	0.0	-0.2	-0.2	0.0	0.0
Korea	-0.3	0.0	-0.3	-0.2	0.0	0.0
Malaysia	-1.7	0.0	-1.6	-1.6	0.0	0.0
Pakistan						
Philippines	-0.8	-0.1	-0.7	-0.7	0.0	0.0
Thailand	-1.1	0.0	-1.0	-1.0	0.0	0.0
Taiwan POC	-2.8	-0.1	-2.7	-2.2	-0.4	0.0
Financial centers	**-14.8**	**-5.2**	**-9.6**	**-5.2**	**-1.9**	**-2.5**
Hong Kong SAR	-3.3	-0.9	-2.4	-1.7	-0.5	-0.2
Singapore	-10.2	-2.5	-7.7	-6.3	-0.7	-0.7
Caribbean financial centers 2/						
Emerging Europe	**-0.1**	**0.0**	**-0.1**	**-0.1**	**0.0**	**0.0**
Czech	-0.4	0.0	-0.4	-0.4	0.0	0.0
Hungary	-0.1	0.0	-0.1	-0.1	0.0	0.0
Poland	-0.6	0.0	-0.6	-0.6	0.0	0.0
Russia	0.0	0.0	0.0	0.0	0.0	0.0
Turkey	0.0	0.0	0.0	0.0	0.0	0.0
Other emerging	**-2.1**	**-0.9**	**-1.2**	**-0.9**	**-0.2**	**-0.2**
Israel	-0.9	-0.3	-0.6	-0.3	-0.1	-0.2
Morocco						
South Africa	0.0	0.0	0.0	0.0	0.0	0.0
African oil exporters 3/	0.0	0.0	0.0	0.0	0.0	0.0
Middle East oil exporters 4/	-6.6	-2.8	-3.7	-2.7	-0.6	-0.5
World	**-1.1**	**-0.4**	**-0.7**	**-0.5**	**-0.1**	**-0.1**
Of which: Reserves	-0.3	0.0	-0.3	-0.3	0.0	0.0

Source: Author's calculations based on datasets described in the text.

1/ The shock is based on a simultaneous and unanticipated 10 percent decline in the value of the dollar, 10 percent fall in equity prices, and 10 percent fall in bond prices. It is assumed that 77 percent of Agency and Corporate bond holdings are in U.S. dollars, with the rest in foreign currency. Aggregates include only those countries listed individually.
2/ Bahamas, Bermuda, British Virgin Islands, Cayman Islands, Netherlands Antilles, and Panama.
3/ Algeria, Gabon, Libya, and Nigeria.
4/ Bahrain, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates.

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