CAPITAL MARKETS IN THE EAST AFRICAN COMMUNITY

Developing the Buy Side

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I. Overview

Deep, liquid capital markets are fundamental to economic growth because they help channel the domestic savings of a nation to their most productive uses, and in so doing enable the private sector to invest, produce, and create jobs. But while much work has been done on improving the investment climate in developing countries for institutional investors, less work has focused on the institutional investors themselves. However, a crucial step in developing capital markets is to develop the domestic "buy side"—that is, to encourage greater participation of local and regional institutional investors such as pension funds and insurance firms in domestic capital markets. Most fundamentally, these large pools of savings can evolve into important sources of long-term finance for economic growth—for infrastructure, for example. In addition, a well-functioning buy side reduces an economy's reliance on foreign portfolio investors, increasing macroeconomic resilience to shocks caused by sudden capital inflows and outflows.

Policymakers in developing countries, however, must find a regulatory balance that helps enable the development of the buy side into a force for capital-market deepening, financial stability, and long-term finance while at the same time upholding the fiduciary requirements of these institutions to protect the savings with which they have been entrusted. To foster this kind of balanced regulatory regime, it is fundamental for regulators to understand how domestic institutional investors respond to regulatory and other incentives.

In order to address this question, we undertook a comprehensive survey of buy-side institutions based in Kenya, Rwanda, Tanzania, and Uganda—focus countries for our study in the East African Community (EAC).[1] Participating firms accounted for just under half of total assets under management (AUM) by the insurance and pension industries in these countries. Through questionnaires and interviews with key decision-makers in asset management and national regulatory authorities,[2] we sought to understand how institutional investors manage their portfolios, the factors that influence their decisions, and the hurdles they face in taking a more diversified portfolio approach. We used these evidence-based findings to identify areas for potential policy and regulatory reform that can achieve the dual objectives of encouraging deeper capital markets and sources of long-term finance and ensuring that long-term savings are prudentially managed.

We found that the EAC's institutional investor base is growing rapidly but that its ability to contribute to local and regional capital-market development can likely be further enhanced. With respect to investments across various asset classes, many pension funds and insurance companies still allocate substantial portions of their portfolios to government securities, real estate, and bank deposits. Low allocations to private-sector securities do not reflect a lack of demand, but rather a host of other factors, including regulatory restrictions, conservative internal investment guidelines, internal capacity limits, and a lack of investable product—all of which can be addressed over time through a combination of

[1]This paper focuses on the EAC member states that have local capital markets.
[2]More specifically, the study methodology focused on a mix of data and information collection through a survey instrument, semi-structured discussions, and canvassing available time series data from capital-market regulators and other secondary sources. As a first step to help inform development of our questionnaire, we held discussions with key stakeholders in the private and public sectors in the focus countries and with other capital-market experts.

prudent regulatory reform, capacity development, and the introduction of new investment products that meet the needs of these investors.

With respect to cross-border investments, we find that in spite of the EAC Common Market Protocol, some investors, notably insurance companies, are restricted in their ability to invest throughout the EAC. However, even where investors are allowed to invest across the region, many do not, either because of misperceptions about what the regulations do and do not allow or an inability to manage foreign exchange risk. To encourage greater intraregional investment, regulatory clarity and harmonization are important, as is the development of local hedging instruments.

This paper is organized as follows: In the following section, Section II, we survey the relevant literature on the link between institutional investors and capital-market development, with particular attention given to institutional investors in sub-Saharan Africa and the EAC. In Section III, we provide important contextual factors, such as demographic and labor market characteristics, that influence the insurance and pension industries. In Section IV, we examine how these investors manage their portfolios, including the regulatory, capacity, and other factors that influence their ability to diversify across local asset classes. In the same section, we examine where institutional investors actually allocate assets and how this stacks up against their internal targets, as well as regulatory restrictions. In Section V, we look at whether firms diversify their portfolios beyond their domestic markets and what barriers they may face to doing so further. Section VI narrows the cross-border focus to examine how a small, underdeveloped capital market such as Rwanda's can draw on its intraregional ties to attract institutional investors that have accumulated large assets. Rwanda's government has recently embarked on a major initiative to develop its capital markets, and so it is appropriate to give some additional attention to how this market might expand its investor base. Finally, Section VII summarizes our findings and draws policy implications informed by evidence from this study.

II. Literature review

A growing body of research has examined how and under what conditions local institutional investors may contribute to capital-market development. This research has focused mainly on contractual savings institutions—pension funds and, to a lesser extent, life insurance companies.[3] As Catalan, Impavido, and Musalem (2000) point out, contractual savings institutions are special types of financial intermediaries because their investors cannot liquidate their accounts at will. As such, contractual savings institutions tend to have liabilities that are long-term. Theoretically, they are well-suited to investing in assets with similar long-term maturities and with less risk of unexpected liquidity demands. According to this line of reasoning, contractual savings institutions can provide a stable market for issuers of long-term securities.

Several studies since the 1990s have established an empirical link between contractual savings institutions and capital-market development. James (1997), for example, observed that in Chile, local financial-market liquidity increased as pension funds diversified their portfolios to include more

[3] Other types of institutional investors, such as general insurance companies and mutual funds, have received less attention in the secondary literature.

marketable securities. Using data from both OECD and non-OECD countries, Catalan, Impavido, and Musalem found that countries with larger contractual savings sectors tended to have larger, more liquid stock markets and that this relationship held for developed as well as developing countries. This study also linked growth in contractual savings with growth in stock market capitalization and turnover. In a study focused on Latin American countries, Walker and Lefort (2002) showed that pension reform led to a decrease in the cost of capital for firms, as well as lower security-price volatility. Similarly, Impavido, Musalem, and Tressel (2003) showed that stock and bond markets deepened as the share of financial assets held by pension funds and life insurance firms grew.

Researchers have proposed a number of transmission channels through which local institutional investors could contribute to domestic capital-market development. In addition to being a stable source of demand for long-term securities, institutional investors can spur financial product innovation and adoption of more efficient market practices by demanding products and services that meet their investment, trading, and risk-management needs. According to Walker and Lefort, institutional investors promoted local introduction of zero-coupon indexed bonds in Chile, as well as mutual funds and securitized instruments in Argentina. In the same study, the authors described how the growth of institutional investors catalyzed the establishment of market makers in Argentina, as well as the transition to electronic trading and custody in Chile.

Institutional investors also contribute to financial-sector development, according to Vittas (1998), by acting as advocates for higher observed standards of corporate governance, accounting, transparency, and protection of minority shareholders. Furthermore, a World Bank study (2001) emphasized that institutional investors can drive learning and human-capital development among local market participants. Institutional investors benefit from significant economies of scale, which facilitate professionalization and greater specialization.

Research has also shown, however, that these benefits do not accrue automatically. Vittas (2000) argued that while successful pension reform requires a stable macroeconomy and financial system, as well as an effective regulatory regime, several additional conditions must be met for pension funds to contribute to capital-market development. These conditions include critical mass in terms of assets, a diverse investor base, and proper incentives for fund managers to optimize their portfolios. Raddatz and Schmukler (2008) found that if incentives are misaligned, fund managers tend to invest more conservatively, or exhibit greater short-termism, than is optimal for long investment horizons.

The literature on the relationship between institutional investors and capital-market development in sub-Saharan Africa is less developed. In 2007, the World Bank linked pension funds' then-poor investment returns in Kenya, Tanzania, and Uganda with undiversified portfolios, partly due to restrictive investment policies, including intraregionally. Dominated by general insurance, the insurance sectors in all three countries were characterized by comparably low penetration rates, owing to lack of awareness and high costs. The report concluded that these sectors would benefit from regionalization and being allowed to invest across borders. In a follow-up study, Wagh, Lovegrove, and Kashangaki (2011) reported that the main investors in EAC capital markets were institutional investors and that Kenyan investors were predominant.

In a more recent survey of the EAC's pension sector, Callund Consulting (2013) concluded that virtually all the major EAC pension funds had markedly improved their own governance and operations in recent years and that the sector was "clearly moving in the right direction."[4] However, its report noted continuing weaknesses, including political interference and "a combination of often high inflation rates and limited choices for investment [which] leads to low rates of return." The report also noted that regional integration would benefit the pension sector by expanding investment options, particularly if EAC members were to harmonize their investment guidelines. Most recently, a World Bank (2015) assessment of Rwanda's financial sector emphasized the critical importance of regional integration, given that the pool of funds across the EAC, especially in Kenya, exceeds what a small economy such as Rwanda's can generate internally.

III. Taking stock of EAC pension fund and insurance sectors: Current context

In general, the pension fund and insurance industries in East Africa are characterized by low participation rates. Despite demographic tailwinds, low levels of formal-sector employment remain a barrier to access to retirement benefits for large segments of the regional population. Though large, state-run schemes still dominate the pension industry, hundreds of private, employer-based schemes have been established in a few countries in recent years, a development that has contributed to the rise of a private asset-management industry. Private schemes, following a larger trend throughout Africa, are increasingly defined-contribution (DC) as opposed to defined-benefit (DB). At the same time, an insurance industry has also been growing, though insurance products remain out of reach for many. Still, despite obstacles, the pool of assets managed by pension funds and insurance firms has increased in recent years, with AUM nearly doubling since 2011.

Demographics and labor markets

Youthful populations and strong economic growth hold promising potential to buoy the development of local pension and insurance sectors across the EAC. Fertility rates have been declining but remain high by world standards. At the same time, life expectancies, as shown in Table 1 below, have improved thanks to public health advances and steady economic development gains in these countries over the past decade or so. However, both pension and insurance coverage remain limited in the EAC focus countries, even Kenya. Only 11 percent of Kenya's population participated in a pension scheme in 2013.[5] In Rwanda, the Rwanda Social Security Board (RSSB) covers only about 8 percent of the population, while one recent study estimated that only 1 percent of Ugandans contribute to their country's National

[4] Callund Consulting (2013), "Review of the Structure of the Pension Sector in the EAC" (London: Callund Consulting).
[5] FSD Kenya (2013), "FinAccess: National Survey 2013" (Nairobi: FSD Kenya).

Social Security Fund (Uganda-NSSF).[6] Meanwhile, just 17 percent of Kenyans use insurance products, along with 13 percent of Tanzanians, 9 percent of Rwandans, and 2 percent of Ugandans.[7]
Current labor market dynamics pose one of the most serious obstacles to developing the institutional investor base in these countries. In a survey of pension sectors in 15 African countries, for example, Stewart and Yermo (2009) observed that most funds covered workers only in the formal sector, yet a large majority of populations were employed in the informal sector. Across the EAC, participation in pension programs is commonly available only via formal employment. The fact that large segments of these countries' populations work in the informal sector limits the pool of savings available for investment. In Kenya, for example, jobs in the informal sector represent 83 percent of total employment. In Rwanda, the informal sector constitutes 68 percent of total employment.[8] In Uganda, 95 percent of workers ages 18 to 30—precisely those workers policymakers hope will pay into the retirement benefits system—are employed informally.[9] At the same time, official unemployment rates are 9.3 percent in Kenya, 13.2 percent in Rwanda, 10.3 percent in Tanzania, and 9.4 percent in Uganda.[10]

Private schemes and the shift to defined-contribution

Many African countries' pension sectors remain characterized by dominant mandatory state schemes and much smaller private pension schemes, if the latter exist at all. Reforms are underway to extend pension benefits to a larger share of populations and put in place more self-financing schemes. The number of formal-sector, employer-sponsored pension schemes has been growing, particularly following the establishment of dedicated retirement benefit regulatory authorities. (See Section IV for a discussion of regulatory reforms.) Privately managed funds (occupational schemes) play a relatively large role in Kenya's system, where the Retirement Benefits Authority (RBA) now lists nearly 2,000 private schemes as registered members, double the number from a decade ago. Uganda has also seen an increase in the number of these employer-based schemes. The National Bank of Rwanda (BNR) recently announced that it would begin licensing private pension schemes in much the same way

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[6] Callund Consulting (2013), "Review of the Structure of the Pension Sector in the EAC" (London: Callund Consulting); Economic Policy Research Center (2013), "Uganda Finscope III: Survey Report Findings" (Kampala: Economic Policy Research Center).
[7] FSD Kenya (2013), "FinAccess: National Survey 2013" (Nairobi: FSD Kenya); Financial Sector Deepening Trust (2013), "Finscope Tanzania 2013" (Dar es Salaam: Financial Sector Deepening Trust); Access to Finance Rwanda (2016), "Financial Inclusion in Rwanda 2015" (Kigali: Access to Finance Rwanda); and Carpenter, Richard, Lisa Beichl & Roland Steinmann (2013), "Microinsurance in Uganda: Country Diagnostic Report on Market and Regulations" (Frankfurt: Deutsche Gesellschaft für Internationale Zusammenarbeit).
[8] National Institute of Statistics of Rwanda (2016), "Labor Force Survey 2016: Pilot."
[9] Uganda Bureau of Statistics, "Statistical Abstract 2015" (October 2015).
[10] The Kenyan figure refers to 2015 and is produced by International Labor Organization employment models. The other figures derive from national statistics institutes, as reported in "Labor Force Survey 2016: Pilot," National Institute of Statistics of Rwanda (June 2016); "Integrated Labor Force Survey 2014: Analytical Report," National Bureau of Statistics of Tanzania (November 2015); and "Statistical Abstract 2015," Uganda Bureau of Statistics (October 2015). Interestingly, the Rwandan report notes that if employment were defined to include persons "engaged wholly or mostly in subsistence foodstuff production," the unemployment rate would be 2.8 percent. This recalculation, however, would not significantly affect the development of institutional investors in Rwanda, as this kind of employment would not include participation in an organized pension scheme.

Kenyan and Ugandan regulators do.[11] Insurers in Rwanda already manage about 50 private pension schemes.

TABLE 1. Selected demographic indicators in the EAC

	Fertility rate (children per woman)	**Median age of population** (years)	**% of population**		**Life expectancy** (years)	
			0-24 years of age	25-49 years of age	2000	2015
Kenya	4.4	18.9	61.4%	29.4%	51.9	60.6
Rwanda	4.1	19.2	60.4%	29.7%	44.4	63.1
Tanzania	5.2	17.3	64.4%	26.3%	49.1	64.0
Uganda	5.9	15.9	68.4%	24.4%	44.5	57.3
Worldwide	2.5	29.6	42.3%	35.3%	65.6	70.5

Source: United Nations, Department of Economic and Social Affairs Population Division, "World Population Prospects: The 2015 Revision"

Over the past decade or so, there has been an overall shift in Africa away from DB and toward DC pension schemes.[12] Among the challenges facing pension systems in the EAC and other African countries, however, is that DB schemes are costly and may be underfunded, posing a growing financial burden, while DC schemes tend to be small in number and assets.[13] While DC schemes are viewed as less costly, more transparent, and easier to manage overall, they shift the pension investment risk from the employer to the contributing employee. In the absence of effective benchmarks and incentives, this can place the focus of pension providers, employees, and regulators more on the short term rather than the longer-term goal of ensuring the fund pays out an adequate retirement income.[14]

The use of external fund managers

The proliferation of small, employer-based schemes has given rise to the greater use of external fund managers, since many of the employer-based schemes lack the internal capacity to manage financial portfolios. The Uganda Retirement Benefits Regulatory Authority has licensed six such fund managers, and in Kenya, 20 external fund managers have been licensed. The Kenyan managers range greatly in size and sophistication, some serving only a handful of clients while others serve over 300 small schemes.[15]

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[11] The New Times, "BNR to Start Licensing Private Pension Providers Next Month" (September 29, 2016).

[12] In a study on the financial systems of 24 African focus countries for the AU/NEPAD-commissioned Africa Infrastructure Country Diagnostic project, Irving and Manroth found that in 12 of the countries with a pension system in place, DC schemes were becoming more prevalent while the role of DB schemes was declining as pension systems overall allowed a larger role for privately managed pension fund administrators. See Irving, Jacqueline and Astrid Manroth, "Local Sources of Financing for Infrastructure in Africa," Policy Research Working Paper (2009).

[13] See, e.g., presentation in 2012 by Mushi, Ansgar, director of research and policy development, SSRA-Tanzania, "Pension Developments in East Africa."

[14] See Stewart, Fiona, "Proving Incentives for Long-Term Investment by Pension Funds: The Use of Outcome-Based Benchmarks" (2014), World Bank Policy Research Working Paper 6885 (Washington: World Bank).

[15] Nzomo Mutuku, Koome Kathurima, and Cherop Toroitich, "Viability of a Multi Manager Approach to Investment of Retirement Benefits Assets in Kenya," Retirement Benefits Authority of Kenya (May 2013).

As required by the Retirement Benefits Act, these clients provide the fund managers with a broad investment policy that may, for example, include caps on asset allocation but also allows the managers flexibility to make critical investment decisions. Of the firms surveyed for this study, more than half hired external firms to manage some or all of their assets. (See Box 2 below.)

Insurance coverage

Insurance coverage also remains low in the region, reflecting low incomes and weak contract enforcement.[16] In many countries, the insurance sectors are fragmented and dominated by general insurance firms. According to Beck, Maimbo, Faye, and Triki (2011), demand for life insurance across Africa remains limited by lack of affordability, lack of awareness, low trust, and inadequate consumer protection. The insurance sector continues to face challenges of building trust, controlling costs, and ensuring that consumer financial education and protection keep pace with product innovation. At the same time, the demand for insurance products is growing, particularly as young and growing middle-class populations expand. Technology-enabled solutions such as mobile money are helping to drive the sector's growth, enabling insurers to reach new customers—to deliver as well as promote these products.

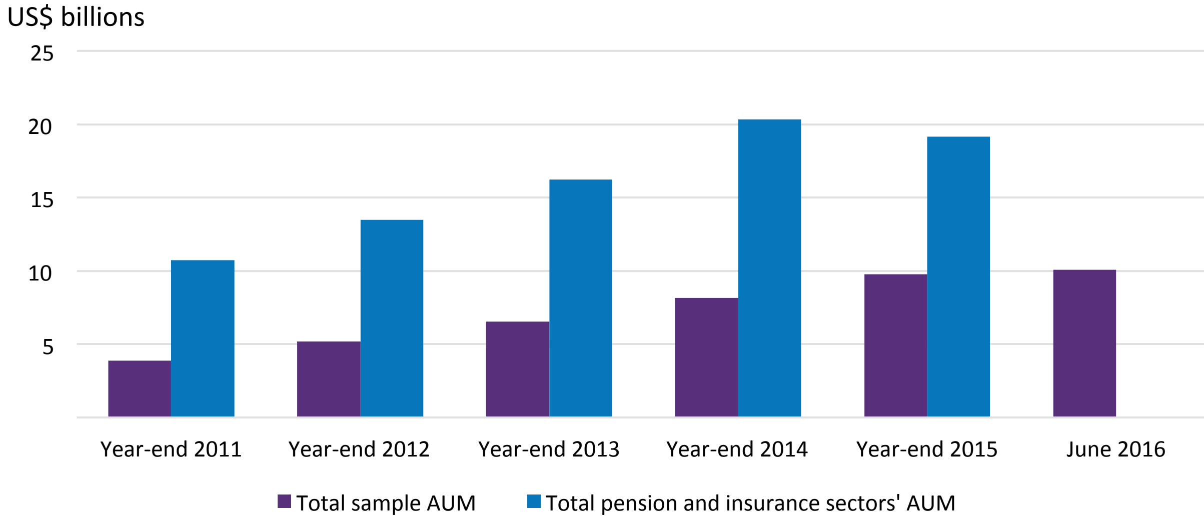
Deepening asset pools

Overall, the institutional investor base is expanding in the EAC focus countries. National-level statistics show that total AUM for pension funds and insurance companies have nearly doubled in recent years, from $10.7 billion in 2011 to about $19.1 billion in 2015.[17] As shown in Figure 1, the AUM of firms that participated in this study, as estimated in U.S. dollars, has grown from $3.9 billion to just under $10 billion over the period. The combined AUM for institutional investors in our survey sample represents about 49 percent of total assets managed by pension funds and insurance firms in the EAC.

[16] For comparison, direct gross insurance premiums in OECD countries were 9 percent of GDP in 2011. See "Insurance and Pensions: Key Tables" from OECD (2013), Table 4.
[17] National regulator and author calculations.

