Online Appendix for: The Financial Crisis and The Geography of Wealth Transfers*

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A Data Sources

A.1 Aggregate positions and flows

International Investment Position (except foreign exchange reserves): we rely on national sources for Canada (Statistics Canada), China (State Administration of Foreign Exchange (SAFE)), Euro Area (European Central Bank), Japan (Bank of Japan), Switzerland (Swiss National Bank), United Kingdom (Pink Book) and the United States (Bureau of Economic Analysis). Data for all other countries were obtained from the IMF Balance of Payments database.

Foreign exchange reserves: we use "total reserves minus gold" available from the IMF International Financial Statistics database.

Financial flows: IMF Balance of Payments statistics

A.2 Bilateral positions

The data construction closely follows Milesi-Ferretti, Strobbe and Tamirisa (2010). We collect annual bilateral positions data for end-2007 and end-2008.

Brazil

FDI: reported bilateral FDI assets and liabilities are measured at book value. To obtain market value estimates of Brazil's bilateral direct investment positions, we use market value data derived from partner countries' reported assets and liabilities vis-à-vis Brazil. Bilateral positions are imputed from the following countries: Australia, Canada, China, Denmark, Japan, New Zealand, Norway, Sweden, Switzerland, United Kingdom and the United States.

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Portfolio equity and debt: based on reported and derived portfolio equity/debt assets and liabilities available in IMF Coordinated Portfolio Investment Survey tables 1.1, 1.2 and 5.1, 5.2.
Foreign Exchange Reserves: following Milesi-Ferretti et al. (2010), the US dollar share of total reserves is estimated as the difference between US debt liabilities vis-à-vis Brazil and Brazil's debt assets in the US as reported in the CPIS. The remainder is assumed to be held in euros.

Canada

FDI: we use the data on Canadian direct investment abroad and foreign direct investment to Canada by country and sector available from the Office of the Chief Economist of the Canadian Ministry of Foreign Affairs and International Trade (http://www.international.gc.ca/economist-economiste/statistics-statistiques/investments-investissements.aspx?lang=eng)
Portfolio equity and debt: based on reported and derived portfolio equity/debt assets and liabilities available in IMF Coordinated Portfolio Investment Survey tables 1.1, 1.2 and 5.1, 5.2.
Foreign exchange reserves: we use the currency composition of reserves published by the Canadian department of Finance (http://www.fin.gc.ca/pub/oir-ro-archives-eng.asp)

China

China does not report the geographical allocation of its portfolio investment holdings, as it does not take part in the CPIS. We investigated details national sources and hand collected data to remedy this shortcoming. International Investment Position data are not at market value in official sources (SAFE). We construct data on bilateral equity assets and liability and market value as well as data on debt assets. We also manage to reconstruct bilateral FDI assets and liabilities at market value using Ministry of Commerce data. We reconstructed bilateral data on Chinese external assets at market value from various Chinese data sources.

FDI Assets: The only market value estimates of Chinese FDI have been done in 2004.This was the first survey ever been done on Chinese FDI. After 2004, government agencies added up flow data to estimate the official IIP. Therefore, the official IIP of 2005-2011 are not at market value.
We obtain Ministry of Commerce data with a very good geographical breakdown. The aggregate numbers are not exactly identical to the IIP SAFE numbers as the Ministry of Commerce has a different statistics standard from SAFE. The data are at market value so we use the 2004 stock (based on survey data) and cumulate flows using the corresponding stock indexes for valuation adjustment.
FDI Liabilities: We use the 2004 stock (based on survey data) and cumulate flows using the Shanghai stock index for valuation adjustment.
Portfolio debt: We obtained as detailed data as possible from individual banks report. Portfolio debt is held mainly by 5 Chinese state-owned international banks (Bank of China, Industrial and Commercial Bank of China, China Construction Bank, Agricultural Bank of

China, Chinese Development Bank) and the sovereign wealth fund CIC[1]. We have a detailed geographical decomposition of cross border claims (into Hong Kong, Other Asia Pacific locations, North and South America, Europe, Middle East and Africa) , and separately, a currency breakdown (RMB, dollar, euro, HK dollar, yen, CHF and other) of overseas loans and of securities held for the Bank of China[2]. In 2010, the total amount of cross border claims for BoC is 1,260,10 millions RMB while the amount of non RMB assets is about double at 2,526,5777 millions RMB. This indicates that a sizable amount of the domestic assets of the BoC are in foreign currency. Making a set of straightforward assumptions[3], we are able to construct for 2007-2010 a table of cross border security holdings disaggregated by country and currency. The Bank of China is historically the main player overseas (Bank of China has been ranked No. 3 in 2009 within all banks in the world by market capitalization). We have a coarser set of data for ICC, CCB, ABC for which we could obtain data only on cross-border claims by locations. We apply the Bank of China weights to allocate assets between investment securities and total claims, by location, thereby constructing a table of securities by location. For CDB, we obtained securities by currencies. We allocated the dollar securities to the US and the (small) remainder of overseas currency securities to Hong Kong.

