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FOREIGN INVESTMENT IN DEVELOPING COUNTRY AGRICULTURE – THE EMERGING ROLE OF PRIVATE SECTOR FINANCE

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ABSTRACT

This paper reviews the actual and potential interest of institutional private sector investors in investing in developing country agriculture. The paper draws on in-depth industry information to identify trends and key players. It describes the nature and activities of the various types of private institutional investors including sovereign wealth funds, microfinance providers, investment managers, pension funds, hedge funds, private equity investors, banks and agribusiness. The paper notes that interest in investing in developing country agriculture has increased in each case as investors seek to diversify portfolios and to exploit profitable opportunities either individually or in collaborations between different types of investor.

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1 INTRODUCTION

Investments in developing world agriculture by institutional private sector investors are, of course, hardly a new phenomenon and date back centuries in one form or another. Despite the current global recessionary environment and unstable financial markets, a review of the available industry data demonstrates that for a variety of factors, there is renewed interest by institutional private sectors in expanding their investments in developing world agriculture. To underscore this theme, *The Wall Street Journal (WSJ)* on 11 May 2009, stated that investors are "aggressively returning" to developing world markets, driving stocks up 50 percent since the beginning of March 2009. The newspaper added that in May 2009, investors plowed USD4 billion into emerging market investment funds. While the article did not specify which sectors these investments are destined, but given the diversification philosophy of the vast majority of portfolio managers supported by other information to be discussed in this paper, one can deduce that a portion of these investment funds is destined for the agricultural sector in one form or another. The Morgan Stanley Company International (MSCI) Emerging Markets Index has rallied 39 percent this year, outpacing a 7.3 percent increase in the MSCI World Index. Developing countries account for all ten of the world's best-performing markets.

Such investments take many forms, some are rather obvious and traditional (e.g. equities, fixed income, infrastructure, etc.) and others more indirect through a variety of financial products some of which have caught investor interest in the very recent past (exchange traded funds "ETFs", hybrid securities, commodity derivatives). Large private sector institutional investors typically have different investment aims, diverse risk appetites and often varying time horizons for their investments. A number of these investments have recently attracted wide media coverage such as: the buying/leasing of large tracts of developing world agricultural land by private sector international investors; private sector development projects in certain countries (e.g. Iraq); large private sector financed infrastructure projects; certain private/public investment partnerships. Despite the attention on the "land deals", it is estimated by industry professionals that a sizable amount of the investments and identities of the institutional investors involved frequently does not appear in the general media unless it is in the specialized financial press or similar types of publications. In fact, a number of investments or investment vehicles in developing world agriculture pass totally unnoticed by the entire media because a certain investment may be deemed too small or other more "important" financial news has occurred. Furthermore, in today's world of "real time" trading by institutional investors, billions of dollars of investments can change hands within minutes particularly in the more liquid securities or in products such as commodities and quite obviously such capital movements proceed attracting little, if any, attention. As a consequence, at times, it is difficult to empirically verify and quantify the extent to which these investments are occurring in developing world agriculture

Yet as this paper will show, a sufficient number of these investments have been identified and are openly discussed by the investors themselves as they market their funds or disclose such investments to their respective clientele. The goal of this paper will be to refine our current understanding of private sector institutional investors active in developing world agriculture and what type of investments they are making along with the potential ramifications from this type of investing on the various stakeholders involved. The scope of the paper is limited and will therefore review the subject matter in a condensed manner but nonetheless will identify the trends and key players involved in this very important investment phenomenon.

The growth of private sector investments in emerging market agriculture is by no means a panacea for the many problems faced by developing countries in supporting the growth of their agriculture sectors. The global macro-economic situation is still very fragile despite certain signs and statistics indicating the international financial crisis has abated to a degree and a number of economists are revising their predictions on the severity and duration of the current global recession. It still remains to be seen the total impact on the short and near term economic prospects for the developing world given the lag effect that international downturns often have on their economies. The International Monetary Fund (IMF) published in March 2009 a report entitled "The implications of the Global Financial Crisis for Low Income Countries" and warns that the global crisis will have a major impact on Low Income Countries (LICs) and it will likely result in massive financing needs. The report further mentions that 26 LICs are particularly vulnerable to the effects of a severe downturn. The IMF study further argues that the current recession will affect the LICs even more as these countries are much more integrated with the global economy than in the past due to trade, worker remittances and foreign direct investments (FDIs). The IMF points out at the time its paper was written that developing world bourses have also suffered along with those of the developed world and specifically refers to the Merrill Lynch Africa Lions Index which tracks 15 African countries and that through December 2008 the index was down some 70 percent. This same Lions Index is now up approximately 40 percent from January to May 2009. The reporting of this more current statistic is by no means intended to belittle the important data and erudite observations that the IMF made in its recent report. On the contrary, the fact is merely presented to demonstrate that private sector financial markets change rapidly in this age of instantaneous investment and this holds true for the developed or developing world.

The World Bank also published a recent report dated March 2009 entitled *Swimming against the tide: How developing countries are coping with the global crisis*. The paper states out in convincing fashion, that global trade is on track to register its largest decline in 80 years and financing needs of LICs will have huge funding gaps in 2009. Like the IMF, the World Bank warns that direct foreign investment is falling particularly in the natural resource sectors as financing becomes more difficult to find. The World Bank paper also emphasizes that maturing debt constitutes a key risk to emerging markets along with expected contraction of direct private capital flows in 2009 and worker remittances. The situation as reported by this highly respected international organization appears quite grim for LICs. But what of these investments by private institutional investors mentioned above? What are they exactly and what are market observers predicting? Can these private sector investors be of further assistance in providing investment capital in developing world agriculture? Henry Kravis, the international financier and chairman of the large private equity firm, Kohlberg Kravis Roberts & Co (KKR), was recently quoted as saying that there are some USD300–400 billion of just private equity dollars looking for an investment home. So while there certainly is a global economic crisis and the consequences are very serious for the developing world, there is renewed investor interest, albeit cautious, in the developing world and also in its agricultural sector, as will be discussed in detail here below.

As stated above, this paper will focus on the principal institutional private sector investors and, to the extent possible, discuss in various geographic locations to buttress the argument that developing world agriculture is of general institutional investor interest irrespective of the location. It is very important to bear in mind when reading the following various investor categories that there is substantial cross investing between these groups. For example, a sovereign wealth fund could be investing in a private equity fund which in turn invests in a specialized hedge fund that is buying agricultural land while at the same time investing in the various commodity markets. But first, let us review the principal institutional investors to understand who they are and find out what type of investments they are currently making and the relevance towards developing world agriculture.

2 BACKGROUND/METHODOLOGY

Institutional investors are financial organizations that invest, usually in a fiduciary role, large sums of money in securities, real estate, in companies and in a wide variety other investment assets on behalf of third parties. These investors include: mutual funds, banks, pension funds, hedge funds and private equity funds. Today, enormous pools of money are being managed not only in the main financial centres but literally in the four corners of the globe. Investments are made and trades executed around the clock through a vast array of electronic trading vehicles. A quick phone call or an inserted electronic trade order from, for example, a pension in Norway can potentially have vast repercussions on say, cocoa growers in Africa. The money management business has grown tremendously worldwide in the last two decades and the role of these investors is increasingly important in the economies of the developed as well as the developing world across all sectors including agriculture.

Monitoring the various investment activities of these large institutional investors is not an easy task even for the industry analysts due to the organizational profile of many of these investors particularly for those which are not required to make full public disclosure of their investments such as the hedge funds. Up until the present, this investor group, (note: hedge funds will likely face more regulatory oversight in the near future), has been able to operate in an almost confidential manner and quite often furnish their fund investors only with an opaque overview of their activities. This element of non public disclosure is also true with many private equity firms and venture capital groups (a sub sector of private equity). These two groups of money managers in their offering prospectuses often describe their investment plans in only general and vague terms which permit the fund managers the maximum operational flexibility. Consequently, pinpointing their investments is problematic for investors in the fund, and of course, for third parties including regulatory authorities. While Sovereign Wealth Funds (SWFs) are government entities and have reporting requirements, often their portfolio managers are given vast discretion over what type of investments they make. For example, if a SWF makes an investment in hedge fund or private equity fund (to be discussed below) how is it possible to identify with precision where their investments are ultimately destined? This same argument holds true, to an extent, for pension funds as well. Furthermore, the various commodity markets and other securities markets see massive volumes of trading on a daily basis and quite obviously tracking these flows with accuracy in terms of which entities are making the investments is quite difficult to say the very least.

That said, there certainly exists a considerable amount of in-depth industry information that tracks these investors and the above discussion is meant to qualify the methodology and data points that will be presented in this paper. In order to review private sector investment activities, use of primary private sector media and research sources is fundamental. In this light, a wide range of newspapers, specialty magazines, research reports were consulted for this paper and all of which very serious and well respected publications. A sampling of those used in this report includes: T*he Wall Street Journal, Fortune Magazine. Pensions and Investments, Euromoney, Bloomberg, Institutional Investor, The Times, The Financial Times*, Deutsche Bank research, Rabo bank research. Also, FAO research was consulted, along with World Bank and IMF publications. Sources of information are generally cited in the text particularly if the information is deemed to be of considerable importance in the context of the paper.