FIGURE 1. Assets under management by pension funds and insurance firms have been increasing

AUM for total survey sample and total pension and insurance sectors in the EAC focus countries



Note: The total AUM figure for the EAC focus countries' pension and insurance sectors for year-end 2015 includes projected AUM figures for the insurance sector in Uganda and midyear AUM figures for the Rwandan and Tanzanian pension sectors.
Sources: Milken Institute Center for Financial Markets estimates based on data provided by national pension industry and insurance-sector regulators; Milken Institute CFM survey of EAC institutional investors

BOX 1. Savings rates in EAC countries

National savings rates influence the amount of money that can be channeled into the pension and asset management sectors, which, in turn, determines the amount of money these sectors have to invest. The average gross savings rate across sub-Saharan Africa was 13.8 percent in 2015—substantially lower than the average of 31 percent for all low- and middle-income countries worldwide.[18] Low and unstable income levels, as well still-high illiteracy rates and low life expectancies, continue to keep savings rates relatively low.[19] In analyzing its own country's low savings rate, Rwanda's Ministry of Finance and Economic Planning identified additional factors, such as lack of a savings culture and limited access to formal banking services, particularly in rural areas.[20]

Recognizing the need to boost regional savings, in 2011 the EAC's *Fourth Development Strategy* identified a savings rate benchmark of at least 20 percent of GDP, calling on the member states to cultivate a "savings culture" within their populations.[21] Actual progress among the EAC focus countries in raising savings rates has been mixed. The gross savings rates for Rwanda and Uganda in 2015 were 14.1 percent and 16.7 percent, respectively—roughly comparable to the average for sub-Saharan Africa as a whole. However, Kenya's gross saving rate was quite a bit lower, at 10.7 percent, while Tanzania's was significantly higher, at 22.5 percent.[22]

Higher savings rates in Tanzania can be attributed to decelerating inflation and the consequent rise in real interest rates, as well as GDP growth gains and increases in the working-age population.[23] Kenya's savings rate has fallen by a third in the decade since 2006, which the World Bank attributes to a combination of factors including high youth unemployment, rising price volatility causing low-to-negative real rates on bank deposits, increases in household borrowing as incomes have risen and financial access has improved, and high budget deficits.[24]

Looking ahead, policymakers can help spur an increase in their national savings rates by taking steps to create more job opportunities for youth; reduce and contain inflation rates, which should encourage households and companies to save and invest more; and shift public spending away from goods and services and more toward infrastructure and other investments that raise the economy's productive capacity.

IV. Drivers of asset allocation by institutional investors

In this section, we look at how institutional investors in the EAC manage their portfolios in response to the regulatory, capacity, and other drivers that affect their ability to diversify across local asset classes. First, we look at the different approaches taken by the national regulators—including whether and to

[18] Gross savings as a percent of GDP. See World Bank, World Development Indicators, Gross Savings (% of GDP), accessed Jan. 9, 2017.
[19] See, e.g., Beck, Maimbo, Faye, and Triki, "Financing Africa: Through the Crisis and Beyond" (2011), p. 61.
[20] Rwanda Ministry of Finance and Economic Planning, "Rwanda Financial Sector Strategy: 2013-2018" (2013), p. iii.
[21] East African Community, "Fourth EAC Development Strategy (2011/12 – 2015/16)" (2011), p. 17.
[22] World Bank, World Development Indicators, Gross Savings (% of GDP), accessed Jan. 9, 2017. Latest data for Kenya is 2014.
[23] Real interest rates in Tanzania increased from -5 percent in late 2011 to 7 percent in mid-2013. See World Bank, "Tanzania Economic Update: Raising the Game—Can Tanzania Eradicate Extreme Poverty?" (2013), p. 8. See also World Bank, "Kenya–Country Economic Memorandum: From Economic Growth to Jobs and Shared Prosperity" (2016), p. 61.
[24] World Bank, "Kenya–Country Economic Memorandum: From Economic Growth to Jobs and Shared Prosperity" (2016), p. 59.

what extent they impose quantitative limits on pension funds' and insurers' portfolio allocation by asset class. Next, we consider where institutional investors actually allocate assets locally in these countries—and how this stacks up against their own internal targets, as well as the regulatory restrictions. Finally, we turn to the question of how these investors view their own information technology (IT) and human capabilities for executing investment strategy, as well as their self-reported capacity for assessing different types of risk.

A. National regulatory constraints

As capital markets across the EAC develop and the range of investable securities increases, national regulatory approaches have been evolving to keep pace. Policymakers share the broad aim of striking the right balance in implementing rules and guidelines that deepen the local institutional investor base while safeguarding the public's savings. In the past, pension and insurance sectors in many African countries were either unregulated or operated under incomplete, highly restrictive, or fragmented regulations.[25] In recent decades, however, many countries, including in East Africa, have established clear regulatory frameworks and dedicated regulatory bodies. Within the EAC, Kenya took the lead on pension-sector reform with the passage of the Retirement Benefits Act of 1997, followed by the establishment in 2000 of the Retirement Benefits Authority and a comprehensive regulatory framework. The other EAC countries have reformed their pension sectors more recently. Regulations governing the insurance sector date back to the 1980s and 1990s and also continue to evolve.

Regulations regarding asset allocation may have been set with at least a partial view to the currently limited available investment options in certain markets and asset classes. Regulatory approaches as well as investor responses may also reflect a lack of familiarity with newer asset classes. In the case of private equity (PE) and venture capital (VC), in particular, regulatory approaches are still evolving and unclear. Preferential treatment generally given to government securities through regulatory approaches—specifically, relatively high portfolio ceilings—may induce pension funds to overallocate to this asset class at the expense of others.[26] At the same time, the investment ceilings for real estate may also be considered relatively high.

As pension and insurance sectors continue to evolve, further reforms can be expected in the years ahead. For example, the Kenyan National Treasury has proposed merging the RBA, the Insurance Regulatory Authority (IRA), and other financial-sector regulatory bodies into a single Financial Services Authority (FSA).[27] In the coming years, some EAC countries will transition to a risk-based capital regime, which assigns different capital charges to different asset classes, for regulating insurance companies. Kenya is already in the process of doing so, with a view toward completing the transition by 2018.[28] This

[25] Beck, Maimbo, Faye, and Triki, "Financing Africa: Through the Crisis and Beyond" (2011), p. 156.
[26] See, e.g., Roldos, "Pension Reform, Investment Restrictions, and Capital Markets," IMF Working Paper 04/4 (Washington, DC: IMF). This could potentially create a captive market for government debt as well as limit the development of other securities markets.
[27] Ngigi, "Top Jobs on the Line as Financial Services Regulators Are Merged," Business Daily (May 31, 2016).
[28] "New Regulatory Framework Bringing Kenya in Line with International Best Practices," Oxford Business Group. Tanzania has also committed to adopting the regime by 2020, although it has not yet finalized a new regulatory framework. See EY, "Sub-Saharan Africa: The Evolution of Insurance Regulation" (2016).

transition may affect how insurance companies invest: In the case of undercapitalized insurers, it may force them to divest at least a portion of their riskier assets.[29]

NATIONAL CEILINGS BY ASSET CLASS

Kenya, Tanzania, and Uganda each maintain quantitative investment restrictions that establish how much pension funds can invest in various asset classes. Rwanda's pension fund regulations do not establish quantitative investment restrictions for any asset class. However, the RSSB does maintain internal asset-allocation guidelines. Since the RSSB controls the vast majority of assets in Rwanda's pension sector, this section will present the RSSB's guidelines as representative of the limits on Rwandan pension investments.[30] As for asset management companies, Ugandan regulations do not explicitly address portfolio allocation limits. In Kenya, however, asset managers face the same restrictions as pension funds when acting as pension funds' agents.[31]

National regulations in Kenya, Tanzania, and Uganda set comparatively high ceilings on the maximum share of the portfolio that pension funds can allocate to local government securities. (See Table 2.) In Rwanda, the RSSB sets ceilings of 5 percent for government bills and 50 percent for government bonds.[32] Tanzania also requires that pension funds invest a minimum of 20 percent of their portfolios in domestic government securities.[33] The OECD's "Guidelines on Pension Fund Asset Management" recommends that regulators set minimum requirements only in exceptional circumstances. The reasoning is that investment minimums force institutional investors to allocate funds to asset classes they might consider "unwise investments or investments inappropriate for their portfolios," and may have the effect of inflating prices of the assets in question.[34]

The countries generally set tighter limits on pension fund investment in demand versus term deposits. Ceilings on pension fund investment in real estate are similar to those set for term deposits.

[29] Genga, "Shakeout Looms for Kenyan Insurers Squeezed by Capital Rules," Bloomberg (July 14, 2016).
[30] It should be noted, however, that these limits are subject to regular revision by the RSSB and do not carry the same force as regulatory restrictions.
[31] KPMG, "Africa Funds and Fund Management Industry" (2013), p. 28.
[32] These guidelines include strategic policy weights as well as tactical minimum and maximum policy weights. As defined in the RSSB's IPS, the strategic policy weights represent the "optimum asset-allocation targets." The tactical minimums and maximums "represent the range within which the allocations are allowed." For more, see Rwanda Social Security Board, "Investment Policy Statement for Pension and Occupational Hazard Schemes" (2016).
[33] Bank of Tanzania, "The Social Security Schemes Investment Guidelines" (2015). In addition, Tanzania requires that if pension funds are to invest in securities other than government bills and bonds, these securities must have higher ex-ante maturity-adjusted returns than government bills and bonds. If they do not, pension funds must secure permission from the Bank of Tanzania prior to investing.
[34] OECD, "OECD Guidelines on Pension Fund Asset Management" (2006), p. 12.

TABLE 2. Investment limits for pension funds in government debt, bank deposits, and real estate

Maximum allowed (% of total AUM) – Pension funds

	Government*		**Bank deposits**		**Real estate**
	Bills	Bonds	Demand	Term	
Kenya	90%		5%	30%	30% + 30%**
Tanzania	70%		-	35%	30%
Uganda	80%		5%	30%	30%
Rwanda (RSSB)	5%	50%	5%	40%	35%

*Regulatory limits for government debt in Kenya, Tanzania, and Uganda apply to combined totals of government bills and bonds.
**Regulatory limit for Kenyan pension funds is 30% for immovable property and, separately, 30% for REITs.
Sources: Regulatory authorities in Kenya, Tanzania, Uganda, and Rwanda and the RSSB

For corporate bonds, pension funds in the four focus countries are subject to investment limits that fall within a range of 20 percent to 30 percent. (See Table 3.) Kenyan and Ugandan pension funds may invest up to 70 percent of their assets in equities listed on a stock exchange, while in Tanzania the ceiling is a much lower 20 percent. In Rwanda, the RSSB applies a combined maximum of 40 percent for public and private equity. The threshold for PE and VC in Kenya and Uganda is set at 10 percent and 15 percent, respectively, while Tanzania's regulators have not yet specifically recognized this asset category.

TABLE 3. Investment limits for pension funds in corporate bonds and equities

Maximum allowed (% of total AUM) – Pension funds

	Corporate bonds*	**Public equities**	**Private equity/venture capital**
Kenya	20%	70%	10%
Tanzania	20%	20%	-
Uganda	30%	70%	15%
Rwanda (RSSB)	20%	40%	

*Regulatory limits for corporate fixed-income securities across the EAC generally apply to combined totals of short-term commercial paper and corporate bonds. An exception to this is Kenya, which revised its pension fund investment guidelines in 2016 to split corporate bonds/mortgage bonds and commercial paper/unlisted bonds into separate categories, with investment limits of 20% and 10%, respectively.
Sources: Regulatory authorities in Kenya, Tanzania, Uganda, and Rwanda and the RSSB

At the same time, the investment ceilings for real estate, which allow pension funds across the four countries to allocate about one-third of portfolio assets, may be considered relatively high—especially given the illiquid nature of these assets. Institutional investors may find it easier to assign a value to real estate, which is tangible, compared with corporate bonds, equities, and other securities.[35] Another reason may be that as investment managers seek to diversify beyond government debt and bank deposits, they encounter a dearth of other investable products.[36] The high investment limits for real

[35] Honahan and Beck, "Making Finance Work for Africa" (2007).
[36] World Bank, IMF, and OECD, "Capital Markets Instruments to Mobilize Institutional Investors to Infrastructure and SME Financing in Emerging Market Economies" (2015).

estate may reflect both a desire on the part of the government to accommodate this reality, by acknowledging that investors lack other options, as well as a desire to reinforce this reality so as to channel investor funds into the real estate sector.

Taken as a whole, the EAC restrictions on pension asset allocations are not atypical of regulations governing pension funds in developing countries, where quantitative investment limits dominate over qualitative regulations such as the prudent-person rule. However, this kind of regime, as Chan-Lau (2004) and others argue, may force institutional investors to allocate funds to asset classes they otherwise would not have selected and may impede optimal portfolio diversification. The rigidity of investment minimums can also impede investors' room to maneuver in the face of changing financial markets or conditions.[37]

Regulators in the four EAC focus countries all impose quantitative investment restrictions on the asset classes that insurance firms can invest in.[38] Uganda has formulated its restrictions somewhat differently from the other countries, however, and these guidelines are dealt with separately below.

Tables 4 and 5 show the regulatory limits for life insurance firms.[39] In Kenya, Tanzania, and Rwanda, it would be possible for these firms to invest their entire portfolios in government debt. All three countries also set very high ceilings on insurers' investments in time deposits. Kenyan insurance firms may allocate a large majority of their portfolios to real estate, in contrast to insurers in Tanzania and Uganda.

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[37] Chan-Lau, "Pension Funds and Emerging Markets," IMF Working Paper 04/181 (Washington, DC: IMF).

[38] Kenya is in the process of transitioning from one regulatory regime to another in regulating how insurers allocate assets. The previous law was repealed in 2015, and the implementing rules for the new law are still under consideration. For Kenya, this section will consider the draft investment guidelines published in 2015, with the caveat that they have not been fully implemented and may be further revised.

[39] It should be noted that not all insurance firms share the same risk profile. Non-life insurers, which provide auto insurance and home insurance, among other products, have shorter-term liability structures than life insurers do. To ensure they have sufficient liquidity to cover policyholders' claims, non-life insurers must keep a larger share of their assets in more liquid investment vehicles. Life insurers, which have longer-term liability structures, have greater capacity—and need—to invest in longer-term assets. Investment regulatory frameworks in Tanzania and Uganda both recognize this distinction by permitting life insurers to invest more of their portfolios in public equities, corporate bonds, and real estate. The investment regulations of Kenya and Rwanda, however, do not set different limits for non-life and life insurers.

TABLE 4. Investment limits for insurance firms in government debt, bank deposits, and real estate

Maximum allowed (% of total AUM) – Life insurance companies

	Government*		Bank deposits		Real estate**
	Bills	Bonds	Demand	Term	
Kenya	100%		30%	95%	70%
Tanzania* **	100%		100%		30%
Rwanda****	100%				30%

*Regulatory limits for government debt in Kenya and Tanzania apply to combined totals of government bills and bonds.
**As drafted, the Kenyan regulatory regime will allow insurers to allocate up to 70% to investment properties, up to 50% of AUM to land and buildings, and up to 10% to REITs. Tanzanian life insurance companies may also place up to 50% of assets in residential mortgages.
***For Tanzanian life insurance firms, at least 40% of portfolio assets must be invested, in one way or another, in these asset classes: government securities, Bank of Tanzania securities, prescribed statutory bodies' securities, local authorities' securities, and-or bank deposits.
****The Rwandan regulatory regime allows insurers to invest up to 100% of assets into any mix of government securities and bank deposits.
Sources: Regulatory authorities in Kenya, Tanzania, and Rwanda

Table 5 summarizes the caps on life insurance firms' investment in corporate bonds, equities, and PE/VC. Tanzania allows for a relatively higher percentage of assets to be invested in corporate bonds. All three countries' regulators impose a similar cap on investment in public equities. None of the countries' regulations refer specifically to private equity.

TABLE 5. Investment limits for life insurance firms in corporate bonds and equities

Maximum allowed (% of total AUM) – Life insurance companies

	Corporate bonds*	Public equities	Private equity/venture capital
Kenya	10%	30% ordinary shares + 10% preferred shares	-
Tanzania	50%	30%	-
Rwanda	20%	30%	-

*Regulatory limits for corporate fixed-income securities in Tanzania and Rwanda apply to combined totals of short-term commercial paper and corporate bonds. Kenya's draft guidelines distinguish between corporate bonds, corporate paper, and other corporate debt securities.
Sources: Regulatory authorities in Kenya, Tanzania, and Rwanda

Uganda's regulatory approach to insurers' portfolio asset allocation differs from those of the three other focus countries. Ugandan general and life insurance companies are required to invest a minimum of 20 percent and 30 percent, respectively, in government securities.

On meeting this requirement, they may invest no more than 35 percent of assets in real estate and "a proportion of not more than 35 percent in at least two" of the following asset categories: Ugandan government securities, Bank of Uganda securities, mortgages, debentures, commercial paper, listed equities, investments in building societies, policy loans, fixed deposits, promissory notes, and East African Development Bank and Preferential Trade Area Bank bonds. For non-life insurers, the requirements are structured in the same way, but the percentages are 25 percent and 25 percent, respectively.

B. Drivers of asset allocation: Theory vs. empirical findings

Asset-allocation approaches can vary by type of institutional investor, based on differing liquidity needs and liability structures. Because pension funds generally tend to have a longer-term liability structure, they have relatively limited short-term liquidity needs aside from having to make regular payments to their current beneficiaries. To meet their withdrawal needs, non-life insurers, whose products include auto insurance and home insurance, have shorter-term liability structures than do life insurers. To ensure they have sufficient liquidity to cover policyholders' claims and avoid an asset-liability mismatch, non-life insurers tend to keep a larger share of their assets in more liquid investment vehicles. Life insurers, which have longer-term liability structures, have greater need to invest in longer-term assets. Reinsurance firms tend to hold sizable short-term, liquid assets so they can make assets available to insurance firms that experience large losses.

From a risk-return standpoint, it does not make sense for an investor, particularly one with long-term liabilities, to hold a significant share of assets in low-yielding demand or short-term time deposits. Heavy holdings in short-term government securities also typically are not optimal from the standpoint of generating returns.[40] This could potentially create a captive market for government debt as well as limit development of other securities markets.[41] More diversified portfolio holdings across asset classes where returns are not highly correlated can provide a way to manage risk, as well as generate returns.[42] However, faced with a lack of alternative investment instruments, it is not uncommon for investors domiciled in bank-dominated financial systems to hold most of their assets in relatively lower-yielding assets such as bank deposits and short-term government securities. Equity and corporate bond markets in underdeveloped financial markets worldwide face the challenge of attracting more local firms to list—so as to increase "investable product" and improve the capital market's overall effectiveness in intermediating finance. Even where pension funds invest in (or sell) these securities listed on small, illiquid equity markets, the shortage of retail and other investors means they can end up having very large effects on market share prices. Investor concerns about illiquidity and their ability to exit, as well as uncertainty about how restrictions apply, also tend to impede their diversification into these asset classes.

And the very small size of PE/VC markets generally in underdeveloped financial markets means investors can also find it difficult to exit these markets and get other investors to take up stakes. At the same time, recent studies have found that African institutional investors' demand for this asset class has been

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[40] Ashiagbor, David et al., "Pension Funds and Private Equity: Unlocking Africa's Potential" (2014), (London: Commonwealth Secretariat).
[41] Roldos, "Pension Reform, Investment Restrictions, and Capital Markets," IMF Working Paper 04/4 (Washington, DC: IMF).
[42] See, e.g., the seminal articles by Markowitz, Harry, "Portfolio Selection" (1952), Journal of Finance 7, pp. 77-91 and Roy, A.D., "Safety First and the Holding of Assets" (1952), Econometrica, Vol. 20, pp. 431-49.

growing.[43] This form of longer-term private capital can provide a critical source of finance to high-growth potential startups and other firms operating in strategically important sectors, which can diversify economies and help create jobs.

Changes in the macroeconomic context—particularly with respect to inflation and nominal interest rates—may affect the value and volatility of institutional investors' balance sheets on both the asset and liability sides. This, in turn, can influence how these investors allocate portfolio assets. A stable macroeconomic context is a prerequisite to the functioning of institutional investors and capital markets broadly.

