The Holders and Issuers of International Portfolio Securities*

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Abstract

Research on the geographical distribution of international portfolios has mainly focused on data aggregated to the country level. We exploit newly-available data that disaggregates the holders and issuers of international securities along sectoral lines. In addition, we also explore newly-expanded data on the currency composition of international portfolios. We find that patterns evident in the aggregate data do not uniformly apply across the various holding and issuing sectors, such that a full understanding of cross-border portfolio positions requires a granular analytical approach.

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1. Introduction

The analysis of international financial linkages is a primary theme in international macroeconomic research. At the theoretical level, the extent and characteristics of international financial integration is an important influence on macroeconomic outcomes and the cross-border risk distribution. In similar vein, the capacity of policy officials to scan the horizon for emerging macro-financial risks and calibrate policy interventions depends on an adequate understanding of international financial transmission mechanisms. Along both dimensions, a solid platform of empirical evidence is necessary in order to help design useful models and make effective policy decisions.

Since 2001, the Coordinated Portfolio Investment Survey (CPIS) has been published on a regular basis by the International Monetary Fund.[1] Relative to aggregate international investment position data, the CPIS represented a significant improvement by publishing the geographical composition of cross-border bond and equity holdings for the reporting countries.[2]

Building on the extensive gravity literature on international trade patterns and previous work on geographical patterns in international financial flows (Portes and Rey 2005), an empirical literature soon developed that studied the cross-country variation in bilateral portfolio holdings (Lane and Milesi-Ferretti 2008, Couerdacier and Martin 2009, and Hale and Obstfeld 2014).[3] In turn, these empirical patterns have also inspired new theoretical models (Okawa and Van Wincoop 2012).

However, this literature has just studied the aggregate bilateral data. This is restrictive, since the transmission of international financial shocks may depend on the identities

[1] A trial survey was run in 1997 with a limited number of reporter countries. The CPIS was published on an annual basis from 2001 until to 2012; and has been published twice a year since 2013. The number of reporters now stands at 78 (latest release). A sister survey on direct investment positions (the CDIS) has been run since 2009.

[2] See Lane and Milesi-Ferretti (2008) for an extensive discussion of the limitations of the dataset.

[3] The main focus has been on explaining cross-country variation in the levels of bilateral holdings. Galstyan and Lane (2013) explore the dynamic adjustment of bilateral holdings during the global financial crisis.

of the issuers and holders of portfolio securities. In similar vein, the currency denomination of bonds obviously influences the relation between currency movements and financial dynamics. Accordingly, the recent expansion of the CPIS to provide sectoral information on the holders and issuers of portfolio securities and an enhanced currency decomposition is welcome.[4] This paper represents a first attempt to analyse these newly-available data.

Previewing our results, we find important differences in the geographical patterns of international portfolio allocation across these categories. In relation to both holders and issuers of international securities, the data highlight the importance of gravity-type factors in cross-border distribution of portfolio securities across different asset classes. We also find that common membership of the euro area is non-negligible for the holding sectors of both portfolio debt and equity securities: while a similar pattern is present across all issuing sectors for debt securities, we find no such correspondence across sectors in relation to equity issuance.

In relation to variation across sectors, our results highlight that patterns evident in the aggregate data do not uniformly apply across all individual holding or issuing sectors. For instance, across holding sectors in advanced countries, the distance effect is stronger for banks and households than for other financial corporations and non-financial corporations. To take another example, in relation to portfolio debt issued by emerging economies, investors exhibit a stronger distance effect vis-a-vis bonds issued by banks or sovereigns than vis-a-vis bonds issued by non-financial corporates.

Finally, in relation to currency composition, we highlight the differential sensitivity of bond holdings denominated in different international currencies to gravity-type and country-specific covariates. For instance, higher domestic inflation raises the importance of holding debt assets denominated in "safe haven" currencies, such as the US dollar and Swiss Franc. We also find support for foreign bond holdings as a trade hedge.

[4] Ideally, a complete dataset that identifies the ultimate owner and ultimate issuer of each security would be an "asset". The expanded CPIS is confined to broad sectoral categories and is organised on a residency basis rather than a nationality basis.

The rest of the paper is structured as follows. Section 2 describes the CPIS data. In Section 3 we describe the empirical approach, while in Section 4 we report the econometric results. Some conclusions are offered in Section 5.

2. The CPIS Data

2.1. Data Availability

To analyse the bilateral distribution of holdings and issuances of portfolio assets, we employ the latest available data from the Coordinated Portfolio Investment Survey (CPIS). Until recently, the CPIS primarily reported aggregate bilateral holdings of bonds and equity. While the availability of bilateral data was a step improvement relative to international investment position data that only included aggregate foreign holdings, it was also clear that the absence of extensive sectoral and currency information on the composition of the bilateral data severely limited the ability of analysts to make useful inferences.

Since 2013, an expanded version of the CPIS reports the sectoral identities of the issuers of portfolio securities (22 countries) and the holders of portfolio securities (67 countries). In addition, more countries (50 countries) now also report the currency composition of their international bond holdings, even if the currency breakdown is not available on a bilateral basis. The sectoral categories of issuers are: central banks (CB), deposit-taking corporations excluding central banks (BANKS), other financial corporations (OFC), general government (GG) and nonfinancial corporations (NFC). Similarly, the sectoral categories of holders are: central banks (CB); deposit-taking corporations excluding central bank (BANKS); other financial corporations (OFC); general government (GG); nonfinancial corporations (NFC); households (HH), and non-profit institutions serving households (NPISH). The OFC category is further broken down into subsectors: insurance corporations and pension funds (ICPF), money market funds (MMF),

and others (OOFC). The currency composition is broken down between: dollars, euro, yen, Swiss Francs, Sterling and a catch-all Other category.[5]

2.2. Stylised Facts

Figures 1a-1c present the sectoral shares of total portfolio assets by holders for selected years. We note several observations. First, there are differences across sectoral holdings. The category of other financial corporations holds the lion's share of total portfolio assets at 54 percent in 2004 and 64 percent in 2014. These are followed by banks, households and the general government, respectively. Non-financial corporations, together with non-profit organisations and central banks (labeled others) hold the smallest share of portfolio assets at less than 4 percent.