Given the vast nature of the subject matter and resources available, this short paper can only present a limited amount of information with the stated intent to identify the key investors and most relevant investment trends and present them in the fashion of an overview. Hyperbole aside, this topic is of critical importance. Institutional investors through their massive investment power hold great influence, directly or indirectly, over the developing world and its agricultural sector. It is important therefore, to study these investors in order to better understand their current investment philosophies and how their investment decisions can and will affect the developing world. The investor groups discussed below are deemed to be the most representative of those pursuing such investments but this by no means implies that there are not other institutional investor groups involved in developing world agriculture. The limitations in terms of subjects chosen and information sources will not detract from the overall quality of the research presented and the identifiable investment themes contained in this brief paper.

3 TYPES OF PRIVATE INSTITUTIONAL INVESTORS

A. Sovereign Wealth Funds

Given the highly topical nature of this investor class, we will begin with the Sovereign Wealth Funds (SWFs). By definition, a SWF is a state-owned investment fund and generally would not be in the scope of this private sector focused paper due to its public ownership. However, a very recent phenomenon is the investment world is that SWFs are “teaming up” with private institutional investors in their home country to make joint investments abroad and this is extremely significant particularly in regards to international land purchases in the developing world. Also, SWFs are placing money with private international money managers who in turn are investing in a number of asset classes including developing world agriculture. In fact, funds flowing from SWFs into large fund managers are considered a “growth industry” for the latter.

SWFs have been around for decades, but since 2000 the number of SWFs has increased dramatically. The vast majority of SWFs are managed separately from the other funds within a given government. The first SWF was the Kuwait Investment Authority, a commodity SWF created in 1953 from oil revenues before Kuwait even gained independence from Great Britain. According to many estimates, Kuwait's fund is now worth approximately USD250 billion. SWFs are typically created when governments have budgetary surpluses and have little or no international debt. This excess liquidity is not always possible or desirable to hold as cash or to channel it into consumption immediately. This is especially the case when a nation depends on raw material exports like oil, copper or diamonds. SWFs may be created to reduce the volatility of government revenues, to counter the boom-bust cycles' adverse effect on government spending and the national economy, or to build up savings for future generations.

Typically, the SWFs are held solely by a central bank that accumulates the funds in the course of their management of a nation's banking system. Other sovereign wealth funds are simply the state savings which are invested by various entities for the purposes of investment return. It is estimated that assets under management of SWFs increased 18 percent in 2008 to reach USD3.8 trillion. The SWFs tend to be "long term investors" as opposed to the majority of the other institutional investors to be discussed henceforth in this paper. The SWFs have been attracting much attention in the developing world for their investment activities and Europe and the United States are also scrutinizing these funds. On 5 March 2008, a joint sub-committee of the United States House Financial Services Committee held a hearing to discuss the role of "Foreign Government Investment in the United States Economy and Financial Sector". On 20 August 2008, Germany approved a law that requires parliamentary approval for foreign investments that endanger national interests. Specifically, it will affect acquisitions of more than 25 percent of a German company's voting shares by non-European investors. On 2-3 September 2008, at a summit in Chile, the International Working Group of Sovereign Wealth Funds - consisting of the world's main SWFs - agreed to a voluntary code of conduct first drafted by the IMF. The OECD reportedly is currently drafting a parallel code of conduct for recipient countries of SWF investments. As mentioned, SWFs may operate though a subsidiary operational company, or through entering into shared-governance joint ventures with private sector companies or with other governments' state-owned enterprises or investment funds.

A sampling of some of the largest SWFs include the following funds: Abu Dhabi Investment Authority (ADIA) (USD875 billion); The Government Pension Fund of Norway (USD350 billion); Government of Singapore Investment Corporation (USD330 billion); Kuwait Investment Authority (USD250 billion); Caisse de dépôt et placement du Québec (CDPQ) (USD214 billion); China Investment Corporation (USD200 billion); Singapore's Temasek Holdings (USD159.2 billion); and the Stabilization Fund of the Russian Federation (USD158 billion). Estimates for the aggregate of SWFs ranges from USD1.9 to USD3.5 trillion. The investment styles, mandates and governance structures are quite diverse for these funds therefore generalizations concerning "SWF investing behaviour" must be done carefully. It is true however, that in the market turmoil of the last 18 months a number of SWFs have encountered sharp losses on their investments portfolio and there has been a noticeable shift towards more conservative investments. An argument can be made that investments in agriculture, specifically land, are an indicator of this more prudent investment strategy of buying "hard assets" by a number of these SWFs.

The traditional investment vehicles for sovereign wealth in the form of foreign currency reserves have been the debt instruments such as government bonds from the industrialized nations. Compared to other large institutional investors (e.g private equity), SWFs invest with longer time horizons and have more stability (less redemptions of their funds as opposed to most investment vehicles) Historically, the low returns on these government bonds and similar "conservative" investments have motivated many SWFs in the last two years to invest in equities and other products to achieve a higher return. The expanded activities of the SWFs over the past several years as well as the increased amounts available to the funds have led to claims that the SWFs can destabilize financial markets and the global economy if their investments are motivated by political rather than economic considerations.

With regards to the developing world agriculture sector, there have been a number of stories in the international media on the "land purchasing" SWFs in the developing world. The more credible sources confirm a number of these purchases or, as the case may be, leases but it is difficult to quantify the total amount and exact characteristics of these land investments. Nonetheless, it is a discernable trend in today's markets that the SWFs are making investments in the agriculture sector in the developing world and acquiring land is certainly one of the more conspicuous with the rationale often cited by these SWFs is "food security".

China and Korea along with the Gulf States of Qatar, Saudi Arabia and the United Arab Emirates (UAE) appear to be emerging as key investors in these land purchases. According to the more reliable media reports, Congo, Ethiopia, Madagascar, Mozambique, Sudan and Tanzania are the principal partners of these land deals in Africa whereas in Asia, Cambodia, Indonesia, Laos, Pakistan, and the Philippines seem to be the countries selling or leasing large tracts of their agricultural land. Direct investment in foreign land at times occurs directly from government to government or in other occasions, the SWFs work in conjunction with private sector intermediaries, their "private" subsidiaries or state owned enterprises (SOEs).

For example, Saudi Arabia has two new investment companies, one that will invest in agriculture abroad and the other in international and domestic commercial projects. In April 2009, Abdullah al-Obaid, Deputy Minister for Agriculture, announced that the government would set up a new public company to invest in agricultural projects around the world, a move that has been under discussion for at least a year. Mr Obaid told the *Financial Times* that the new Saudi Company for Agricultural Investment and Animal Production would be managed by the State Public Investment Fund (PIF), which invests domestically and that it would initially have capital of USD800 million. The government is apparently phasing out domestic wheat production in order to conserve water and is encouraging Saudi public and private firms to buy farmland abroad, sometimes with subsidies from the state-owned Industrial Development Fund. The investment rationale is to improve Saudi food security.

In the private sector, several major Saudi agricultural firms have formed a consortium. Participants in the consortium include Al Marai, Tabuk Agricultural Development Company (Tadco) and Aljouf Agricultural Development Company and Jenat. The latter is to invest in food production in Africa. Initially, Jenat plans to invest SR70 million (USD18.7 million) in wheat, barley and animal feed in Egypt, to be followed by a total of SR80 million (USD21.3 million) in Ethiopia and Sudan, according to an announcement by the Ministry for Agriculture in March 2009. Also in March of this year, an Indonesian government envoy, Alwi Shihab, said his country would allocate at least 2 million hectares of land for joint ventures with Saudi investors, mostly in rice production. Saudis invested USD1.3 billion in agricultural projects in Indonesia in 2008, according to the Chair of the Council of Saudi Chambers of Commerce and Industry, Mohammed Abdulkader al-Fadel, quoted by the *Reuters* news agency in March.

A number of factors with respect to these recent land purchases/leases are new and an important one is the size. In the past, a large land deal used to be around 100 000 hectares whereas now the largest ones are reported as being several times that. In Sudan, South Korea has reportedly signed deals for 690 000 hectares along with the United Arab Emirates (UAE) for 400 000 hectares and Egypt has secured a large land deal to grow wheat there. An official in Sudan says his country will set aside for Arab governments roughly a fifth of the cultivated land in Africa's largest country. Several other features of the process are also new. Unlike older projects, the current ones mainly focus on staples or biofuels—wheat, maize, rice, jatropha. Egypt and South Korea both have projects in Sudan for wheat aligned with the theme of food security. Libya for example, has leased 100 000 hectares of land in Mali for rice growing. By contrast, past farming ventures often used to be about cash crops (coffee, tea, sugar or bananas).

As stated above, China has also been quite active in developing world land investing. Recently, it was reported that China secured the right to grow palm oil for bio fuel on 2.8 million hectares of Congo, which would be the world's largest palm-oil plantation. China is negotiating to grow bio fuels on 2m hectares in Zambia, a country where Chinese farms are already said to produce a quarter of the eggs sold in the capital, Lusaka. The *Financial Times* (FT) reported on 17 March 2009, that the Government of China is to pump a further USD2 billion into its African investment fund which is earlier than planned in order to take advantage of opportunities on the continent. The prospectus of this fund as per the FT lists initial investments in agriculture ventures in Ethiopia, Malawi and Mozambique; a share of an USD450 million power station in Ghana; and Egyptian, Mauritian and Nigerian industrial zones, among other projects. The article quoted Mr Chi of the Chinese fund who stated that the fund had also invested in Zimbabwe. The fund has spent so far USD400 million and it “will drive Chinese enterprises to make investments of more than USD2 billion". From 2009, it would embark on a second, USD2 billion phase of investments, accelerating towards its goal of USD5bn in total investments in Africa.

