Tapping into $1.1 trillion of Domestic Development Aid Funding
Garrett Wright, David Stevens and David de Ferranti

Executive Summary

In the aftermath of the Great Recession, donor countries continue to face years of protracted growth and budgetary constraints. Affinity MacroFinance and Results for Development have researched an alternative source of financing for development—emerging market pension funds. We estimate that the pension fund schemes of the 45 countries we surveyed control more than $1.1 trillion in assets. Of these assets, 60% percent are invested in fixed income securities, with, in many cases, significant overconcentration in central government bonds.

This under-reported financial resource should be recognized by the development community as an important and largely untapped potential source of aid for poorer countries. Just 5 percent of these assets prudently unlocked for development projects would represent more than the $58.8 billion of commitments granted by the entire World Bank Group in 2009. Investing a portion of these pension proceeds in national development allows for matching funding of longer-term infrastructure and other development projects which are best financed in local currency. With the help of guarantees and other credit enhancements, these investments can help develop the local physical and social infrastructure while providing a safe, healthy financial return for pensioners.

Latin America leads the four regions with $537 billion in assets. Asia is the second largest region with $337 billion worth of assets, while Africa and Central and Eastern Europe total $169 billion and $92 billion, respectively. While the bulk of the balances are found in middle-income nations, a surprising number of poorer nations are beginning to see substantial growth in their pension fund balances.

The growth of these pension funds enhances the case for greater developmental self-sufficiency among emerging nations and creates an important opportunity for increasing the pace of development in these nations despite the setbacks in the financial position of donor countries.
Outlook: A Protracted Period of Aid Scarcity

Once every three years, World Bank officials meet with donor countries to determine commitments to the world’s largest fund for the poor, the International Development Association (IDA). In 2007 the World Bank was able raise $42 billion from donor countries to fund zero-interest loans and grants to IDA countries. Meeting 2007 commitment levels this time around, however, will be an extremely difficult task. The world, after all, has changed significantly since then.

In 2008, just a year after the last IDA meeting, the largest financial crisis in nearly a century was in full swing. Governments all over the world were forced to inject large amounts of capital to save their financial institutions and protect their economies from an imminent downward spiral.

As IDA officials met in Mali in June 2010, many of the leading donor countries faced the largest budget deficits since World War II. The two leading donors from 2007, the UK and the US, now face budget deficits exceeding 10 percent of GDP—well above US historical averages and the EU deficit limit of 3 percent. Unfortunately, the US and the UK are not alone. Other donor countries throughout Europe face similar budgetary problems.

Historic domestic budgetary problems throughout the advanced donor economies are forcing World Bank officials to look toward rising economies like Brazil, India, and China, which have managed to escape the economic crisis relatively unscathed. In 2007, Brazil and India donated $100 million and $30 million respectively, but these countries have significant development issues of their own and are unlikely to make up any large shortfall of advanced economies. India is actually still eligible for IDA funding because of its large population living in deep poverty while Brazil and China still receive significant support from other parts of The World Bank Group including the International Bank for Reconstruction and Development (IBRD) and the International Finance Corporation (IFC). The IFC and IBRD, in fact, will likely be tapped to help fill any IDA funding gap, taking away valuable dollars for middle-income countries.¹

Budgetary problems and development aid scarcity are likely to persist in years to come as advanced donor economies struggle through the consequences of the recent economic crisis. In light of these enduring challenges, this paper explores an alternative source of development financing—emerging market pension funds that control over $1.1 trillion in assets. Just 5 percent of these assets prudently unlocked for development

¹ The IFC pledged $1.75 billion to the 15th replenishment of IDA (IDA15) in 2007 indicating it will probably be asked to continue its commitment to the IDA fund for IDA16. In addition, according to Reuters, IBRD may be asked to contribute.
projects would represent more than the $58.8 billion of commitments granted by the entire World Bank Group in 2009.²

**Background and Methodology of the R4D Study**

In 1889, Otto van Bismarck created one of first pensions for workers over the age of 70 in Europe. Almost 10 years later in England, Lloyd George pushed through a payment of five shillings for men over 70. Since then, pension systems have grown dramatically in size and complexity. Most, however, can be classified as either funded or unfunded. These early pensions were typically unfunded or pay-as-you-go pension systems, in which income from workers is transferred to retired individuals, just as Social Security in the United States does today. These unfunded programs can work well for youthful populations that only support relatively few retirees, but as the population ages, they become difficult to sustain.