Second, across sample periods, the holdings of banks have declined from 36 percent in 2004 to 31 percent at the peak of the global financial crisis in 2008-2009 to around 20 percent in 2014. In contrast, the portfolio holdings of the general government sector has steadily increased from 4.6 percent in 2004, to 5.8 percent in 2008 and about 8.3 percent in 2014.

In Figures 1d-1i, we split total portfolio assets into debt and equity holdings and show a similar sectoral breakdown. Among the sectors, consistent with Figures 1a-1c, other financial corporations hold the largest shares in both asset classes. While other financial corporations have maintained a relatively stable share of equity holdings, their share in debt holdings has expanded from 47 percent in 2004 to 60 percent in 2014. This increase has been matched by a steady decline in the bond holdings of banks from 44.3 percent in 2004 to 37.9 percent in 2008 and 27.2 percent in 2014. The second largest holder of equity assets are governments, with the share increasing from 7 percent to 13 percent, while banks have experienced a twofold decline in their equity share from 2004 to 2008. As might be expected, banks hold far more bonds than equity, while the other sectors

[5]There are many zero observations in the CPIS data associated with trivial holdings or minor destinations. In order to avoid "skewed results", we eliminate this subset of data.

hold larger proportions of equities.

Figures 2a-2c show the breakdown of liability issuance by sectors for year 2014.[6] Across the sectors, we observe roughly equal shares in total portfolio issuances for banks, other financial corporations, non-financial corporations and general government.[7] The split between asset classes highlights that banks and the general government are the largest issuers of debt liabilities while (not surprisingly) non-financial corporations dominate in issuance of equity securities.

Tables 1 and 2 present some distributional patterns in holdings and issuances across country groups for year 2014. We note that advanced countries tend to hold a very small share of liabilities issued by emerging countries. While a similar pattern is observed in the latter group, the share of issued liabilities, however, is substantially larger than the share of advanced-country holdings of emerging-country liabilities (asymmetric group-bias). For instance, households in emerging economies allocate 82 percent of their international portfolio debt holdings to advanced countries, compared to households in advanced countries with 94 percent of holdings allocated to advanced countries.

Furthermore, general government in emerging countries hold more in debt and equity in advanced countries than the corresponding sectoral holdings of advanced countries in the same country group. In terms of issuance patterns, we observe that advanced economies are the main holders of portfolio debt liabilities of both advanced and emerging countries, regardless of the sector of issuance. For instance, 92 percent of public debt issued by emerging countries is held by the advanced countries. A noteworthy feature of both tables is the substantial cross-sectoral heterogeneity of shares (especially across sectors of emerging economies).

Figures 3a-3c describe the currency composition of international debt holdings. Among the currencies, almost half of holdings are denominated in euro (EUR). This can be ex-

[6] The distribution for 2013 is very similar.

[7] Of other financial corporations, "other" other financial corporations, mostly comprised of hedge funds, are the dominant issuers of portfolio debt securities with a sectoral share of around 98 percent. They also dominate equity issuance, albeit to a lesser extent, with a share of 71 percent. Mutual funds are the second largest issuers of equity with a sectoral share of 23 percent.

plained by the high level of cross-border financial trade among member countries of the euro area (Lane 2006). Holdings in US dollar (USD) are in second place at around 30 percent of total portfolio holdings. Debt denominated in Japanese yen (YEN) comes in third and has been declining since 2004, while the shares of Swiss Franc (CHF) and Sterling (GBP) have remained relatively small and stable. Another notable feature of the graph is the substantial increase in the share of debt liabilities denominated in "other" currencies from 6 percent in 2008 to 10.5 percent in 2014. This is consistent with the much-discussed increase in the willingness of global investors to hold the local-currency bonds of emerging economies.

Finally, we also highlight substantial variation in the currency shares of bond holdings across advanced and emerging groups. The currency share of debt holdings for advanced countries is the highest for euro (49 percent) and dollars (30.4 percent), while the highest shares are allocated to dollars (60 percent) and the "other" category (22 percent) in emerging economies. As noted above, the high euro share for advanced economies reflects the high degree of cross-border bond investment among euro area countries, while the predominance of US dollars in the portfolio debt assets of emerging economies is consistent with the central role played by the dollar in the international financial environment facing these countries.

3. Empirical Specification

One main objective of the paper is to investigate whether the bilateral variables that have been identified as important covariates of aggregate bilateral portfolio holdings exhibit different patterns across the disaggregated categories of sectoral holders and issuers of portfolio securities. A second objective is to examine the sources of variation in the currency denomination of international portfolios across reporting countries.

There are various reasons to expect differential patterns in cross-border allocations of portfolios across sectors. First, differences in the severity of informational frictions

across sectors might have an asymmetric impact on the composition of portfolios. Second, the degree of professionalisation of portfolio selection may vary across sectors, with the choices of institutional investors in the OFC category systematically differing from the choices of households. Third, the portfolio strategies of governments may be influenced by a wider range of factors than the trade off between expected returns and risk.