According to the International Food Policy Research Institute (IFPRI), between 15 and 20 million hectares of farmland in poor countries have been subject to transactions or talks involving foreigners since 2006. That is the size of France’s agricultural land and a fifth of all the farmland of the European Union. Putting a conservative figure on the land’s value, IFPRI calculates that these deals are worth USD20–30 billion, at least ten times as much as an emergency package for agriculture recently announced by the World Bank and 15 times more than the American administration’s new fund for food security. It remains to be seen how many of the announced investments actually close, but is clear that the SWFs and their private sector partners are investing in increasing amounts in developing world agriculture both in land and other investments.

Other SWFs have reportedly formed joint ventures with private financial institutions to develop infrastructure projects in Africa. The Abu Dhabi Investment Authority and the Swiss bank, UBS, started a joint venture in early to focus on infrastructure projects in Africa including agriculture. The Libyan Arab African Investment is working with Libyan Arab Holding Company (GLAHCO) to make agricultural investments in Ghana.

Table 1: Ten largest sovereign wealth funds

Fund	Country	Date established	Current size (a) (USD bn)
Abu Dhabi Investment Authority	UAE	1976	500-875(e)
Government of Singapore Investment Corp	Singapore	1981	100-330(e,r)
Government Pension Fund–Global	Norway	1990	308
Future Generations Fund	Kuwait	1976	174
Stabilisation Fund of the Russian Federation	Russia	2004	122
Temasek Holdings(b)	Singapore	1974	108
Central Huijin Investment Co (b)	China	2003	66e
Qatar Investment Authority	Qatar	2005	50e
Revenue Regulation Fund	Algeria	2000	43
Future Fund (b)	Australia	2006	42
Total (c)			2 032

(e) = estimate, (r) = some or all assets are included in reserves

(a) Data are from end-2006 or the most recent date available; (b) A portion of the holdings is in domestic assets; (c) Total uses the midpoint of the range of estimates.

Source: Peterson Institute for International Economics/The Economist

B. Microfinance providers

The antecendents of microfinance date back to Franciscan monks in Perugia, Italy who in the 1500s lent, for a fee and backed by collateral, small amounts of money to the poor in times of need and labelled the fund “Monte di Pieta”. Through the ages various types of lending to the poor continued in various forms but most observers believe that “modern microfinance” dates to the 1970s with the founding in 1976 of the most celebrated microfinance institution, the Grameen bank by an economics professor, Muhammad Yunus. Mr Yunus began originally lending less than one US dollar to a group of families and found that the families were able to repay the loans with next to zero defaults. For his pioneering work in the field, the Nobel Committee awarded the Nobel Peace Prize to Yunus and the Grameen Bank in 2006.

From such humble beginnings, today’s microfinance is a huge industry that gives small-scale financial services such as loans, savings, insurance and money transfer to poor customers who would otherwise not have access to banking services. Microcredit, an important component of microfinance, involves offering very small loans to poor clients without any collateral and often without any written contract.

Microfinance institutions (MFIs) are operating all over the globe. The biggest markets are Asia (70 percent), Latin America (20 percent) with the rest scattered in various locations. In terms of countries, the markets that are the largest are found in Bangladesh, Bolivia, India and Kampuchea. Worldwide there are an estimated 10 000 microfinance institutions with about 100 million micro-borrowers. *MicroBanking Bulletin*, at the end of 2006, was tracking 70 MFIs that were serving 52 million borrowers (USD23.3 billion in outstanding loans) and 56 million savers (USD15.4 billion in deposits). The sector has grown enormously in the past four years and is expected to keep growing quickly. According to the *Times of London*, the ten largest microfinance funds grew at an annual rate of 32 percent in the last 5 years. Nonetheless, several billion people in the world still lack these basic, life-improving financial services. The microfinance industry today serves less than one in ten of them. Few people believe microfinance can grow quickly enough under its own steam without adopting a more private sector friendly commercial model.

Now private sector multinational banks see microfinance as a profit opportunity and the banking sector is rapidly expanding its activities in microfinance. In an interview in the *Financial Times* on 6 December 2008, Robert Annibale, who became Citi's first microfinance chief in 2005 was asked of his new position as head of the microfinance unit said, "Colleagues asked me if was giving up a business role. I'd say, No, I'm taking up a new one”. Mr Annibale’s plans are to make money for Citigroup by providing technology, advice and investment banking services to microfinance lenders. And so far, his division has been largely unaffected by this year's market turmoil. Some of the private sector banks/investors are also investing for altruistic reasons but it is altruism wedded with profit sector profit mentality. In India for example, the *Trust Press of India* (29/4/09) reported in an article entitled *Betting big on the fast-growing microfinance sector*, that leading private and foreign banks are all set to scale up their MFI operations in the country. Apart from providing financial support to the fund starved MFIs, banks are also active in launching schemes to support the growth of small MFIs by giving them training in management skills. Foreign lender Royal Bank of Scotland (RBS) has said it has developed a plan to grow its Indian microfinance portfolio, by approximately 40 percent by the end of this fiscal year 2009. The UK-based lender currently provides direct financing to around 30 MFIs across India and has partnered with another 41 MFI units to build up the administrative skills and strong business model, said RBS Vice President Moumita Sen Sarma. He added, “despite the financial crisis, MFIs have been least affected as they have managed to maintain the quality of the business. RBS will continue to expand its MFI portfolio and expects to grow the size to Rs 450 crore by the fiscal-end” (2009)".

The UK-based lender did not expect any deterioration in the asset quality of MFI units in financial year 2009-10, she said. India’s largest private-sector lender, ICICI Bank, also plans to significantly scale up its operations in the sector in the current fiscal. Over the last year, ICICI Bank has nearly doubled its MFI portfolio to Rs 2 600 crore and expects the segment to grow by at least 20 percent in the current fiscal, according to its general manager, Kumar Hashish. Foreign banking major HSBC also has plans to enhance its MFI portfolio in India. The lender currently has tie-ups with 21 MFIs across the country. "We are shortly launching a project in rural Maharashtra with a leading MFI. HSBC assists the MFIs to build up a strong business model in a number ways," HSBC Group General Manager and CEO Ms Naina Lal Kidwai said in a recent interview.

On 19 March 2009, Emmanuel de Lutzel, Head of Microfinance at BNP Paribas spoke at UNESCO in Paris and said that within the financial industry, the microfinance sector is largely unaffected by the credit crisis. Nevertheless, the financial crisis will have the indirect impact of reducing the growth rate of microfinance, which, in de Lutzel's view, will probably reach only 10 percent in 2009. De Lutzel went on to say that over the last dozen years, a number of bridges have been built between microfinance and conventional finance. In his estimate, there are approximately fifteen international commercial banks involved in supporting this sector. BNP Paribas views microfinance as an arena in which they can exercise corporate social responsibility while at the same acting as bankers. He views BNP as "pioneers" in this field over the last 15 years and the bank helps to finance approximately twenty partner institutions in a dozen different countries.

France's third largest bank, Crédit Agricole has also been very active in the microfinance world and is developing financial service programs to meet the needs of farmers. The bank is teaming up with the Grameen bank to target organizations active in the agricultural sector. The head of Microfinance at Crédit Agricole, Jean Luc Perron, was quoted in Euromoney (8 September 2008) stating "the situation for farmers in less developed countries today is not so different from that of farmers at the end of the 19th century in Europe. The vast majority of farmers were completely excluded from the formal banking system as banks focused on serving large industrial companies in the cities and ignored the needs of farmers".

Citigroup and the other banks of the world are not the only private sector commercial oriented players to get involved in what was once a purely philanthropic endeavour. Sequoia Capital, the venture capital fund that backed Google, Apple and Cisco, has taken an USD11 million stake in SKS Microfinance, a large Indian lender. Private equity groups such as Helios Capital are making similar moves. Pierre Omidyar, founder of eBay, gave USD100 million to Tufts University in 2005 with the stipulation that the donation be used to create a fund seeking its returns only through investments in microfinance. Tryfan Evans, director of the Omidyar-Tufts Microfinance Fund, recently predicted that it would be fully invested by the end of 2009.

Another recent trend in the field is for established public sector microfinance institutions to transform themselves from what were essentially charities to profitable private companies through initial public offerings (IPOs). A very noteworthy example is Mexico's Compartamos ("Let's Share"). The company used a USD6 million investment to turn itself through an IPO into a billion-dollar company in less than a decade, expanding rapidly while assuming the characteristics of a private lender. In a number of significant cases, what was once an idealistic public sector movement is now a fast-growing industry, and one that is rapidly changing in many ways, including a discernable move to attract more private sector participants to make up for funding shortfalls and to share their commercial expertise as microfinance (MF) further evolves.

The commercialization/privatization of microfinance is causing a strong debate between profit advocates such as Carlos Danel and Carlos Labarthe, the founders of Compartamos, and traditionalists such as Muhammad Yunus, who see microfinance lenders such as Compartamos as indistinguishable from the moneylenders he set out to replace in 1976. Between these two poles lie the majority of microfinance practitioners, eager to gain access to capital and commercial expertise from the private sector, but concerned that competitive market forces may not help the poorest.

It is viewed by many in the industry that expertise from private sector players might allow microfinance lenders to move beyond simple loans. If lenders could take deposits, they should easily be able to fund their own loans - many poor people are would-be savers who lack a safe place to put their money. But as the credit crisis has made clear, deposit-taking is a difficult business requiring regulatory supervision even in rich countries and commercial expertise is necessary in order for the marketing endeavour to be successful.