Tangible assets can be particularly attractive in financial systems where most available investment vehicles generate relatively low returns, especially in real terms. In many underdeveloped financial markets where banks predominate and a range of investable securities is lacking, local institutional investors may tend to rely more heavily than otherwise on real assets such as real estate. However, real assets bear other portfolio risks, such as price volatility and illiquidity. When investors turn to investing sizable amounts in tangible assets—buying up real estate and property—this activity can drive up prices in those markets, especially in urban areas. This can have worrying bubble consequences, however. The fact that real estate markets can be subject to sudden price swings and large changes in value over time can cause the share of assets invested in real estate to also undergo sudden and large shifts.

How interest rate changes affect institutional investors depends on the nature and degree of the maturity mismatch on their balance sheets. For pension funds and life insurance firms, it is difficult to neutralize interest rate risk completely, as the duration of their liabilities usually exceeds the duration of their assets. This is particularly true for pension funds and life insurance companies in developing countries, due to the low availability of long-dated securities. Interest rate declines can be particularly difficult to manage. Owing to maturity mismatches, they usually raise the present value of liabilities more than they raise the prices of portfolio assets, widening the funding gap. For pension funds and insurance companies subject to an asset-liability-matching framework, closing the funding gap necessitates either an increase in premiums (for insurance companies) or contributions (for pension funds). Otherwise, institutions may shift to riskier assets in the hope of securing higher returns.[44]

As described by survey respondents, the asset-allocation practices of EAC institutional investors broadly conform to what theory and best practices would suggest, albeit with some exceptions and subject to the constraints of their markets. As might be expected, given their different liquidity needs, the pension funds surveyed tend to hold smaller cash positions than the insurance firms. In addition, although investors' allocations to government securities may be considered high, they have, at least in some cases, declined in recent years, as a broader range of investment products becomes available. Moreover, pension funds tilt their investments in government securities toward issuances with longer maturities, and also invest a meaningful portion of their portfolios in equities, both of which serve to extend the maturity profile of their assets. Investments in corporate bonds remain low, likely owing to

[43]See also FSD Africa and EMPEA, "Conduits of Capital: Onshore Financial Centers and their Relevance for African private Equity" (2015) (Nairobi: FSD Africa).
[44] Committee on the Global Financial System, "Fixed Income Strategies of Insurance Companies and Pension Funds" (2011), CGFS Papers No. 44.

the nascent status of these markets in all but Kenya. Real estate still makes up a significant proportion of many investors' portfolios.

PENSION FUNDS HAVE DIVERSIFIED AWAY FROM CASH AND DEPOSITS

There are clear signs that pension funds in the EAC have been taking a more diversified portfolio approach over the past decade, shifting further away from the most liquid asset classes of demand deposits and cash. Surveyed pension funds hold a relatively small share of their portfolios in highly liquid demand deposits and cash, with the average across countries 1 percent. As many as 10 pension funds hold none, and the upper end of the range for holdings (by just one firm) is 5 percent. This upper range of 5 percent generally is in line with the low ceiling set by national regulators for pension fund holdings in demand deposits. (See also above.)

Findings from our surveyed sample of pension funds also reflect the industrywide trends for pension funds in the focus countries. According to aggregate data collected by national regulators and other sources, the proportion that pension funds industrywide in Kenya hold in cash and deposits (demand plus time) fell from 3 percent of total portfolio assets in 2006 to 1.4 percent at year-end 2015. Pension funds industrywide in Uganda held close to no assets in cash and deposits, down considerably from 26 percent in 2006. In Tanzania, the pension sector held an estimated 9 percent in cash and deposits at year-end 2015, down slightly from 11 percent a decade earlier.

Insurers generally hold a larger portfolio share in cash and deposits than pension funds do. As a result, holdings in this most liquid asset class vary widely across all types of surveyed institutional investors, from a low of 1 percent to a high of 80 percent. Insurers' larger holdings in cash and deposits may be encouraged by regulators' generally high ceilings on the share of an insurer's portfolio that can be kept in bank deposits.[45]

But with only one surveyed firm, a reinsurance firm, holding as much as 80 percent in this liquid asset category, this makes the median value of 3 percent more meaningful.[46] Aside from this firm, the largest holding among surveyed insurers is by a non-life insurer (40 percent). As would be expected, non-life insurers and reinsurers, which typically have shorter-term liability structures than life insurers and pension funds, have portfolios that generally are more heavily weighted in this asset category. Surveyed non-life insurers and reinsurers have average portfolio holdings of 19 percent in cash and demand deposits, with a median figure of 10 percent.

HOLDINGS IN SHORT-TERM GOVERNMENT SECURITIES FALL BELOW NATIONAL AND EVEN INTERNAL CEILINGS

Twelve percent of all surveyed institutional investors hold at least one-third of their portfolio in short-term government securities.[47] The share of these securities held by pension funds varies considerably

[45] The Rwandan regulatory regime is different, allowing insurers to invest up to 100 percent of assets into any mix of government securities and bank deposits.
[46] Reinsurance firms tend to hold sizable short-term, liquid assets so they can make liquid assets available to insurance firms that experience large losses.
[47] Debt securities issued by the government with maturities ranging up to one year.

within and across domicile countries, however. In Kenya, surveyed pension funds allocate an average of 21 percent of their portfolios to this asset class, but actual amounts by individual fund vary considerably, from 2 percent to 86 percent. Similarly, In Uganda, surveyed pension funds allocate an average of 20 percent to short-term government securities, but actual amounts held by individual funds vary from no holdings to 45 percent. In Tanzania, the average allocation is 3 percent, representing actual allocations ranging from no holdings to a high of 6 percent. In Rwanda, the allocation is 3 percent.

Actual allocations to short-term government securities by pension funds, on average, are well below national ceilings. The maximum portfolio share that pension funds in Tanzania, Uganda, and Kenya are permitted to invest in total government securities generally ranges from 70 percent to 90 percent. (See above.) It should be noted here, however, that pension regulators in these three countries combine short-, medium-, and long-term government securities as one asset class in terms of setting limits on portfolio holdings. Rwanda's RSSB has set a significantly lower and separate ceiling of 5 percent for the share that it can invest in short-term government securities.

The portfolio share that insurers allocate to short-term government securities, on average, also falls well below national regulators' ceilings—especially considering that in Kenya, Rwanda, and Tanzania, they essentially impose no ceiling on insurers for this asset class. Insurers' average portfolio allocation varies widely by country, at 23.5 percent, 1.25 percent, and 30 percent, respectively. And insurers in Uganda allocate 15.2 percent on average, which also falls well below that country's ceiling. (See above.)[48] With non-life insurers generally having shorter-term liability structures than life insurers, average portfolio allocation to short-term government securities is somewhat higher in the case of the former across the countries (13.1 percent) than for the latter (9.9 percent).

Tanzania and Uganda also set minimum investment requirements for investors' holdings in public-sector securities—not distinguishing by maturity terms. For Tanzanian pension funds, a minimum of 20 percent of assets must be invested in government securities. For Ugandan general and life insurance companies, the minimums are 20 percent and 30 percent, respectively. Although regulators may justify these in prudential terms, investment minimums are often seen as a means of creating a captive market for government debt. Because these investment minimum requirements do not specify by maturity terms, they may be encouraging more holdings in short-term securities due to the shorter supply of longer-term securities in these markets.

Notably, however, the vast majority of surveyed firms in Kenya, Tanzania, and Uganda also set their own internal target thresholds for investments in short-term government securities, and the internal ceilings tend to be more restrictive than the national ceilings. Among surveyed Rwandan firms, these internal targets are less common. These internally set ceilings may be tempering any strong preference for short-term government securities that otherwise could be encouraged by the national regulatory stance. For one of the three surveyed pension funds in Kenya that set internal targets for short-term government securities, the internal ceiling matches the national regulator's threshold of 90 percent. But actual investments in 2016 fell short of that target by 29 percentage points. Excluding this firm, the average

[48] Uganda's regulatory approach vis-à-vis insurers' portfolio allocation to government securities imposes a minimum requirement and then sets a ceiling over a broad list of asset categories including short-term government securities.

maximum threshold set internally for surveyed Kenyan institutional investors was 42 percent, and actual investments fell far short of these internal ceilings in all but one firm's case. For Ugandan institutional investors, internally set maximum thresholds fell far short of the national ceiling in all cases, averaging 35 percent, and actual investments fell short of these internal ceilings in the majority of firms' cases. In Tanzania, the average ceiling set by surveyed firms was 20 percent, well short of the national ceiling.

PENSION FUND HOLDINGS IN GOVERNMENT BONDS ARE SIZABLE BUT BELOW CEILINGS

Many survey participants hold a relatively high share of their portfolios in government bonds. As many as 12 percent hold at least half their portfolio in this asset class. Pension funds, in particular, typically have a strong need to invest in long-term maturities for sustainable cash flow to pay pensions. (See above.) Pension funds in Kenya, Tanzania, and Uganda have average portfolio allocations to government bonds ranging from 31 percent to 43 percent.

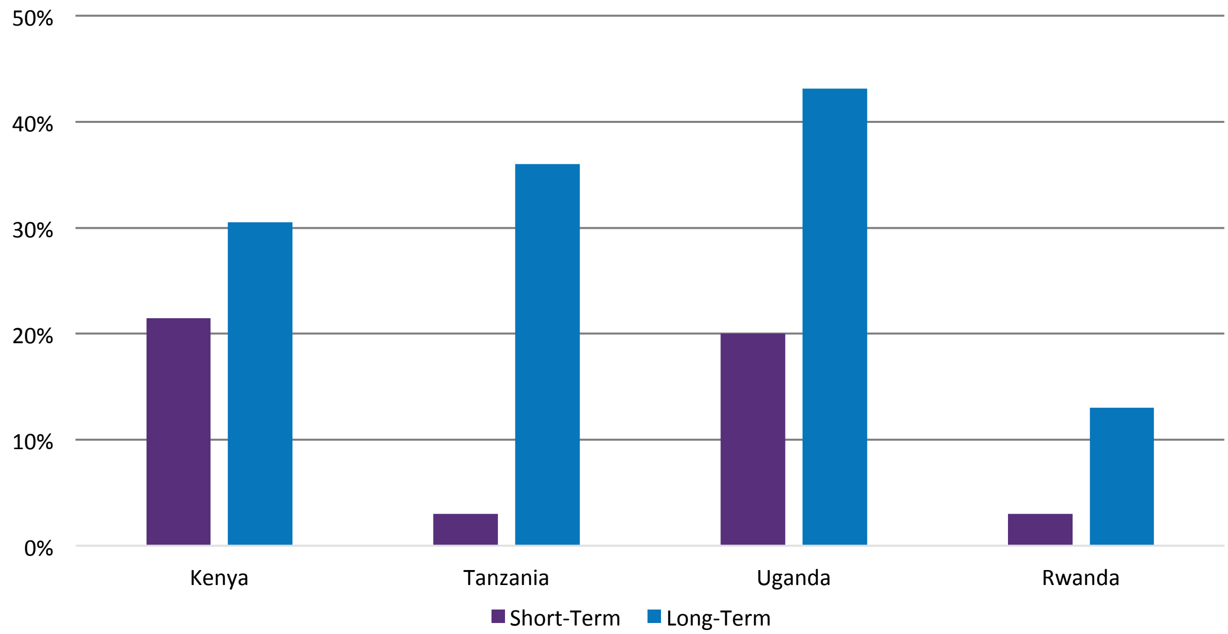
There is considerable variation among surveyed institutional investors in how heavily they weight their portfolios in government bonds, however. Some 15 percent of surveyed respondents hold none of their portfolio in government bonds. Among surveyed insurers, the portfolio share allocated to government bonds, ranging from an average of 6 percent to 25 percent across the countries, is considerably lower than the corresponding range for pension funds. This finding is not surprising given that non-life insurers, which made up a majority of the survey sample, have shorter-term liability structures and typically are inclined to keep relatively more assets in more liquid instruments.

Where firms across the EAC countries set internal ceilings on the share of assets allocated to government bonds, these ceilings tend to be well under the national ceilings. And firms' actual investments in government bonds tend to fall far below their internal ceilings. Among surveyed Kenyan firms that set internal targets, one-third set an internal ceiling for investment in government bonds as high as 90 percent to 100 percent of AUM. But actual investments for each of these firms fall under the internal target by at least 42 percentage points. Excluding these firms, the average maximum threshold set internally for Kenyan firms is 57 percent, and actual investments fall well short of these targets.

Aggregate sector data compiled by official national statistical sources indicate the overall share held by national pension sectors in government securities (all tenors combined) has declined significantly over the past decade for Kenyan funds and also declined somewhat for Tanzanian funds but increased for Ugandan funds. The proportion that Kenyan pension funds as an industry hold in government securities has declined since 2006 by 12 percentage points (to 29.8 percent), while the proportion held by Ugandan funds increased by 21 percentage points (to 69.3 percent). In Tanzania, the proportion decreased an estimated 4 percentage points, to 20 percent. The trends of significant decline over the past decade in pension funds' holdings in government securities may be explained by Kenya's relatively more developed capital markets offering investors more product choices—a wider range of investable securities. Based on our survey of a sample of national pension sectors, we can deduce that pension funds overall have a large majority of holdings in government securities that are in medium- to long-term tenors. (See Figure 2.)

FIGURE 2. Surveyed pension funds are holding a relatively higher share of assets in government bonds vs. short-term securities

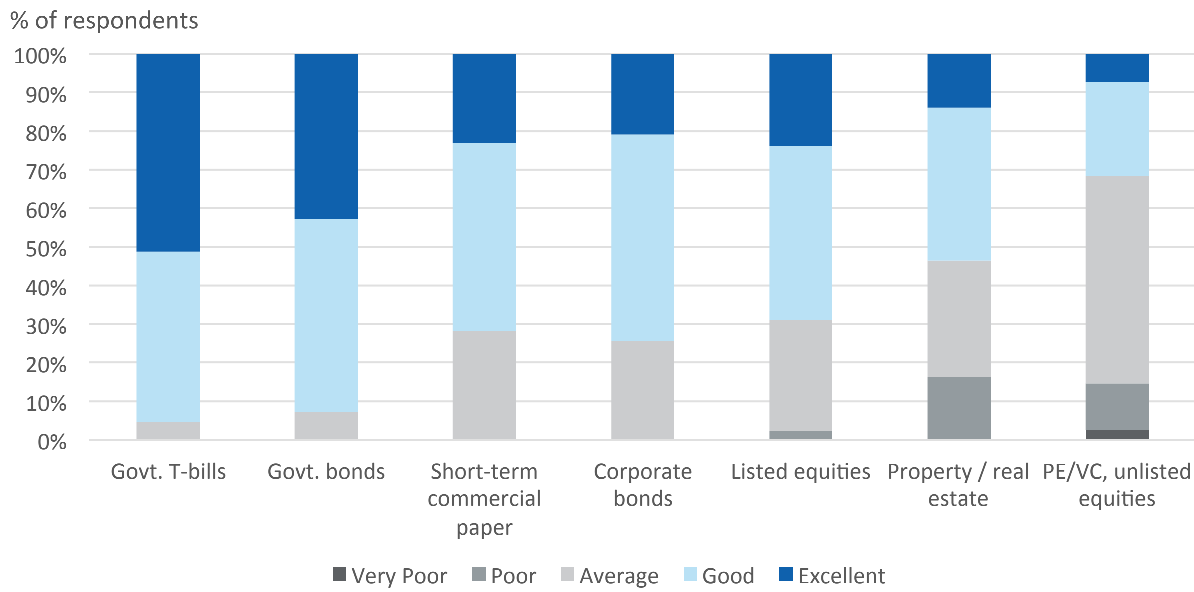
Average portfolio allocation for short-term vs. long-term government securities at year-end 2015



Source: Milken Institute Center for Financial Markets survey of EAC institutional investors

Investors' still-sizable total allocations to government securities may partly reflect strong self-reported levels of capacity. (See Figure 3.) Participating institutional investors rated their capacity for assessing short-term government securities as strongest among asset classes: 95 percent of respondents rated this capacity as good to excellent. A similarly high ratio (93 percent) of participating investors report "good" or "excellent" capacity to assess government bonds.

FIGURE 3. Institutional investors' reported capacity to assess various asset classes



Source: Milken Institute Center for Financial Markets survey of EAC institutional investors

VERY LIMITED CORPORATE BOND HOLDINGS REFLECT SMALL MARKET SIZE

Just over 40 percent of total surveyed investors report holding some proportion of total assets in corporate bonds, with amounts ranging from 1 percent to 14 percent of total AUM. But as many as 57 percent of participating surveyed pension funds across the EAC countries hold no assets in corporate bonds. Even in Kenya, surveyed pension funds reported holding an average of just 2.5 percent in corporate bonds, ranging from nil to a high of 10 percent. Aggregate industry data collected from national regulators show the share of assets that pension funds sectorwide in Kenya and Uganda hold in corporate bonds increased slightly over the past decade, from 4 percent to 6 percent and from 1.8 percent to 2.5 percent, respectively.[49] In Tanzania, however, data estimates show that this share fell for the pension industry over the period, from 7 percent to 1 percent.

Pension funds' limited progress in diversifying into this asset class at least partly reflects a lack of product in these markets. (See Figure 4.) This is not an uncommon problem in emerging and frontier markets where the limited supply of equity and fixed-income securities issued by corporates may impede institutional investors' desire to further diversify their portfolios.[50] Listings of securities by companies on EAC stock exchanges remain small in number and size, and among these listings, equity issues predominate.[51] In Tanzania, there are fewer corporate bonds listed (four) than even nearly a decade ago (five in 2007). Even in Kenya's more developed financial market, there were only 14 firms that had

[49] From year-end 2006 to year-end 2015.
[50] See, e.g., Chan-Lau, Jorge, "Pension Funds and Emerging Markets" (2004), IMF Working Paper (Washington: IMF).
[51] See, e.g., Beck et al., "Financing Africa: Through the Crisis and Beyond" (2011). Corporate bond listings on EAC exchanges, in particular, have remained small in number and size over the past five years.

bonds listed on the stock exchange (compared with nine in 2007)—and the vast majority of these were financial services firms.[52]

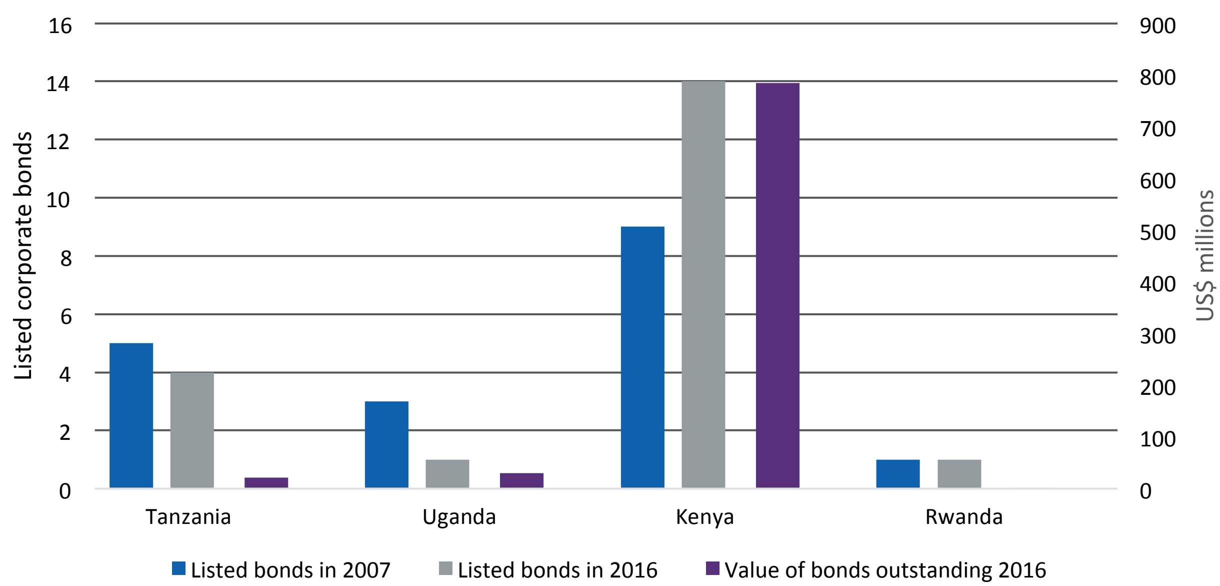
According to one surveyed EAC pension fund manager, the fund has been managing its portfolio partly with the ultimate aim of boosting capital-market activity and increasing available product. To that end, this fund has recently increased its allocation of assets in corporate bonds, from nearly zero to 7 percent of the portfolio, while simultaneously reducing holdings of bank deposits, to 20 percent from 25 percent. In this way, the fund expects that its increased holdings in this asset class may encourage more firms to issue corporate bonds, deepening the market.