In examining the geographical distribution of positions, we follow the established gravity literature by employing the following benchmark specification

$$\ln(A^k_{ij,t}) = \alpha^k_{i,t} + \alpha^k_{j,t} + \mathbf{g}_{ij}\boldsymbol{\theta}^k + \mathbf{m}_{ij}\boldsymbol{\eta}^k + \varepsilon_{ij,t} \tag{1}$$

where $\ln(A^k_{ij,t})$ is the log of the outstanding bilateral position by reporting country i in destination country j at the end of year t, $\mathbf{g}_{ij}$ is a row vector of gravity-type controls while $\mathbf{m}_{ij}$ is a row vector of membership dummies with corresponding $\boldsymbol{\theta}^k$ and $\boldsymbol{\eta}^k$ column vectors of coefficients. The index k captures the different categories of holders and the different categories of issuers and the instrument in question (portfolio debt or portfolio equity). The gravity variables we consider are the logarithms of bilateral distance and bilateral imports as well as dummies for common language, colonial and legal origins.

The second set of controls, justifiable on grounds of either informational frictions or political economy considerations, is captured by the membership vector which includes dummies that take the value 1 if both source and destination countries are members of the corresponding regional bloc (euro area, European Economic Association, and Association of Southeast Asian Nations respectively) and 0 otherwise.[8] The inclusion of a euro area dummy captures the effect of a common currency, possibly with heterogenous implications for portfolio allocations in relation to the different sectors of holders and issuers.

To control for local, partner and global time-varying factors, we run the regressions

[8]If common membership of international institutions reduce informational frictions, we may expect increased intra-group holdings.

with source and host country-time dummies. In the current specification $\alpha_{i,t}^k$ captures variables affecting aggregate foreign portfolio holdings by source country i at time t, while $\alpha_{j,t}^k$ controls for variables affecting the aggregate foreign portfolio liability position of destination country j at time t. Effectively these time-varying host/source effects filter common trends and valuation effects out of portfolio allocation, so that what remains is the purely bilateral variation.[9] Given the bilateral nature of the data, it is reasonable to expect some heteroskedasticity at the country-pair level. To account for the impact of non-spherical disturbances, we estimate equation (1) with OLS and correct the standard errors.[10]

To further understand the cross-sectional distributions of international portfolio debt holdings, we split the latter category by the currency of denomination. To this end we run the following cross-sectional regression

$$\ln(D_i^{CURR}) = \alpha_0 + \mathbf{b}_i\boldsymbol{\theta} + \mathbf{c}_i\boldsymbol{\eta} + \varepsilon_i \tag{2}$$

where $\ln(D_i^{CURR})$ is the log of total debt holdings of country i for a given currency of denomination, $\mathbf{b}_i$ is a row vector of bilateral-type controls while $\mathbf{c}_i$ is a row vector of other controls with corresponding $\boldsymbol{\theta}$ and $\boldsymbol{\eta}$ column vectors of coefficients.

The vector of bilateral-type controls includes the log of the distance between the capital of country i and the capital of the country with corresponding currency and the log of imports of country i at time t from the country with corresponding currency. The other variables included in the specification are the average inflation rate over the past ten years, the logarithm of per capita GDP and the logarithm of total debt holdings. Equation (2) is estimated with OLS.

Regarding the control variables, we take the level of bilateral imports from the IMF's Direction of Trade Statistics database. Data for distance, common language, colonial

[9] See Galstyan and Lane (2013).
[10] An alternative approach is to use GLS (Galstyan and Lane 2013).

links, and legal origins are from CEPII Distances database. Information on the membership of various blocs is obtained from www.ecb.int for the euro area, www.europa.eu for the European Economic Association, and www.aseansec.org for the Association of Southeast Asian Nations. Data for inflation are taken from IMF's World Economic Outlook Database, while per capita GDP data are taken from the World Development Indicators Database of the World Bank. Finally, data on fixed exchange rates are compiled from the IMF's Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER).

The sectoral data on the holders of portfolio securities are available for a longer period (2001-2014) than the sectoral data on the issuers of portfolio securities (2013-2014). We examine sub-samples of advanced and emerging markets as holders and issuers vis-à-vis other countries as well.

4. Results

The purpose of this section is to study general and sectors specific patterns in distributions of parameter estimates of the bilateral variables as well as examine the sources of variation in the currency denomination of international portfolios across reporting countries.

4.1. International Portfolios: Holding Sectors

Table 3 presents results for portfolio debt holdings by the different sectors. We split the sample between advanced reporting countries in Panel A and emerging reporting countries in Panel B. Table 3 confirms that most holding sectors exhibit the basic gravity pattern by which international bond holdings are disproportionately concentrated in neighbouring countries. Among advanced economies, the distance effect is stronger for banks and households than for other financial corporations and non-financial corporations: these differences are less apparent for emerging reporting countries. The sectoral

differences for advanced countries warrant further investigation to understand why the bond portfolios of banks and households exhibit greater sensitivity to distance than the bond portfolios of other financial corporations and non-financial corporations.

It is striking that the distance effect is not significant for bond holdings of the government sector. This is perhaps not surprising to the extent that the bond holdings of governments are mainly in the form of official reserves and may be concentrated in the major reserve currencies rather than in neighbouring countries.

For both advanced and emerging reporting countries, trade is consistently significant as a covariate of bond holdings for the different holding sectors: this may reflect a hedging motive by which investors guard against the risk of depreciation vis-a-vis major import partners (Obstfeld and Rogoff 2001). The common legal origins dummy is also typically significant for both groups, with the exception of the holdings of banks and non-financial corporates in emerging economies. It is striking that a common language is typically important for holding sectors in emerging economies but is not significant for the advanced group (with the exception of a significant but negative coefficient for the bond holdings of advanced-country banks).

In relation to common membership of institutional blocs (euro area, European Economic Area, Association of Southeast Asian Nations), common membership of the euro area is significantly positive across all holding sectors, with common membership of the European Economic Area significantly positive for the holdings of non-financial corporations but significantly negative for banks and households. For the emerging group, common membership of the European Economic Area is significantly positive for other financial corporations, banks and households, so that this institutional anchor seems more important for these holding sectors in the emerging economies of Central and Eastern Europe than for these sectors in the advanced economies. The ASEAN dummy is significantly positive for banks but significantly negative for other financial corporations.