We have data on fixed income holdings for CIC but we do not have explicit geographical data. We are told however (private communication with Chinese sources) that it is almost all US debt.

[1]We give below the market capitalization of the four largest stated owned banks in China.The Bank of China (BoC), the Industrial and Commercial Bank of China (ICBC), the China Construction Bank (CCB), the Agricultural Bank of China (ABC).

Banks: (2010)	Bank of China	ICBC	CCB	ABC
Total Assets (million RMB)	10,459,865	12,779,711	10,810,317	10,337,406
Cross border claims (million RMB)	1,260,170	381,982	272,829	82,254
overseas assset ratio	12.0%	3.9%	2.5%	0.8%

[2]We have a breakdown into: derivative financial assets; loans and advances to customers (net); investment securities (broken down in available for sale ; held to maturity and loans and receivables) and other assets. We present in our spreadsheet all the source data we gathered. We work with the assumptions that all the investment securities are debt securities. In principle they could also be equities. In 2007-2008 however we have the exact amount of portfolio equity bought by all our 5 banks via the QDII system (see below for the construction of portfolio equity assets). This amount is less than $4 bn, so we treat it as negligible (the order of magnitude of our total debt asset numbers are in the range of $200 bn).

[3]The data indicate that there is more Hong Kong dollar assets than claims to Hong Kong, more dollar assets than claims to North and South America, less euro and sterling assets than claims to Europe, less yen assets than claims to other Asia Pacific location. We make the following assumptions: all Hong Kong claims are in HK$; all euro and sterling assets are to Europe, all yen assets are to "other Asia Pacific"; all North and South America, Middle East and Africa claims are in $. Any remaining Europe claims not in euro or sterling are assumed to be in $, any other Asia Pacific claims not in yen are assumed to be in US $. We compute the share of investment securities in total US $ assets and use this weight to derive securities holdings in dollar portfolios, for all geographical areas.

We focus on the investment securities part of the claims (securities available for sale; held to maturity and loans and receivables) of the bank balance sheet. We do not use here the data on loans. We check that the total amount of US $ securities we obtain for cross border holdings is inferior to the total amount of reported US $ securities in the total assets of the bank. For example for 2010, the amount of US $ denominated cross border securities we estimate is 105, 883 millions RMB and the reported US dollars securities of the bank amount to 290,943 millions RMB. The difference is therefore domestic holdings of US $ denominated securities.

It is our belief that the union of these five banks and CIC cover the universe of Chinese investors in international debt assets (foreign exchange reserves are accounted for separetely).
Portfolio debt liabilities: We do not have any direct source for debt liabilities and have to take the official IIP numbers. The amount involved are very small (in the order of 20 times smaller than debt assets according to the IIP data).
Foreign exchange reserves: The currency composition of the Chinese reserves is not disclosed. Nevertheless, we have one snapshot of the currency weights. In September 2010, the *China Securities Journal* revealed the following breakdown for the $2,450 billion reserves of the People's Bank of China: 65% in dollars, 26% in euros, 5% in sterling, and 3% in yen. We assume that these weights are similar in 2007-2008, as they are likely to be slow moving (by doing so we probably slightly underestimate the dollar share in 2007-2008). For the aggregate amount of reserves we use total reserves minus gold from IFS (similar to SAFE).
Portfolio equity assets: Equity investment overseas is strictly regulated. QDII is a quota system for domestic investors to hold equity abroad. We obtained a record of all authorized investments in foreign equity for the years 2006-2010. from SAFE. According to Chinese sources, most of the investment reported in QDII is in equity, ETFs or commodities. Unfortunately, we have the breakdown by domestic investor name but not disaggregated by geographical area of investment. However, the amounts involved are very small due to QDII having been launched only in 2006. Besides, China does not have many wealth management services to help Chinese invest in overseas equity markets. For 2006, the total flows amount to $9,675 million, for 2007 $30,544.7 million and for 2008 $3,255 million. Furthermore, private communication with Chinese sources indicate that about 50% of the QDII allocation is equity out of which about 40% is in the Hong Kong market 5% to the US and 5% to Singapore. We value the remaining QDII assets using a global commodity price index (Source IMF: PALLFNF_Index).
We have detailed data on the geographical location of the equity holdings of the sovereign wealth fund CIC. It is our belief that CIC and QDII cover the entire spectrum of portfolio equity investment overseas.
Portfolio equity liabilities: We use partner country data.

Emerging Asia

FDI: reported bilateral FDI assets and liabilities are measured at book value. To obtain market value estimates of Emerging Asia's bilateral direct investment positions, we use market value data derived from partner countries' reported assets and liabilities vis-à-vis Emerging Asia. Bilateral positions are imputed from the following countries: Australia, Canada, China, Denmark, Hong Kong, Japan, New Zealand, Norway, Singapore, Sweden, Switzerland, United Kingdom and the United States.
Portfolio equity and debt: based on reported and derived portfolio equity/debt assets and liabilities available in IMF Coordinated Portfolio Investment Survey tables 1.1, 1.2 and 5.1, 5.2.
Foreign exchange reserves: We use the 2007 currency composition in Milesi-Ferretti, Strobbe and Tamirisa (2010), netting-out the Taiwan-US debt liabilities position from the Milesi-Ferretti, Strobbe and Tamirisa (2010) bilateral USD FX position. For 2008, we assume that the currency share is unchanged from 2007.