In an effort to supplement pay-as-you-go systems, many employers and governments also began to offer and incentivize funded pension schemes throughout the 1900's. Funded systems can be mandatory or voluntary and can have defined benefits (the provider agrees to specific benefits regardless of contribution) or defined contributions (the provider only agrees to a specific contribution), but they all have some level of assets to support future benefits. As of December 2009, the largest seven developed nation pension fund schemes held over $20 trillion in assets, most of which were invested in domestic debt and equity securities. The capital raised through these securities is in turn put to work by domestic governments and businesses—creating a virtuous circle in which local, long-term savings are pooled and invested into assets that not only pay interest to the pensioners, but also aid in the long-term development of an economy.

Over the last few decades, the importance of building sustainable pension systems that include some form of pension fund has gained wide recognition. In response, countries throughout the world have labored to reform their pension systems, with varied levels of success. This paper examines the results of these efforts in 45 emerging economies spanning across Africa, Asia, Central and Eastern Europe (CEE), and Latin America. We sought to, at its simplest level, conduct a “census” of developing nation pension systems: to understand the extent of existing pension fund assets, how these assets are invested, and the regulations guiding those investments. These countries were chosen based on prior understanding of local pension fund activity and recent market reform including those countries known to have privately managed pension funds or relatively large government-managed funds. All 45 of the countries we studied are eligible for World Bank development assistance; a quarter of them qualify for IDA assistance. This census was by

---

² According to The World Bank Annual Report 2009, IBRD committed $32.9 billion, the IDA committed $14 billion, the IFC committed $10.5, and MIGA committed $1.4 for a group total of $58.8 billion.
no means meant to be an exhaustive study of all potential emerging market pension funds, nor was it meant to be an exhaustive study of each country. Rather, the goal was to determine the general state of pension funds in emerging markets in an effort to understand their potential to contribute to the development of their own domestic economies—to create, in effect, their own “virtuous circles.”

With this in mind, our team conducted Internet-based research on each country. When possible, we used consolidated sources of information. For example, we consulted the web site for the Association of Latin American Pension Supervisors (AIOS), which covers the largest private pension funds in Latin America outside of Brazil, and supplemented that with data from national regulatory bodies, pension fund administrators, and associations. For many countries, consolidated resources were unavailable, so in these cases we used country-specific sources. Due to the variety and disparity between countries, aggregated data may represent different years and/or discrepancies in reporting methodology. For example, the reporting period for most countries was December 2008. In some cases, however, the pension fund asset levels were based on older data or calculated based on reported pension assets as a percent of GDP. The lack of readily available and recent data was particularly acute in many African countries. In a few such cases, we conducted telephonic interviews with country officials. We recognize that these information imperfections diminish, to some extent, the precision of our “census,” but we do not believe they detract significantly from reaching our goal of understanding the potential of pension funds to contribute to the development of their own domestic economies.

Over $1.1 trillion in Assets

Progress in pension fund reform in emerging markets over the last three decades has been uneven. Nonetheless developing nation pension fund assets have expanded greatly. We estimate that the pension fund schemes of the 45 countries surveyed now control more than $1.1 trillion in assets. Of these assets, 60 percent are invested in fixed income type securities that include government and corporate debt as well as bank deposits. Latin America, with its early reform, leads the four regions with $537 billion in assets. Asia, the second largest region with $337 billion worth of assets, may actually control more than Latin America when China’s fragmented provincial funds are included. Unfortunately we were not able to gather details on these funds, and, as such, we did not include them in our
$1.1 trillion global total or the $337 billion Asia regional total. Africa and Central and Eastern Europe total $169 billion and $92 billion, respectively.

