

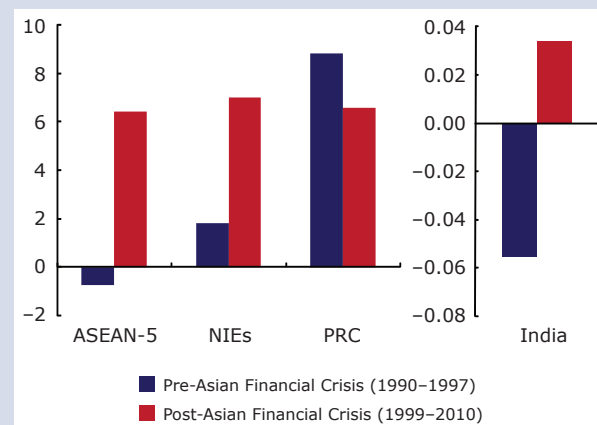
Intraregional Portfolio Debt Investment⁵

One key feature of Asia in the post-1997/98 crisis period has been its transformation from a region with a current account deficit into one with a current account surplus—or, equivalently, from a net importer of capital into a net exporter of capital. Much of the growth in savings in Asia is attributable to the People’s Republic of China (PRC), which together with Japan accounts for the bulk of savings in the region. The PRC’s average savings rate increased from 41.3% in 1990–1997 to 45.6% in 1999–2010. India also increased its savings rate from an average of 22.6% in 1990–1997 to 28.1% in 1999–2010.

Figure 19 shows the savings–investment gap both before and after the 1997/98 Asian financial crisis as a percentage of gross domestic product (GDP) for the PRC; NIEs (Hong Kong, China; Republic of Korea; Singapore); ASEAN-5 (Indonesia, Malaysia, Philippines, Thailand, Viet Nam); and India.⁶ The savings–investment gap in the PRC fell slightly in the post-crisis period from a high and substantial surplus pre-crisis. The savings–investment gap of the NIEs widened in the post-crisis period, while a deficit among ASEAN-5 countries became a large surplus after 1997/98.

Much of these savings are either retained within the country of origin as bank deposits or invested abroad in low-risk securities, which ultimately return to the region in the form of foreign direct and other investment. However, these capital flows invariably push up the cost of intermediation and raise questions about the development, depth, and efficiency of domestic and regional financial markets. The recycling of Asian savings through advanced economies and their global financial centers is an extreme form of the Lucas Paradox. This results in a situation where capital does not flow from developed to emerging economies to reflect the lower availability of capital per worker

Figure 19: Saving–Investment Gap—Emerging Asia (% of GDP)



ASEAN = Association of Southeast Asian Nations, GDP = gross domestic product, NIEs = newly industrialized economies, PRC = People’s Republic of China.

Notes:

1. Emerging Asia comprises the People’s Republic of China; Hong Kong, China; India; Indonesia; the Republic of Korea; Malaysia; the Philippines; Thailand; Singapore; and Viet Nam.
2. Actual data for Viet Nam starts in 1994 and Malaysia and the Republic of Korea only covers up to 2009.
3. Saving–Investment gap is computed as difference between gross domestic savings (% of GDP) and gross fixed capital formation (% of GDP). Percent of GDP is computed based on current prices.
4. ASEAN-5 comprises Indonesia, Malaysia, the Philippines, Thailand, and Viet Nam.

Source: World Bank’s *World Development Indicators*.

in the latter. In the case of Asia, the direction is reversed, with capital flowing from emerging to developed markets.

The region’s policymakers are cognizant of these inefficiencies and have been keen to address the risks emanating from the twin mismatches that contributed to the crippling effects of the 1997/98 Asian financial crisis. They have undertaken significant country-level reforms and regional collective action to develop local currency (LCY) bond markets as a means of channelling the region’s massive savings to meet its burgeoning financing needs.

The Asian Bond Markets Initiative (ABMI), which was endorsed at the 2003 ASEAN+3 Finance

⁵ This section is based on a forthcoming paper by Azis and Mitra, 2012.
⁶ ASEAN = Association of Southeast Asian Nations, NIEs = newly industrialized economies.

Ministers Meeting, aims to develop efficient and liquid bond markets in Asia in order to channel Asian savings into long-term productive uses. This regional initiative facilitates intraregional cross-border investment by addressing institutional barriers and developing the requisite market infrastructure. ABMI measures have already yielded significant results. For example, total LCY bonds outstanding in emerging East Asia increased by an annual average rate of 15.1% over the last 5 years to US\$5.7 trillion in 2011.

However, intraregional portfolio debt investment remains low. The share of cross-border debt investment as a percentage of the region's total stood at 7.2% in 2010, up only slightly from 4.2% in 2001 (**Table 12**). About 46% of total intraregional debt investment in 2010 was placed in markets in the PRC and the Republic of Korea. Meanwhile, investors from Hong Kong, China accounted for about 45% of all debt investments in the region. This suggests that intraregional investments are still concentrated in the larger markets and that there remains room for initiatives to encourage greater regional integration.⁷

The current section focuses on factors affecting cross-border investments in emerging Asian bond markets. It seeks to identify the rationale behind the seeming lack of intraregional bond investments, with the objective of providing valuable inputs to the process of strengthening intraregional bond investment flows. Stylized information on "investment bias" is presented first. Investigating this phenomenon further, an empirical analysis of the factors determining non-resident holdings of domestic bonds is presented next. Lastly, results are shared from a survey conducted to ascertain how Asian investors prioritize factor-considerations affecting their offshore bond investment decisions.