The mobile phone has also been a tool of private sector operators in expanding and opening new prospects for microfinance through enabling the transfer of funds and loan creation. The global penetration rate of mobile telephony has more than doubled in five years (2002-2007) and has now reached 50 percent, with considerable growth in emerging economies. In the Philippines, with a population of 90 million, there are now more than 50 million subscribers, and mobile banking now reaches 6 million people. Unique alliances have developed between traditional banks and mobile telephone operators. In West Africa for example, BNP Paribas has teamed up with the mobile operator Orange. India will also be a target market for the "mobile microfinance operators" as there are an estimated 400 million mobile phone subscribers in the country, with a growth rate of more than 10 million per month. As 85 percent of the rural Indian population has no access to financial services, this gives an idea of the considerable market potential for the mobile telephone microfinance companies.

The industry has attracted other international financial institutions like Citigroup, Standard Chartered, and BNP Paribas. SKS Microfinance, India's largest MFI, recently raised about USD75 million from private equity sources. Citibank is one of the most ambitious big banks in this area, having established relationships with MFIs in some 20 countries, and it may soon expand to another ten countries. Venture capitalists also see MFIs as a good place to invest during this economic downturn and are investing in MFIs in India. Udaia Kumar, chairman and managing director of Share Microfin Ltd, (a regulated MFI that provides financial and support services to rural Indian women) said during an interview with Business Line last month his firm is in the process of finalizing an equity investment of USD50 million from a private equity player based in India. TIAA-CREEF, the second largest United States pension fund has reportedly made a USD43 million investment in Procredit Holdings AG, the world's largest microfinance vehicle. According to industry sources, it is the third investment in microfinance for this large United States pension fund.

Deutsche Bank also views MF as a growth sector and in a report entitled "Microfinance at a glance: an emerging opportunity" (December 2007), the German bank collected the following statistics:

- by 2010, investors will have put an estimated USD20 billion into microfinance institutions worldwide;
- the volume of microfinance loans grew from USD4 billion in 2001 to USD25 billion in 2006;
- since 2004, foreign funding of microfinance has doubled to USD4.4 billion;
- estimated funding gap – the extra amount needed to make microfinance services available to the world's three billion poor: USD250 billion;
- estimated number of microcredit borrowers worldwide: 152 million;
- worldwide there are more than seven savings accounts for each loan account.

While it is not easy to break out specific private sector investments earmarked for MF agriculture, there is certainly some evidence that shows specific interest in this subsector. Nimal Fernando of the Asian Development Bank (Asian Development Bank vol. 4, no. 2, 2007) spoke of "the growing interest of many microfinance investors (MFIs) in agricultural microfinance and this must be seen in the broader context of risk management in the industry". He argues that financing agriculture is more credit intensive than financing trade or industry and is also more risky than financing non-agricultural micro enterprises. Fernando points out that many traditional (i.e. non commercial) MFIs interested in agricultural microfinance have not been sufficiently aware of the inherent credit risks due to the "pervasive risks in agriculture and their ramifications for the MFIs' pursuit of growth in agricultural microfinance". He further adds that "the rapid emergence of a large number of private lenders is one of the most encouraging aspects of microfinance" due to the vast amounts of private funding that will be needed in the future to meet MF demands but also because of the commercial expertise of the private investors.

A recent issue controversy has developed in MF and if not addressed it might hamper certain much needed private sector investment in the sector. J. Abrams & D. Stauffenberg in their paper *Role Reversal: Are Public Development Institutions Crowding out Private Investment in Microfinance?* (*MFInsights*, February 2007) make the argument that the international financial institutions (IFIs) - essentially public sector bilateral or multilateral development agencies- are "forcing private lenders out of the most lucrative segment of microfinance". The authors further state that the various development agencies or IFIs such as AECI the Spanish aid agency, KFW the German Development Bank, the World Bank private sector affiliate IFC, BIO (Belgium), the European Investment Bank and the Central American Development Bank (CABEI), among others, have been heavily concentrating their funding in the largest and most successful MFIs which is the same target investment market of private investors. The authors label this "trophy lending" and call the practice widespread. Their view is that these public sector agencies should be taking, at this stage, the risk that the private sector is not yet willing to take. As more private lenders enter the MF field, one would have expected government-owned development institutions to shift their lending to more risky MFIs but, according to this study, the opposite is happening. If the private investors, over time, do not feel comfortable with the risk/reward parameters a scaling back of lending/investing could result and this would obviously be extremely negative for the growth of the sector. At this juncture however, this issue has not deemed yet to be a serious impediment to increased private sector focus in MF, but it should nonetheless be tracked to see if there is an eventual effect on investment flows from the private institutional investors.

C. Investment Managers

This section will describe and outline the investment activities as they pertain to the developing world agricultural sector of the various "money managers" or "fund managers" as they are often labelled in the financial industry. It should be emphasized, once again, that there is quite often an intertwined relationship between these various fund managers particularly the large institutional investors (i.e. pension funds and SWF who allocate portions of their investment portfolios to different asset classes managed by specialized fund managers) so the lines are frequently blurred between these investors and consequently labels and categories can be a bit misleading. Be that as it may, we will look at a number of these investment managers and the list will include: pension funds; hedge funds; private equity/venture capital groups and explore their investment activities in the emerging world and particularly in the agricultural sector.

The asset management, or fund management, sector is marked by diversity. In its simplest form the firms are mutual funds (also called unit trusts or collective investment schemes) that place monies in stocks, bonds, money-market instruments and other asset classes. Typically, private equity and venture capital firms buy entire companies (or significant stakes) and attempt to make these acquired firms more valuable through better management or due to a "strategic play". Private equity (PE) firms can hold these investments/companies short or long term and some form of sale is the usual "exit strategy" of the investment. Hedge funds often follow a variety of strategies, including taking long and short positions in a wide variety of securities. Commodity funds take positions in foodstuffs, metals and fuels. Others funds specialise in real estate, infrastructure and "special situations" (distressed debt). Outside the United States, asset managers are rarely listed firms. In Europe and Asia the leading managers are generally subsidiaries of large banking and insurance groups. For example, in Europe the largest fund companies are units of Barclays, a British bank, and Allianz and AXA, insurers from Germany and France respectively. The European Union single market has allowed managers to gain wide market share outside their home countries. Asset management markets in Asia, by contrast, remain largely divided by national boundaries. An important fact to bear in mind when reviewing these various fund managers is that they are, in overwhelming numbers, "ideologically free" in the sense that the social ramifications of their investments take a secondary or tertiary consideration and the only factor that counts is sufficient return versus the estimated risk. Many of these fund managers have the mandate to invest in almost any asset class in any location provided the return potential makes investment sense. The risk/return in developing world agriculture appears to fit the investment parameters of these fund managers. Some of the principal "fund managers" can be broken down as follows with the first being discussed in the pension funds which are the largest of these institutional investors.

Pension Funds

A pension fund is, of course, a pool of assets forming an independent legal entity that are funded with the contributions to a pension for the exclusive purpose of financing pension plan benefits to its contributors. Pension funds are extremely important and powerful shareholders of listed and private companies. They are especially significant players in the various stock markets where large institutional like the Ontario (Canada) Teachers' Pension Plan and the California Public Employees Retirement Fund (CALPERS) have substantial influence. The largest 300 pension funds collectively hold about USD6 trillion in assets. In the 17 January 2008 issue, *The Economist* reported that the investment bank Morgan Stanley estimates that pension funds world-wide hold over USD20 trillion in assets, the largest for any category of investor and well ahead of mutual finds, insurance companies, currency reserves, sovereign wealth funds, hedge funds or private equity. Pension funds are the archtypical “conservative” institutional investor given their vast fiduciary responsibilities in managing workers pension monies. The pension funds typically have an investment style which stresses very low risk and consequently they are resigned to accept low returns. Yet being run by professional fund managers, the pension funds also seek diversification of their investment portfolios and there is evidence that emerging markets including the agricultural sector are being explored by this extremely sizable institutional investor.

The Times (London) reported on 31/8/2008, that a sizable investment form an American pension fund was placed into a private equity vehicle run by the €2 billion (Euro) (£1.6 billion) UK-based hedge fund Emergent Asset Management. The fund is called the “Africa Land Fund” and will invest in the African agriculture sector (note to the reader: notice the three-part investment here. A pension fund gives money to a hedge fund which in turn structures a private equity investment fund to invest in African agriculture). It was reported in the United States industry specialist magazine *National Real Estate Investor* (September 2008, Vol. 50, Issue 9) That the largest United States pension fund, the California Public Employees' Retirement System, (CALPERS) initiated formal plans to increase its emerging markets investments. The significance of citing CALPERS is that this mega pension fund is considered a “leader” or often an “early mover” in the pension fund world and when it acts other United States funds take notice and often do the same. It is being recommended that CALPERS invest up to 20 percent of its international real estate portfolio in emerging markets and up to 5 percent in so-called "frontier" markets. CALPERS is not alone in its quest for diversification into the emerging markets. The second largest pension fund in America, NY-based Teachers Insurance and Annuities Association-College Retirement Equities Fund (TIAA-CREF), is also stepping up their exposure to emerging and frontier markets. As mentioned earlier in this paper, TIAA-CREF made a USD43 million investment in Procedit Holdings, the world’s largest microfinance fund along with other such investments.