Where pension funds in Kenya, Tanzania, and Uganda set internal maximum targets for corporate bonds, they were set at least several percentage points below their national regulators' ceilings in 70 percent of surveyed funds' cases. For 86 percent of the firms that set these ranges, actual investments fell closer to or even below the target minimum—again, likely due at least partly to lack of product.

As would be expected, surveyed insurers' portfolios in these countries have lower holdings in corporate bonds than pension funds do. This likely is due to a mix of limited product on these markets, firms' liability structures tending to favor more liquid assets, and tighter national regulatory limits overall on their holdings. (See above.) Three-quarters of surveyed insurers (all of the sample in Tanzania and Uganda) hold no assets in corporate bonds. Even in Kenya, surveyed insurers' portfolio holdings average just 3.8 percent, although for life insurers the average is as high as 9 percent.

FIGURE 4. Corporate bond issues have remained low in number and amount

Number of listed corporate bonds (2007 and 2016) and total amount outstanding (2016)



Sources: National securities exchange websites, Bloomberg

[52] Nairobi Securities Exchange website, "Bond Statistics," https://www.nse.co.ke/market-statistics/bonds-statistics.html.

Self-rated capacity for assessing corporate bonds as an asset class is at least average for all participating investors. Just over three-quarters of total participants rate capacity for assessing corporate bonds as good to excellent. This may be overly optimistic, however, given known factors such as costly underwriting processes, limited credit-risk evaluation capabilities, and illiquidity impeding the growth of corporate bond markets in underdeveloped capital markets.[53]

PENSION FUNDS HOLD MUCH MORE THAN INSURERS IN LISTED EQUITIES

Nearly 60 percent of all participating respondents hold some portion of their assets in listed equities. Across the countries, however, pension funds generally hold a larger share of their portfolio in listed equities than insurers do. (See Figure 5.) In Kenya, surveyed pension funds hold amounts ranging from 18 percent to 28 percent of their portfolios in listed equities, while insurers' amounts ranged from nil to 3 percent.

National regulatory ceilings seem relatively high—as high as 70 percent in Kenya and Uganda—and so do not pose a deterrent to pension funds seeking to diversify into public equity. The proportion that pension funds industrywide in Kenya hold in listed equities remained relatively constant: 23 percent of total portfolio assets versus 24 percent in 2006. Pension funds industrywide in Uganda hold 18 percent in listed equities, up considerably from 5 percent in 2006. In Tanzania, however, the industry held an estimated 9 percent at year-end 2015, down from 17 percent in 2006.

As much as three-quarters of all surveyed insurers across the EAC countries hold none of their portfolio in listed equities. Average portfolio share held by insurers in these countries ranged from nil to a high of 9 percent. A particular disincentive to non-life insurers holding some portion of their assets in listed equities is the illiquidity of equity markets in these countries, which can render these insurers unable to sell off shares when needed and pay claims and benefits to policyholders. National regulatory ceilings on insurers' holdings of listed equity do not seem to pose an impediment to more take-up as actual amounts, even at the highest end of the range, fall far below the ceilings.

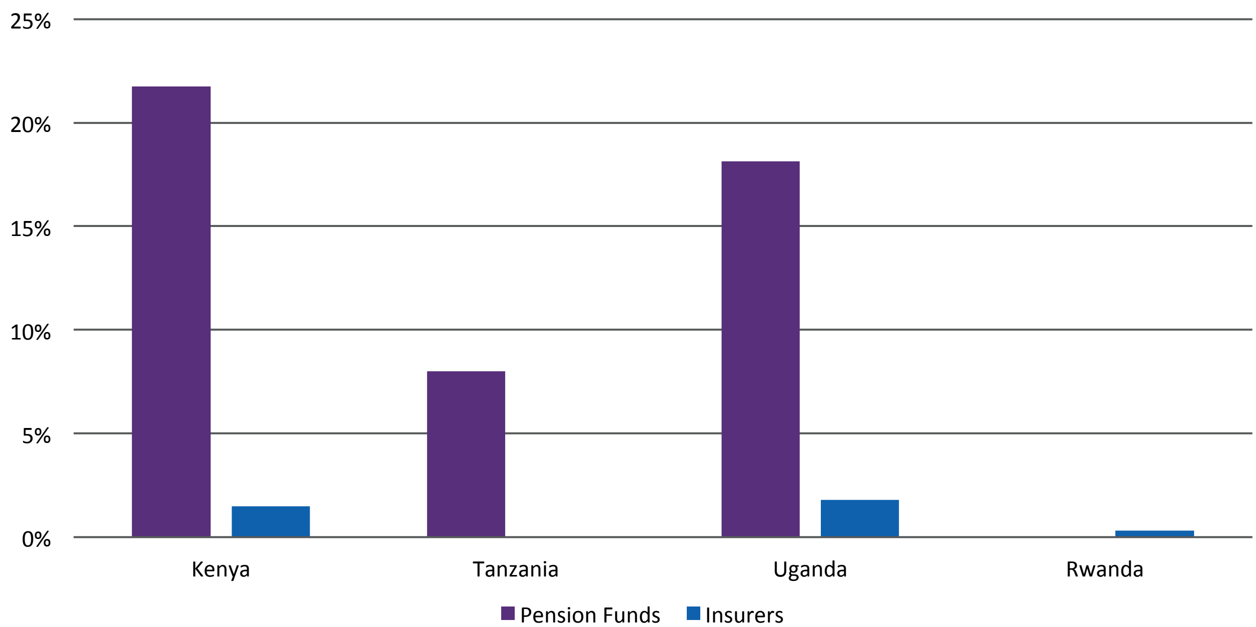
It is notable that the overall share of pension funds' public equity holdings by country seems to be in line with the size of these countries' national equity markets. Most equity markets across the region face the challenge of increasing product by increasing fundable projects and attracting more firms to list. The challenge of bringing more firms to market has been made somewhat more difficult by declines in stock market indices and returns across African countries in the past year, as record-high economic growth rates have slowed and as investors have expected a rise in U.S. policy rates. Even where pension funds take up (or sell) shares of listed firms on small, still illiquid equity markets, the shortage of retail and other investors means they end up having very large effects on market share prices.

The level of institutional investors' confidence in assessing listed equities is high. Nearly 70 percent of surveyed participants rated their capacity as good to excellent. In fact, only one participant rated this capacity as below average.

[53] Chan-Lau, Jorge, "Pension Funds and Emerging Markets" (2004), IMF Working Paper (Washington: IMF).

FIGURE 5. Pension funds generally hold a larger share of assets in listed equities

Share of AUM allocated to listed equities by pension funds and insurers at year-end 2015



Source: Milken Institute Center for Financial Markets survey of EAC institutional investors

INVESTORS GENERALLY HOLD VERY SMALL, IF ANY, AMOUNTS IN UNLISTED EQUITY

Only 18 percent of surveyed institutional investors report holding any assets in venture capital, private equity, or other unlisted equity. In half of these cases, the amount was just 1 percent of the total portfolio. In the other half of cases, amounts ranged from 4 percent to 10 percent of assets. Surveyed pension funds and asset management firms hold 1 percent to 5 percent of their portfolio in PE/VC in Kenya and insurers hold none. No surveyed pension funds or insurers in Tanzania and no pension funds in Uganda hold PE/VC assets. One participating Ugandan insurer holds 1 percent. In Rwanda, one insurer reported allocating as much as 10 percent of assets to private/unlisted equity, somewhat unexpectedly.

Even in developed financial markets, private equity typically is a relatively small portion of pension fund portfolios. The average private-sector pension fund in North America, for example, allocated 6 percent of total AUM to private equity in the first half of 2016, according to research provider Preqin.[54] Private equity has been viewed as a strongly performing asset class by institutional investors in the U.S., where net returns have been greater than 10 percent over a 10-year time horizon, compared with the Africa Private Equity & Venture Capital Index's 5.2 percent return rate over 10 years.[55] That said, even in

[54] Preqin, "North America-Based Pension Funds in Private Equity – May 2016," available at https://www.preqin.com/blog/0/14495/north-american-pension-funds.
[55] See Africa Venture Capital and Private Equity Association, "Key Findings and FAQs: African PE & VC Performance Benchmark" (September 2016).

advanced markets, alarm bells have been ringing more recently about the associated risks and continued ability of this asset class to reap high returns.[56]

There is also likely considerable investor uncertainty as EAC national regulators are in the process of clarifying how they will address this relatively new asset class. As noted above, Kenya and Uganda have only recently established specific regulatory limits on the share of pension fund portfolios allocated to domestic PE and VC. In terms of intraregional limits (discussed in greater detail below), Kenya treats PE/VC investment by pension funds in other EAC countries as foreign investments, with stricter limits, while in Uganda, domestic pension fund rules apply.[57] For Tanzania's pension funds, the regulations on intraregional PE/VC investments are as yet unwritten. None of the four countries have specifically addressed insurance firms' asset allocation to PE/VC, even in their domestic markets.

Very small allocations to private equity, venture capital, and unlisted equities by institutional investors in the EAC partly reflect capacity limitations and lack of experience in assessing this asset class, rather than lack of demand. Only 29 percent of surveyed participants report good or excellent capacity to assess this asset class, while 14 percent report poor or very poor capacity.[58] Even among Kenyan institutional investors, as many as three-quarters report average capacity at best in assessing this asset class. Institutional investors must be prudent in allocating investment to early-stage financing since failure rates can be high.[59] And the small size of PE/VC and capital markets generally in underdeveloped financial markets means investors can find it difficult to exit and get other investors to take up stakes. It will be important to boost capacity among regulators, investors, and financial intermediaries in evaluating the risks as well as the opportunities associated with this still-relatively new source of private capital. One solution that may address capacity constraints and mitigate some of the risk would involve pooling and channeling EAC investors' money through VC/PE funds or a "fund of funds" that could be listed on a stock exchange. Such funds could pool risk by diversifying investor portfolios across a large number of VC-funded firms in the subregion, for example.[60] As discussed below, institutional investors have expressed an appetite for this kind of product.

OVERALL DIVERSIFICATION AWAY FROM REAL ESTATE

Surveyed pension funds across the EAC hold, on average, 9.3 percent of assets in real estate and property, but asset holdings range widely, from nil to 25 percent. Although surveyed Kenyan pension funds set internal ceilings that are in line with national regulators' 30 percent ceiling on portfolio allocation to real estate, the average allocation is actually 15 percent. Similarly, at an average of 12.4 percent, surveyed Tanzanian pension funds' actual allocation falls far short of internal ceilings set

[56] Financial Times, "Pensions' Shift into Private Equity Ignores Risks" (August 26, 2016).
[57] In many cases, foreign–not intraregional–investment regulations apply to private equity investments. Allocations to PE are also affected by restrictions on foreign investment to the extent that the majority of African private equity vehicles are domiciled in Mauritius.
[58] Similarly, Ashiagbor et al. found in their 2014 study that a major reason African pension funds were reluctant to invest in private equity was unfamiliarity with this asset class, rather than any outright "aversion" to it.
[59] See, e.g., the discussion in Vittas (2000) on how even a small, sudden reallocation of pension assets toward equities could cause large shifts in market prices in underdeveloped capital markets.
[60] See this discussion in, e.g., Irving, Schellhase, and Woodsome, "Framing the Issues: Developing Capital Markets in Rwanda" (2016) (Washington, DC: Milken Institute).

roughly in line with national regulators' ceilings of 25 percent to 30 percent. Where surveyed Ugandan pension funds have internal ceilings on this asset class, they tend to be significantly below the 30 percent ceiling set by national regulators, averaging 10 percent. And actual allocation by Ugandan funds tends to fall well below even their internal ceilings, at 4 percent.

Moreover, aggregate data collected by regulators indicate that Ugandan pension funds as an industry hold significantly less in real estate compared with a decade ago: 2.2 percent at year-end 2015, down from 17 percent in 2006, while Tanzanian funds continue to hold just under one-quarter. Kenyan funds, however, hold quite a bit more in this asset class: 18.5 percent at year-end 2015, up from 6 percent in 2006. These trends may have occurred at least partly in response to trends in the countries' real estate markets. Until earlier this year, Kenya's real estate market was widely considered to have been a bubble in urban areas.[61] And there has been strong investor interest in the first real estate investment trust (REIT) in Kenya's market, launched in 2015. Regulators there have recently set a separate 30 percent ceiling on pension fund portfolio allocations to REITs.[62] In Tanzania, the pension fund sector held an estimated 24 percent in real estate at year-end 2015, compared with 23 percent in 2006. Earlier this year, Tanzanian President John Magufuli specifically called on the country's pension funds to further diversify their portfolios away from real estate and invest more in export-oriented industrial sectors with job-creating potential.[63]

Surveyed life insurers hold an average of 3 percent in real estate and, somewhat surprisingly, non-life insurers hold as much as 10 percent, on average. As with pension fund holdings, these average figures also mask significant variation by individual investor. For example, AUM in real estate ranges from nil to 40 percent across non-life insurers.

There is significant variation by country of domicile in how investors view their capacity to assess real estate investments. Despite investing, on average, about 10 percent of their assets in real estate, as many as 17 percent of total participating institutional investors rate their capacity to assess real estate investments as poor. All but one of these is domiciled in Uganda. And 40 percent of total participating institutional investors across the countries see their capacity to assess real estate as good or excellent, with a high concentration of these in Kenya.

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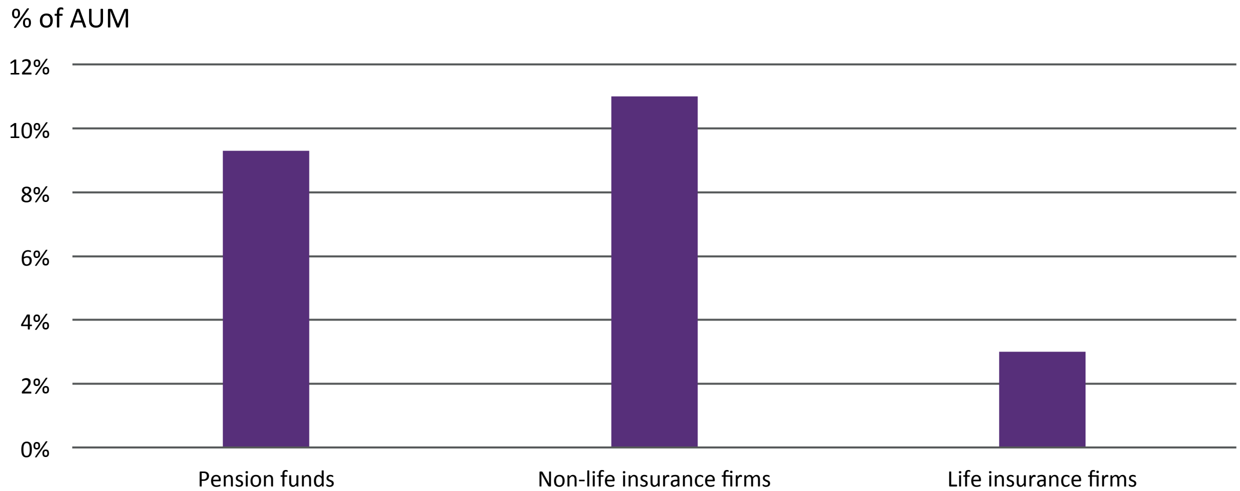
[61] The Independent, "Uganda: Members Query NSSF Bosses" (October 26, 2016).
[62] The regulatory ceilings for Kenyan pension funds' investments are 30 percent for immovable property and, separately, 30 percent for REITs.
[63] Daily News, "NSSF, PPF Link Up to Establish Sugar Factory" (October 22, 2016). Most recently, NSSF and PPF pooled some of their assets to invest in a sugar-processing factory in Tanzania's Morogoro region.

FIGURE 6. Surveyed institutional investors hold, on average, 10 percent of assets in real estate—but this masks significant variation among them

Share of AUM allocated to real estate by pension funds and insurers at year-end 2015



Source: Milken Institute Center for Financial Markets survey of EAC institutional investors

BOX 2. Use of external managers and motivating incentives

Institutional investors facing fund management capacity constraints often look to external managers to attain tangible benefits from skill transfers and to gain a "guided benchmark." In Kenya, regulators even require private, employment-based private schemes to entrust funds to qualified asset managers.

Nearly half of all surveyed firms in the EAC countries use external fund managers. Among these firms, 70 percent use some form of incentives to motivate them. The top incentive used is value and performance of AUM (cited by one-third). Ten percent set specific targets and benchmarks in seeking to motivate external managers.

The use of external fund managers is less prevalent in Rwanda than in the other EAC focus countries, practiced by fewer than 30 percent of surveyed Rwandan investors. The Rwandan investors that use external fund managers rely on compensation tied to value and performance of AUM and terms specified in their contracts as motivating incentives. In contrast, only 39 percent of surveyed institutional investors in the EAC countries indicated they use specific incentives to motivate internal fund managers. Performance-based bonus pay is the top incentive used to motivate internal fund managers, used by just over 40 percent of those responding. Just over one-third use specific targets, benchmarks, and investment policy guidelines. In Rwanda, use of incentives to motivate internal managers is much less frequent than in the rest of the EAC focus countries: Only one surveyed firm indicated it uses these, relying on performance-based bonus pay.

C. Assessing capacity for executing investment strategy

Another factor that informs a firm's portfolio strategy is its own internal capacity to assess the financial instruments available and to make timely investment decisions. To understand whether capacity issues were constraining the portfolio diversification of East African institutional investors, we asked a series of questions about how they view their internal resources and their ability to assess several types of risk. We found that institutional investors are optimistic about their firms' own information technology (IT) and human capabilities for executing investment strategy. Moreover, institutional investors across the focus countries generally believe their capacity for assessing credit and interest rate risks is strong. There is much more variability, however, in participants' perceived abilities to manage price-volatility and exchange-rate risk.

IT AND HUMAN CAPACITY

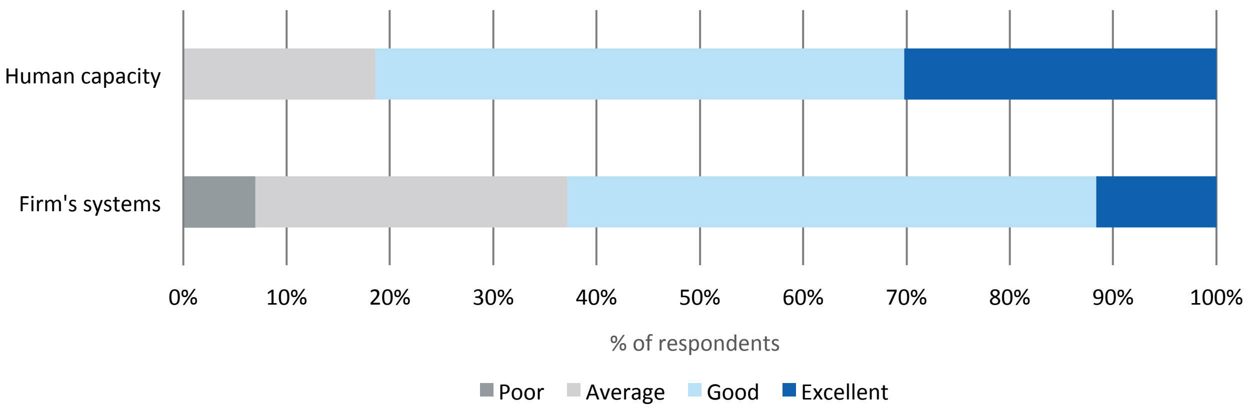
Portfolio diversification depends on whether firms have employed talented securities analysts who can assess a variety of asset classes and determine at what volume to invest in particular issuances. Firms also need access to high-quality information technology to retrieve and analyze market data, monitor balance sheets, perform risk analytics, and execute trades in a timely manner. Although firms operating in a frontier-market context might be expected to have low capacity levels, participating East African institutional investors generally reported strong internal capacity, both in terms of human resources and their IT systems.

Over 80 percent of respondents rate their firm's human capacity as good or excellent. (See Figure 7.) Only 19 percent describe their human resources as average, and no firms rate themselves as poor or very poor. Asset managers slightly edge out pension funds and insurance companies in their confidence in their human capacity. And a higher percentage of Kenyan firms rate their human capacity as good or excellent compared with the other EAC focus countries.