Portfolio Debt Allocation by Asian Investors: A Home, Regional, or Global Bias?

To understand Asian investors' appetite for foreign bonds, it is paramount to investigate whether Asian bond investors have a relative preference for (i) domestic bonds (home bias), (ii) Asian bonds from outside of their home country (regional bias), or (iii) bonds from the United States (US) and European Union (EU) (global bias). We employed simple non-parametric statistical tests to examine whether the distributions of two samples were equal.

Data used for the model included the portfolio debt allocation shares of investors in nine Asian economies—Hong Kong, China; India; Indonesia; Japan; the Republic of Korea; Malaysia; the Philippines; Singapore; and Thailand—in home, regional, and global markets for the years 2001, 2009, and 2010. The use of portfolio allocation shares in a non-parametric test—particularly the Wilcoxon signed rank sum test—have been used in other empirical studies dealing with investment bias (Ackert and Church 2009).

Table 13 presents each of the nine Asian economies' portfolio debt share of the total debt securities held in three investment destinations: (i) the home economy of the Asian investor (Home); (ii) Asian economies including the PRC; Hong Kong, China; India; Indonesia; Japan; Republic of Korea; Malaysia; Philippines; Taipei, China; Thailand; and Viet Nam (Asia); and (iii) global economies including the US and EU-15 member countries (Global).

All nine Asian markets displayed the largest portfolio debt weight in Home markets in all three years under review. Between 2001 and 2009, the Home portfolio debt allocation share rose for Hong Kong, China and the Philippines, but fell for most other Asian economies. The portfolio debt weight for Asia increased for Indonesia, Malaysia, the Philippines, Singapore, and Thailand over the same period, but declined for the Republic of Korea and remained roughly unchanged for the rest.

⁷ International Monetary Fund's *Coordinated Portfolio Investment Surveys* (CPIS) 2001–2010.

Table 12: Asia Cross Border Debt Securities Investments (US\$ million)

Investment in:	Investment from:										Total Value of Investments		
	Hong Kong, China	India	Indonesia	Japan	Korea, Rep. of	Malaysia	Philippines	Singapore	Thailand	Total Asia		US	EU-15
	2001												
China, People's Rep. of	2,967	-	-	880	142	-	-	412	-	4,401	634	1,412	7,029
Hong Kong, China	-	-	96	1,268	306	28	25	1,622	119	3,464	1,893	9,717	16,809
India	-	-	-	166	66	6	-	266	-	504	301	834	2,009
Indonesia	-	-	-	108	63	8	3	560	-	741	315	422	1,957
Japan	7,103	-	1	-	75	15	5	9,014	-	16,213	27,125	75,170	209,707
Korea, Rep. of	3,789	-	-	5,454	-	3	7	2,182	-	11,433	4,938	7,360	24,920
Malaysia	1,817	-	2	2,200	329	-	9	1,591	-	5,947	1,680	1,733	9,705
Philippines	1,179	-	-	1,347	106	41	-	761	-	3,435	2,671	1,926	9,304
Singapore	1,282	-	38	1,209	151	10	59	-	98	2,847	1,442	8,151	14,508
Taipei,China	609	-	-	82	8	15	13	340	-	1,066	253	677	2,074
Thailand	659	-	-	748	159	21	-	841	-	2,429	782	765	4,217
Viet Nam	-	-	-	30	15	-	-	-	-	45	21	37	106
Total Asia (A)	19,405	-	137	13,492	1,419	147	121	17,588	217	52,526	42,055	108,205	302,348
Total Value of Investment (B)	110,985	-	701	1,062,403	6,735	947	2,024	73,923	743	1,258,460	690,936	3,555,740	7,515,934
Ratio of A to B	17.5%	-	19.5%	1.3%	21.1%	15.5%	6.0%	23.8%	29.2%	4.2%	6.1%	3.0%	4.0%
US	27,795	-	249	366,689	3,309	140	1,752	11,977	278	412,190	-	628,935	2,074,148
EU-15	22,665	-	214	427,855	1,017	490	61	28,436	198	480,936	360,185	2,218,666	3,670,376
	2010												
China, People's Rep. of	45,875	-	106	494	167	9	-	1,970	1	48,622	1,602	6,332	58,647
Hong Kong, China	-	-	144	1,484	405	234	217	6,440	419	9,341	2,297	8,023	22,380
India	9,131	-	10	1,057	94	235	-	10,570	446	21,542	5,009	17,665	58,988
Indonesia	376	-	-	2,649	74	253	697	12,637	43	16,730	9,622	14,191	42,294
Japan	18,332	4	14	-	1,220	65	62	10,650	73	30,419	52,700	194,567	534,465
Korea, Rep. of	18,383	-	115	12,200	-	2,427	-	17,543	11,412	62,079	25,772	48,240	147,925
Malaysia	5,555	-	49	2,774	186	-	21	8,264	133	16,982	11,940	21,185	51,409
Philippines	1,161	-	1	2,937	219	512	-	2,769	46	7,646	7,506	7,177	26,656
Singapore	5,308	7	721	4,998	149	1,991	138	-	176	13,488	7,552	11,199	40,438
Taipei,China	1,664	-	5	25	17	-	-	4,283	-	5,995	377	6,676	13,226
Thailand	729	-	2	886	83	165	-	3,146	-	5,010	2,035	4,810	12,860
Viet Nam	290	-	1	38	22	-	-	113	1	464	674	2,009	3,168
Total Asia (A)	106,805	12	1,167	29,542	2,635	5,890	1,135	78,384	12,749	238,319	127,086	342,076	1,012,457
Total Value of Investment (B)	344,854	527	5,549	2,667,349	29,990	10,843	5,843	204,636	17,942	3,287,533	2,091,098	12,403,303	24,827,387
Ratio of A to B	31.0%	-	21.0%	1.1%	8.8%	54.3%	19.4%	38.3%	71.1%	7.2%	6.1%	2.8%	4.1%
US	72,199	175	246	868,676	12,760	1,047	1,804	35,895	1,604	994,407	-	1,928,954	5,968,406
EU-15	93,912	302	1,468	874,774	7,871	1,182	1,144	58,852	1,055	1,040,560	923,866	8,109,088	12,454,422