Euro Area

FDI: reported bilateral FDI assets and liabilities are measured at book value. To obtain market value estimates of the Euro area's bilateral direct investment positions, we use market value data derived from partner countries' reported assets and liabilities vis-à-vis the Euro area. Bilateral positions are imputed from the following countries: Australia, Canada, China, Denmark, Japan, New Zealand, Norway, Singapore, Sweden, Switzerland, United Kingdom and the United States. The Euro area total is calculated as the sum of the individual member countries bilateral positions.
Portfolio equity and debt: based on reported and derived portfolio equity/debt assets and liabilities available in IMF Coordinated Portfolio Investment Survey tables 1.1, 1.2 and 5.1, 5.2. The Euro are total is calculated as the sum of the individual member countries bilateral positions, netting-out the intra Euro area positions.
Foreign exchange reserves: we use the 2007 currency composition in Milesi-Ferretti, Strobbe and Tamirisa (2010) and, for 2008, assume that the currency shares are unchanged from 2007.

Hong Kong

FDI: we use tables 050 and 048 on the geographical breakdown of outward and inward FDI published by the Census and Statistics Department of the Government of Hong Kong. (http://www.censtatd.gov.hk/hong_kong_statistics)
Portfolio equity and debt: based on reported and derived portfolio equity/debt assets and liabilities available in IMF Coordinated Portfolio Investment Survey tables 1.1, 1.2 and 5.1, 5.2.
Foreign exchange reserves: we use the 2007 currency composition in Milesi-Ferretti, Strobbe and Tamirisa (2010) and, for 2008, assume that the currency shares are unchanged from 2007.

India

FDI: reported bilateral FDI assets and liabilities are measured at book value. To obtain market value estimates of India's bilateral direct investment positions, we use market value data derived from partner countries' reported assets and liabilities vis-à-vis India. Bilateral positions are imputed from the following countries: Australia, Canada, China, Denmark, Japan, New Zealand, Norway, Singapore, Sweden, Switzerland, United Kingdom and the United States.
Portfolio equity and debt: based on reported and derived portfolio equity/debt assets and liabilities available in IMF Coordinated Portfolio Investment Survey tables 1.1, 1.2 and 5.1, 5.2.
Foreign exchange reserves: we estimate the currency composition of reserves based on the aggregate currency shares for emerging markets in the IMF COFER database.

Japan

FDI: we use the geographical breakdown of outward and inward FDI provided in the Bank of Japan publication "Regional direct investment position assets and liabilities (end of 2009)" (http://www.boj.or.jp/en/statistics/br/bop/index.htm/)

Portfolio equity and debt: based on reported and derived portfolio equity/debt assets and liabilities available in IMF Coordinated Portfolio Investment Survey tables 1.1, 1.2 and 5.1, 5.2.
Foreign exchange reserves: we use the 2007 currency composition in Milesi-Ferretti, Strobbe and Tamirisa (2010) and, for 2008, assume that the currency shares are unchanged from 2007.

Other advanced

FDI: For Australia we use table 2, "Foreign Investment in Australia, Level of Investment by country and Country Groups by type of investment and year", and table 5 "Australian Investment Abroad, Level of Investment by country and Country Groups by type of investment and year" provided by the Australian Bureau of Statistics (http://www.abs.gov.au/AUSSTATS). For Denmark we use the geographical breakdown provided in table 3 "Direct Investments broken down by country" provided by the central bank of Denmark (http://www.nationalbanken.dk). For New Zealand we use the geographical breakdown provided in table 3: "Stock of direct investment by country" in the "Balance of Payments and International Investment Position: Year ended 31 March 2010" provided by Statistics New Zealand (http://www.stats.govt.nz). For Sweden and Norway we obtain the geographical breakdown of direct investment from the OECD (http://stats.oecd.org/BrandedView.aspx?oecd_bv_id=idi-data-en&doi=data-00337-en).
Portfolio equity and debt: based on reported and derived portfolio equity/debt assets and liabilities available in IMF Coordinated Portfolio Investment Survey tables 1.1, 1.2 and 5.1, 5.2. The country group total is calculated as the sum of the individual member countries bilateral positions.
Foreign exchange reserves: we use the 2007 currency composition in Milesi-Ferretti, Strobbe and Tamirisa (2010) and assume that the 2008 currency shares are unchanged from 2007.

Russia

FDI: reported bilateral FDI assets and liabilities are measured at book value. To obtain market value estimates of Russia's bilateral direct investment positions, we use market value data derived from partner countries' reported assets and liabilities vis-à-vis Russia. Bilateral positions are imputed from the following countries: Australia, Canada, China, Denmark, Japan, New Zealand, Norway, Sweden, Switzerland, United Kingdom and the United States.
Portfolio equity and debt: based on reported and derived portfolio equity/debt assets and liabilities available in IMF Coordinated Portfolio Investment Survey tables 1.1, 1.2 and 5.1, 5.2.
Foreign exchange reserves: we use the currency composition reported in the annual reports of the central bank of Russia (http://www.cbr.ru/eng/publ/main.asp?Prtid=God).