Nearly two-thirds rate their IT systems as good or excellent. Meanwhile, 30 percent rate themselves as average in IT, and 7 percent give themselves a rating of poor. In this case, there is little difference among the different kinds of institutional investors. Kenyan firms signal more optimism about their IT systems than firms domiciled in other countries, however. Almost 70 percent of participating Kenyan firms rate their IT systems as good or excellent, whereas only 62 percent of Ugandan participants say the same. No Rwandan respondents rate their firm's IT capacity as excellent, and only 43 percent rate them as good, with the other 57 percent calling their IT systems average. Only one of the three Tanzanian respondents considers their firm's IT systems to be good. Another rates their firm's IT capacity as average, and the third calls theirs poor.

FIGURE 7. Institutional investors' reported capacity: Human and IT systems

Overall firm capacity



Source: Milken Institute Center for Financial Markets survey of EAC institutional investors

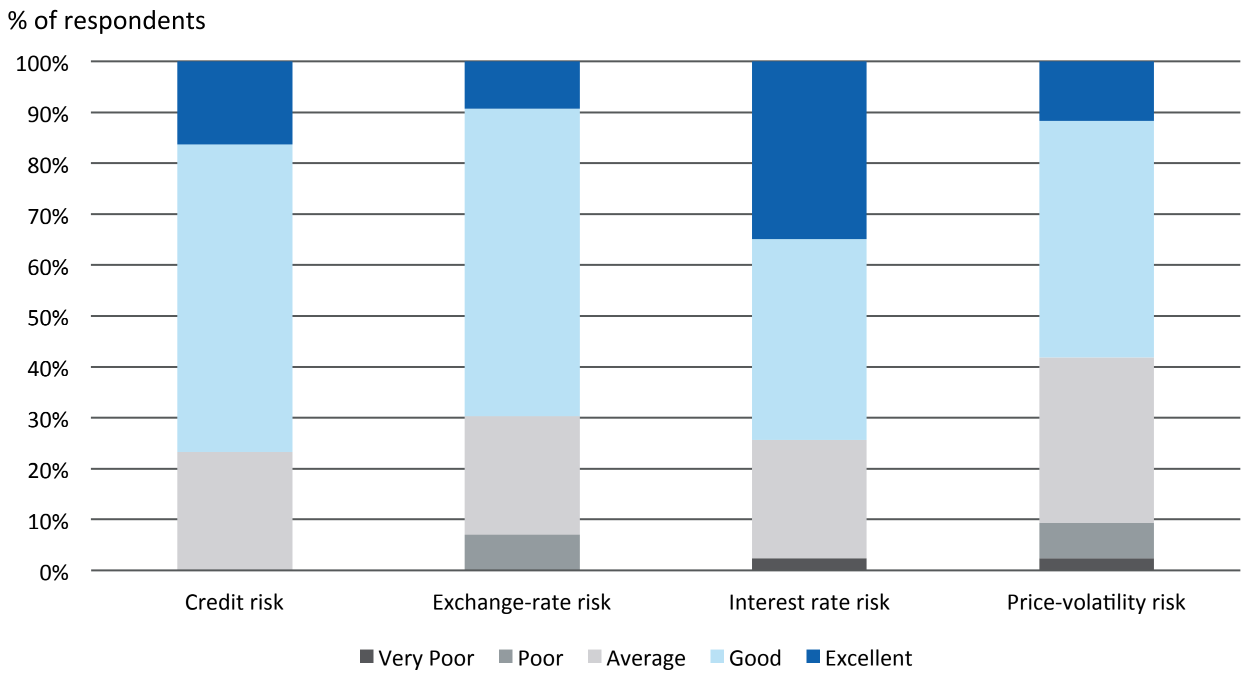
It would be expected that firms with higher self-assessments of capacity would achieve stronger returns than those with lower capacity, and the survey findings show that this connection between reported capacity and returns does in fact exist in East Africa. For human capacity, those firms reporting excellent capacity had an average return for 2015 of 10.9 percent. Firms rating their capacity as good averaged returns of 10.4 percent, and those saying they have average human capacity reported an average of 9.5 percent. The same pattern holds for systems capacity. Those firms with excellent IT capacity report, on average, returns of 12.3 percent for 2015, compared with 10.9 percent for firms with good IT capacity and 9.5 percent for firms rating their capacity as poor to average.

CAPACITY TO ASSESS RISKS

Sound investment decision-making requires the ability to monitor and assess a variety of risks that affect returns. We asked firms to assess their capacity to judge the risk for debt default (credit risk), the risk of changes in value of securities due to shifts in foreign exchange rates (exchange-rate risk), the risk of shifting investment values based on interest rate changes (interest rate risk), and the risk of sudden drops in the market price of securities (price-volatility risk).

Capacity for assessing credit risk and interest rate risk is rated as good or excellent by 78 percent and 76 percent of participants, respectively. Respondents are less confident overall in their capabilities to assess price-volatility risk, with one-third viewing their capacity as average and 9 percent considering it poor or very poor. (See Figure 8.) Only half of insurance firms rate their capacity to assess price-volatility risk as good, and none assess this capacity as excellent. When it comes to assessing exchange-rate risk, 70 percent of respondents rate their firms as good or excellent, while a quarter view their capacity as average, and 7 percent consider their abilities to be poor. Surprisingly, all firms that view their capacity to assess exchange-rate risk as poor currently hold assets abroad.

FIGURE 8. Investors' reported capacity to assess various types of risk



Source: Milken Institute Center for Financial Markets survey of EAC institutional investors

BOX 3. Portfolio management practices among EAC institutional investors

Value at Risk (VaR): VaR was originally developed by banks to monitor market risk on their trading books. More recently, it has been adopted by some institutional investors to monitor portfolio volatility.[64] Survey responses indicate that VaR has become a common risk-management tool among institutional investors in the EAC but not a standard one. Among the respondents, 63 percent of asset management companies report using VaR. Participating insurance companies split evenly on this question. However, among pension funds, just over a third report using VaR. It is worth noting that the use of VaR by institutional investors, particularly by pension funds, is controversial. Randle and Rudolph (2014) note that VaR is easy to quantify and can serve as a high-frequency metric; however, "its relevance to long-term investors is questionable." As they also note, "VaR is a measure of volatility and provides little information about the probability of reaching an adequate pension at retirement age."[65]

Dedicated Liquidity Portfolios: In many cases, institutional investors around the world choose to keep a certain percentage of their assets in cash or in assets that are readily converted into cash, to meet expected and unexpected liquidity demands. Overall, 69 percent of those who responded reported keeping a dedicated liquidity portfolio, including large majorities of the surveyed pension funds and insurance companies. Table 6 shows the average composition of liquidity portfolios among participating firms. Cash and demand deposits carry no principal risk and are therefore best suited for immediate liquidity needs, whereas time deposits, government T-bills, and commercial paper are more appropriate for anticipated liquidity needs that are some months out.[66] It is therefore unsurprising that insurance companies and asset management companies allocate more of their portfolios to cash, as they are typically subject to greater liquidity risk than are pension funds.[67]

TABLE 6. Asset composition of liquidity portfolios

% of total liquidity portfolio (average)

	Cash/ demand deposits	Time deposits	Government T-bills	Short-term commercial paper	Other investments
All respondents	16.3%	35.5%	24.8%	3.2%	20.1%
Asset management companies	14.7%	32.0%	23.0%	10.0%	20.3%
Insurance companies	25.1%	38.6%	19.6%	0.0%	16.6%
Pension funds	4.8%	33.4%	33.2%	3.6%	25.0%

Note: Averages exclude responses that totaled less than 100%.

[64] Simons, "The Use of Value at Risk by Institutional Investors," New England Economic Review (November/December 2000).
[65] Randle and Rudolph, "Pension Risk and Risk Based Supervision in Defined Contribution Pension Funds," World Bank (2014).
[66] Kinniry and Hammer, "Managing Cash in Your Portfolio," Vanguard Group (2012).
[67] A few respondents defined "Other investments" in their liquidity portfolio as including government bonds, private equity, and real estate—asset classes not typically considered appropriate for a liquidity portfolio.

V. Cross-border asset allocation and its drivers

In theory, holding foreign securities would be particularly appealing to investors based in developing countries with shallow financial markets. Investing abroad gives pension funds and insurance firms access to a much wider range of securities, including higher-quality ones. It also can allow them to extend the maturity of securities held in their portfolios, particularly when there are not enough long-term securities available domestically.[68] Moreover, asset prices abroad may be less correlated with those of domestic markets, providing investors—and their beneficiaries—some means of hedging the risk of financial downturns at home.

Portfolio diversification to include foreign assets is a common risk-management strategy for institutional investors worldwide. In many developing countries, however, local institutional investors face tight limits on foreign investment. Examining restrictions on pension funds in seven developed markets and eight emerging markets, Chan-Lau (2004), for example, found that quantitative limits on investing abroad were relatively stricter in emerging markets.[69] Such restrictions may be put in place out of concerns that may include local investors' lack of technical capacity and experience in investing abroad.[70]

As discussed below, the focus countries for this study do set limits on investors' foreign asset allocations. However, as members of a regional economic community, there is an added wrinkle to cross-border limits. Within the EAC region, regulatory restrictions are generally looser—and sometimes lacking altogether. That is, for certain asset classes, investors are still subject to asset allocation restrictions but are not subject to any additional cross-border restrictions for investments within the EAC. As most policymakers recognize, regional cooperation and, ultimately, integration of financial markets can be an important step to achieving deeper, more liquid capital markets.[71] Forging closer regional links—including through cross-listings and cross-border investment—may offer a way for small, less developed capital markets to achieve needed scale.

Possible benefits associated with a regional approach to capital-market development include diversified risk in a wider market, more efficient and competitive markets, lower costs, and more opportunities to generate returns. By pooling the resources of small local capital markets, regionalization can boost liquidity and the ability of these markets to intermediate capital for private-sector and infrastructure development.[72] Institutional investors would gain access to a broader range of securities. Likewise, issuers would gain access to a larger number of investors.

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[68] Beck, Maimbo, Faye, and Triki, "Financing Africa: Through the Crisis and Beyond" (2011).

[69] Chan-Lau, "Pension Funds and Emerging Markets," IMF Working Paper 04/181 (Washington, DC: IMF). In a survey of institutional investors in 21 developing countries, IOSCO found that seven jurisdictions required prior authorization to invest abroad, and 12 imposed limits on foreign investments. See IOSCO, "Development and Regulation of Institutional Investors in Emerging Markets" (2012).

[70] Beck, Maimbo, Faye, and Triki, "Financing Africa: Through the Crisis and Beyond" (2011). They may also be motivated by a desire to restrict capital outflows; see IOSCO, "Development and Regulation of Institutional Investors in Emerging Markets" (2012).

[71] See, e.g., Warden, "Virtuous Circle for East Africa: Regional Capital Market Integration Is the Only Option" (2015), The Bulletin, Vol. 6, Ed. 4 (London: Official Monetary and Financial Institutions Forum).

[72] See Irving, Jacqueline, "Regional Integration of Stock Exchanges in Eastern and Southern Africa: Progress and Prospects" (2005), IMF Working Paper 05/122 (Washington, DC: IMF). Liquidity is one of the most essential elements for a strong link

The section that follows describes three types of constraints that institutional investors in the EAC may face when they consider diversifying their portfolios beyond domestic markets. First, these investors operate under national regulatory limits on foreign investments, both within the EAC market and beyond. Second, boards and investment committees apply their own internal guidelines that may limit allocations in other jurisdictions beyond national restrictions. Third, investors may lack hedging solutions needed to adequately manage exchange-rate risk. This section closes by examining investors' actual portfolio allocations to foreign assets and the reported motives behind these investments.

A. Regulatory limits on intraregional and other cross-border investment

It is common for institutional investors in developing countries to face limits on their foreign asset holdings for reasons that can include capacity limitations of regulators, as well as investors and financial intermediaries. (See above.)[73] EAC members' national regulators generally follow this trend—certainly in how member countries' regulate investment by local pension funds and insurers outside the EAC itself. From the standpoint of EAC national regulators, all countries outside the EAC are considered foreign, while, at least theoretically, other EAC member states should be considered domestic investments under the 2010 EAC Common Market Protocol. In practice, however, national regulators have flagged some asset classes where other EAC countries as place of domicile are treated as "foreign," while others are treated as "domestic."

Table 7 shows how pension fund regulators in Kenya, Tanzania, and Uganda treat different asset classes domiciled in other EAC countries. For example, Kenyan regulators take a particularly mixed approach across different asset classes domiciled in other EAC countries as to whether pension fund investments in those assets would be considered foreign or domestic.

TABLE 7. Regulatory view of pension fund investments across asset classes in EAC countries other than where the fund is domiciled

	Government*		**Bank deposits**	**Corporate bonds**	**Real estate**	**Public equities**	**PE/VC**
	Bills	Bonds					
Kenya	Domestic		Foreign	Domestic	Mixed**	Domestic	Foreign
Tanzania	Domestic		Domestic	Domestic	Domestic	Domestic	Not addressed
Uganda	Domestic		Domestic	Domestic	Mixed**	Domestic	Domestic

*Regulatory restrictions for government debt apply to both government bills and bonds.
**The Kenya and Uganda regulatory regimes consider all REITs within the EAC as domestic investments and immovable property investments in other EAC countries as foreign.
Sources: Regulatory authorities in Kenya, Tanzania, and Uganda

Where assets are considered foreign for regulatory purposes, Kenya's regulators have placed tight limits on the share of pension and insurance portfolios that may be invested in foreign securities. (See Table 8.)

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between stock market development and long-term economic growth. See, e.g., Levine (1991), who argues that liquid stock markets can encourage more investment in high-return projects that require long-term capital commitments.

[73] Beck, Maimbo, Faye, and Triki, "Financing Africa: Through the Crisis and Beyond" (2011). They may also be motivated by a desire to restrict capital outflows; see IOSCO, "Development and Regulation of Institutional Investors in Emerging Markets" (2012).

Tanzania and Uganda, however, go even further. Tanzania does not permit local institutional investors to invest abroad at all. In Rwanda, the regulations do not specify limits for investment in foreign assets. The Rwandan Social Security Board's internal guidelines include maximum tactical policy weights for foreign allocations. For foreign equities, the maximum tactical policy weight is 25 percent. For regional fixed income, it is 20 percent, while for foreign fixed income, it is 10 percent. The RSSB places a few additional restrictions on its foreign investments, including a 50 percent limit on the share of the offshore portfolio that can be controlled by a single fund manager.

TABLE 8. Limits on foreign investment by EAC institutional investors

Maximum allowed (% of total AUM)

	Pension funds	*Insurance companies*
Kenya*	15%	5%
Tanzania	0%	0%
Uganda	5%	0%
Rwanda (RSSB)	25% in equities and 10% in fixed income	100%

*Kenyan restrictions on insurance company asset allocations are still in draft form.
Sources: Regulatory authorities in Kenya, Tanzania, Uganda, and Rwanda and RSSB

Intra-EAC limits imposed on insurance firms vary even more by country. Kenya's draft investment guidelines for local insurance firms set a maximum portfolio allocation of 5 percent for foreign investments. However, the guidelines do not specify whether insurers' investments in assets in other EAC countries would be considered domestic or foreign for the purpose of this ceiling. Surprisingly, Rwanda's insurance regulations place no explicit restrictions on the ability of local insurance firms to invest in foreign assets, whether inside the EAC or outside it—meaning that, at least in theory, local insurers face no specific restrictions on foreign investment. Regulations in Tanzania and Uganda do not allow insurers to invest abroad at all, even within the EAC. However, in Tanzania's case, this restriction is expected to be eased for intra-EAC investments by mid-2017.[74]

B. Internal guidelines on cross-border investments within the EAC

In addition to national regulatory restrictions, institutional investors themselves often set internal limits on their intra-EAC investment, as part of their larger portfolio strategy. Notably, these internal guidelines often view asset allocations to other EAC markets as foreign investments, even when regulators would consider them domestic. And in actually managing their portfolios, many surveyed investors are taking a still more conservative approach than that provided for in internally set guidelines, falling well short of their firms' own maximum targets in holding assets domiciled outside their own countries.

[74] Correspondence with TIRA staff.

Roughly half of institutional investors in the EAC have internal guidelines that treat investments in other EAC countries as foreign. Surveyed firms tend to fall well short of ceilings set by their own firms' internal guidelines in holding assets in non-local EAC countries—including for key asset categories that could help diversify their portfolios.

In terms of their internal guidelines, participating institutional investors are divided nearly equally on whether they regard asset classes in other EAC countries as domestic or foreign investments. A slightly smaller proportion (45 percent) of participating institutional investors regard all of the EAC as domestic.

More than half of surveyed firms rely on a combination of regulator thresholds and internal guidelines in determining thresholds for asset classes domiciled in non-local EAC markets. One in 10 participants relies more on internal guidelines in determining thresholds for asset classes in non-local EAC markets.

A number of surveyed firms specified the internal ceilings they apply to intraregional investments in various asset classes. Ceilings for government bonds range widely, from 10 percent to 50 percent of the portfolio, while corporate bond maximums are set at 5 percent to 15 percent. Most of these firms cap intraregional public equity allocation at 15 percent, though one firm has set it as high as 40 percent. Only a few firms have guidelines on maximum allocation to private or unquoted equity, and these portfolio thresholds range from 5 percent to 20 percent.

Internal thresholds, however, do not mean that firms have made investments in these asset classes. Among institutional investors based in EAC focus countries (excluding Rwanda[75]) that invest in assets intraregionally, 88 percent that set internal ceilings on holdings in government bonds issued by other EAC countries hold nothing in this asset category. Meanwhile, Kenya's national regulations specify a ceiling as high as 90 percent of assets for pension funds' investment in government securities issued by other EAC countries.

None of the institutional investors that set internal ceilings on the portion of their portfolio held in corporate bonds issued in other EAC countries are holding any of their assets in these securities. These ceilings range from 5 percent to as high as 15 percent. As four of these firms are based in Kenya and the fifth is based in Uganda, this could reflect the lack of product in non-local EAC capital markets.

This seems to be a trend across asset categories—even very liquid, low-risk assets such as demand and time deposits. The vast majority of institutional investors that have set thresholds for the portion of assets held in these asset categories domiciled in non-local EAC countries are holding nothing in these categories. For these more liquid, lower-yielding assets, concerns may center on whether the value of repatriated yields merits the investment, especially where there may be some uncertainty about how these investments are regarded from a regulatory standpoint. And national ceilings are relatively low for these asset categories anyway, even when within the EAC. (See above.) For bonds and less liquid securities, institutional investors may not be taking these up intraregionally due to the general lack of product and concerns about illiquidity/exit, as well as uncertainty about how restrictions apply.

[75] There were only two Rwandan institutional investors that indicated they invested in assets domiciled outside of Rwanda, and these firms did not indicate the actual or maximum amounts allowed to be invested in asset classes domiciled in other EAC countries. For this reason, the analysis in this section excluded Rwandan institutional investors.

For listed equities, however, this trend is less prominent, although still present. Half of institutional investors based in EAC countries (excluding Rwanda) that report setting thresholds for assets held in equities listed on non-local EAC markets hold none of their assets in these securities. The ceiling is 15 percent in each of the four cases where institutional investors do hold some of their portfolios in this asset category, with the actual amounts invested ranging from 3 percent to 6 percent.

Setting internal ceilings for assets held in unquoted private equity issued by entities domiciled in other EAC countries is less common—only four institutions set such ceilings in their internal guidelines, and they range from 5 percent to 20 percent. Only one firm, however, actually allocates assets to this category, at 5 percent of total assets (against a 20 percent target). The lack of attention to this relatively new asset class in internal target setting likely reflects the fact that national regulations are still emerging, as well as the overall lack of available product and more limited evaluation capabilities.

AVAILABILITY OF CURRENCY-HEDGING INSTRUMENTS

A third main potential constraint that institutional investors in the EAC may face when they consider diversifying their portfolios beyond domestic markets is a lack of the hedging instruments needed to adequately manage exchange-rate risk. Given the survey findings above that, in diversifying their portfolios beyond domestic markets, investors often fall far short of ceilings that apply internally as well as those imposed by regulators, this may be a much more significant impediment than quantitative restrictions and targets.