- = data not available, EU = European Union, US = United States.

Notes:

1. The data are derived from the creditor side for both assets and liabilities.

2. EU-15 consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, and the United Kingdom. Source: OREI calculations based on data from the International Monetary Fund's *Coordinated Portfolio Investments Survey*.

Table 13: Portfolio Debt Allocation of Asian Investors in Selected Regions (%)

Portfolio Debt Allocation of Investors from:	2010			2009			2001		
	Home	Asia	Global	Home	Asia	Global	Home	Asia	Global
Hong Kong, China	37.8	19.3	30.0	37.4	12.4	34.0	34.6	11.4	29.7
India	99.9	0.0	0.04	100.0	0.0	0.0	100.0	0.0	0.0
Indonesia	94.7	1.1	1.6	96.4	0.8	1.6	98.6	0.3	0.9
Japan	80.9	0.2	12.5	80.4	0.2	13.2	83.5	0.2	12.4
Korea, Rep. of	97.4	0.2	1.8	97.6	0.1	1.8	98.4	0.3	1.0
Malaysia	95.3	2.5	1.0	96.3	1.4	1.0	98.9	0.2	0.7
Philippines	93.6	1.2	3.2	94.2	0.5	3.2	94.0	0.4	5.3
Singapore	44.1	21.4	25.9	41.9	16.3	32.5	43.5	13.4	30.9
Thailand	92.4	5.4	1.1	89.8	8.0	1.4	98.2	0.5	1.1

Notes:

1. Asia comprises the People's Republic of China (PRC); Hong Kong, China; India; Indonesia; Japan; the Republic of Korea; Malaysia; the Philippines; Singapore; Taipei, China; Thailand; and Viet Nam.

2. Global refers to the United States (US) and European Union (EU)-15 member countries.

Source: OREI calculations based on data from *AsianBondsOnline*, Bank for International Settlements, and International Monetary Fund's *Coordinated Portfolio Investment Survey*.

Moreover, the Global allocation climbed between 2001 and 2009 for Hong Kong, China; Indonesia; Japan; the Republic of Korea; Malaysia; and Singapore; but fell for the Philippines.

Between 2009 and 2010, the Global portfolio debt share declined in Hong Kong, China; Japan; Singapore; and Thailand, while remaining steady in other markets. Meanwhile, the Asia portfolio debt share climbed in most markets, including Hong Kong, China; Indonesia; the Republic of Korea; Malaysia; Philippines; and Singapore. Changes to the debt allocation in Home markets between 2009 and 2010 were mixed, rising for Hong Kong, China; Japan; Singapore; and Thailand; while falling for all other markets.

The results for 2001 reveal that the difference between the portfolio debt allocation of Asian investors in Home and Asian markets was statistically significant (at the 1% level). As the portfolio debt weights for Home were substantially larger than for Asia, this implies a home bias among Asian investors relative to bonds in other Asian markets. There was also a statistically significant difference (at the 5% level) in the portfolio debt shares of Asian investors between Home and Global, indicating that Asian investors also have a home bias relative to bonds available in global

markets. Comparing the portfolio debt shares of Asian investors in Asia versus Global bonds, there was a statistically significant difference between the two, suggesting that Asian investors prefer US and EU bonds over those from other Asian markets.

Meanwhile, the results for 2009 showcase a home bias relative to other Asian and global bonds. That is, there was a statistically significant difference in the portfolio debt allocation of Home with respect to Asia (at the 1% level), and with respect to Global (at the 5% level). However, there was no statistically significant difference for Asian investors between Asia and Global bonds.

The results for 2010 are similar to those from 2009: Asian investors had a home bias relative to bonds from other Asian countries and global markets, with no discernible bias between the latter two categories. Interestingly, the significance of the difference of portfolio debt allocation between Home and Global strengthened in 2010, which suggests that the home bias of Asian bond investors strengthened between 2009 and 2010. Overall, Asian investors have a bias toward their own respective bond markets and this bias appears to have strengthened in 2010, especially relative to bonds from the US and Europe.

Box: Determinants of Cross-Border Debt Securities Holdings in Asia

This box analyzes the factors affecting cross-border investment in Asian bond markets in order to explain the low level of intraregional bond investment and identify effective methods for increasing such flows.