In Table 4, we conduct a similar exercise in relation to international portfolio equity

holdings. Relative to the patterns for bond holdings in Table 3, Table 4 shares some similarities but also exhibits some differences. For both advanced and emerging reporting countries, the distance effect is negative and statistically significant. Among advanced countries, banks, households and non-financial corporations exhibit the highest sensitivity to distance. The government sector is least sensitive to distance, a finding that is qualitatively similar to the distance-insensitivity of bond holdings. There is less evidence in favor of sectoral variation in the distance coefficient in the sample of emerging markets.

Trade is a positive and consistently significant covariate across both sample splits. Furthermore, in the group of advanced countries, we observe disproportionately higher holdings by banks of equities originating from trade partners with closer bilateral linkages. It is noteworthy that legal origins matter for advanced economies substantially more than for sectors in emerging economies, with households in the former group attaching to this fundamental the highest weight. We also find that a common language is marginally more important for holding sectors in emerging countries than advanced countries.

Finally, the institutional variables appear to be more essential for the holding sectors of advanced countries than emerging countries. In particular, common membership of the euro area has a significantly positive covariation with cross-border holdings of equity securities across all sectors. Among these sectors, the other financial corporations sector shows the least sensitivity to the membership dummy. In relation to the European Economic Area, it is striking to observe a significantly negative coefficient in relation to equity holdings for most sectors, with households in advanced countries exhibiting the highest sensitivity (the EEA dummy is insignificant for the government sector). This pattern is in stark contrast to the effect the same membership has on cross-border holdings of debt securities.

4.2. International Portfolios: Issuing Sectors

Panels A and B of Table 5 present results for debt regressions by the sector of issuer for advanced reporting countries and emerging reporting countries respectively. For advanced economies, a striking pattern is that the distance variable is only significant for the bonds issued by banks; distance is more generally significant for the bonds issued by the different sectors in emerging economies, although considerably weaker for the bonds issued by non-financial corporates relative to banks or sovereigns.

In the sample of advanced reporting countries, trade is consistently positive and significant as a covariate of the cross-border variation of debt liabilities, while trade matters only for non-financial corporations in the sample of emerging economies. Legal origin is also important for the bonds issued by governments and non-financial corporations in emerging countries. This finding is consistent with the importance of legal origins for the holding sectors of advanced countries, which, in turn, hold 92 percent (for general government) and 75 percent (for non-financial corporations) of debt liabilities issued by emerging countries.[11]

In relation to the institutional variables, membership of the euro area is associated with higher bilateral debt positions across most sectors. Common membership of the European Economic Area is significantly positive for non-financial corporations, and marginally negative for banks in advanced countries. In contrast, the EEA membership dummy is positive and significant for the debt liabilities issued by sovereigns in emerging countries. The implication is that investors from fellow EEA member countries are disproportionately willing to hold the sovereign debt issued by governments in Central and Eastern Europe.

Next, we shift our attention to equity-issuing sectors. In Panel A of Table 6, we present results for the issuing sectors in advanced countries, while Panel B shows the results for the issuing sectors in emerging countries. In stark contrast to the debt regres-

[11]The statistical significance of legal origins in advanced countries is driven by "other" other financial corporations, which is comprised mostly of hedge funds.

sions, distance is consistently negative and statistically significant across both samples. While there is hardly any variation across sectors for the advanced and emerging groups, there are important differences across the groups: equity-issuing sectors in emerging economies seem to be disproportionately held by investors in neighbouring regions than the corresponding sectors in advanced economies.

Bilateral trade linkages and colonial links mostly matter to the issuing sectors of advanced countries, in particular vis-a-vis the shares issued by non-financial corporations and banks. The common legal origin dummy is significant for both groups of countries (with the exception of other financial corporations), with less apparent differences both across sectors and across sample splits. It is striking, however, that in advanced countries a common language is associated with a negative covariation pattern via-a-visa the equity securities issued by banks, while the corresponding association is positive in emerging economies.

Turning to the institutional variables, the EEA dummy is positive and statistically significant only for issuing banks in emerging economies: membership to the European Economic Area has non-negligible implications for the funding sources of banks in Central and Eastern Europe.

4.3. Currency Denomination of International Portfolio Debt Holdings

In this section, we take a snapshot at the end of 2014 and examine the sources of variation in holdings of international portfolio debt assets across reporting countries by the currency of denomination.[12] The results are presented in Table 7.

The level of total debt holdings by each reporting country is included as a scaling factor: it is positive and significant in all specifications. The coefficient on inflation is positive and statistically significant in the regressions for bonds denominated in US dollars

[12] See Galstyan, Mehigan and Mercado (2015) for a more extensive treatment of the currency composition of international portfolio debt assets.

and Swiss Francs.[13] A natural interpretation is that investors in high inflation economies seek to hold safe-haven currencies as a hedge against currency depreciation. It is striking, however, that a similar pattern is not observed for bonds denominated in euro, Yen or Sterling. The level of GDP per capita is marginally significant as a covariate of holdings of Swiss Francs.

In relation to gravity-type variables, the level of imports is consistently significant as a covariate for bonds denominated in US dollars, Swiss Francs and Sterling. There is some evidence that the euro and Yen are significant regional currencies: holdings of these currencies are significantly correlated with distance from Frankfurt and Tokyo. The absence of a distance effect for US dollars and Swiss Francs is consistent with the status of these currencies as global safe havens.

5. Conclusions

This paper has studied the newly-available disaggregated data from the Coordinated Portfolio Investment Survey in order to explore whether geographical patterns in portfolio holdings vary in systematic ways across different categories of investors, different issuers of financial liabilities and different currencies.