Singapore

FDI: for outward direct investment we use table 2 "Total Direct Investment Abroad by Country/Region, 2000-2009" of the report "Singapore's Investment Abroad 2009" and for inward direct investment we use table 2 "Foreign Direct Investment in Singapore by Country/Region, 1998-2008" of the report "Foreign equity investment in Singapore, 2008". Both reports are published by Statistics Singapore (http://www.singstat.gov.sg/pubn/business.html).

Portfolio equity and debt: based on reported and derived portfolio equity/debt assets and liabilities available in IMF Coordinated Portfolio Investment Survey tables 1.1, 1.2 and 5.1, 5.2.

Foreign exchange reserves: we use the 2007 currency composition in Milesi-Ferretti, Strobbe and Tamirisa (2010) and assume that the 2008 currency shares are unchanged from 2007.

Switzerland

FDI: we rely on the geographical composition provided in table 1.2 "Swiss direct investment abroad by country" (http://www.snb.ch/en/iabout/stat/statpub/fdi/stats/fdi/fdi_ChDirAus_LgKapBe) and table 2.2 "Foreign direct investment in Switzerland, by country" (http://www.snb.ch/en/iabout/stat/statpub/fdi/stats/fdi/fdi_AusDirCh_KapBeHL) published by the Swiss National Bank.

Portfolio equity and debt: based on reported and derived portfolio equity/debt assets and liabilities available in IMF Coordinated Portfolio Investment Survey tables 1.1, 1.2 and 5.1, 5.2.

Foreign exchange reserves: we use the currency allocation of official reserves provided in chapter 5 of the annual reports of the Swiss National Bank (http://www.snb.ch/en/iabout/pub/annrep/id/pub_annrep)

United Kingdom

FDI: we use the geographical composition provided in table 3.1 "Net FDI international investment position abroad analysed by area and main country, end 2000 to end 2009" and table 6.1 "Net FDI International positions in the United Kingdom analysed by area and main country, 2000 to 2009" in the "Foreign Direct Investment Business Monitor MA4" published by the Office of National Statistics (http://www.statistics.gov.uk/statbase/product.asp?vlnk=9614).

Portfolio equity and debt: based on reported and derived portfolio equity/debt assets and liabilities available in IMF Coordinated Portfolio Investment Survey tables 1.1, 1.2 and 5.1, 5.2.

Foreign exchange reserves: we use the currency composition of the UK government's official reserves published in the quarterly annex to the "UK International Reserves & Foreign Currency Liquidity Template" (http://www.bankofengland.co.uk/statistics/reserves/intro.htm).

United States

FDI: for bilateral outward direct investment we rely on the table "U.S. direct Investment Abroad: Selected Items by Detailed Country, 2005-2009" (http://www.bea.gov/international/di1usdbal.htm) and for bilateral inward direct investment on the table "Foreign Direct Investment in the United States: Selected Items by Detailed Country, 2005-2009" (http://www.bea.gov/international/xls/LongCountry.xls) both published by the Bureau of Economic Analysis.

Portfolio equity and debt: for portfolio equity and debt assets we use IMF CPIS tables 1.1 and 1.2. Portfolio equity and debt liabilities were obtained from the Survey on

Portfolio Holdings of U.S. Securities as of June 2007 and June 2008, published by the U.S. Treasury (http://www.treasury.gov/resource-center/data-chart-center/tic/Pages/fpis.aspx). Positions are updated using the monthly estimates provided in Bertaut and Tryon (2007) (http://www.federalreserve.gov/pubs/ifdp/2007/910/default.htm).

Foreign exchange reserves: we use the 2007 currency composition in Milesi-Ferretti, Strobbe and Tamirisa (2010) and assume that the 2008 currency shares are unchanged from 2007.

A.3 FDI market value estimation

We denote market value by MV, book value by BV, current cost by CC and historical cost by HV. The list of countries providing both aggregate and bilateral FDI positions data at MV includes:

- Australia (IIP & bilateral positions; see http://abs.gov.au/austats/abs@.nsf/mf/5370.0.55.001)
- Hong Kong (IIP & bilateral positions)
- New Zealand (IIP & bilateral positions, except for some firms that provide positions at BV; see http://www.unctad.org/sections/dite_fdistat/docs/wid_cp_nz_en.pdf)
- Norway (IIP & bilateral positions; see http://www.ssb.no/intinvpos_en/about.html)

For the following countries, we estimate both the aggregate FDI positions and the bilateral positions at MV:

- Canada (IIP & bilateral positions = BV, we estimate MV, initial 2005 market to book value ratio provided by Simard and Boulay (2006))
- China (IIP & bilateral positions = BV, we estimate MV, initial 2004 aggregate and bilateral FDI positions are at market value)
- Denmark (IIP & bilateral positions = BV, we estimate MV, initial 2006 market value estimate provided by Kumah, Damgaard and Elkjaer (2009))
- Switzerland (IIP & bilateral positions = BV, we estimate MV, initial 2005 market value estimate provided by Stoffels and Tille (2009))
- United Kingdom (IIP & bilateral positions = BV, we estimate MV, initial 2005 market value estimate provided by Kubelec, Orskaug and Tanaka (2007))

Countries providing aggregate FDI data at market value along with official valuation series:

- Japan (IIP & bilateral positions = BV, Bank of Japan provides estimate of aggregate FDI abroad & inward market-to-book value ratio, we use this to obtain bilateral positions at MV)
- Sweden (IIP & bilateral positions = BV, also provides estimate of aggregate FDI at MV, we use these to obtain bilateral positions at MV)

- United States (IIP = CC, BEA bilateral positions = HC, market-to-HC ratio provided by BEA, we use these to obtain bilateral positions at MV)

The following countries do not report aggregate FDI at MV and we are unable to compute our own estimates. Reported bilateral positions are at BV.

- Brazil (IIP = BV, bilateral positions at MV imputed from partner countries)
- Emerging Asia (IIP = BV, bilateral positions at MV imputed from partner countries)
- Euro Area (IIP & bilateral = BV, bilateral positions at MV imputed from partner countries)
- India (IIP = BV, bilateral positions at MV imputed from partner countries)
- Russia (IIP = BV, bilateral positions at MV imputed from partner countries)

Methodology for market value estimation:

1. we start from an initial estimate of the aggregate FDI abroad/inward position at MV (usually for 2005, provided by statistical agency or other, see above).
2. multiply the date t position in USD with the weighted average of the destination countries' USD ex-dividend equity index returns, with weights corresponding to the date t FDI portfolio weights (FDI abroad); or home country USD equity index return (inward FDI)
3. add USD financial outflow/inflow to obtain date t+1 position at MV
4. calculate market-to-book value ratio for each date
5. calculate bilateral positions at MV using 4)

Due to data limitations, we are unfortunately unable to obtain full bilateral FDI balance sheets at market value for those countries where positions were imputed from partner country FDI assets and liabilities. Instances with bilateral positions unavailable for at least one country of a source/partner country pair are indicated with "na" in the matrix of bilateral valuation gains and losses on the net FDI portfolio.

A.4 Data on asset-backed securities

Fractions of Treasuries vs. corporate ABS

We use the breakdown of foreign holdings of long-term U.S. debt securities provided in the Survey on Portfolio Holdings of U.S. Securities as of June 2007 and 2008 published by the U.S. Treasury (http://www.treasury.gov/resource-center/data-chart-center/tic/Pages/fpis.aspx). Foreign holdings of long-term U.S. Treasuries can be found in table 20 (21) in the June 2007 (June 2008) survey. Corporate ABS positions are from table 21 (2007 survey) and table 22 (2008 survey).

For each survey date we calculate fractions of long-term Treasuries and corporate ABS in countries' total holdings of U.S. debt securities (both short- and long-term). We then average the June 2007 and June 2008 fractions to obtain approximate fractions as of end-2007.

Adjustment for additional exposure through re-securitisation (Figures 8 and 9 in published paper

We follow Kamin and DeMarco (2010) to obtain holdings of U.S. long-term asset-backed securities adjusted for indirect exposure through re-securitisation. As described in Kamin and DeMarco (2010), a sizeable part of total U.S. ABS held by foreigners is held and re-securitized in offshore centers, especially the Cayman Islands. Therefore, other countries' holdings of Cayman Island debt securities partly reflect indirect exposure to U.S. ABS. To obtain adjusted foreign holdings of U.S. ABS, we combine direct holdings of long-term ABS from the Survey on Portfolio Holdings of U.S. Securities as of June 2007 with foreign holdings of Cayman Island debt securities from the 2007 Coordinated Portfolio Investment Survey (CPIS).

Specifically, we first register direct foreign holdings of US longer-term ABS from table 23 of the June 2007 U.S. Treasury's Survey on Portfolio Holdings of U.S. Securities (http://www.treasury.gov/resource-center/data-chart-center/tic/Pages/fpis.aspx). Second, we estimate how much of Cayman Island debt held by foreigners represents ABS. Assuming foreign investors have similar portfolio shares as U.S. investors, we can infer the ABS share from U.S. holdings of Cayman Island issued ABS (reported in table 26 of the U.S. Treasury's June 2007 Survey on U.S. Portfolio Holdings of Foreign Securities). Under this assumption, 73 percent of foreign holdings of Cayman Island debt represent exposure to U.S. ABS. Third, we therefore add 73 percent of each country's CPIS-reported holdings of Cayman Island debt to its direct holdings of U.S. ABS obtained from the U.S. Treasury survey.