The determinants of intraregional cross-border bond holdings are analyzed using a gravity equation similar to that applied to trade flows. A gravity model was used to identify the following factors:^a

$$\ln FI_{sdt} = \beta_0 + \beta_1 \text{Distance}_{dt} + \beta_2 \ln \text{Trade}_{sdt} + \beta_3 \text{FinOpen}_{st} + \beta_4 \text{Yield_Spread}_{dst} + \beta_5 \text{ExpER_App}(1)_{dst} + \beta_6 \text{Yield_Volatility}_{dt} + \beta_7 \text{BAS}_{dt} + \beta_8 \text{MCap_GDP}_{dt} + \epsilon_{sdt}$$

For the analysis, annual data on cross-border holdings of long-term debt securities was obtained from the *Coordinated Portfolio Investment Survey* (CPIS) published by the International Monetary Fund (IMF).^b In constructing source-destination pairs for holdings of long-term debt securities, the source and destination economies include Hong Kong, China; Indonesia; Japan; the Republic of Korea; Malaysia; the Philippines; Singapore; and Thailand.

Table shows the determinants of intraregional, cross-border, long-term bond holdings in Asia. The results show that bilateral asset holdings are significantly affected by the return on assets, market liquidity and volatility, various market transaction and information costs, and cross-market relationships.

Increasing overall returns remains the primary motivation of Asian investors. Thus, the return on investment is an important factor in an investor's decision to hold foreign assets, as indicated by the significant positive relationship between yield spreads and cross-border, long-term bond holdings. When currency returns are considered, an expected appreciation of the destination country's currency would result in an exchange for more source country LCY, thereby making cross-border investments attractive, as reflected by the positive coefficient of $\text{ExpER_App}(1)_{dst}$. On average, investor holdings of foreign debt assets respond positively to two components of portfolio returns: (i) the return on assets in the currency of the destination

^a FI_{sdt} is the cross-border holding of the source country s of long-term debt securities issued by the destination country d at time t . Distance_{dt} is a technological measure of distance, given by the number of telephone lines per person in the destination country at time used t . Trade_{sdt} is the sum of export and import between the partner countries at time used t . FinOpen_{st} is the financial openness index of the source country s at time t computed by Chinn-Ito based on information from the IMF Annual Report on Exchange Arrangements and Exchange Restrictions. $\text{Yield_Spread}_{dst}$ is the difference between 5-year LCY bond yields in the destination and source country. $\text{ExpER_App}(1)_{dst}$ is the expected 1-year appreciation of the destination country's currency relative to the source country's currency. $\text{Yield_Volatility}_{dt}$ is the volatility in destination country yields computed using a 12-month rolling standard deviation. BAS_{dt} is the bid-ask spread prevailing in the bond market of the destination country d . MCap_GDP_{dt} is the ratio of stock market capitalization to GDP in the destination country.

^b Long-term debt securities have an original term to maturity of more than 1 year and include instruments such as bonds, debentures, and notes.

Table: Determinants of Cross-Border Long-Term Bond Holdings in Asia, 2001–2009

Variables	Coefficient	SE
Constant	1.083***	0.660
Technological distance	0.425**	0.197
Trade openness	0.888*	0.170
Financial openness	0.682*	0.114
Yield spread	0.125*	0.030
Expected currency appreciation	0.054*	0.015
Yield volatility	(0.513)*	0.204
Bid-ask spread	(0.009)*	0.004
Stock market cap-to-GDP ratio	0.271**	0.140
F-Statistics:		14.195
R-squared:		0.330

() = negative, GDP = gross domestic product, SE = standard error.

Notes:

1. Cross-sections included: 51.

2. Total panel (unbalanced) observations: 240.

3. * denotes significance at 1%, ** denotes significance at 5%, and *** denotes significance at 10% confidence level.

Source: *AsianBondsOnline*.

country relative to the source country, and (ii) the return stemming from the exchange rate gains when converted to the currency of the source country.

The importance of bond market liquidity and stability is evident for Asian investors. The significant coefficient of BAS_{dt} highlights the importance of a liquid bond market in encouraging portfolio investments. The negative coefficient of $\text{Yield_Volatility}_{dt}$ shows that foreign investor sentiment is dampened by a high degree of return volatility.

Financial openness promotes an outward investment perspective and encourages bilateral financial linkages. The limited ability to freely move capital and the existence of trading barriers exacerbate the dearth of intraregional investment since most Asian financial markets are still in the development stage.

Trade among Asian countries plays a significant role in fostering financial linkages. Trade openness is associated with increased demand for external finances, thereby encouraging greater financial flows between the partners, as evident in the positive coefficient of Trade_{sdt} .

The size of the destination country's stock market has also been shown to encourage cross-border bond holdings, suggesting that investor interest in exploring other markets is enhanced by the existence of relatively large financial markets.

The results of this study justify further support for national and regional initiatives that focus on the development of local and regional financial markets to encourage Asians to invest in each other's markets instead of outside the region. Thus, the creation of deep and liquid Asian financial markets can stimulate greater financial flows within the region.