The results in Table 3-6 reveal that that the patterns evident in the aggregate bilateral data do not uniformly apply across the individual holding and issuing sectors. Furthermore, the evidence presented in Table 7 highlights the differential impact of gravity-type and country-specific factors on bond holdings denominated in different international currencies.

While these results are intriguing, a greater level of understanding requires further progress in the collection and distribution of granular cross-border financial data (Lane 2015). For instance, the CPIS organises the data on a residency basis, while information on the nationalities of the holders and issuers of securities is critical for understanding

[13] On the factors influencing holdings of Swiss Francs, see also Bénétrix and Lane (2015).

the distribution of financial risk (Acharya et al 2015, Adjiev et al 2015). To make further progress, a major shift in the international financial data architecture is required.

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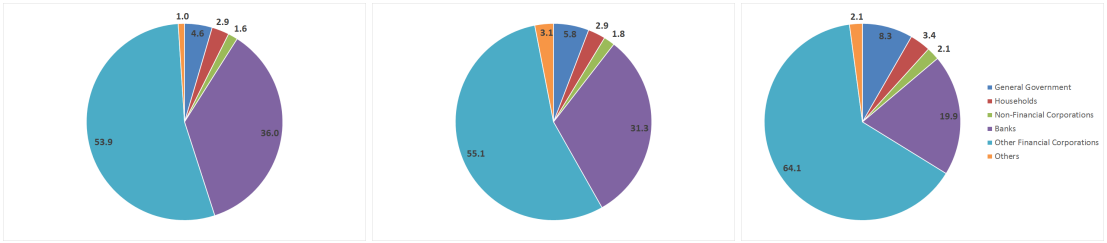
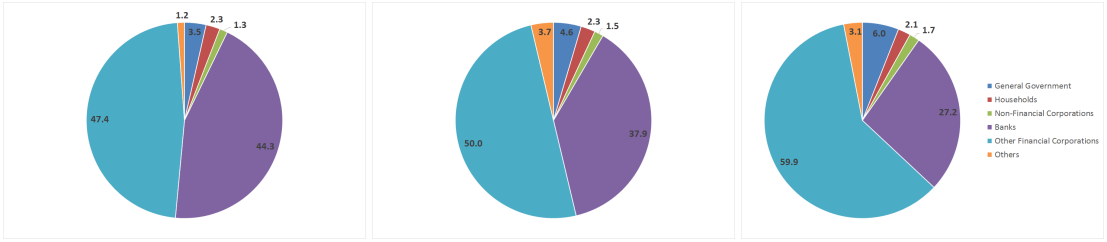
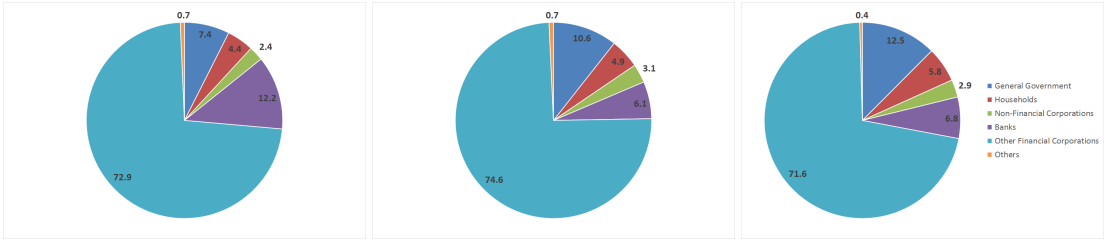
Figure 1: International Portfolios Assets: By Holding Sector



(a) Total, 2004 (b) Total, 2008 (c) Total, 2014



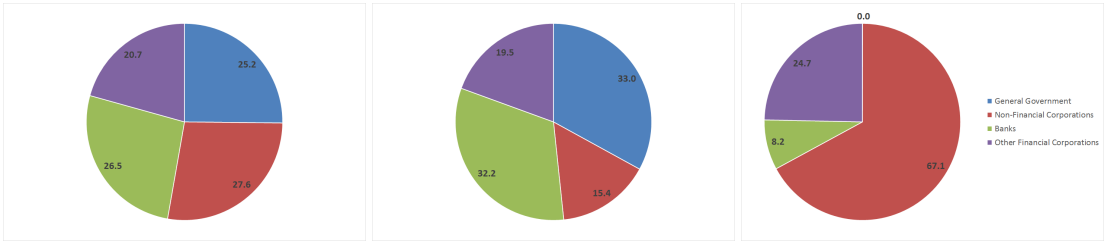
(d) Debt, 2004 (e) Debt, 2008 (f) Debt, 2014



(g) Equity, 2004 (h) Equity, 2008 (i) Equity, 2014

Note: Calculations are based on the CPIS data.

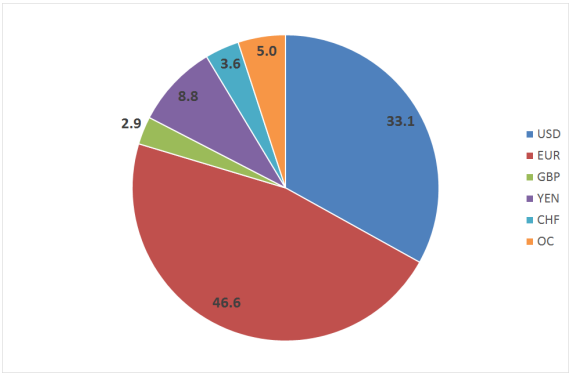
Figure 2: International Portfolio Liabilities: By Issuing Sector



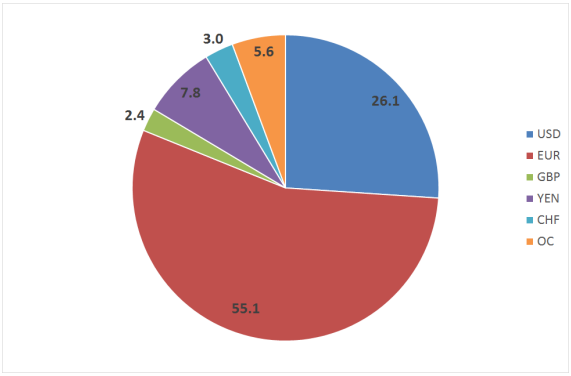
(a) Total (b) Debt (c) Equity

Note: Charts presented for year 2014. Calculations are based on the CPIS data.