B Colored HeatMaps

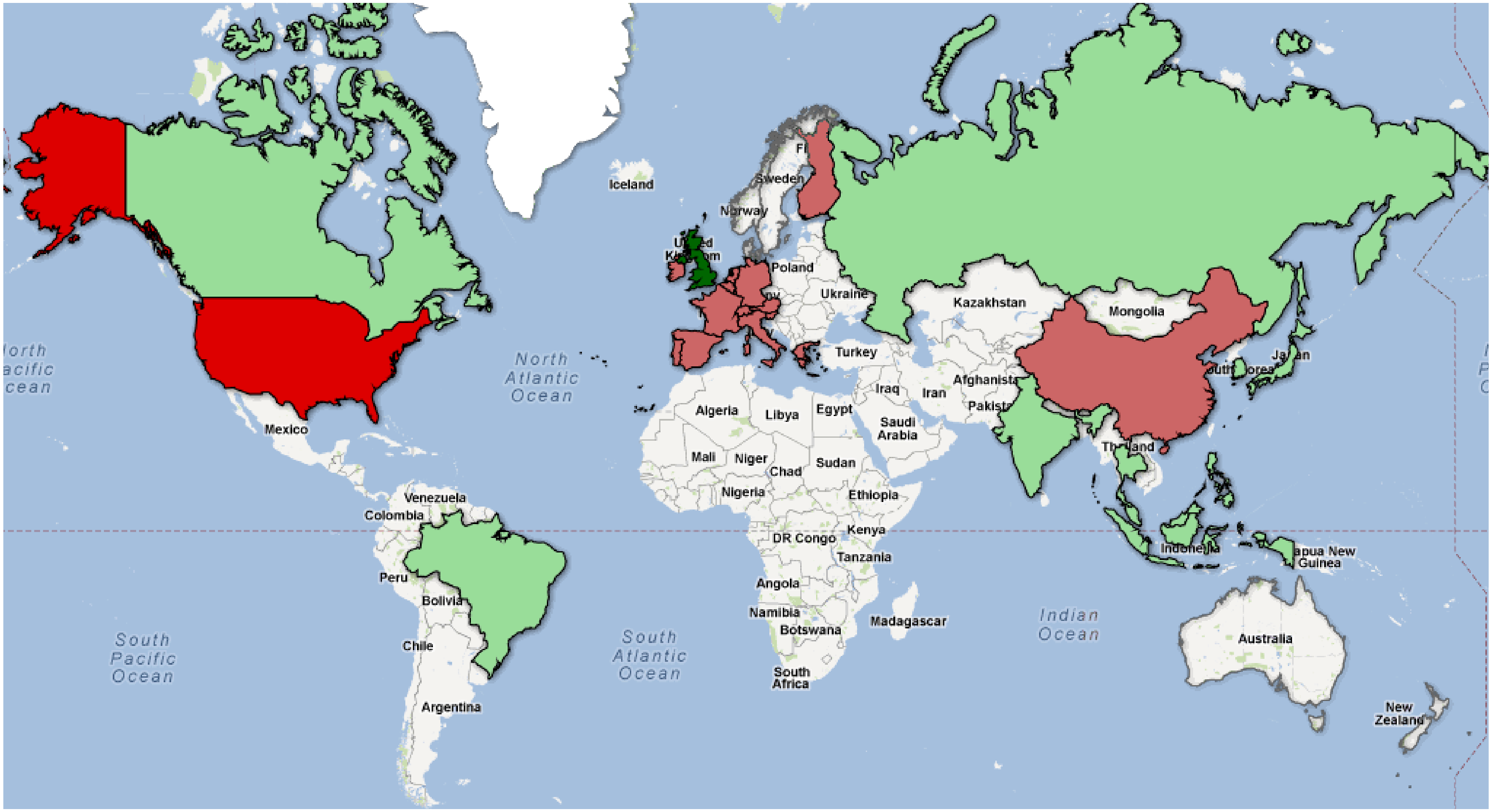
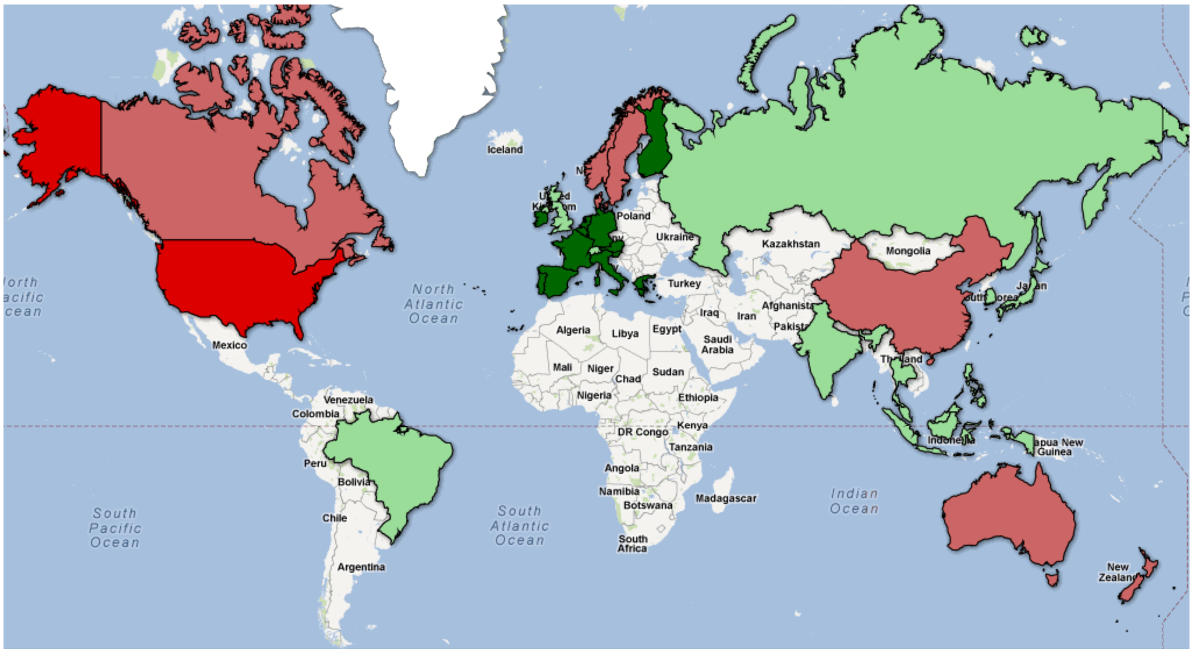