In the industry specialist publication Global Pensions, an article appeared in March 2009 issue entitled *Exploring new frontiers* and the author Giovanni Legorano wrote that many international pension funds are concerned with their under funded positions and targeting more profitable investments and in the last few years are increasingly looked at non-traditional assets such as emerging and frontier markets. The author notes that investment experts mostly agree frontier markets could provide pension funds with interesting opportunities for portfolio diversification. These same experts caution, of course, that while they believe in opportunities in frontier markets, but investors should be very cognizant of the fact that these frontier markets are very small, extremely volatile and very illiquid.

The trend of pension funds looking at emerging markets and agriculture is also underscored by the American pension industry specialist magazine, *Pensions and Investments (P+I).* It reported on 3/3/09 that the California state pension fund California State Retired Teachers Pension Fund (CALSTRS), a separate pension fund from CALPERS, is considering committing USD6 billion, or 5 percent of total assets, to a new investment portfolio that will include agriculture, fixed income, real estate, private equity, commodities, infrastructure, timber, and absolute return/hedge funds. It only stands to reason that some of these funds would be invested in developing world agriculture in one form or another (i.e. an investment in a private equity fund or hedge fund that invests in African agriculture).

In addition to the United States funds, the international pension funds also seem to be following the move towards more emerging market investing. AriPekka Hilden, the global manager of equities at Varma, the largest private sector pension insurer in Finland, said recently private equity type investments were the most interesting ones at this stage, but he also indicated real estate as an allocation to be seriously considered by pension funds in frontier markets. Logically, real estate investments in the developing world would also include agricultural land given the move by other investors in this arena and by the recent push by fund managers in general to have certain asset allocations in “hard assets” such as land.

Hedge Funds

In its typical structure, a hedge fund is an investment fund open to a limited range of “qualified” investors that is permitted by regulators to undertake a wider range of investment and trading activities than other investment funds. In other words, the investors in these funds, either institutions or individuals, are deemed cognizant of the potential risks and consequently the hedge funds can invest in virtually any asset class. The hedge funds pay a management fee to their investment manager and another fee based on overall performance of the fund. Each fund has its own strategy which determines the type of investments and the methods of investment it undertakes. Hedge funds, as a class, invest in a broad range of investments including shares, debt and commodities. Quite often, hedge funds are the most aggressive of the professional money managers and have attracted negative press in recent times some perhaps warranted and other criticism without objective merit.

Despite their general reputation for discretion, some hedge funds are publicly quoted firms and provide extensive financial information. Many general observers are under the mistaken impression that almost all hedge funds are fairly small in size and have only been in operation for the last few years. While it is true that there was an explosion of new hedge funds in the last 3-4 years, there are many long established funds with stellar reputations. Below are some of the larger more well known hedge fund managers. Note that some of these money managers operate as hedge funds as well as private equity managers.

Table 2: Ten largest hedge funds (at end-2007)

Fund	Location	Status	Firm capital (USD billion)
JP Morgan Asset Mgmt	New York	Subsidiary	44.7
Bridgewater Associates	Westport, CT	Private	36.0
Farallon Capital Mgmt	San Francisco	Private	36.0
Renaissance Technologies	East Setauket, NY	Private	33.3
Och-Ziff Capital Mgmt	New York	Public	33.2
DE Shaw Group	New York	Private	32.2
Goldman Sachs Asset Mgmt	New York	Subsidiary	29.2
Paulson & Co	New York	Private	29.0
Barclays Global Investors	London	Subsidiary	26.2
GLG Partners	London	Public	23.9

Source: *Alpha magazine/ The Economist*

The hedge fund industry went through a major retrenchment at the end of 2008. Many of the funds strategies had failed in their promise to deliver returns across the market cycle. Moreover, many of their wealthy investors pulled out funds to transfer into safer cash positions or to meet margin calls in other investments and this of course had a “domino effect” and a considerable number of the smaller hedge funds went out of business. Most industry experts observe that this was a necessary “culling” due to exaggerated speculation and therefore consolidation of the industry was necessary which is continuing to this day. The largest hedge funds, while also having suffered in 2008 along with the smaller funds, are still very active and there a number of signs that they are raising new funds in 2009 and investing in a variety of asset classes including developing world agriculture. For example, In September 2008, New York based BlackRock Inc, one of the world’s largest money managers set up a USD200 million agricultural hedge fund, of which USD30 million will reportedly be used to acquire farmland around the world.

Cliff Quisenberry, former portfolio manager at the Eaton Vance Tax-Managed Emerging Markets Fund from 1994 to 2007 now running his own fund Caravan Capital, observed that until a few years ago, frontier investing in sub-Saharan Africa and Eurasia was the bailiwick of a few dedicated funds but now mainstream investors are investing in the asset class. For a number of these investors the Middle East and North Africa nations along with the sub-Saharan region represent the next leg up in the successful expansion of market economies across the globe. Mr Quisenberry strategy is to arrive at the early stage in the development of economies. Africa is a strong area of focus for his fund. He tells investors that in 2008 five of the ten fastest-growing economies in the world were in Africa and as an example of an African success story, he and others point to Zambeef Products, a Zambian agricultural enterprise that has grown from modest beginnings as a feedlot business into a producer of poultry, cattle, grain and dairy products. Zambeef, which is apparently moving into retail in Zambia and Nigeria through a broad line of products (including Zamchick, Zammilk, Zamleather and Zamflour), and many believe it has great potential. For the past few years, industry observers note that its earnings have grown by 25 to 30 percent annually. The British hedge fund Emergent, is launching its first private equity vehicles, focusing on farmland in Africa and defense and high-tech companies in the US. Emergent’s Africa Land Fund, has plans to grow the fund to €3 billion to invest in agricultural land and livestock. Ms Susan Payne of Emergent was quoted as saying "because of its series of microclimates, its highlands, its agricultural diversity and good logistics, South Africa and sub-Saharan Africa can deliver an enormous amount of food," predicting that initial big investors in her fund will include sovereign wealth funds, university endowments, pension funds, funds of funds and wealthy individuals. "Food security will be one of the driving themes over the next few decades."

The hedge fund world tends to operate very quietly since these funds, as of yet, do not have the same reporting requirements as many of the other types of fund investors. Consequently, it stands to reason that the above cited examples are most certainly not the only investments by hedge funds occurring in emerging market agriculture given the size of some of the funds and their quest for diversification and "new market opportunities". To risk sounding repetitive, these hedge funds invest quite often with the private equity funds and as seen below there is considerable interest in developing world agriculture by this latter category of institutional investor.

Private equity (PE)

This is an asset class consisting typically of equity securities operating companies that are not publicly traded on a stock exchange. Investments in private equity most often involve either an investment of capital into an operating company or the outright acquisition of an operating company. Capital for private equity is raised primarily from institutional investors but also from high net worth individuals. There is a wide array of types and styles of private equity and the term private equity has different connotations in different countries. The most common investment strategies in private equity include leveraged buyouts, venture capital, growth capital, distressed investments and mezzanine capital. Typically, private equity firms seek to buy majority control of an existing or mature firm through the use of leverage (using debt). This is distinct from a venture capital or growth capital investment, in which the private equity firm typically invests in young or emerging companies, and rarely obtains majority control.

As mentioned, there appears to be increased interest among a number of the private equity funds in putting more money to work in the emerging market and a number of these funds are specifically focusing on the agricultural sector. Investor money has been flowing back in to the emerging-market equity funds. The magazine *Euromoney* estimated in November 2008 that the private equity funds worldwide had approximately USD500 million waiting to be deployed in investments. In the last 6 months, given the better tone in the markets, investors have contributed into these funds on a very steady basis. For the week ended 3 June 2009, the funds attracted USD3.79 billion bringing net inflows this 2009 to USD26.1 billion, said EPFR Global (a global tracker of investment fund flows).

Pensions and Investment magazine (6 April 2009), stated that a little more than one-third of private equity investors without exposure to emerging markets funds plan to invest in such funds within the next two years, according to a recent survey conducted by Coller Capital and the Emerging Markets Private Equity Association (EMPEA).

The article went on to mention that close to half, (49 percent) of current emerging market private equity investors expect to commit additional capital to emerging markets within two years. Some 37 percent of limited partners with emerging markets investments expect that their 2009 commitments will be about the same as last year, with 11 percent significantly higher and 14 percent slightly higher than in 2008.

The remaining 38 percent expect to reduce new commitments for two key reasons: Nearly two-thirds cite cash constraints, while 37 percent say they are over-allocated to private equity. Emerging market private equity investors expect higher returns from their emerging market portfolios than from their global investments, the survey found. Some 77 percent of limited partners expect net annual returns of more than 16 percent from their emerging markets private equity funds over the next three to five years, compared with 43 percent of limited partners who anticipate more than 16 percent returns for their entire private equity portfolios, the survey revealed.

"Within their (investors') private equity portfolios, they expect that emerging markets will return better than developed markets," said Sarah Alexander, president of the EMPEA in Washington. More than half of limited partners, 57 percent, stated their 2006 and 2007 emerging market private equity funds will be less affected by the global downturn than developed markets funds of similar vintages because they had much lower levels of leverage.

"The funds did not really use leverage, there were very few leveraged buyouts in the emerging markets — 70 to 80 percent are growth capital," Ms. Alexander said.

"When private equity investors ask themselves if they want to stay allocated in private equity and if so, where to put their money to work, emerging markets seems to be a good proposition," said Erwin

Roex, partner at Coller Capital, a London-based private equity manager that invests on the secondary markets.