Investing in Regional Markets: An Investor Survey

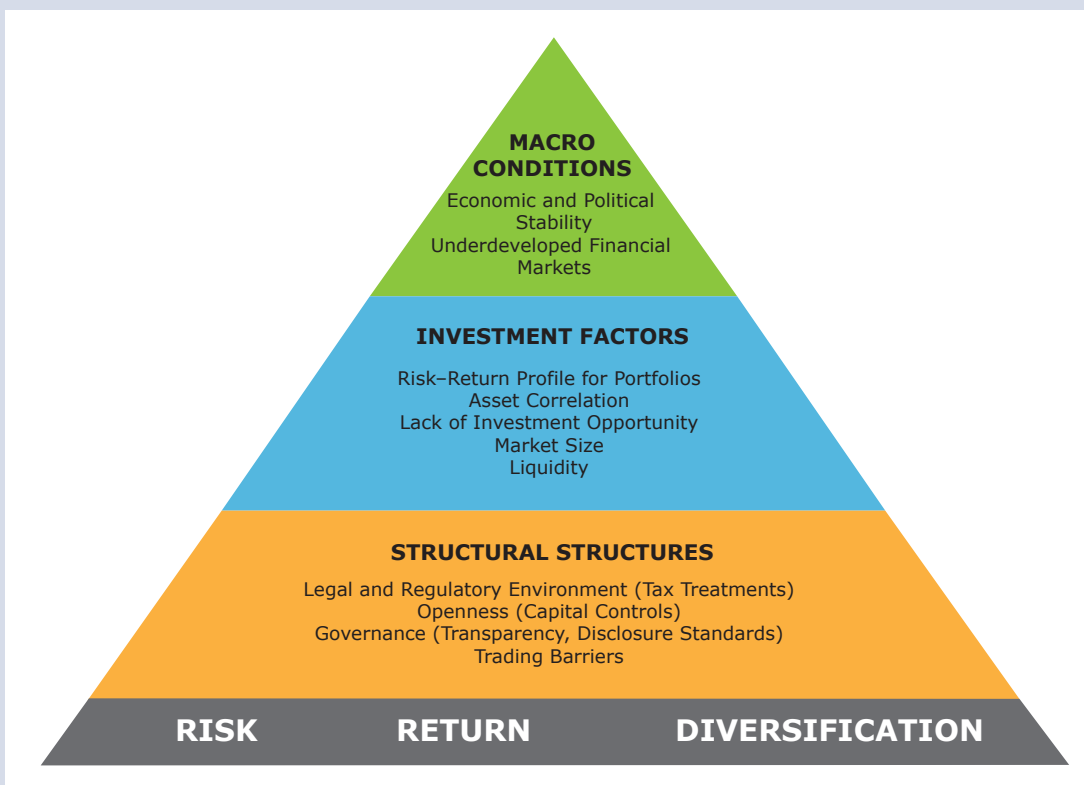
To learn more about intraregional bias—a preference for Asian bonds outside of an investor’s home country over US or EU bonds—a survey of Asian investors was conducted by *AsianBondsOnline*. The investor survey was designed to ascertain how Asian investors prioritize various factor-considerations affecting their offshore bond investment decisions.

In modelling the decision-making process of Asian investors, the analytic hierarchy process (AHP) representation was utilized. The AHP is a structured technique for organizing and analyzing complex decisions. Based on mathematics and psychology, it was developed by Thomas L. Saaty in the 1970s and has been extensively studied and refined since then.

Figure 20 shows the hierarchy map of the decision problem. The general objective is to gain insight on the motivations and priorities in the decision to invest in the LCY bonds of foreign countries. Investors pursue a top-down decision-making approach by initially considering the macro perspective before reviewing the detailed aspects of each macro criterion, and eventually synthesizing this information based on the underlying motives of the decision-making process. The next considerations relate to investment factors, and finally, structural issues. At the same time, all priorities are related to the three underlying motives—risk, return, and diversification.

A total of 78 responses were collected from participants in the following economies: (i) PRC; (ii) Hong Kong, China; (iii) India; (iv) Indonesia; (v) Japan; (vi) Republic of Korea; (vii) Malaysia; (viii) Philippines; (ix) Singapore; and

Figure 20: Hierarchy of Priorities in LCY Bond Investment Decisions



LCY = local currency.
Source: *AsianBondsOnline*.

(x) Thailand.⁸ In terms of geographic distribution, the bulk of the responses came from Japan with 22%, followed by the Republic of Korea with 13% (**Figure 21**). Of the total sample, 77% of respondents came from investment grade sovereigns, while sub-investment grade sovereigns accounted for 23%. By investor type, asset management companies and funds comprised the majority of the sample with 63% of the total (**Figure 22**).

The survey, which comprised pair-wise questions, sought to identify and rank the considerations and primary motives of Asian investors when making intraregional investments. The responses were processed by Expert's Choice, decision-support software that relies on AHP methodology to determine the factors, motivation, and consistency of choices in order of importance.

Responses were also segregated into categories such as high-yield versus conservative investors; responses from countries with investment grade sovereign ratings were classified as conservative or low-yield investors, while investors from countries with below investment grade ratings were classified as high-yield investors. Therefore, investors from Indonesia and the Philippines comprised the high-yield segment of the sample.⁹ All others were considered to be conservative or high-grade. Participants were also classified as being employed by either a bank or a fund. Those participants employed by banks generally managed the treasury assets of a bank. Participants employed by a fund were tasked with managing the portfolios of either institutional or retail investors.