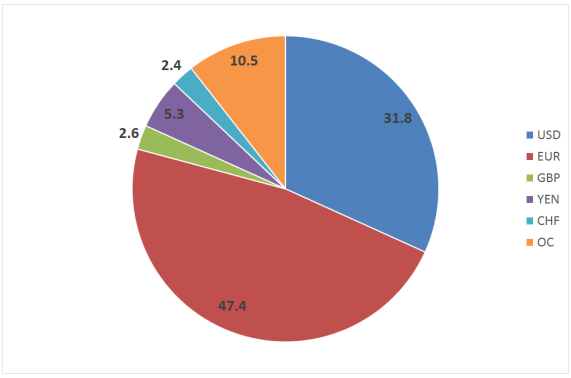
Figure 3: International Portfolio Debt Assets: Holdings by Currency



(a) 2004



(b) 2008



(c) 2014

Note: Calculations are based on the CPIS data.

Table 1: Distribution of Holdings Between Advanced and Emerging Countries

	Total		Debt		Equity	
	ADV	**EM**	**ADV**	**EM**	**ADV**	**EM**
Panel A: ADV						
Other Financial Corporations	90.3	9.7	92.2	7.8	87.3	12.7
Banks	92.2	7.8	94.2	5.8	77.5	22.5
Households	94.9	5.1	93.7	6.3	95.6	4.4
General Government	87.2	12.8	87.9	12.1	86.6	13.4
Non-Financial Corporations	94.9	5.1	96.6	3.4	93.3	6.7
Panel B: EM						
Other Financial Corporations	81.0	19.0	64.9	35.1	89.0	11.0
Banks	63.1	36.9	64.0	36.0	55.2	44.8
Households	89.8	10.2	82.3	17.7	93.2	6.8
General Government	90.0	10.0	90.7	9.3	89.3	10.7
Non-Financial Corporations	76.1	23.9	84.8	15.2	66.4	33.6

Notes: Table presented for year 2014. Values refer to the sectoral shares of portfolio holdings for advanced and emerging countries relative to the total of each country group.

Table 2: Distribution of Issuances Between Advanced and Emerging Countries

	Total		Debt		Equity	
	ADV	**EM**	**ADV**	**EM**	**ADV**	**EM**
Panel C: ADV						
Other Financial Corporations	98.0	2.0	98.7	1.3	96.2	3.8
Banks	98.1	1.9	98.2	1.8	96.2	3.8
General Government	98.7	1.3	98.7	1.3	99.5	0.5
Non-Financial Corporations	93.6	6.4	90.9	9.1	95.7	4.3
Panel D: EM						
Other Financial Corporations	95.2	4.8	95.8	4.2	94.5	5.5
Banks	81.0	19.0	70.5	29.5	91.1	8.9
General Government	92.0	8.0	92.0	8.0	77.8	22.2
Non-Financial Corporations	73.7	26.3	74.9	25.1	73.0	27.0

Notes: Table presented for year 2014. Values refer to the sectoral shares of portfolio issuances for advanced and emerging countries relative to the total of each country group.

Table 3: International Portfolio Debt: By Holding Sector

Panel A: ADV	**Total**	**OFC**	**Banks**	**HH**	**GG**	**NFC**
Distance	-0.57	-0.47	-1.02	-0.76	0.01	-0.44
	(0.03)***	(0.04)***	(0.05)***	(0.08)***	(0.08)	(0.09)***
Trade	0.08	0.04	0.08	0.11	0.19	0.25
	(0.01)***	(0.01)**	(0.02)***	(0.04)**	(0.04)***	(0.05)***
EEA	0.74	0.18	-0.61	-6.71	0.39	6.87
	(0.07)***	(0.11)	(0.17)***	(1.02)***	(0.24)	(2.24)**
EA13	0.99	0.83	0.68	0.74	1.06	0.75
	(0.06)***	(0.07)***	(0.09)***	(0.14)***	(0.11)***	(0.15)***
Common Language	0.10	-0.02	-0.28	0.02	-0.12	0.25
	(0.05)*	(0.08)	(0.09)**	(0.14)	(0.15)	(0.16)
Colonial Links	0.55	0.43	0.52	0.35	0.29	0.13
	(0.05)***	(0.08)***	(0.09)***	(0.13)**	(0.17)	(0.15)
Legal Origins	0.18	0.21	0.45	0.51	0.39	0.54
	(0.03)***	(0.04)***	(0.06)***	(0.08)***	(0.08)***	(0.10)***
Marginal R2	0.17	0.09	0.18	0.11	0.10	0.12
R2	0.84	0.85	0.78	0.84	0.85	0.78
Observations	18200	10836	8322	5054	3916	4085
Panel B: EM	**Total**	**OFC**	**Banks**	**HH**	**GG**	**NFC**
Distance	-0.85	-0.70	-0.58	-0.64	-0.02	-0.76
	(0.03)***	(0.07)***	(0.06)***	(0.07)***	(0.17)	(0.12)***
Trade	0.18	0.16	0.12	0.19	0.28	0.10
	(0.02)***	(0.03)***	(0.04)***	(0.03)***	(0.09)**	(0.06)
EEA	0.79	0.95	0.52	0.66	0.59	0.50
	(0.09)***	(0.17)***	(0.15)***	(0.17)***	(0.45)	(0.26)
ASEAN	0.20	-1.19	0.89	0.55	0.15	0.68
	(0.14)	(0.29)***	(0.28)**	(1.52)	(0.66)	(0.58)
Common Language	0.44	0.41	0.11	0.79	-1.18	1.15
	(0.07)***	(0.16)**	(0.14)	(0.18)***	(0.66)	(0.26)***
Colonial Links	0.10	0.34	0.43	-0.04	0.75	-0.25
	(0.10)	(0.17)*	(0.15)**	(0.22)	(0.36)*	(0.26)
Legal Origins	0.22	0.27	0.01	0.49	0.40	-0.12
	(0.05)***	(0.09)**	(0.08)	(0.10)***	(0.15)**	(0.16)
Marginal R2	0.26	0.19	0.13	0.26	0.15	0.14
R2	0.67	0.60	0.63	0.68	0.84	0.67
Observations	14339	5498	5485	3102	1183	2736