Latin America, in particular Brazil, is attracting more private equity global investors along with venture capital interest because many countries are demonstrating a strong macroeconomic performance with sound fiscal policies for the first time. Latin America is reportedly of particular interest to PE and other investors from the Middle East. Middle Eastern private equity groups typically do not want to invest in companies with too much debt and Latin American businesses often do not have excessive leverage. In addition, it is possible in South America for Middle Eastern investors to be Sharia compliant and invest in natural resources, infrastructure and alternative energy and avoid investments in banks, alcohol and firearms companies. Biodiesel, ethanol and agriculture-related businesses are important for private equity investment in many Latin American countries. This sector is of also of special interest to Asian investors who realize the importance of Latin America as a commodity-producing region.

There is much interest specifically in developing world agriculture among the PE investors. In an article entitled *Agriculture*: *a new frontier for private equity finds* (Reuters 10 October 2008), author Reese Ewing refers to private equity investments in the Brazilian farm sector and states that this is an example of “the growing appetite from private equity funds for investing in agriculture related businesses in emerging countries by taking stakes in large farms, food processing or warehousing companies”. This is due to, the author reasons, food and commodity prices which are very likely to remain high over the near term and this is spurring interest by the private equity community in “green assets”.

In June 2008, the US-based private equity group, Crescent Asset Management, announced it was seeding a dedicated Latin America fund of USD$340 million catering to Middle Eastern investors. Two firms, Advent and Brazil-based GP Investimentos, alone raised USD$1.8 billion in 2008. Smaller private equity fund managers without the track records of those two large firms are turning to local pension funds as a source of capital. In 2008, Colombia and Peru relaxed the rules so that pension fund groups could invest and that has been a boon to the private equity industry. ISRA-Cresud, Argentina’s biggest property developer and agricultural group, is investing in agricultural businesses throughout the region, and Los Grobo, another Argentine agribusiness group teamed up with Pactual Fund Management, a Brazilian private equity fund run by billionaire Andre Esteves, to invest in agriculture in Brazil. Argentina is about to set up its first private equity and venture capital association, which will have more than 15 members. High commodity prices have helped propel Latin America forwards and an increasing number of global private equity investors are likely to see the attractions of investing in a region where the potential returns are so great. Pergam Finance, a private equity firm has recently raised USD70 million for investment in agriculture in Latin America and earlier this year, Galtere Global Farmland Fund raised USD100m for investment in farmland in United States and Brazil. In addition, the Insight Agriculture Fund is in the process of raising USD250 million for global agriculture investments.

KKR, the huge American private equity fund is reportedly sitting on over USD15 billion of uninvested capital but it is very cautious in the new investments it is making due to the still fragile global economic situation. Of these uninvested funds, about USD6 billion apiece will be allocated to Europe and the US, with USD3.1bn destined for Asia. KKR has pointed out that in the future, it will focus increasingly on emerging markets.

An Alternative Investment Market (AIM, a sub-market of the London Stock Exchange which allows smaller companies to float share) listed company, the private equity and consulting company, Origo Sino of India is in the process of raising a USD300 million agriculture fund. Origo currently manages Origo Resource Partners, a listed investment fund making private equity investments in natural resource opportunities in China and India. The investment firm believes that it is seeing a surge in interest among investors for investments in companies involved in agriculture related activities as the sector is expected not to see a slowdown in demand even though the global economy is in the midst of a recession.

The China-Africa Development Fund (CAD Fund) has granted six investment projects involving more than USD90 million since it was established in June 2008, said a CAD Fund executive. "There are almost 100 more projects under consideration, which means further investment in African countries in the future," said Chi Jianxin, president of the CAD Fund company, at a seminar on investment in African countries held in Xiamen City in the eastern Fujian Province. The fund has so far established strategic relations with more than ten major enterprises in China with a view to fully promoting business cooperation with African countries. The fund focuses investment in agriculture, manufacturing, infrastructure, natural resources exploration and industrial parks in African countries in order to enhance local sustained development.

Philippe Heilberg, chairman and CEO of New York-based Jarch Capital, leased 400 000 hectares in South Sudan, telling Reuters, in January 2009, “There’s always an issue of instability. It’s also extremely fertile land.” The Swedish investment groups, Black Earth Farming and Alpcot-Agro, along with the British investment group Landkom collectively acquired nearly 600 000 hectares in Russia and Ukraine, while Al Qudra, an Abu Dhabi–based investment company, bought large tracts of farmland in Algeria and Morocco, and is reportedly closing in on purchases in India, Pakistan, Sudan, Syria, Thailand and Vietnam.

The Blackstone Group of New York, in which the Chinese government has recently bought a stake, has reportedly already invested several hundred million dollars in the agricultural sector, mainly in buying farmland in areas south of the Sahara.

Cru Investment Management, a UK-based private equity fund has an agricultural fund investing in Malawi and it forecasts earnings of 30 percent for 2009-2010. Schroders, the asset manager, is hoping to tap into growing global demand for food production by investing in agricultural land.

For a number of fund managers, the focus of their asset allocation in terms of agriculture over the last 12-24 months has been on the growth of commodities investments. However, for UK-based Schroders Investment Management (USD$150 billion under management) and a number of other firms there is real interest in buying the land itself. The investment theory is that Schroders believes in is with the expected 44 percent growth in the global population over the next 40 years providing a hybrid fund spanning the real estate, private equity and equity markets will give strong returns to investors. The Schroder “Agricultural Land Fund” opened in May of 2008. Fund managers are hoping to deliver investors, such as pension funds and other institutional investors, a net return of 10-15 percent *per annum* over a five to ten-year period, by investing at least 25 percent of the fund in agricultural land-related equities and commodities rather than all in land. The fund managers note that while food consumption is growing, productivity improvements have slowed so part of the funds strategy is to invest in companies and funds which “will generate capital and income from the efficient management of land”, as well as holding direct stakes in agricultural land.

Rabobank, the Dutch bank with a special strategic focus on food and agriculture worldwide, closed its first private equity fund in India focused on food and agribusiness. The first closure of the fund is at USD85 million, while the target amount is USD100 million with an option to increase the fund up to USD120 million. Rabobank, the sponsor of the fund, has invested USD25 million. The lead investors of the fund are International Finance Corporation (IFC), the PE arm of World Bank, Dutch entrepreneurial development bank FMO, and DEG, a part of German KfW banking group who have invested USD20 million each. The remaining amount will be raised from private investors. According to the bank officials, the fund was raised in a record five months which they believe quite an accomplishment considering it is a first of its kind fund for the agricultural sector. The fund, registered in Mauritius and managed by India registered Rabo Equity Advisors, will target small and medium enterprises (SMEs) in food and agricultural companies and will make investments in the range of USD3 million–USD10 million each in a given company. They will take up majority or significant minority positions in the invested companies. The fund plans to invest in 12–15 companies who have revenues between the ranges of USD30 million to USD200 million. The fund plans to invest in more than 38 sub sectors of food and agribusiness identified by Rabobank which includes food processing, dairy, poultry, cold storage, seeds, renewable energy (biomass) among others. The fund is led by Rajesh Srivastava, chairman of Rabobank Equity Advisors, who has worked with Rabobank for the past ten years and has led the food and agribusiness research team of Rabobank in India for last five years. The fund expects internal rate of return of about 20 percent, which is modest compared to traditional private equity funds. Says Srivastava, “This sector needs a lot more patience. We will be content with 20 per cent IRR to start with". Rabobank has similar agriculture focused funds also in Australia and New Zealand.

The International Financial Corporation of the World Bank (IFC) is quite obviously a public sector entity but an interesting article was recently in *Pensions and Investments* magazine *(P+I)* on 28 May 2009. As it is well known, the IFC tends to focus its investments and financial assistance on the frontier regions of the emerging markets but as this article points out it often does so by making investments in private equity funds that are active in these regions. The article points out that some 60 percent of the private equity funds in which the IFC has invested are based in the countries assisted by the World Bank's International Development Association, which supports countries with the lowest gross domestic products.

More than 25 percent of the IFC's investments are in sub-Saharan African countries as of June 30, 2008. For example, IFC was a lead investor in Emerging Capital Partners' AIF Infrastructure Fund, a USD407 million private equity fund.

Over the last two months, IFC committed USD25 million to Citadel Capital's MENA Joint Investment Fund, which has a USD500 million fundraising target. The private equity fund will invest in Egypt and other countries in the region. (Citadel will invest USD250 million alongside the MENA Joint Investment Fund). Agriculture is one of the areas of portfolio focus.

IFC also committed USD17 million to Citadel's Sphinx Turnaround Fund, aimed at investing in smaller Egyptian businesses with distressed assets. For the fiscal year ending this coming 30 June 2009 the IFC will most likely end up committing between USD400 million and USD550 million in 20 private equity funds, somewhat shy of the USD800 million committed to roughly 30 private equity funds in the prior fiscal year. Unlike other institutional private equity investors, IFC must stop investing with a new private equity manager once it fully invested. Once a private equity firm becomes successful, the IFC must bow out because it cannot displace private capital in investment opportunities. As a result, in 2008, 78 percent of the IFC's private equity investments were with new fund managers.