Survey Results

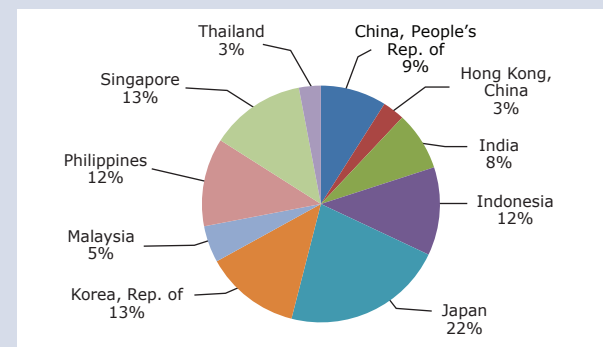
Underlying Motivations

Increasing portfolio returns was found to be the primary motivation for making an intraregional

⁸ The total assets under management of these investors exceeded US\$5.3 trillion.

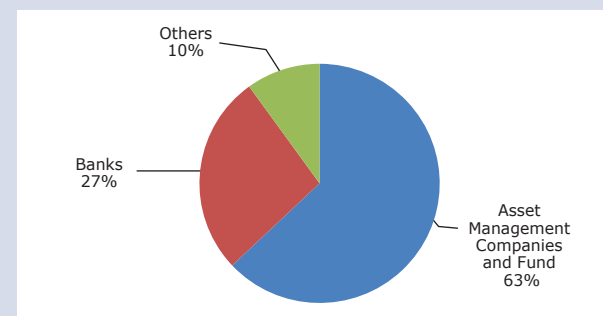
⁹ This survey was conducted before Fitch Ratings and Moody's Investors Service assigned investment grade ratings to Indonesia in December and January, respectively.

Figure 21: Investor Respondents by Country



Source: AsianBondsOnline.

Figure 22: Investor Respondents by Type of Organization



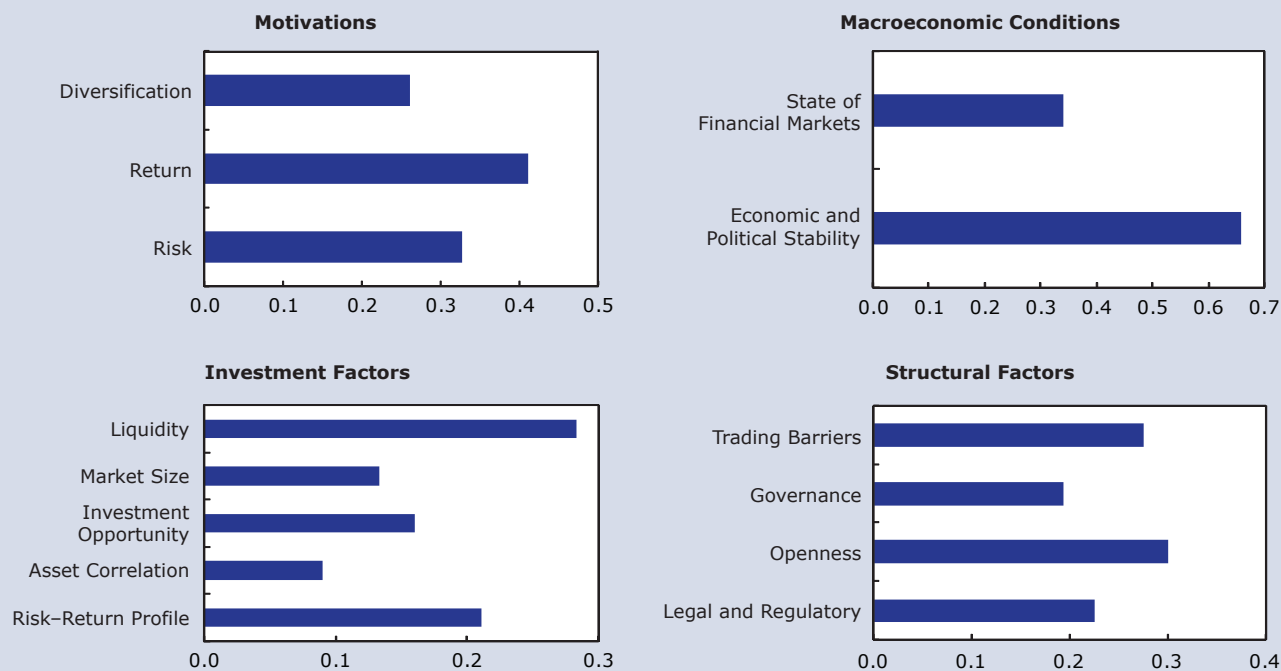
Source: AsianBondsOnline.

investment. Minimizing portfolio risk was a close second. Diversification—despite being important in reducing correlation among items in a portfolio basket—was found to be the least important motivational factor for intraregional investment. This was likely due to the fact that investors in the region believe that bond returns in ASEAN countries are highly correlated.

Macroeconomic Conditions

Investors look for economic and political stability in a country they are considering investing in before they consider the state of its domestic financial markets (**Figure 23**). Stable economic and political conditions provide greater reassurance of long-term growth and a higher probability that historical trends will persist.

Figure 23: Investor Survey Results



Source: AsianBondsOnline.