Notes: The dependent variable is the logarithm of the outstanding bilateral sectoral position. All regressions include host-year and source-year dummies. Sectoral definitions are as follows: other financial corporations (OFC), households(HH), general government (GG), non-financial corporations (NFC). ***, **, * denote significance at 1, 5 and 10 percent.

Table 4: International Portfolio Equity: By Holding Sector

Panel A: ADV	**Total**	**OFC**	**Banks**	**HH**	**GG**	**NFC**
Distance	-0.65	-0.61	-0.95	-1.12	-0.66	-1.07
	(0.03)***	(0.04)***	(0.09)***	(0.08)***	(0.11)***	(0.10)***
Trade	0.21	0.17	0.55	0.13	0.06	0.38
	(0.02)***	(0.02)***	(0.06)***	(0.04)***	(0.05)	(0.06)***
EEA	-0.61	-1.16	-1.66	-9.03	-1.09	-5.81
	(0.07)***	(0.11)***	(0.36)***	(0.48)***	(0.70)	(0.78)***
EA13	0.39	0.71	0.95	1.20	1.79	1.27
	(0.05)***	(0.06)***	(0.16)***	(0.10)***	(0.12)***	(0.13)***
Common Language	0.22	-0.01	0.22	0.67	0.01	0.61
	(0.05)***	(0.08)	(0.15)	(0.14)***	(0.15)	(0.15)***
Colonial Links	0.74	0.46	0.25	0.76	0.02	0.35
	(0.06)***	(0.08)***	(0.15)	(0.13)***	(0.21)	(0.16)*
Legal Origins	0.37	0.37	0.16	0.69	0.08	0.22
	(0.04)***	(0.04)***	(0.10)	(0.07)***	(0.10)	(0.10)*
Marginal R2	0.18	0.15	0.17	0.25	0.18	0.20
R2	0.87	0.87	0.69	0.86	0.91	0.75
Observations	16526	9982	5110	5564	3006	4545
Panel B: EM	**Total**	**OFC**	**Banks**	**HH**	**GG**	**NFC**
Distance	-1.28	-1.29	-0.83	-0.86	-0.73	-1.44
	(0.05)***	(0.07)***	(0.20)***	(0.10)***	(0.24)**	(0.11)***
Trade	0.24	0.16	0.08	0.28	0.33	0.23
	(0.02)***	(0.03)***	(0.12)	(0.06)***	(0.12)**	(0.05)***
EEA	-0.39	-0.33	-0.19	-0.47	-0.19	-0.61
	(0.11)***	(0.16)*	(0.45)	(0.22)*	(0.92)	(0.24)*
ASEAN	0.59	-0.43	-1.15	-0.42	-5.35	-0.34
	(0.17)***	(0.32)	(0.66)	(1.22)	(0.91)***	(0.47)
Common Language	0.53	0.84	0.16	0.55	0.80	1.48
	(0.10)***	(0.14)***	(0.27)	(0.23)*	(0.66)	(0.20)***
Colonial Links	0.54	0.45	-0.05	0.99	-0.03	0.29
	(0.12)***	(0.17)**	(0.39)	(0.21)***	(0.52)	(0.25)
Legal Origins	0.18	-0.09	0.21	0.19	0.18	-0.53
	(0.06)**	(0.10)	(0.17)	(0.15)	(0.31)	(0.16)***
Marginal R2	0.28	0.24	0.06	0.18	0.20	0.24
R2	0.69	0.66	0.76	0.71	0.86	0.69
Observations	13230	6059	2097	3535	801	3669

Notes: The dependent variable is the logarithm of the outstanding bilateral sectoral position. All regressions include host-year and source-year dummies. Sectoral definitions are as follows: other financial corporations (OFC), households(HH), general government (GG), non-financial corporations (NFC). ***, **, * denote significance at 1, 5 and 10 percent.