In another example of PE interest in the agricultural sector, *Euromoney* magazine (December 2008) ran an article entitled "Agriculture: farmland is the new gold". It quoted Ian Watson, the manager of the PE fund Agrifirma Brazil, as saying "farmland is finite and had been declining over the last 20 years." This fund manager, like many, believes that owning farms is more prudent than investments in the volatile commodity markets and reasons that the upside from buying raw land and turning it into cropland had greater return potential. In another *Euromoney* article (May 2009), Mohammed Hanif, fund manager for Insparo's Africa and Middle East multi strategy fund said in terms of investments he likes infrastructure related stocks and agricultural related processing companies.

Perhaps one can summarize to an extent the degree of overall fund manager interest in the developing world agricultural sector, through an interview between the *Wall Street Journal* (*WSJ* Europe 15/06/09) and. Kevin Parker, the well respected global head of Deutsche Asset Management, a unit of Deutsche Bank AG. The *WSJ* asked "What are specific sectors that the firm invests in?" Mr. Parker responded "One area of particular interest to me is agriculture. There's enough land on the planet, at conservative productivity rates, to feed nine billion people and grow what we need to produce the energy we need. What's wrong with this picture is that there's a whole host of tariff systems and subsidies that create distortions on the global agriculture markets. Those distortions lead to a lack of capital formation around the logistics and the supply lines in the agricultural markets and also the development of farmland. As an investor, these are opportunities".

Commodities

The principal markets in commodities continue to be in Chicago, London and New York, but in some commodities there are markets in the country of origin. Some commodities are dealt with at auctions (e.g. tea), each lot being sold is physically inspected by dealers, but most market participants deal with commodities that have been classified according to established quality standards are traded on commodity exchanges, in which dealers are represented by commodity brokers. Many commodity exchanges offer options dealing in futures (futures contracts), and settlement occurs through a clearing house. As commodity prices fluctuate widely, commodity exchanges also provide users and producers with hedging facilities with outside speculators and investors all combine to make an extremely active trading market. Today, many commodities" are just blips on an electronic trading screen as investors, both institutional and private, can transact from their computers or by making a quick telephone call to their broker.

Due to a wide variety of factors besides normal supply and demand (weather, security problems etc.), there are wide fluctuations in commodity prices. Throughout history and certainly up to the present, speculators can cause serious market disruptions and this in turn results in considerable problems in developing countries, from which many commodities originate, as they are often important sources of foreign currency upon which a significant portion of the economic welfare of the country depends. On numerous occasions, a number of measures have been used to attempt to restrict price fluctuations but none to date have been completely successful. In the recent past, a number of new derivative trading instruments have been developed in the commodities arena and this has spurred the interest of new institutional investors who seek "easy access" to the markets and the derivative instruments have provided this entry point along with liquidity. According to some estimates, in the five years up to 2008, the value of global physical exports of commodities increased substantially while the notional value outstanding of commodity "over the counter" (OTC) derivatives increased more than 500 percent and commodity derivative trading on exchanges more than 200 percent. Through the first quarter 2008, the total amount of investments in commodity indices and other commodity and exchange related funds (ETFs) was estimated by *Euromoney* magazine to be between USD150 billion and USD270 billion.

From 2006 to 2008 the sharp upward spike in the prices of agricultural commodities helped attract an unprecedented amount of investor interest and their entry into the market, according to analysts, this increased demand pushed up prices further still. How much of this new investor interest was due to the "innovative derivative trading instruments" is difficult to say. It is likely that interest in commodities would have occurred in any case but the new investment vehicles certainly facilitated a number of large institutional investors entering the market or expand their trading activities. One extremely important factor in many investment decisions for institutional investors is having "liquidity" (i.e. the ability to quickly and anonymously buy or sell a position) and the commodity derivatives facilitate this investment need. Towards the end of 2008, market fundamentals changed and combined with waning demand, prices of many commodities dropped considerably. By and large, institutional investor interest in the commodity sector has been steady or even grown. In fact, there appears to be considerable interest in 2009 in this sector from a number of institutional investors, including those having a longer term investment horizon. These investors believe that worldwide population growth and rising incomes in a number of developing world countries will create more demand for certain types of foodstuffs, particularly protein, which in the form of dairy and meat products will necessitate large amounts of cereals. At the same time, as their investment thesis goes, the United States and European countries are encouraging biofuels in order to offset the rising price of oil and this creates demand for crops such as corn, hence over the long term, agricultural prices will remain high even though commodity prices have recently been fluctuating considerably with downward pressure. Many observers (including FAO) believe that agricultural commodities prices will rise 10-30 percent over the next ten years compared with their average of 1997-2006. Many financial market observers believe that a soft commodities (mostly agricultural products) boom will continue and will be driven by long term higher demand and constrained resources. For many, a perceived structural shift in food prices is underway and the reasons are global population growth, water scarcity, changing diets and also due to the shrinking of farmable land worldwide.

The investment case for agricultural commodities has become, therefore, a compelling one for many institutional investors. In addition to the "fast money" of the hedge funds and other such market players who enter a market, make large speculative bets, then sell their positions and exit, commodities are also attracting the more conservative "main stream" investors such as the large international pension funds. For example, CALPERS , the largest pension fund in the United States, announced it would increase its investments in commodities from USD450 million as at the end of 2007 to over USD10 billion by 2010 (Euromoney April 2008). Even the cautious investor Massachusetts Pension Reserves Investment Management Board, Boston, recently invested USD150 million in Denham Commodity Partners Fund V LP, a USD2 billion private equity fund focused on the energy and commodities sectors. In the same article, JP Morgan is quoted as saying that hedge fund involvement in the commodities markets could rise to USD200 billion in the next few years. In anticipation of this marker growth, the large financial institutions are ramping up their commodity trading capabilities particularly in the derivative side. To cite an example, the French bank BNP recently made several key hires in this area and will rapidly expand its commodities trading team according to industry sources. Rabobank of the Netherlands, once known as a more conservative international agriculturally oriented bank is also very active in commodity derivatives. Rabobank offers a wide range of OTC derivative products to meet the specific hedging needs of its food and agribusiness clients. The range of agricultural commodities covered is comprehensive including commodity price swaps and commodity price options. These are just two examples of expansion in this area and it is being done to serve the trading needs of the various intuitional investors coming into the market

Agriculture and agricultural commodities are also gathering the attention of investors as an inflation hedge as echoed by Tim Owens, global head of commodity solutions at JP Morgan (*Euromoney* 8/9/08). Owens believes that fear of a resurgence in inflation will also put upward price pressure in the agriculture sector worldwide and much of this will occur through the commodities markets. The Financial Times in an article dated 26/4/09 entitled "Still sound reasons to invest in agriculture" underscored the interest of the longer term investors in the sector. The manager the Julius Baird agriculture fund is quoted as saying that they have found more of their clients are prepared to invest in agriculture be it in commodities or in agricultural equities. Farmland is cited as a "real asset and an inflation hedge" by Richard Warburton, head of Agricbusiness at Bidwells, a specialist consultancy.

A very recent development in the commodities market is that Investors should expect tighter regulatory oversight of oil and commodities trading as politicians in the United States and Europe are talking about cracking down on gyrating metal, farm and energy prices. The more conservative and longer term investing institutional investors typically welcome more judicious oversight and regulation in the markets in order to lessen the chances of speculative bubbles. Market observers point to the fact that many in both the developed as well as developing world are concerned about rising commodity prices and the speculators could help push prices to record highs like in 2008. In any case, it is widely expected that the commodities arena should see a great deal more of institutional investor participation in one form or another.

Banking Institutions

As mentioned above, it is difficult to segregate the commercial and investment banks into a separate investor category particularly as today's "universal banks" operate in most investment categories. These big banks are engaged in commercial lending, investment banking, and asset management, private equity, manage in-house mutual funds operate hedge funds through their "prop" (proprietary) trading desks and also have large commodity trading departments. In reality, the large commercial banks are just another "money manager" that also happen to lend money and do retail banking as complementary business lines.

Historically, most countries in the developed or developing world have had their agricultural banks with the obvious mission of providing financing to this key sector of any given economy. To a large extent, particularly in the developing world this the tradition of agricultural banks continues today but the majority of these banks are influenced greatly if not owned outright by the country in question and therefore not in the private sector investor category. The recent worldwide financial crisis has cut the profitability of agricultural banks and other commercial banks. In general, however, the agricultural banks worldwide performed much better than their banking peers as they were engaged in less speculative and highly leveraged lending. In fact, the strongest financial performance emerged from smaller agricultural banks both in the United States as well as in Europe. In the US, The Federal Reserve defines agricultural banks as commercial banks with agricultural loans accounting for more than 14 percent of their loan portfolio which is largely an accepted benchmark among the international agricultural banks as well. Despite their profitable results, agricultural banks worldwide have tightened lending standards to preserve capital and manage more closely the perceived risk arising from the economic downturn. Agricultural banks continue to originate agricultural loans however, they are increasing collateral requirements and reducing maturities on new loans and this is having obvious effects on borrowers worldwide particularly the small farmers in the developing world. While it is too soon to make a definitive analysis, it seems that these more rigid lending standards on agricultural loans to the developing world will result in fewer loans made unless governments back the banks with some sort of government guaranty or insurance programs. To fill the gap, the World Bank and the IFC are increasing their lending at this point and the hope is that the commercial banks over time will, expand lending in the developing world.