As we would expect, a lack of hedging instruments and strategies for managing foreign currency risk does seem to impede the ability of institutional investors to take a more diversified portfolio approach intraregionally. Nearly three-quarters of participating firms said they did not have access to the currency-hedging strategies and instruments they need to adequately manage foreign currency risk. Compared with investors in other member states, Kenyan firms are more likely to possess solutions for currency risk. Almost half of participating Kenyan firms report they have access to hedging solutions, compared with 29 percent of Rwandan firms and only 13 percent of Ugandan institutional investors. None of the three Tanzanian respondents have the tools they need to hedge foreign exchange risk. About one-third of asset managers and insurance companies report they have access to hedging tools, but only 6 percent of surveyed pension funds can say the same.

A large percentage of firms would look to increase investments in neighboring EAC countries if they had access to better solutions for managing foreign exchange risk. Over 40 percent of Kenyan firms and half of participating Ugandan investors would be more likely to increase investment into Rwanda in particular if foreign exchange hedging products were more widely available. Nearly three-quarters of this subgroup of respondents already invests in asset classes outside their home countries. Among Rwandan firms, three out of the seven respondents said they would be more likely to increase investments into other EAC countries if they had better access to foreign exchange hedging products. Two of these three currently invest in assets outside of their home countries.

When asked what their firms need to better manage foreign currency risk, East African institutional investors most frequently say they want to see the development of a local derivatives market. A Kenyan participant notes that these products are currently being developed in the region. Some Kenyan commercial banks, for example, offer clients basic forward contracts and currency swaps.[76] A Ugandan respondent, though, anticipates the need for regulatory changes before hedging contracts become widely available. Along with wanting to see new products, several participants, including two Rwandan firms, indicate they need to build capacity within their firms, through training, increased awareness, and tapping external expertise through hiring outside service providers. As discussed in Section IV, 30 percent of respondents rate their firms' ability to assess exchange-rate risk as average or poor.

Notably, several survey respondents explicitly cite managing currency risk and-or benefiting from currency movements as motivation for diversifying their portfolio into assets held abroad. Twenty percent of the Ugandan firms that invest in asset classes in Kenya are seeking to benefit from exchange-rate movements, even as Kenyan firms indicate similar motives for investing outside the EAC. As shown in Figure 9, the Ugandan shilling has steadily weakened against the Kenyan shilling over the last few years, while Kenya's currency has fallen in value against the U.S. dollar. About one-tenth of total surveyed respondents explicitly report having sought to profit from currency movements.

ACTUAL FOREIGN ALLOCATION OF EAST AFRICAN INVESTORS

Half of respondents report investing in assets beyond their home countries—that is, assets domiciled in other EAC countries and-or markets beyond the subregion. These allocations range widely, from 2 percent to 89 percent of total portfolio. The number holding foreign assets may increase in coming years, as an additional 24 percent of respondents say they intend to make foreign investments in the future. Another 7 percent have held foreign assets in the past but do not currently. About one-fifth of respondents have never invested beyond their home markets and have no plans to do so.

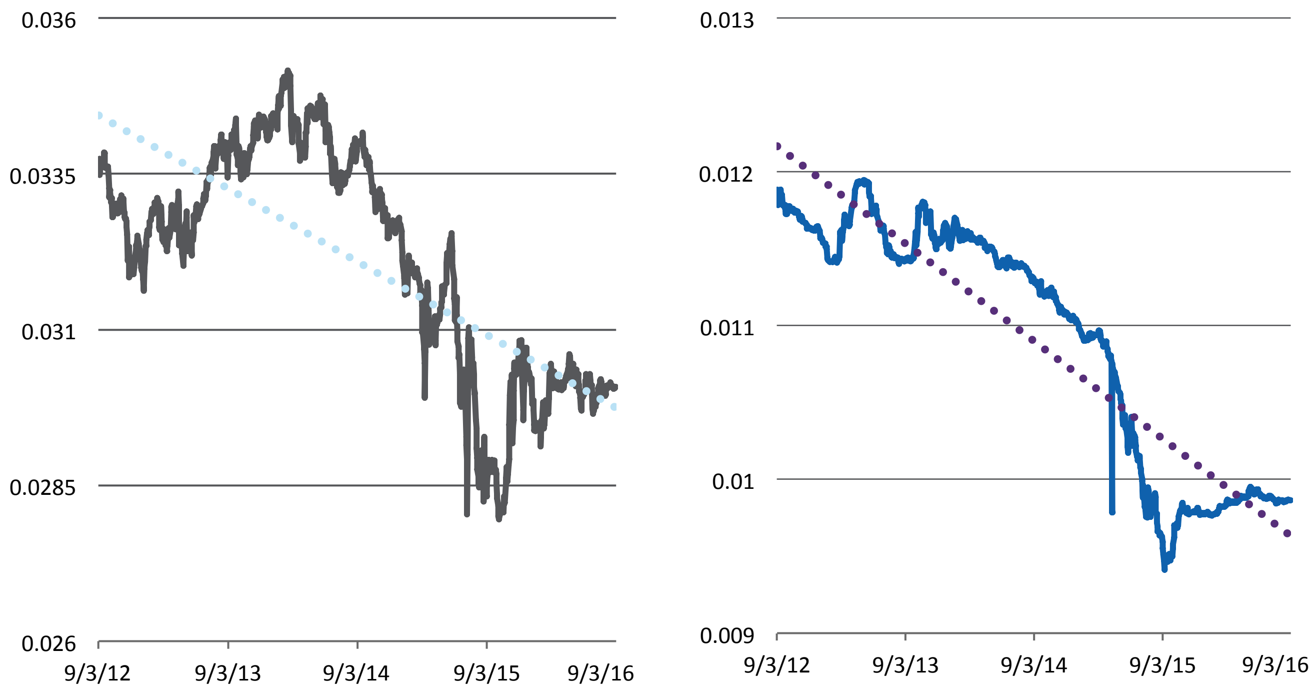
Ugandan institutional investors overall are most likely among the EAC focus countries to hold assets domiciled outside their home country. Nearly 70 percent of surveyed Ugandan investors have allocated funds to assets outside the country, compared with 50 percent of Kenyan firms. (See Figure 10.) Only two of the seven participating Rwandan firms have asset holdings abroad, while none of the Tanzanian investors do. Asset managers are more likely to have invested abroad than other East African institutional investors. Nearly 90 percent of surveyed asset managers hold foreign assets, compared with 65 percent of surveyed pension funds. As might be expected, given that they generally face tighter or still-emerging restrictions on investment in non-local assets, only 13 percent of participating insurance firms across the EAC invest in assets beyond their home countries.

[76] See, e.g., Business Daily, "CBK Sets Rules for Hedging Shilling Swings" (June 19, 2012).

FIGURE 9. Recent exchange-rate trends: Ugandan shillings to Kenyan shillings and Kenyan shillings to U.S. dollars

Daily buy/sell mean, September 3, 2012, to August 31, 2016

UGX/KES (Sept. 2012-Aug. 2016) KES/USD (Sept. 2012-Aug. 2016)



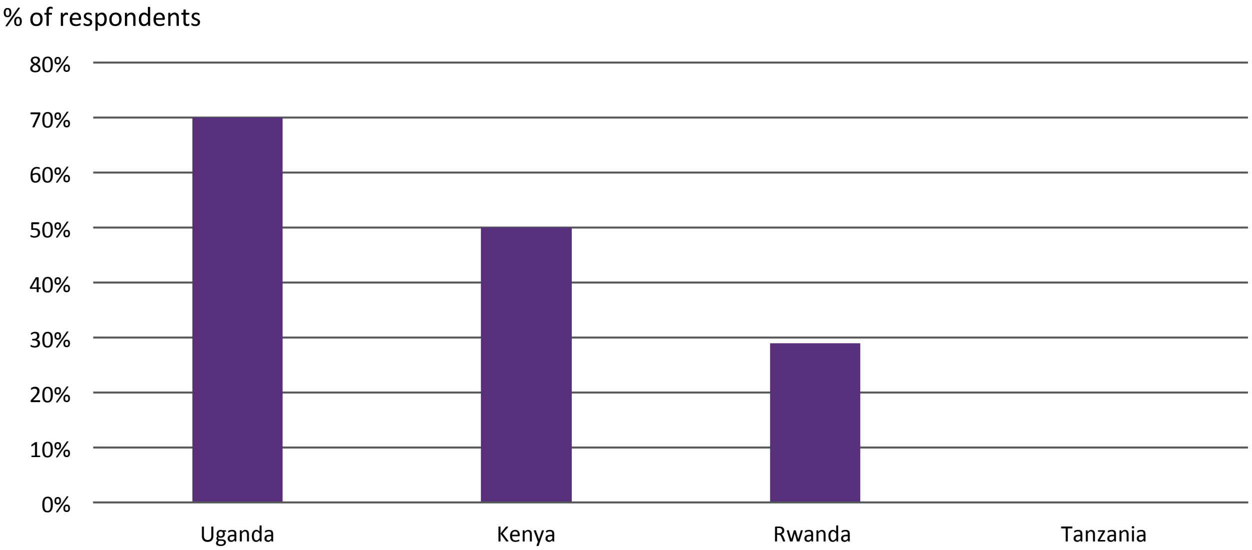
Source: Central Bank of Kenya, https://www.centralbank.go.ke/rates/forex-exchange-rates/

Assets domiciled in Kenya's markets are the most common—and, in some cases, the sole—destination for foreign investments of Ugandan and Rwandan survey participants. Non-Kenyan-based institutional investors are attracted by Kenya's more developed capital markets and relatively more available financial products. Our survey findings confirm, unsurprisingly, that a main motive is access to Kenya's more developed and liquid equity market.

The Kenyan markets appear to be particularly attractive to Ugandan firms. Each of the surveyed firms that has invested 20 percent or more of its portfolio in foreign assets is domiciled in Uganda, and these investors have directed almost all of their non-domestic allocations to Kenya. One Ugandan firm, for example, has invested as much as two-thirds of its portfolio in Kenya, and a small Ugandan pension scheme has allocated half its portfolio to Kenyan fixed-income securities. According to a portfolio manager with one Ugandan-based investor holding all its non-local assets in Kenya's equities market, Kenya is a more active economy with a liquid stock market, and his firm wants to participate in that county's economic growth. This same respondent noted that Kenyan investments are facilitated by the fact that Uganda's regulator considers other EAC markets as "local" for asset management purposes.[77] Another Ugandan investor said he was specifically attracted by the REIT established in Kenya last year and listed on the stock exchange. Several Ugandan firms also cited the opportunity for enhanced returns as a critical motivation for their foreign investments.

FIGURE 10. Ugandan firms are most likely to hold non-local assets—attracted by access to Kenya's more developed market

Percentage of surveyed institutional investors by home country that hold non-local assets



Source: Milken Institute Center for Financial Markets survey of EAC institutional investors

Whereas Ugandan firms want access to deeper, more liquid markets, Kenyan firms are more likely to explicitly reference simple diversification as a motive for foreign asset allocation. Out of 12 surveyed firms that explicitly cite diversification as a primary motive for investing abroad, eight are domiciled in Kenya. In addition to "general diversification," these firms specifically refer to "country diversification," "sovereign diversification," and "diversifying away from Kenyan-specific risk."[78] According to one Kenyan-domiciled respondent, low correlation of other EAC markets to Kenya's market gives access to improved liquidity and portfolio diversification and can enable the portfolio to benefit from currency movements. Share prices on the Nairobi Securities Exchange, after posting strong gains from 2012 to 2014, have fallen in value over the last two years.

About 20 percent of the sample hold assets outside the EAC. Most of these firms are Kenyan asset managers, and they have allocated 3 percent to 7 percent of their portfolios to financial assets beyond the EAC. They describe these allocations as investments in international funds dedicated, for example,

[77] See Section V for a discussion of actual restrictions by asset category on portfolio holdings outside an institutional investor's domicile country.
[78] Standard & Poor's lowered Kenya's credit rating to negative from stable in October 2016 due to elevated risks from currency depreciation and a widening budget deficit. See http://x254.co/standard-poors-lowers-kenyas-credit-rating-outlook-from-stable-to-negative/.

to European equities or exposure to emerging markets. One Kenyan firm has hired Franklin Templeton to manage 5 percent of its assets in offshore securities. Another Kenyan asset management company invests 3 percent of its portfolio in African stock exchanges outside the EAC. Out of all surveyed institutional investors, the firm that has allocated the largest percentage of its portfolio to assets outside the EAC focus countries is a Ugandan firm that invests 23 percent of its fund in Malawi and South Sudan.[79]

Though Kenyan firms more frequently invest beyond the region, the majority of assets these firms hold outside of Kenya stays within the EAC. In terms of value, investments into other EAC countries equal 69 percent of total foreign investments reported by participating Kenyan firms, with Uganda the most common destination. It is significant that the majority of non-domestic assets held by Kenyan institutional investors remain within the EAC. Kenyan investors represent the bulk of institutional savings for the region, and policymakers in countries with smaller financial markets hope to tap into this pool of savings as their markets grow.

VI. The buy side for Rwanda: How can Rwanda's capital markets attract institutional investors across the EAC?

Forging closer regional links across the EAC's capital markets may offer a way for small, less developed capital markets to achieve needed scale. This is particularly true in the case of Rwanda, where policymakers have launched a 10-year capital-market master plan that emphasizes a regional approach. Policymakers are acutely aware of the importance of attracting the right kind of development-enhancing foreign capital and have emphasized in their regional integration aims the potential for sourcing more longer-term capital intraregionally, particularly from Kenya.

Rwanda's policymakers also recognize that progress toward regional cooperation and integration of capital markets may actually help spur accelerated economic integration goals in other areas. For example, the harmonization of stock market regulations and trading practices that accompanies regionalization could deepen regional integration more broadly in policy areas such as taxation, accounting standards, corporate governance, and legal practices.[80] And increased regional cooperation and market integration may facilitate the financing of cross-border infrastructure projects, such as the EAC's Northern Corridor, which includes Kenya, Uganda, and Rwanda.

In many ways, Rwanda represents an interesting case study of the ability of a small, developing country to attract foreign investment, particularly from neighboring countries belonging to the same regional economic community. With its domestic institutional investor base currently very small and its own financial markets at too nascent a stage to meet the country's pressing needs for long-term development finance, it must look farther afield. Kenya's financial market is much larger and more developed than Rwanda's and those of the other EAC countries, and Kenya's institutional investors tend

[79] South Sudan acceded to the EAC in April 2016. Uganda, Malawi, and South Sudan (as of May 2016) are all also members of the Common Market for Eastern and Southern Africa (COMESA), another regional economic community.
[80] Okeahalam, Charles C., "Strategic Alliances and Mergers of Financial Exchanges: The Case of SADC" (March 2005), Journal of Southern African Studies, Vol. 31, No. 1.

to have significantly larger assets. The challenges Rwanda faces in attracting cross-border investment from its EAC neighbors—and how it overcomes those challenges—may have useful applications for other small, developing countries in Africa and other emerging regions.

A. What stops investors at the Rwandan border?

According to the survey findings, Rwanda is struggling to attract large amounts of investment from institutional investors domiciled in other EAC countries. Only 16 percent of EAC firms domiciled outside Rwanda report investing in Rwandan assets. This group includes two Kenyan and two Ugandan firms but none from Tanzania. Among these firms, investments in Rwandan-domiciled assets range from just 0.3 percent up to 10 percent of total AUM. In dollar figures, these investments add up to about $45 million, or less than 0.5 percent of total AUM reported by participating Kenyan, Tanzanian, and Ugandan firms. Moreover, these respondents' investments in Rwanda are limited to only two asset classes, with approximately $8 million invested in shares listed on the Rwanda Stock Exchange (RSE) and as much as $37 million invested in real estate. Surprisingly, especially in light of the National Bank of Rwanda's new regular issuance program, no EAC institutional investor outside Rwanda reports investing in Rwandan government securities.

To understand the potential obstacles to further participation in Rwandan markets, our survey asked a series of questions about why Rwanda may be unattractive—or attractive—as an investment destination. It is important to note that these are perceptions and that the findings outlined below do not necessarily imply that the perceived barriers to investment are more pronounced in Rwanda relative to other EAC member states.

Institutional investors from other EAC countries rank low levels of liquidity, lack of investable product, and concerns about market infrastructure as the most significant barriers preventing them from increasing investment in Rwanda. Nearly 60 percent of non-Rwandan institutional investors identify market liquidity as a highly significant barrier to investing in Rwandan markets, as shown in Figure 11. Nearly 70 percent of these investors are Kenyan-domiciled, and the vast majority of these are pension funds or asset managers. Among those Tanzanian and Ugandan investors that cited low liquidity as a significant impediment, 80 percent are likewise pension funds or asset managers.[81] As many as 44 percent of participating non-Rwandan institutional investors consider the lack of investable securities a major barrier, and 26 percent find market infrastructure a major barrier.

A majority, 57 percent, of institutional investors in other EAC countries identify currency-conversion fees as a major discouragement to their participation in Rwandan markets. An additional 19 percent say that foreign exchange and currency-conversion fees discouraged their investment in Rwanda to some extent. Respondents rate these fees as more discouraging than any other costs associated with investing in Rwandan securities markets. Nearly one-quarter of EAC institutional investors outside Rwanda flag exposure to the Rwandan franc as a Top 3 barrier to investing in Rwandan capital markets. Notably, the majority of those firms that do invest in Rwandan assets report that foreign exchange and currency-

[81] Notably, the lack of market liquidity is the most-cited challenge facing Rwandan investors as well.

conversion fees nevertheless discourage their investment in Rwanda to a large extent. These findings are directly related to the general lack of hedging instruments discussed in Section V, as most of these firms report they do not have access to the hedging solutions they need.

A majority of surveyed firms also report that custodian fees, central depository system fees, and trading fees discourage, at least to some extent, their participation in Rwandan capital markets. Notably, however, 71 percent say broker commissions on trades did not discourage their investment in Rwanda at all. Likewise, 65 percent are not at all discouraged by bid-ask spreads.

Somewhat surprisingly, given the Rwandan capital market's relative newness and level of development, only 4 percent of non-Rwandan EAC respondents see a weak information environment or a lack of investor protection as a significant barrier. None of the surveyed firms identify low levels of corporate governance, an unattractive regulatory regime, or the cost of trading commissions and fees as significant barriers. On the other hand, the areas of the corporate governance and legal environment that need the most improvement, according to EAC institutional investors outside Rwanda, are willingness of executives to engage with investors (cited as a priority by 60 percent of this group), disclosure standards (cited by 56 percent), and minority shareholder rights (cited by 48 percent).

BOX 4. Rwanda's market needs more investable securities

Development of a local capital market in Rwanda has been partly hindered by a combination of reluctance, inability, and-or lack of awareness by more local firms to issue securities and list. Rwanda's capital markets currently are small and illiquid, with just three firms having shares listed and one company having issued a bond so far.

Many firms, especially the small and medium-sized enterprises (SMEs) that make up the vast majority of the commercial sector, lack the scale, resources, and capacity to issue on the capital markets. [82] Inadequate capacity to meet financial reporting requirements for listing has impeded many family-owned firms in accessing capital markets in Rwanda. But there also is a need for more financial education and greater awareness of the capital market as a financing option for those local firms that could list or become part of a pipeline of companies for later listing.[83]

The resulting shortage of investable securities impedes the ability of capital markets to attract investors, locally and intraregionally. The lack of investor interest then becomes a major obstacle to attracting new issuers, resulting in a "chicken and egg" dilemma impeding further market development.

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[82] Sau, Moutusi and John Schellhase, "Survey Brief: Rwandan Businesses Share Their Priorities for Capital-Market Development" (2015) (Washington, DC: Milken Institute).
[83] Irving, Schellhase, and Woodsome, "Framing the Issues: Developing Capital Markets in Rwanda" (2016) (Washington, DC: Milken Institute).

B. What makes Rwanda attractive to investors?

The most attractive aspects of the Rwandan markets to outside investors are the economy's strong record of growth, an attractive regulatory environment, and macroeconomic stability. Over half of firms from other EAC countries rank the economy's strong recent expansion as one of the most attractive features of investing in Rwanda, with an additional 35 percent identifying the attractiveness of the country's macroeconomic stability. Over 40 percent say that Rwanda's attractive regulatory environment is one of its most compelling aspects as an investment destination. About one-quarter of non-Rwandan survey participants consider Rwanda attractive because it represents an opportunity for portfolio diversification. Figure 11 summarizes these perceptions and others.