Investment Factors

Specific investment factors are examined after considering the macroeconomic conditions. High liquidity, or the ease of entering and exiting local markets without adversely affecting prices, is the leading investment factor for intraregional investments. The next most important investment factors in order of priority: (i) risk–return profile, (ii) availability of investment opportunity, (iii) market size, and (iv) asset correlation.

Structural Factors

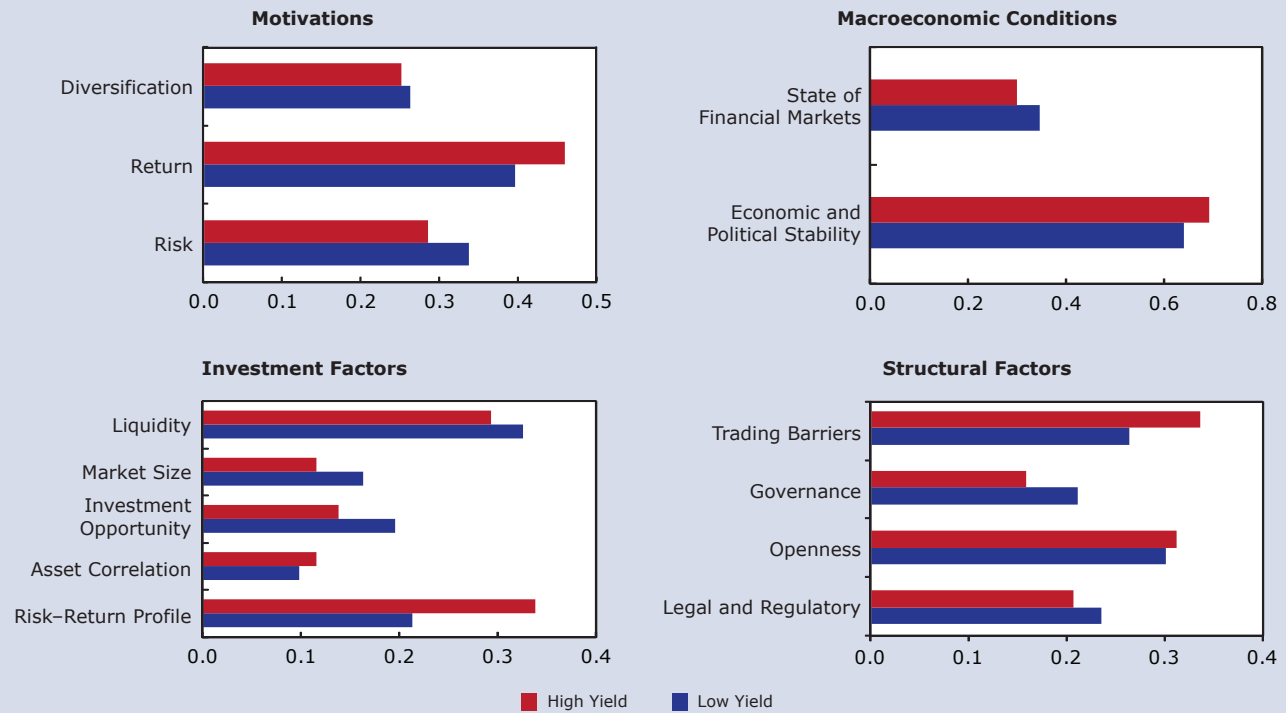
Finally, investors consider structural issues in executing intraregional investments. Economic openness and the presence of trading barriers were given nearly equal importance, followed by a country’s regulatory framework and the level of transparency in its governance. The total sample result was influenced by the responses of low-yield or conservative investors, who placed more importance on openness than on trading

barriers, whereas the reverse was true for high-yield investors.

High-Yield versus Low-Yield Investors

High-yield investors prioritize higher absolute returns over reducing risk, especially compared with the rest of the sample (**Figure 24**). The wider the gap between return and risk, the more reluctant high-yield investors will be to make intraregional investments since their respective domestic yields provide the highest returns in the region.

Meanwhile, the gap between return and risk priority weighting for conservative or low-yield investors is minimal, which is an indication of a more conservative investing approach as minimizing risk is considered to be almost as important as chasing higher returns. This explains the limited investments of low-yield investors in high-yield countries.

Figure 24: Differences between High-Yield and Low-Yield Investor Decisions

Source: AsianBondsOnline.

Low-yield or conservative investors, such as Japanese investors, place greater value on liquidity compared with other investors, a tendency that skews the total sample to favor this factor. It is vital for these investors that markets in which they plan to invest have ample liquidity and the necessary depth to execute trade views or portfolio rebalancing with ease and precision. The magnitude of funds these investors can deploy prevents them from participating in small high-yield markets without adversely influencing prices. Thus, any added benefit from an intraregional investment in a high-yield market is difficult to achieve. Furthermore, conservative investors believe that liquidity vanishes first in high-yield markets during a crisis, which would prevent them from immediately liquidating their holdings.