As outlined before, the international commercial banks that specialize in agriculture (Rabobank, Crédit Agricole, etc.) are making a strong push into the microfinance sector and their asset management subsidiaries are investing, like other institutional investors, in the emerging market agricultural sector. The international commercial banks are also making a push into rural Africa which some bankers view as the last untapped banking market. The focus, along with microfinance, seems to be primarily on the "less risky" retail banking and while most emphasis is on the urban areas, a number of these banking services are also being provided in rural agricultural regions. Barclays is doing this in Zambia, Guaranty Trust in Nigeria, the Portuguese bank BCP in Mozambique, Standard Bank in the Democratic Republic of the Congo and Citibank in Senegal. The banks' strategies are to convince local farmers to open bank accounts and it is optimistically thought that this will eventually motivate these foreign banks as they become more familiar with the local environment, to increase outright lending in the agricultural sectors in these countries given the enormous need for project finance and infrastructure lending. The international investment banks, the few that still exist, are mostly active in the developing world agricultural sector through their money management entities, "prop desks", private equity departments and of course through their strong capabilities in the commodity trading markets. It was recently reported that the United States investment bank Morgan Stanley bought a large tract of farmland in Ukraine and is also considering other acquisitions in other geographic locations.

Agribusiness

This sector involves companies whose lines of business include the production, processing and trading of agricultural and horticultural products and foods including the supply of input materials. By definition, international agribusiness firms are very much involved in developing world agriculture. The larger global firms, Cargill, Dreyfuss, Bunge, Monsanto, Archer Daniels, Nestle, Syngenta etc., have substantial presence and operations all over the developing world. These agribusiness conglomerates have so much control over markets and infrastructure that they have regularly been accused of manipulating prices on a world scale to bolster profits. Others say that large agribusiness companies are providing jobs, expertise and investment in the developing world and without them these countries would be in an even more problematic situation in terms of their agricultural development.

Cargill, the largest firm in the United States agribusiness field, had revenues of USD120 billion in 2008 (numbers are down considerably through first quarter in 2009), and has operations in 67 countries around the world. The other large global agribusiness companies also had banner years in 2008, and although profits are down so far in 2009, it is agreed in general that the agribusiness sector as a whole has a very positive outlook. The American rating agency Fitch has the view that "solid liquidity will help the United States agribusiness sector maintain its stability through 2009," (Fitch Ratings' United States Agribusiness Outlook 2009). The report goes on to say that "well-diversified product lines and vast geographic footprints will also support the sector through the global demand slowdown. Agribusiness companies' internally generated liquidity and cash flow have improved dramatically since mid-year 2008 as agricultural commodity prices have tumbled from their peaks. Credit metrics are currently strong for the investment-grade agribusiness sector and they are well positioned if earnings weaken during the recessionary period". The outlook is similar for the large international agribusiness firms as well. Other observers note that the industry fundamentals cannot be disputed: the global population is clearly growing and demand for food products will consequently continue to rise and the agribusiness sector, while subject to swings in earnings, will continue to prosper in the future.

Rabobank's well respected industry analysts (Rabobank News 2/5/09) acknowledge that the majority of food and agricultural products are grown and consumed locally. They predict the international processed food industry will be a big growth sector for agribusiness in the future. The Dutch bank believes that food processing in Asia, in particular, will be a substantial growth market. The issue is, over time, how much of this food processing will be done locally (Asia, Africa and Latin America) as opposed to large plants in the industrialized world.

In the *Wall Street Journal (WSJ)* (US Eastern edition 27/05/08) appeared an article entitled *Agriculture's last frontier: African farmers, US companies try to create another breadbasket with hybrid.* The *WSJ* article stated that in addition to the large agribusiness companies trying to sell hybrid seeds and other related products in the developing world, the industry is now attempting to sell tractors and other capital goods in certain parts of the developing world which is a divergence from the past when these companies often avoided these markets due to political instability and the perception that there was not a sufficiently large customer base which could afford their products. According to this article, this is starting to change. "Africa is the only continent where per capita food production is declining, so the need is there," says J.B. Penn, the chief economist of Deere & Co. and a former undersecretary at the U.S. Agriculture Department. The present food crisis "is solved only through higher production," adds Paul Schickler, president of DuPont Co.'s Pioneer unit. "That is what is needed in Africa, through the use of better technology, genetics and agronomic practices." The view of Mr Schickler and others is that with global grain surpluses down, demand rising and certain prices set to soar, that the market fundamentals have changed and it makes sense to increase operatons in Africa and other developing world countries. In one way or another, agribusiness will continue to be heavily involved in developing world agriculture but it remains to be seen in what exact forms over time and how much local investment will be done by these companies particularly in the agricultural infrastructure which is deemed crucial for further local economic development.

4 CONCLUSION

This paper, in its limited scope, has sought to outline in general terms the current level of private sector institutional investor involvement in the agricultural sector of the developing world. Based on the nature of the international financial markets and the profile of some of the investors themselves, obtaining an exhaustive amount of reliable information which tracks these investments is not readily available. As a consequence, it is not possible to assign an exact "dollar amount" neither on the total investments nor the number of institutions involved in this market segment. That said, based on the review of the data presented and discussed above, there is sufficient empirical evidence that confirms the substantial interest in developing world agriculture by a wide and diverse swath of institutional investors. Credible information has shown that the Sovereign Wealth Funds (SWFs) are acting with private companies and have been buying/leasing large tracts of farmland in the developing world. These same SWFs are allocating more of the funds they hold under management to outside international money managers who are, in turn, increasing their investment "buckets" to include more developing world agriculture exposure.

The data presented also demonstrates that the international private equity (PE) community is investing more and more in the sector as they seek diversification and perhaps a new found appreciation for "hard assets" in light of the derivative debacle that occurred in a number of markets over the last year or so. These investments by the PE funds seem to know no geographic bounds as deals have been reported and announced in Sub Saharan Africa, Asia and Latin America. The PE sector has also increased its exposure to the micro finance world, which by almost all estimates, is booming and this should continue in the near and long term. The private international banks are also increasing their investments in microfinance and are providing much needed capital in this sector as well as commercial expertise particularly in the more credit intense segment of agricultural microfinance. The banks are also expanding their retail banking operations in certain agricultural areas of the developing world with the hope that over time this will turn into more agricultural project lending. The larger commercial banks, we have seen, are diversified financial conglomerates and are acting as money managers, commodity traders and investors in developing world agriculture in a number of ways.

The paper has also evidenced that the historically prudent international pension funds have also been expanding and diversifying their portfolios to include more developing world agriculture exposure be it in the form of commodity trading, investments in micro finance, or investments in private equity funds which in turn invest in agricultural companies or purchase developing world farmland. As seen, the recurrent theme in this paper has been to emphasize the substantial amount of "cross investing" between the various investor classes through a wide array of different assets or products. It is clear from the above discussion that institutional investors are becoming an important component, financial or otherwise, in developing world agricultural. But what of the potential benefits and downside of these investment flows to the developing world recipient countries? There are those who are enthusiastic exponents and champion, in their view, the positive aspects of this investment phenomenon by pointing out to potential benefits such as: employment creation (for direct investments), technology transfers, introduction of private sector "know how" and sustainable business models, international market access, skills development, local funding, fostering economic linkages and more transparency. Those more wary of these investors (or certain of these investors) cite possible pitfalls such as: the creation of monopolies/cartels, manipulation of markets by speculators and financial players, undermining local businesses, land grabs, displacement of local farmers, local food insecurity, exploitation and damage of local natural resources and the risk of social instability.

Despite the controversy that sometimes surrounds certain aspects of the private sector, it is nevertheless a general consensus among most involved stakeholders that the private sector intervention in one form or another is not only a growing reality but is, in fact, a necessary and important partner for the long term growth and sustainability of the developing world agricultural sector. Simply put, it is highly likely that institutional private sector investors will continue to be an important part of the financial and economic landscape in these countries, as long as the investment climate is favourable and gives proper financial incentive to these investors for the estimated risk involved. The immutable fact is that spurring private sector involvement, both external and internal, is critical to the successful long term socio-economic development for any given country and in any given economic sector.

So what can be done at this juncture by FAO *vis-à-vis* the private sector and its investments in developing world agriculture? It is recommended that FAO actively expand its engagements with the private sector on a regular and ongoing basis. A policy initiative could be to set up a "private sector liaison desk" which would be the focal point of FAO interfacing with the private sector. The desk could have the mission of being the contact point for both the private sector interested in making developing world agricultural investments and for countries in the developing world seeking FAO expertise and advice on how to deal with these investors. The desk could closely and actively monitor the investments of the private sector and take on the dual role of an information provider to member countries and to the private sector. Perhaps FAO, in this role, could eventually influence and help develop a code of conduct for private sector investments. Another strategic recommendation would be for FAO expand its contacts and enhance its dialogue with the various private sector investors through a series of meetings in Rome. Naturally, the investors chosen for these meetings should be those of a certain reputational standing in the international financial community. Since a number of these investor groups have different investment goals and styles it would be more productive for all concerned to "split up" these encounters. For example, one such meeting could have pension funds and global asset managers. Another could have the sovereign wealth funds and their private sector partners. Another still could have the private sector financial institutions involved in microfinance. Smaller and more focused meetings would likely be better received and more productive to all concerned. Above all, what is needed is regular and direct contact with these private investors and the window of opportunity for this important initiative is open now.

One fact remains at this stage. It is well-established that the private sector is present and necessary in developing world agriculture. FAO has the expertise to be a key stakeholder as the market process continues to unfold and further engaging the private sector investors in a concerted and proactive manner would undoubtedly be a major benefit to all parties involved.