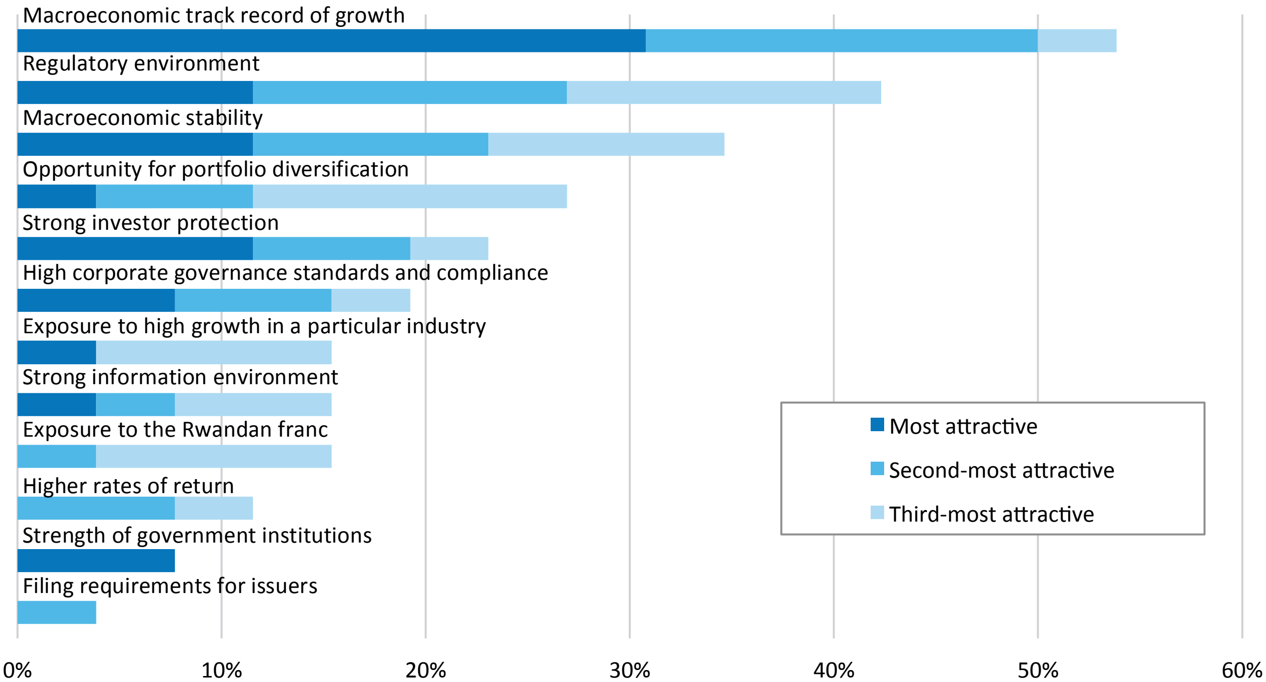
Asked to rank the best-performing aspects of corporate governance and the legal environment in Rwanda, 85 percent of respondents based outside Rwanda acknowledge the low levels of corruption there. As shown in Figure 12, more than half of EAC firms also find Rwandan regulators to be responsive. Among participating firms, the lowest-ranked aspects of the Rwandan corporate governance and legal environment were access to the courts, minority shareholder rights, and investor rights generally.

Rwandan participants generally mirror the views of their EAC neighbors. Four out of seven participating Rwandan firms rank macroeconomic stability as the most attractive aspect of the local investment environment. The majority of Rwandan respondents also agree that low levels of corruption and the responsiveness of regulators are appealing aspects of their country's markets. It is worth noting that these views also track closely with independent assessments. The Corruption Perceptions Index, for example, as produced by the nonprofit group Transparency International, ranks Rwanda as the 44th-least corrupt country in the world.[84] The nimble approach of Rwandan policymakers in implementing reforms has been well documented. One frequently cited example of the responsiveness of Rwandan government officials is the rapid rise of the country on the World Bank's Doing Business index.[85] In 2008, Rwanda ranked 150th worldwide on this index. After a targeted, deliberative effort to improve its scores across the World Bank indicators, Rwanda today ranks 56th worldwide, despite its small size and still-low levels of economic development.

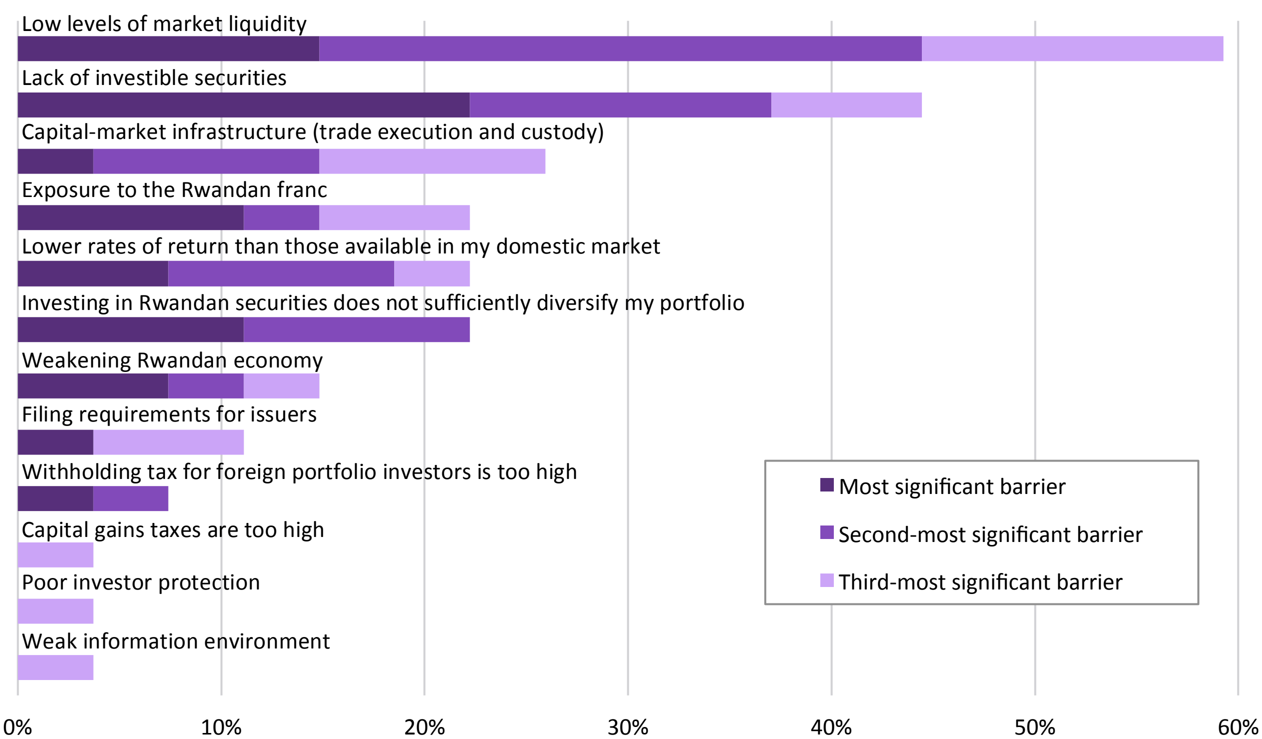
[84] Transparency International, "Corruptions Perception Index 2015" (2016).
[85] World Bank Group, "Doing Business 2017: Equal Opportunity for All, 14th Edition" (2016).

FIGURE 11. How EAC institutional investors view Rwanda's financial markets

Attractions of investing in Rwanda



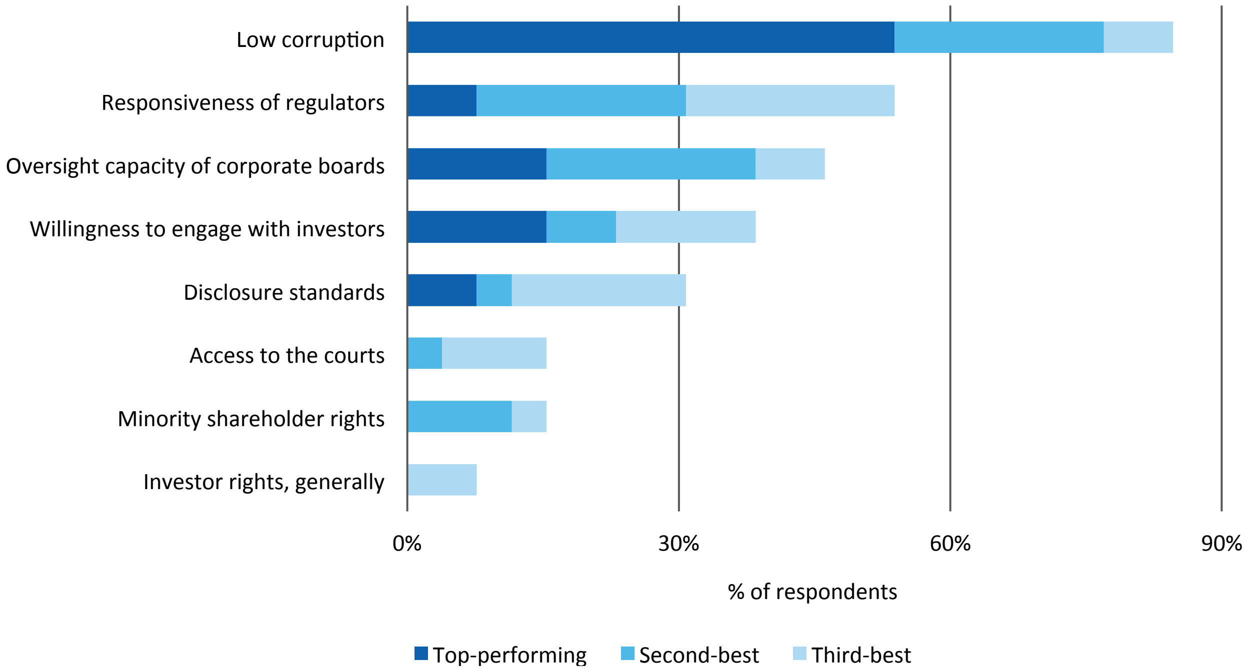
Barriers to investing in Rwanda



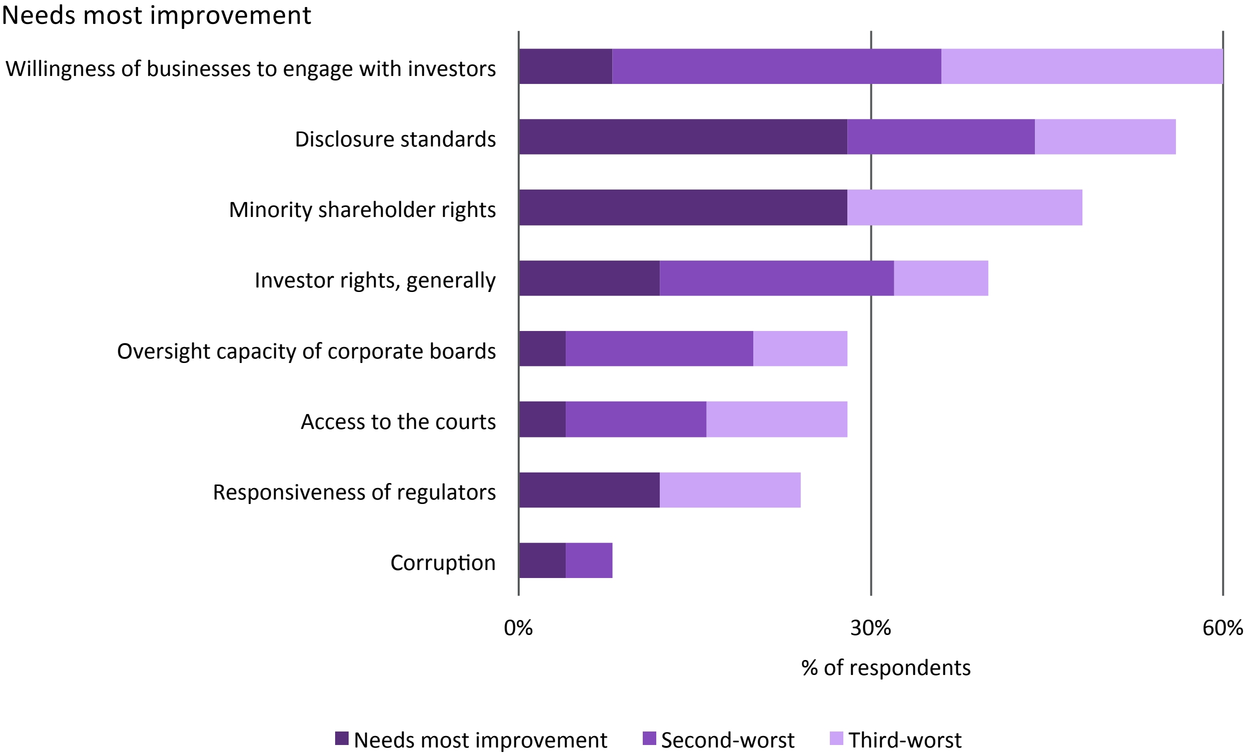
Source: Milken Institute Center for Financial Markets survey of EAC institutional investors
Note: Survey participants in Kenya, Tanzania, and Uganda were asked to select the three most attractive aspects of and three most significant barriers to Rwanda's financial markets. The charts above aggregate their responses.

FIGURE 12. How EAC institutional investors view Rwanda's corporate governance and legal environment

Best-performing



Needs most improvement



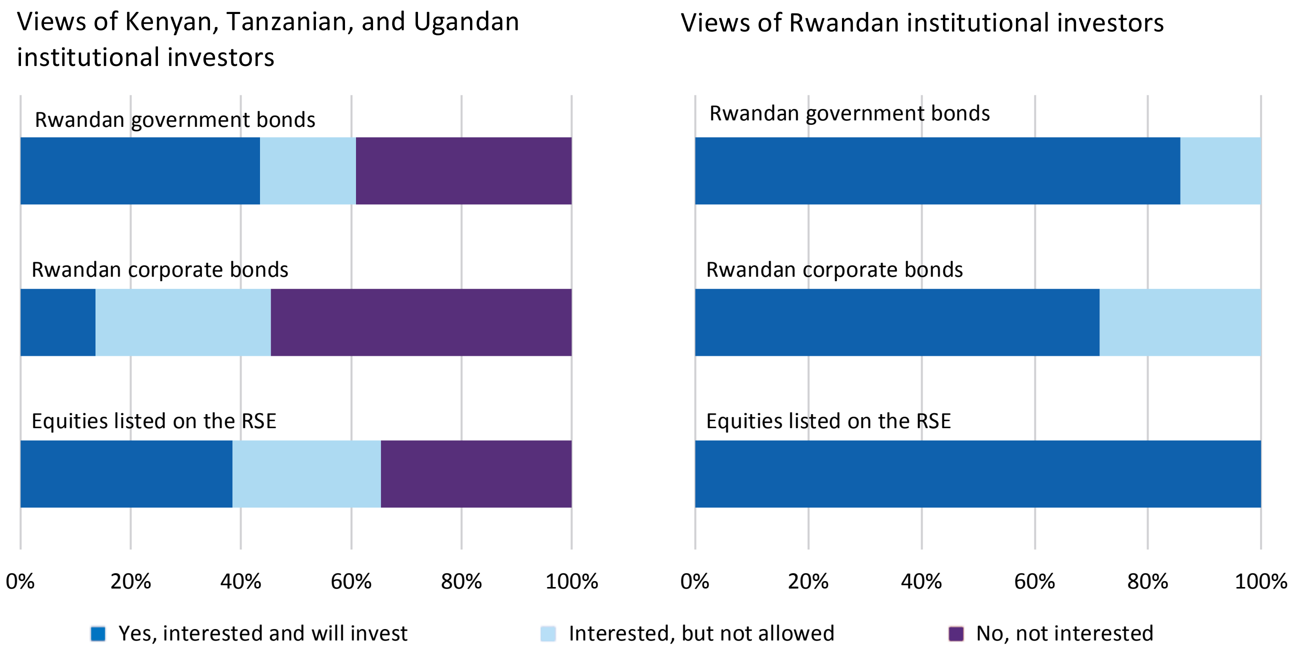
Source: Milken Institute Center for Financial Markets survey of EAC institutional investors
Note: Survey participants in Kenya, Tanzania, and Uganda were asked to select the three best-performing aspects of Rwanda's corporate governance and legal environment, as well as the three aspects that needed the most improvement. The charts above aggregate their responses.

C. Investor appetite for increasing investments in Rwanda

To better understand what types of investments might draw regional capital to Rwanda, our survey asked investors to indicate their interest in increasing investments in particular asset classes over the next two years. These assets included three types of securities currently available on the Rwandan markets: government bonds, corporate bonds, and listed equities. As one EAC country regulator told the Milken Institute, however, "Pension funds are growing, but they are outpacing the amount of investable product on the market." Since the small supply of investment vehicles is a widely acknowledged challenge to capital-market development, the survey also asked participating institutional investors about their potential interest in nine asset categories that are not currently available on Rwanda's markets but could be in the future.

Considering the currently available capital-market securities, 65 percent of EAC institutional investors are interested in increasing their investments in listed shares on the Rwanda Stock Exchange over the next two years. As shown in Figure 13, a similar proportion of just over 60 percent of non-Rwandan EAC respondents say they would look to increase investments in Rwandan government bonds over the next few years. On the other hand, there is little appetite for Rwandan corporate bonds, with 55 percent of EAC investors indicating no interest in increasing investments in this asset class in the next few years. However, this lack of interest in Rwandan corporate bonds likely reflects the fact that there is only one such security currently listed and the market is thus highly illiquid. Even assuming more firms issue bonds over the next few years, there also could be a more general disinterest in this asset class among EAC institutional investors. As discussed above, less than half of surveyed investors hold corporate bonds at all, and those that do generally allocate a relatively small percentage of their portfolios to this asset class.

FIGURE 13. Interest in increasing investment in currently available securities listed on Rwandan capital markets



Source: Milken Institute Center for Financial Markets survey of EAC institutional investors

Notably, some surveyed non-Rwandan EAC institutional investors indicated they would like to increase their investments in Rwandan securities, but they believe they would be restricted from doing so even in cases where it would be permitted. This concern exists among 27 percent of firms with regard to investments on the RSE, 17 percent of firms considering increasing investments in government bonds, and 32 percent of firms when it comes to Rwandan corporate bonds. In all but a few of these cases, the firms that are interested in increasing their investments but believe it would not be permitted are based in Uganda. And they tend to be Ugandan pension-sector respondents more often than insurance firms. From a regulatory perspective, Ugandan pension funds' investments in these Rwandan securities are treated as domestic—subject to the same rules as investment in these securities listed on Uganda's domestic market, as discussed above. Several Ugandan pension schemes, therefore, appear to be operating with a misunderstanding of the intraregional regulatory restrictions by asset class that they actually face—or they may be impeded more by internal restrictions set by their own board members.

On the other hand, Ugandan insurance regulators do not permit intra-EAC investments at all. Somewhat surprisingly, at least one Rwandan insurance company also perceived restrictions on investing in government and corporate bonds to be more restrictive than they actually are. This indicates a need for both Ugandan and Rwandan regulators to communicate clearly to institutional investors in their countries how current regulations actually affect their ability to allocate assets across classes and intraregionally.