While middle-income, regional players like Brazil, China, South Africa, and Poland represent a large proportion of pension fund assets, smaller economies are also making substantial progress in their pension fund reforms—accumulating relatively large pools of capital. In fact, the twelve low-income countries in our survey that qualify for IDA funding control over $100 billion in pension fund assets. Our research suggests that the dual trends of reform and growth will likely continue for both low and middle-income countries as they labor to shore up the financial stability of their current pension systems, while increasing benefits to their often aging populations.

**Latin America**

Much of Latin America has struggled with some sort of economic crisis during the closing decades of the twentieth century—the Latin American Debt Crisis of 1982, the Mexican Crisis of 1994-1995, and the Argentina Crisis in 2001 are just a few. Throughout this period of turmoil, many countries reformed large parts of their economies including their pension systems. Many of the region’s unfunded pension schemes were transformed into privately managed, mandatory, funded systems. Chile and Mexico are the largest examples of these types of reforms. Assets for these new funds reached $74.3 billion and $67.7 billion, respectively, at the end of 2008.3 Brazil, on the other hand, has maintained its large pay-as-you-go system with two complementary pension fund systems, the EFPC and EAPC. While they are both voluntary pension funds, they are the largest in Latin America with a combined value of $338.1 billion as of the end of 2008.

Countries generally promulgate pension fund investment guidelines stipulating minimum and maximum investment levels for a given asset class. Limits often include a provision for the percentage of the portfolio that can be invested abroad, in equities, or in real estate. Asset class distribution varies significantly throughout the region. For example, in Chile pension fund investment in government-issued debt was just 14.3 percent. Less developed countries like Uruguay and Bolivia show concentrations of 58.5 percent and 68.5 percent, respectively; these percentages are of total assets—as a percentage of fixed income assets, these concentrations are even higher. Over-concentration in government bonds is not necessarily limited to countries with less developed capital markets. Pension funds in Mexico, boasting one of largest local capital

---

3 This is after a tumultuous year in which many pension funds throughout the world lost a substantial proportion of their asset value. Chilean pensions, for example, lost more than a third their value from the heights of 2007 when they were valued at $111 billion.
markets in the region, had 68.3 percent of their total assets in government debt. The region as a whole had more than 60 percent of its assets invested in fixed income instruments issued by the government or corporate sector, of which over 40 percent was invested in government debt. Outside of the Chile and Brazil, this statistic jumps to 75 percent of fixed income assets.

An important lesson from the census so far is that many pension systems, particularly in underdeveloped markets, are overly concentrated in their own central government debt. Not only does such overconcentration violate basic precepts of portfolio diversification, but in practice this also means that huge portions of these pension funds are earning merely the local “risk-free” rate. Assets earning the risk-free rate, by definition, do not increase the real, inflation-adjusted wealth of future pensioners; rather, they “tread water” and merely maintain the current wealth level. The paucity of highly rated non-central government fixed income investments is a key problem for these pension funds. It suggests that much of the growth we have seen in these pension funds is driven by population increases rather than by fund performance, which is dragged down by having so many fund assets invested in securities earning the local risk-free rate.

Overconcentration on the part of these funds in government debt is understandable. A typical government regulatory scheme will severely limit the choices a pension fund manager can make in fixed income, in the interest of minimizing investment risks. Some very large majority percentage of fixed income assets will typically have to be in local currency, national-scale AA and/or AAA-rated bonds. Investment “buckets” for A and BBB securities will typically be very small, both for reasons of investment prudence and because, simply stated, there are very few (if any) BBB and A-rated bonds available in these markets. In this context, pension fund managers are forced to allocate most of a fund’s fixed-income investments to AA and AAA national-scale securities—and the corporate, structured finance and municipal bond sectors in many of these countries are so small that there is no way that a pension fund cannot be over-concentrated in central government debt.