Table 5: International Portfolio Debt: By Issuing Sector

Panel A: ADV	**Total**	**OFC**	**Banks**	**GG**	**NFC**
Distance	-0.02	0.22	-0.57	0.01	0.11
	(0.09)	(0.34)	(0.22)**	(0.23)	(0.26)
Trade	0.51	0.70	0.57	0.45	0.36
	(0.07)***	(0.18)***	(0.15)***	(0.13)***	(0.15)*
EEA	1.01	1.89	-1.47	-0.02	2.21
	(0.26)***	(1.32)	(0.65)*	(0.91)	(0.72)**
EA13	1.29	0.93	0.96	1.36	0.57
	(0.15)***	(0.44)*	(0.34)**	(0.35)***	(0.34)
Common Language	-0.25	-1.20	-0.82	0.17	-0.15
	(0.17)	(0.46)**	(0.45)	(0.37)	(0.34)
Colonial Links	0.43	0.02	0.39	0.10	0.40
	(0.22)*	(0.45)	(0.53)	(0.62)	(0.38)
Legal Origins	0.21	1.32	-0.01	0.04	0.32
	(0.11)	(0.38)***	(0.26)	(0.24)	(0.22)
Marginal R2	0.22	0.18	0.16	0.10	0.14
R2	0.83	0.84	0.80	0.83	0.84
Observations	1938	369	473	431	472
Panel B: EM	**Total**	**OFC**	**Banks**	**GG**	**NFC**
Distance	-0.91	0.09	-1.29	-0.92	-0.45
	(0.06)***	(0.38)	(0.32)***	(0.15)***	(0.19)*
Trade	0.11	0.19	0.09	-0.01	0.16
	(0.02)***	(0.13)	(0.07)	(0.04)	(0.06)**
EEA	0.84	-0.95	0.34	2.09	-0.65
	(0.20)***	(0.67)	(1.45)	(0.58)***	(1.11)
ASEAN	0.27		-0.64		2.34
	(0.29)		(0.95)		(0.72)**
Common Language	0.09	-0.15	-1.48	-0.27	0.43
	(0.13)	(1.07)	(0.62)*	(0.43)	(0.56)
Colonial Links	0.29	-0.64	-0.49	-0.41	-1.29
	(0.19)	(0.93)	(0.47)	(0.30)	(0.46)**
Legal Origins	0.55	-0.13	0.42	0.63	0.55
	(0.08)***	(0.34)	(0.23)	(0.16)***	(0.20)**
Marginal R2	0.26	0.02	0.15	0.13	0.16
R2	0.73	0.71	0.68	0.79	0.73
Observations	3816	319	475	858	632

Notes: The dependent variable is the logarithm of the outstanding bilateral sectoral position. All regressions include host-year and source-year dummies. Sectoral definitions are as follows: other financial corporations (OFC), general government (GG), non-financial corporations (NFC). ***, **, * denote significance at 1, 5 and 10 percent.

Table 6: International Portfolio Equity: By Issuing Sector

Panel A: ADV	**Total**	**OFC**	**Banks**	**NFC**
Distance	-0.54	-0.99	-0.49	-0.40
	(0.10)***	(0.26)***	(0.23)*	(0.17)*
Trade	0.48	0.38	0.36	0.55
	(0.06)***	(0.21)	(0.13)**	(0.11)***
EEA	-0.13	0.28	0.63	-0.33
	(0.23)	(0.81)	(0.61)	(0.49)
EA13	0.10	-0.45	-0.46	0.10
	(0.15)	(0.37)	(0.38)	(0.24)
Common Language	-0.07	0.11	-0.79	-0.19
	(0.18)	(0.41)	(0.35)*	(0.33)
Colonial Links	0.90	1.75	1.80	0.25
	(0.24)***	(0.84)*	(0.55)**	(0.46)
Legal Origins	0.37	-0.06	0.66	0.48
	(0.12)**	(0.30)	(0.27)*	(0.21)*
Marginal R2	0.23	0.20	0.23	0.23
R2	0.86	0.78	0.83	0.89
Observations	1918	444	412	603
Panel B: EM	**Total**	**OFC**	**Banks**	**NFC**
Distance	-1.34	-1.46	-1.01	-0.90
	(0.08)***	(0.39)***	(0.36)**	(0.23)***
Trade	0.13	-0.13	-0.05	0.11
	(0.03)***	(0.14)	(0.08)	(0.07)
EEA	-0.90	-1.25	6.29	0.79
	(0.28)**	(0.91)	(1.82)***	(1.37)
ASEAN	0.13		-0.67	1.54
	(0.36)		(1.09)	(0.94)
Common Language	0.51	1.04	1.53	0.07
	(0.17)**	(3.15)	(0.70)*	(0.53)
Colonial Links	0.58	-0.27	-0.69	-0.48
	(0.20)**	(0.50)	(0.55)	(0.43)
Legal Origins	0.74	0.67	0.67	1.01
	(0.12)***	(0.35)	(0.26)*	(0.23)***
Marginal R2	0.26	0.08	0.11	0.18
R2	0.73	0.66	0.78	0.73
Observations	3102	400	479	847

Notes: The dependent variable is the logarithm of the outstanding bilateral sectoral position. All regressions include host-year and source-year dummies. Sectoral definitions are as follows: other financial corporations (OFC), general government (GG), non-financial corporations (NFC). ***, **, * denote significance at 1, 5 and 10 percent.

Table 7: International Portfolio Debt Assets: By Currency of Denomination

	USD	**GBP**	**EUR**	**CHF**	**YEN**
Inflation	10.32	15.77	-7.53	24.13	61.52
	(4.80)**	(18.73)	(5.56)	(10.28)**	(73.99)
GDPPC	0.20	0.75	0.23	1.34	0.24
	(0.23)	(0.56)	(0.31)	(0.75)*	(2.15)
Imports	0.36	0.62	-0.31	0.61	0.49
	(0.08)***	(0.27)**	(0.17)*	(0.34)*	(0.72)
Distance	0.58	0.34	-1.14	0.04	-4.66
	(0.35)	(0.38)	(0.19)***	(0.34)	(1.82)**
Debt	0.74	0.82	1.15	0.54	1.93
	(0.09)***	(0.22)***	(0.12)***	(0.31)*	(0.87)**
Constant	-9.36	-18.67	6.66	-21.38	15.25
	(4.44)**	(7.68)**	(4.41)	(7.96)**	(27.49)
R2	0.89	0.76	0.93	0.70	0.56
Observations	47	45	44	30	26

Notes: The dependent variable is the logarithm of debt assets denominated in a given currency. ***, **, * denote significance at 1, 5 and 10 percent.