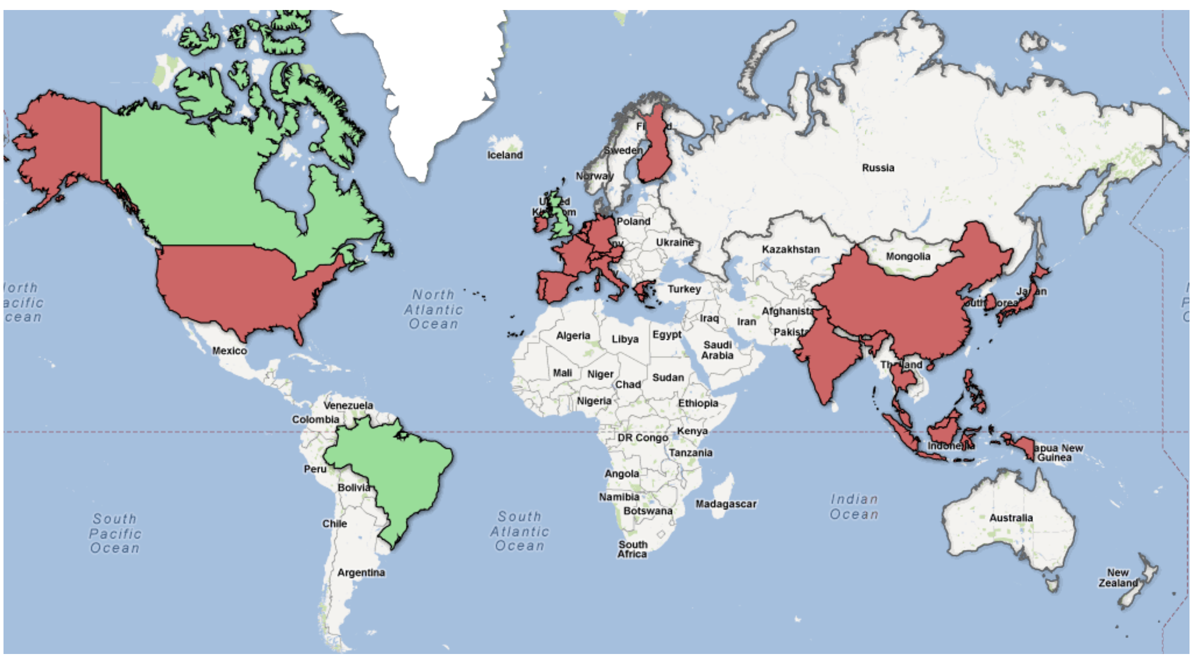
Figure 1: Heat Map of Valuation Gains and Losses

The figure reports total valuation gains/losses. ■ Losses in excess of \$400bn. ■ Losses between \$10bn and \$400bn. ■ Gains between \$10bn and \$400bn. ■ Gains in excess of \$400bn.