Asia

Many of Asia’s largest economies continue to struggle with “legacy” pension systems that provide limited benefits to a small proportion of their large populations. China’s pension system, for example, is slowly shifting from the so-called “iron rice bowl” (through which military personnel and civil servants were guaranteed unfunded benefits) to a more sustainable and standard multi-pillar...
This transition is still highly fragmented; policies vary significantly from province to province. In addition to this provincial mix of funds, the Central Committee and State Council created a central National Social Security Fund (NSSF) in an effort to shore up retirement funding. While provincial numbers are hard to come by, the NSSF publishes annual reports, which stated assets valued at $82.5 billion at the end of 2008. Of this, 60 percent was invested in fixed income assets. Unfortunately a breakdown of fixed income investments was unavailable; however, regulations stipulate no less than 50 percent of assets must be invested in government bonds or bank deposits, and no more than 10 percent can be invested in corporate bonds.

Malaysia, on the other hand, reformed its pension system, dating from colonial times, in the early 1990’s, to manage the mandatory contributions of its members. As the largest pension fund in Asia, valued at over $106.6 billion at the end of 2008, it is almost entirely state-run, with only 2 percent of assets managed externally. India, like other former British colonies in the region, has a legacy provident fund pension system that it is actively reforming to be more inclusive and competitive. In 2004, it created a new mandatory direct contribution pension system for government employees; in 2009 it began to allow additional external managers for its private sector employee provident fund.

Like Latin America, Asian countries surveyed had over 60 percent of their assets invested in fixed income securities. Asian pension funds, however, are more likely to be managed by state agencies and operate under defined-benefits provisions. Unfortunately, these pension funds appear to be short of meeting their promised defined benefits; moreover, they cover just a small proportion of the population. With aging populations, these countries are working to reform their systems to improve sustainability and increase financial returns. This, combined with the growing affluence of the region, makes it poised for continued pension fund growth.

Africa

African countries have just under $169 billion in pension fund assets. A vast majority of this is held in the two large economies that anchor the north and south of the continent, Egypt and South Africa. Other countries throughout the region, however, have been quietly making progress on pension reforms and are beginning to accumulate relatively

---

4 The World Bank recommends a multi-pillar pension system containing a combination of several ‘pillars’. Pillar 1 is typically a pay-as-you-go system. Pillar 2 consists of a system of mandatory pension fund while Pillar 3 is a voluntary pension fund system.

5 Provident Funds are individual retirement savings accounts in which both the employer and employee contribute

6 The South African figure only includes the Government Employee Pension Fund, the largest fund in the country. There are other private retirement funds, however, that could increase this figure.
large pools of domestic assets. Botswana, for example, had over 100 private pension funds with a total of $4.4 billion in assets at the end of 2006. This represented more than a third of its GDP at the time. Much of Botswana’s pension fund assets were invested in equities, with only 11 percent invested in domestic bonds. Nigeria is another prime example with over $5.6 billion in assets invested in 2007. Unlike Botswana, however, Nigeria invested mainly in fixed income assets, representing 54 percent of total assets. Of this 64 percent is invested in government debt.

More than any other region, African pension regulatory requirements and implementation vary from country to country. Limited transparency also appears to continue to be a problem in some countries, creating unfortunate opportunities for corruption that occasionally makes the news. That said many countries throughout Africa are transitioning to pension systems more in line with transparent, multi-pillar system recommended by the World Bank. Asset allocations of these systems vary greatly from country to country. Pension funds in South Africa, with the largest and most developed capital markets, for example, have more liquid and domestic securities in which to invest. Smaller markets, like Tanzania, with only 15 companies listed on the local exchange and limited domestic fixed income assets, often look to other asset classes and geographies to invest. Expanding pension fund assets, however, should help to increase transparency, liquidity, and investment options as has been the case in other countries throughout the world.

Just as we did in our discussion of Latin America, we pause here to reflect on the opportunity for the involvement of local pension funds in development finance in Africa. Countries like Egypt and South Africa, while designated middle-income countries by the World Bank, nevertheless face an immense development challenge in terms of anti-poverty programs like micro finance and SME development, health care, water and sanitation, infrastructure, power, development of renewable and non-carbon-emitting power sources, and education. These two countries boast pension fund assets of over $137 billion. Using just a fraction of this amount without undue risk to pensioners for development finance would be an important demonstration of the power of these national savings accounts to magnify the potential of development finance; using a significant portion of these funds for development would be truly revolutionary, dwarfing the resources of, for example, the Gates Foundation, in just two countries.