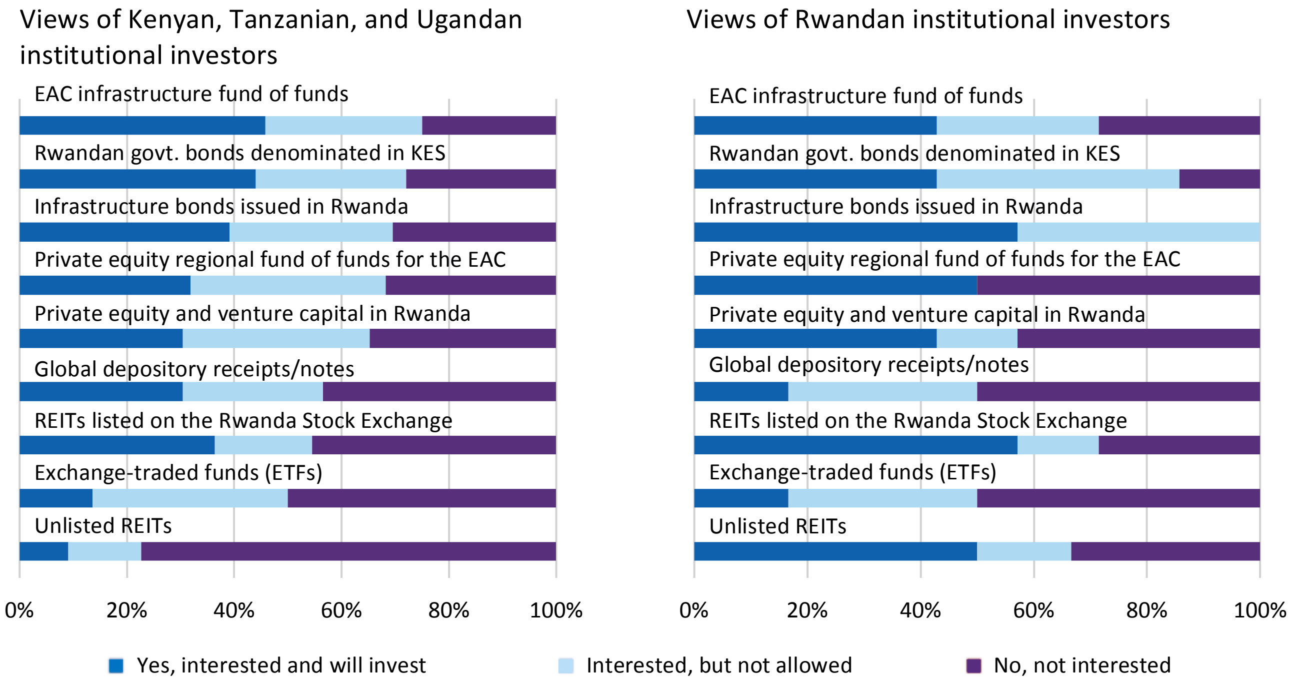
Among possible investment vehicles that could be developed in the future, surveyed EAC investors have the most appetite for an EAC infrastructure "fund of funds," followed by interest in Rwandan government debt issued in Kenyan shillings and Rwandan infrastructure bonds. More specifically, 75 percent of participating Kenyan, Tanzanian, and Ugandan investors would be willing to invest in a regional infrastructure "fund of funds" that would include projects in Rwanda.[86] Nearly 70 percent of non-Rwandan respondents are interested in investing directly in Rwandan infrastructure projects financed with bonds. And 72 percent would be interested in investing in Rwandan treasury bonds denominated in Kenyan shillings if these securities were to become available. Over 60 percent of investors express interest in private equity investments in Rwanda or a private equity regional fund for the EAC.

On the other end of the continuum, REITs listed on the RSE, exchange-traded funds (ETFs), and global depository receipts are of comparatively less interest as potential investable instruments to EAC institutional investors. Investors show the least appetite for unlisted REITs available on Rwanda's market, with 77 percent of non-Rwandan EAC respondents saying they would not invest in this product if it was available. These results are perhaps to be expected as many of these products are not yet available even in Kenya, and investors may not be familiar with them and may view their introduction as premature given the underdeveloped, nascent state of Rwanda's market. In August 2015, the Capital Markets Authority of Kenya issued guidance on the introduction of ETFs, but to date none have been established. CMA-Kenya only recently (in October 2016) requested stakeholder feedback on the regulatory framework for the introduction of global depository receipts and notes to the Kenyan markets. Listed REITs, however, have been traded on the Nairobi Securities Exchange since October 2015, when it became only the fourth exchange in Africa to offer this product to investors.[87] According to one EAC pension fund manager who participated in our survey, REITs listed on an exchange may be one way to manage risk associated with investment in real estate, by reducing direct exposure to the market.

[86] A regional "fund of funds" would pool resources and could be structured to invest in a diverse portfolio of infrastructure products across the region, including the Northern Corridor transport route. This "fund of funds" could pool risk by diversifying its portfolio across a number of different projects by sector and country. Rwandan investors also show enthusiasm for this product, with all participating Rwandan firms indicating they would be interested in investing in infrastructure bonds issued in Rwanda.

[87] Daily Nation, "History as Stanlib Launches Kenya's first REIT IPO" (October 22, 2015).

FIGURE 14. Gauging investors' interest in possible future products on Rwanda's markets



Source: Milken Institute Center for Financial Markets survey of EAC institutional investors
Note: Survey participants were asked to assess their level of potential interest in asset classes not currently available in Rwanda's financial markets, assuming these were to become available in the future. The charts above aggregate their responses.

Kenyan pension funds and asset managers, perhaps unsurprisingly, show strong enthusiasm for any future possible opportunity to invest in Rwandan government bonds denominated in Kenyan shillings, with 77 percent expressing interest in this type of issuance. From the Rwandan government perspective, such an issuance would enable the country to potentially tap a large pool of investors, particularly the more than $11 billion in contractual savings available in Kenya. For Kenyan investors, the benefits of taking up such an issue would be the ability to diversify their portfolios into Rwanda without the commensurate foreign exchange risk. Ugandan firms, notably, find a Kenyan-shilling-denominated bond as attractive as their Kenyan counterparts do, with 78 percent of surveyed Ugandan firms indicating a willingness to invest in such bonds if they become available. As shown above, several Ugandan firms have increased their investment in Kenyan assets to take advantage of exchange-rate trends. And the attraction of this possible security is not limited to foreign investors. As many as 86 percent of Rwandan institutional investors would also want to invest in Rwandan treasury bonds denominated in Kenyan shillings.

A strong majority of participating non-Rwandan EAC institutional investors also show interest in increasing investment in private equity in Rwanda. About two-thirds of investors in other EAC countries would like to invest in either an EAC-wide private equity fund or in private equity or venture capital investments in Rwanda, if these investment vehicles become available. However, firms expressed concern about how regulations (as they currently exist) would affect their potential ability to take up these assets. In this case, their worries are not without cause. Investments by Kenyan pension fund managers in private equity deals outside Kenya are subject to the same restrictions as those that apply to investments in non-EAC countries. In contrast, for Ugandan pension fund managers, investments in private equity in other EAC countries would be considered domestic. Tanzanian pension regulations do not yet specify any limits on non-domestic private equity investments.

VII. Conclusions and policy implications

It is broadly acknowledged that local institutional investors can play an important role in capital-market development. This long-term money can help catalyze investment from other sources to deepen capital markets. Our survey sought to understand how local institutional investors allocate their assets and what might prevent them from further diversifying their portfolios. To the degree that investors currently are not diversifying across asset classes or geographically, we sought to understand whether this was due to regulatory barriers, capacity issues, and-or other factors.

Overall, the local institutional investor base is deepening across the EAC. National-level statistics show that pension funds and insurance companies across the subregion have nearly doubled their portfolio assets in recent years, from $10.7 billion in 2011 to about $19.1 billion in 2015.[88] While only a small percentage of the total populations of these countries have access to pension and insurance products, these industries are growing, and these local investors will almost certainly play a significant role in how the EAC's capital markets develop in the coming years. Survey findings indicate that these investors generally are taking a more diversified portfolio approach and desire to further diversify their portfolios.

Our survey findings also indicate that many institutional investors in the EAC continue to hold a significant share of their assets in government securities, however, as well as real estate and bank deposits, while investing very little in corporate securities. Preferential regulatory treatment may be inducing at least some institutional investors in the EAC to overallocate to government securities at the expense of other asset classes. As Chan-Lau (2004) observed more than a decade ago in several Asian and Latin American markets, the limited supply of investable securities in underdeveloped, still-emerging local capital markets can constrain the ability of institutional investors to take a more diversified portfolio approach.

Relatively heavy allocations to government securities may also partly reflect high levels of capacity for assessing government securities compared with other, newer investment vehicles. Reported levels of capacity track closely with how firms allocate their assets, suggesting that further portfolio diversification naturally also may be linked to capacity development. Our survey findings indicate that about 95 percent of surveyed investors rated their own capacity to assess government securities as good to excellent, while only 29 percent report good or excellent capacity to assess private equity, and 14 percent report poor or very poor capacity.

Very small allocations to private equity, venture capital, and unlisted equities by institutional investors in the EAC partly reflect capacity limitations and lack of experience in assessing this asset class, rather

[88] National regulator and author calculations.

than lack of demand or constraining regulatory investment limits. In fact, in the case of PE/VC in particular, regulatory approaches and investor responses are still evolving. Kenya and Uganda have established specific regulatory limits on the share of pension fund portfolios allocated to private equity and venture capital. None of the four focus countries have specifically addressed how they will regulate insurers' asset allocations to PE/VC.

Greater clarity on how private equity and other relatively new, alternative investment instruments are treated by national regulators as investable asset classes may enable and encourage local institutional investors to further diversify their portfolios. These alternative investment instruments certainly are not risk-free and remain a very small part of institutional investor portfolios worldwide, including in countries with deep and liquid financial markets. But some diversification into this asset class in the context of a well-managed portfolio could help generate returns. As demand for these investment vehicles grows, it will be important to boost risk-evaluation capacity among regulators, investors, and financial intermediaries.

Moreover, continued strong growth of assets managed by institutional investors in the EAC without commensurate development of investment alternatives raises investors' risk of being overly concentrated in just a few assets. This, in turn, can impede their ability to adequately manage risk.

Regulations that steer investors into investment decisions that place excess emphasis on uniform portfolio performance without regard to generating returns can impede the potential for emerging institutional investors to allocate assets to more productive investments, including those that could spur socioeconomic development. When institutional investors have the room to maneuver to take a more diversified portfolio approach that seeks to maximize returns and invest in productive economic sectors, while still safeguarding the public's savings, more people may also be incentivized to place money with contractual savings products.[89] Our findings show that, in most cases, regulatory investment limits are *not* the binding constraint preventing local institutional investors in the EAC from diversifying their portfolios. Firms' allocations to public equities and corporate bonds generally fall far below national regulatory caps. The vast majority of surveyed firms in Kenya, Tanzania, and Uganda also set their own internal target thresholds for investments in government securities. These internal ceilings, particularly for short-term government securities, tend to fall well below the national ceilings—as do these firms' actual investments in these securities. While nationally imposed and investors' own internal ceilings do not appear to be an impediment, it will be important for policymakers to remain mindful about how investment limits set for different asset classes influence how investors manage their portfolios.[90]

There is an overall need in the EAC focus countries for more "product"—more longer-term investment instruments in particular—and also more market participants. For example, with secondary markets for corporate bonds almost nonexistent, investors now often hold these securities to maturity. And more needs to be done to raise awareness of how listing on capital markets can benefit firms—to address the

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[89] See Inderst, Georg and Fiona Stewart, "Institutional Investment in Infrastructure in Emerging Markets and Developing Economies" (2014) (Washington, DC: World Bank).
[90] See Chan-Lau, Jorge, "Pension Funds and Emerging Markets" (2004), IMF working paper (Washington: IMF) and Stewart, F. and J. Yermo, "Pensions in Africa" (2009), OECD Working Papers on Insurance and Private Pensions, No. 30 (Paris: OECD).

disconnect in knowledge and perceptions that contribute to the illiquidity and small size of local capital markets.

There also is a lack of appropriately designed and structured products that allow institutional investors to invest in a way that meets their own aims. This latter issue can be a problem even in developed economies, however.[91] Since the small supply of investment vehicles is a widely acknowledged core challenge to capital-market development, particularly in a small financial market such as Rwanda's, the survey asked participating institutional investors about their potential interest in several asset categories that are not currently available in Rwanda but could be in the future. Among possible investment vehicles that could be developed, surveyed EAC investors have the most appetite for an EAC infrastructure "fund of funds." As many as 75 percent of participating Kenyan, Tanzanian, and Ugandan investors would be willing to invest in a regional infrastructure "fund of funds" that would include projects in Rwanda.

A majority of non-Rwandan respondents also would be interested in investing directly in Rwandan infrastructure projects financed with bonds, as well as in Rwandan government debt denominated in Kenyan shillings, if these investment vehicles were to become available. And a majority of surveyed investors express strong interest in private equity investments in Rwanda or a private equity regional fund for the EAC.

An intraregional "fund of funds" that invests specifically in PE/VC could help mitigate some of the risk investors face in being overconcentrated in just a few assets and facilitate the ability of investors to diversify into this new asset class.[92] Under one possible model, EAC institutional investors could themselves seed such a regional fund to focus on investing in SMEs across the region. Under another model, government and donors could encourage development of these funds by offering technical assistance to improve SME financial reporting, help entrepreneurs develop business plans, and help fund managers identify investment targets. Making available a list of registered SMEs to potential VC/PE investors is one relatively easy step that would facilitate development of these funds.

Further progress on intraregional integration within the EAC may help to mitigate some of the risks associated with cross-border investment. The limited supply of investable securities in local capital markets strengthens the case for easing or harmonizing restrictions within the EAC so investors with significant assets can look to diversify their portfolios across EAC countries as well as asset classes. Since pension funds and insurance companies have as part of their mandates the safeguarding of returns for pensioners and shareholders, it is important that they also be able to diversify risk through investments abroad, particularly within the EAC subregion. This regional approach also would help develop the very small institutional investor bases in countries such as Rwanda. More cross-border listings as well as cross-border investment in the EAC could help overcome national capital markets' impediments of small size, illiquidity, and inadequate market infrastructure. And this intraregional approach to capital-market

[91] See Inderst, Georg and Fiona Stewart, "Institutional Investment in Infrastructure in Emerging Markets and Developing Economies" (2014) (Washington, DC: World Bank).
[92] See, e.g., Ashiagbor, David et al., "Pension Funds and Private Equity: Unlocking Africa's Potential" (2014) (London: Commonwealth Secretariat). See also, Irving, Schellhase, and Woodsome, "Framing the Issues: Developing Capital Markets in Rwanda" (2016) (Washington, DC: Milken Institute).

development could facilitate the ability of firms and governments in these countries to raise financing for infrastructure and other socioeconomic development.

Half of all surveyed institutional investors allocate some portion of their portfolio to assets outside their home countries. Top motives are opportunity to manage country and-or foreign exchange risk and opportunities for diversification and enhanced returns. Assets domiciled in Kenya attract the vast majority of foreign investment from firms in other EAC countries, particularly Uganda. Of course, diversifying assets across countries carries its own risks, which need to be managed appropriately.

Theoretically, at least, investments in assets domiciled in other EAC member states would be considered domestic investments under the 2010 EAC Common Market Protocol. In practice, regulators have flagged some asset classes where other EAC countries as place of domicile are considered foreign while others are considered domestic. At the same time, roughly half of institutional investors in the EAC have internal guidelines that treat investments in other EAC countries as foreign. Yet surveyed firms tend to fall well short of ceilings set by their own firms' internal guidelines in holding assets in non-local EAC countries—including for key asset categories that could help diversify their portfolios.

Survey findings indicate that some institutional investors are operating with a misunderstanding of the actual intraregional regulatory restrictions by asset class that they actually face—or they may be impeded more by internal restrictions set by their own board members than by national regulatory limits. Regulators should step up their communications efforts with institutional investors to ensure that they clearly understand both the limits and opportunities in how they invest across asset classes and within the EAC.

A lack of hedging instruments and strategies for managing foreign currency risk also seems to impede the ability of institutional investors to take a more diversified portfolio approach intraregionally. A large majority of surveyed institutional investors across the EAC report they lack adequate tools and strategies for managing foreign exchange risk. Nearly half would invest more across the EAC if they had access to these tools.

A large majority of pension funds across the EAC use external managers. Institutional investors often look to external managers to attain tangible benefits from skill transfers and to gain a "guided benchmark." One possible way to address one of the challenges posed by small financial markets would be for institutional investors to look to work with external fund managers that are intraregional in their investment strategy.

Further building capacity among both institutional investors and regulators in the EAC, particularly for evaluating newer asset categories such as PE/VC, will be important in enhancing the ability of investors to manage risks as well as identify profit-generating opportunities. As national pension and insurance sectors grow and their products are taken up by more people across the EAC, it will become imperative to improve the capacity of regulators and asset managers to evaluate these new asset categories. Our survey findings also underscore that it will be important to build capacity among institutional investors for managing price-volatility and foreign exchange risks.

It will be important for EAC countries to build on their progress in implementing reforms that develop capital markets, including those that encourage privately managed pension funds and other institutional investors with long-term investment horizons. This will be a key step toward improving financial intermediation in these markets and increasing financial market competitiveness overall. It will also pave the way for investors with longer-term horizons to serve as a well-needed source of financing for infrastructure. Applying the same principles and standards in managing, supervising, and incentivizing public-sector pension schemes as apply to privately run schemes will help inculcate an approach to managing investment portfolios that emphasizes maximizing returns while managing risk.[93]

[93] See also Callund Consulting, “Review of the Structure of the Pension Sector in the EAC” (2013) (London: Callund Consulting); Economic Policy Research Center, “Uganda Finscope III: Survey Report Findings” (2013) (Kampala: Economic Policy Research Center).

Addendum: Highlights from a roundtable discussion on developing capital markets, 2016 Milken Institute London Summit

On December 6, 2016, the Milken Institute's Center for Financial Markets (CFM) hosted a roundtable, "The Role of the Buy Side in Developing Capital Markets," as part of the Milken Institute London Summit. Roundtable participants included institutional investors from emerging and advanced economies, financial firms working in East Africa, and development economists. As a springboard for discussion, CFM presented evidence-based research findings from its survey on developing the buy side in East Africa. A discussion followed on the role of local institutional investors in capital-market development more broadly. The discussion also touched on issues that were beyond the scope of the main themes in this paper, some of which could be topics for further research and other work.

As one participant noted early in the discussion, diversifying and deepening the investor base is one critical component in developing local capital markets that effectively intermediate long-term finance. And yet, as this participant observed, local institutional investors often buy and hold, so markets can remain illiquid even as assets under management increase. Other important factors in a multipronged approach to capital-market development are increasing investable product and ensuring an appropriate, enabling environment. A diverse investor base that includes investors with a range of risk preferences and time horizons is also important. In addition to developing pension funds and insurance companies, this requires a properly sequenced approach to bringing in mutual funds (unit trusts), retail, and other types of investors, underpinned by an appropriate and sound supervisory framework. At the same time, as another participant emphasized, capital-market development must be approached within the broader framework of financial-sector development.

Several participants argued that some economies are too small to sustain deep, liquid capital markets. Some questioned whether small economies should focus on developing their own capital markets. Low-income countries sometimes invest significant (scarce) resources, for example, on the market infrastructure needed for a national stock exchange, viewing it as a national flagship. As a counterpoint, some participants argued that local capital markets are important to financial- and private-sector development because, for example, even large local firms may lack access to bank and other sources of finance. Since small and medium-sized enterprises typically are the backbone of emerging and frontier market economies, this highlights a related question of whether and how SMEs should access capital markets. This issue has only recently begun to receive attention in the empirical literature, mostly on a selective country basis, and further study is needed.

One participant pointed out the need for local-currency financing as a reason to develop local capital markets. This is especially important for companies that sell primarily to domestic markets and for financing infrastructure projects that earn revenues in local currency. Securities issued on international capital markets can have high country-risk premiums and carry the risk of currency mismatch.

Regional cooperation and integration of financial markets may provide one way to overcome size barriers while ensuring that local companies have access to the financing they need. As one participant said, developing countries must strike the right balance in building a local and intraregional institutional base and attracting investors from outside the region. Another participant noted that many European countries were also constrained by the size of their domestic markets prior to European integration. He further argued that even these highly developed financial markets may offer selective lessons to emerging and frontier markets seeking to take a regional approach to developing their capital markets.

The ways in which domestic and foreign investors interact—and how they best complement each other—could also be a fruitful topic for future research. Institutional investors at the roundtable emphasized the importance of participating in and promoting funds that invest in developing countries. One participant observed that financial institutions in high-income countries may be able to play a role in developing financial products that are well-suited for frontier markets. He cited as an example an investment bank that had stepped in to help African telecom companies issue local bonds. It could be useful to further examine what new financial products could attract the interest of local institutional investors, such as the "fund of funds" model for private equity or infrastructure investments. Roundtable participants also pointed to the opportunity for international institutional investors to engage with technical capacity and knowledge exchange programs that seek to strengthen local institutions in frontier markets through investments in human capital. Future evidence-based research could usefully examine whether such programs meet their aims and, if so, under what circumstances.

Several participants emphasized the importance of intermediaries in developing financial products. A participant with an investment bank active in emerging and frontier markets remarked that too little attention was given to the role of intermediaries in capital-market development, arguing that intermediaries were a more common source of innovation than investors or the government. The potential impact of intermediaries on capital-market development in frontier markets is certainly a topic that merits further research as well as consideration from securities regulators.

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