Figure 2: Heat Map of Valuation Gains and Losses



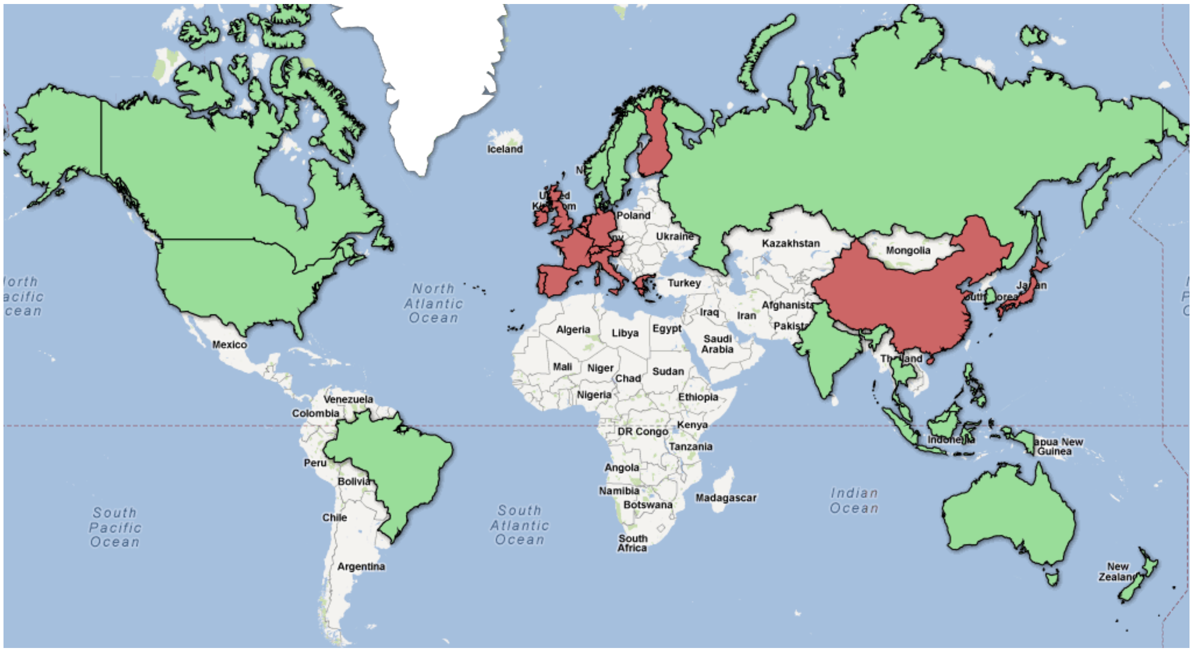
(a) Portfolio Equity



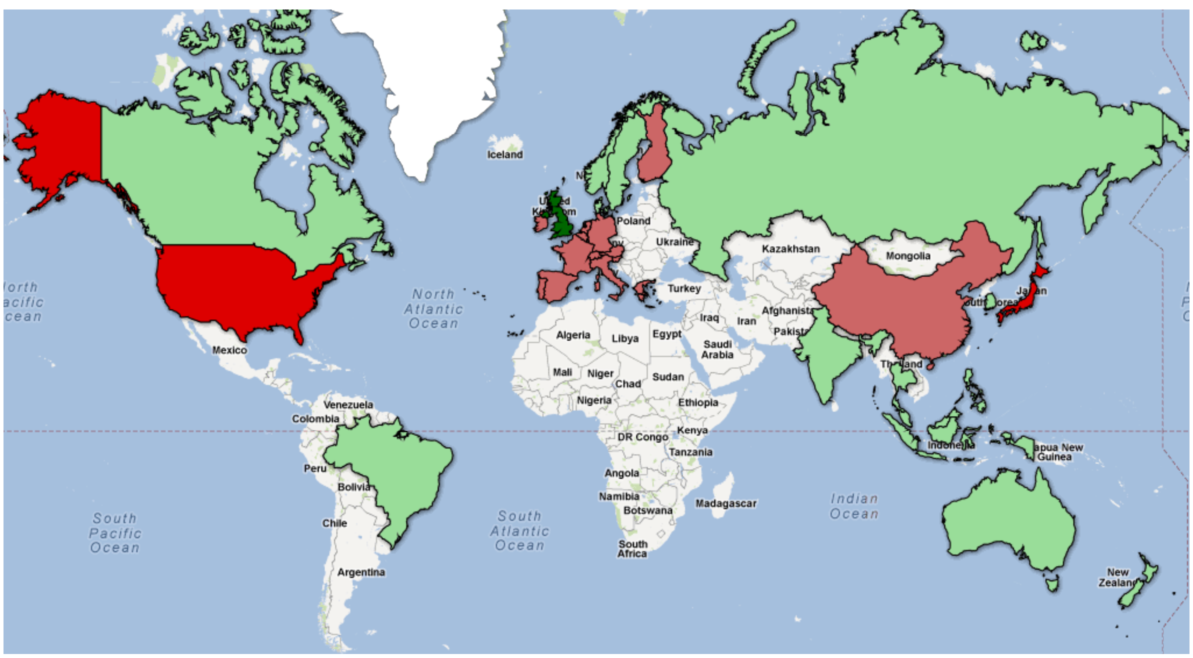
(b) Portfolio Debt

The figure reports total valuation gains/losses. Losses in excess of \$400bn. Losses between \$10bn and \$400bn. Gains between \$10bn and \$400bn. Gains in excess of \$400bn.

Figure 3: Heat Map of Valuation Gains and Losses



(a) Direct Investment



(b) Currency Gains/Losses

The figure reports total valuation gains/losses. Losses in excess of \$400bn. Losses between \$10bn and \$400bn. Gains between \$10bn and \$400bn. Gains in excess of \$400bn.

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