In the middle of the scale, we find Nigeria with over $5.6 billion of pension assets and, representative of the lower end of the scale, tiny Rwanda, with but $250 million. Yet both nations could take large steps forward by finding prudent ways to deploy some of these balances for national development programs. Results for Development, as it happens, has visited the pension funds of both of these nations and found strong interest in our ideas for creating AAA-rated fixed income investments for development that would provide the pension funds a yield above the local risk-free rate while stimulating economic and social development.
Central and Eastern Europe

Central and Eastern Europe, perhaps surprisingly, has the lowest pension fund balances of all regions surveyed, with just over $92 billion in pension fund assets. After the end of the Cold War in 1991, Central and Eastern Europe was left with a strong statist legacy. Much like China’s Iron Rice Bowl policy, many of these nations found themselves responsible for large unfunded social safety nets providing benefits to retirees. After the fall of the Iron Curtain, most of these countries embarked on a series of pro-market reforms, which eventually included pension reform. Styled after the three-pillar system of the EU, most countries maintain some form of a pay-as-you-go benefits system. In addition, they created privately managed mandatory and voluntary pension fund systems. Poland was one of the earliest reformers, creating a mandatory pension fund in 1999. In consequence, it is now the largest pension fund system in the region, reaching $48.3 billion by the end of 2008. The next largest is Hungary with over $13.5 billion; Hungary in 1998 was the first CEE nation to add a mandatory pension fund to its existing system of pay-as-you-go and voluntary pension funds. Slow-to-reform smaller CEE nations have really just begun to accumulate pension fund assets. Romania, for example, just completed its reforms in 2007.

Regulation throughout the region varies, but as in other regions, most countries have imposed investment guidelines including minimum and maximum investment levels by asset class. Investments are usually restricted either to domestic markets or other nations within the European Union. The actual asset breakdown in Central and Eastern Europe, however, is heavily slanted towards government securities and other fixed income assets including bank deposits. We were surprised by this research result, as both the CEE and especially Western Europe boast a wide variety of highly rated corporate debt issuers which could be providing a higher and reasonably secure return than do government bonds and bank deposits. However, given recent macroeconomic and market developments, this caution is quite understandable. For the CEE region, these fixed income assets account for over 75% of all investments. While asset allocation differs between countries, a high allocation to fixed income assets is typical.

Tapping into Emerging Market Pension Funds

The existence of $1.1 trillion in pension savings in 45 developing nations creates interesting potential for significant advances in development finance, particularly given developed world fiscal problems that are likely to limit foreign currency aid flows. The

---

7 For the purposes of this paper, Turkey was included in Central and Eastern Europe. This was done due to Turkey’s EU style reform and geographic proximity to the region. The background surrounding its reform, however, is obviously different in historical motivation than much of the CEE region.
pension balances exhibit several important characteristics: they are growing rapidly; they are weighted to fixed-income rather than equity investments; and they are generally heavily regulated, forced to channel investments into highly rated local currency securities. This in turn results in massive over-concentrations in central government bonds, which provide pensioners only the local risk-free rate as a return.

Results for Development has been working to launch Affinity MacroFinance, a global financial guarantee insurance enterprise that could help catalyze AAA-rated, local currency development financings for infrastructure, essential public services like health care and education, pro-poor financings in sectors like microfinance and SMEs, and other asset classes. Such financings would provide local pensioners diversification and greater yield than central government bonds and would have important macroeconomic and social development benefits for emerging nations. The existence and continued growth of these pension funds creates an important opportunity for increasing the pace of development in these nations despite setbacks in the financial position of donor countries.
Bibliography

**General**


**Latin America**


SAFP. "Superintendencia De Pensiones - Gobierno De Chile - Límites De Inversión Y Cartera De Las AFP." *Superintendencia De Pensiones - Gobierno De Chile.* SAFP. Web.

**Central and Eastern Europe**


**Asia**


Africa