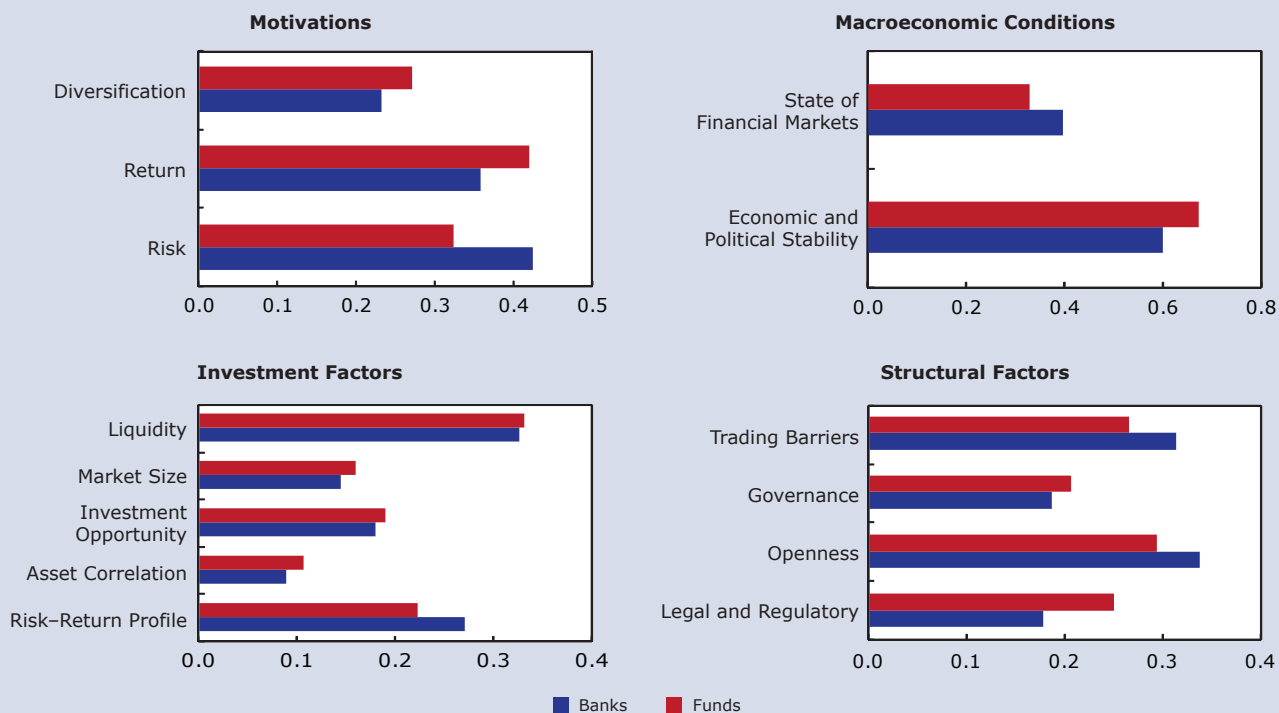
Meanwhile, high-yield investors—mostly Indonesians in our sample—attach more importance to the risk-return profile of the investment on a stand-alone and aggregate basis. These investors are willing to allocate a portion of their portfolios

to regional investments if they show higher risk-adjusted returns than their respective domestic market. Since these investors operate in high-yield markets already, they are not as interested in investing outside of their home market.

Low-yield investors' bias toward openness can be viewed in the context of their preference for liquidity among investment factors. Since these investors value liquidity, they are on the lookout for any form of explicit or implicit capital controls. Restricting capital flows prevents the execution of trade views and portfolio rebalancing, resulting in lower risk-adjusted returns.

Meanwhile, high-yield investors initially consider the administrative difficulty and cost of trading in a prospective market. These trading barriers include documentary requirements, transaction costs, varying modes of settlement, and ineffective monitoring of investments. Ultimately, these investors can only allocate a small amount of their portfolio for intraregional investment.

Figure 25: Differences between the Investment Decisions of Banks and Funds



Source: AsianBondsOnline.

Banks versus Funds

Banks prioritize the minimization of risk exposure over maximizing returns (**Figure 25**). On the other hand, funds favor higher returns over minimizing risk exposure when undertaking regional or overseas investments. This difference highlights the more conservative investment stance of banks compared with fund management companies.

Conclusion

Increasing overall returns remains the primary motivation of Asian investors. However, risk minimization is another factor that is closely considered. This suggests general cautiousness among participants when considering intraregional investment. The enormous weight placed on economic and political stability also provides a partial explanation of the high degree of home bias among Asian investors. The emphasis on stability in macro conditions is primarily a

function of familiarity with and knowledge of domestic situations.

Prioritizing liquidity, openness, and trading barriers only exacerbates the reluctance of investors to pursue intraregional investment as most emerging Asian financial markets are still in a developing stage. Finally, intraregional investments are hampered by restrictions on capital mobility, whether due to existing regulatory restrictions or to limited depth and breadth in market liquidity. Survey participants also highlighted regulatory hurdles that exist in their respective domestic jurisdictions as factors inhibiting intraregional investments.

This study shows that the direction of cross-border financial flows is determined by key financial market characteristics such as market liquidity, the risk-return profile of the asset and currency, and financial openness. Looking at the decision-making

process of Asian investors, policymakers would be prudent to focus on the importance investors give to macroeconomic and political stability, market liquidity, openness, and trading barriers.

The results of this study have important implications for financial and monetary cooperation in Asia. Along with investor indifference between regional and global markets in the aftermath of the

2007–2009 global financial crisis, the results justify providing further support to initiatives that focus on the development of local capital markets to encourage Asians to pursue intraregional investments. The creation of deep and liquid markets and the lifting of cross-border barriers in Asia can stimulate greater financial integration and put the region's vast savings to greater long-term productive uses.