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## **2015 Global Food & Agriculture Investment Outlook: Institutional investors meet farmers**

Strategic review of the investment landscape across the asset class,  
with an up-to-date analysis of the major asset categories  
and a special section on South America's challenges & opportunities.

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“ Investing in agriculture represents a significant opportunity in terms of return and diversification benefits to a portfolio.

## Editorial

The food & agriculture asset class:  
A long way from alternative to mainstream

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As we start 2015, a review of the developments in the food & agriculture (F&A) investment world makes us to believe that this emerging asset class continues to grow in size and depth and it remains one of the bright spots in the alternative investment space.

2014 has seen new raised capital across the private equity and venture capital space, more farmland investments, notably in North America and Oceania and solid performance on the trade finance side. A large number of M&A deals are also testimony to this growth. Despite these positive developments, we also note that fundraising has proved challenging, especially for managers established in emerging markets.

A year ago, we had predicted a period of stabilization in the value of F&A assets, which was for a good part reflecting a moderation in some of the main growth drivers of the last decade. Fast-forward one year, the sharp drop in agricultural commodities is affecting farmers' income with the expected pressure on farmland valuations and several segments of the agribusiness equities' universe.

Also the CIS agribusiness sector is under stress following the Ukraine's conflict and the sanctions on Russia. Elsewhere the broader financial uncertainty over the future of global economic growth and monetary policies are worrying retail and institutional investors.

But we also said we expected a new phase, one that would be increasingly connected to investing capital to improve productivity and efficiency along the value chain, with increasing focus on sustainability. The growth of the ag-tech space reflects this trend.

As we enter into 2015, we hold on to this view, as the structural trends that are shaping our industry remain intact. Even when the lower global economic growth and the ease in food prices have moved away some focus on climate change and food security, our planet and its people are prone to face future challenges to secure sustainable supplies of healthy food.

In a recent event, the Land O' Lakes CEO projected that F&A would be the growth industry of our generation. Carlyle Group's co-founder David Rubenstein, during the firm's 2Q earnings call back in July, said the agribusiness was one of the greatest areas for private equity. Silicon Valley, as well, is pushing into every stage of the food-growing process.

Indeed, from an asset management perspective, after the recent volatility seen in the global financial markets, investors face the hard reality that stocks & bonds still look expensive. We believe that the rise of the food & agriculture asset class since the financial crisis is only the beginning of a long-term shift in investor behavior towards this space.

To reach there, however, the sector has still a long way to go to demonstrate to the investment community its ability to deliver adequate returns. We also place emphasis on the imperative to maintain the highest level of character in investment practices and business ethics across the food & agriculture sector. We hope you enjoy the reading!

“Over 240 investment funds specialized in food & agriculture investments manage \$45 Billion in assets.

#### Highlights from the study

- The F&A value chain provides an ever-growing pool of investment opportunities. At present, over 240 funds are operating in the food & agriculture sector, against 33 in 2005. As of 2014, these funds manage around \$45 Billion in assets.
- The sector has attracted the attention of institutional investors – Pension funds, endowments, SIFs and family offices are increasing allocations to this sector.
- The number of funds is growing in all types of assets – including listed equities, commodities, farmland, private equity, venture capital and structured trade finance.
- The institutionalization of the asset class is also driving innovations in terms of investment strategies and capital structures.
- In South America, the political leadership across the region faces the end of the commodities' boom and declining growth. The sector has the ability to promote investments and sustain economic growth. The local policies and the regulatory framework for the sector will largely determine its future performance.

## Executive summary

### The background

- **The food & agriculture asset class includes over 240 investment funds that manage close to \$45 Billion in assets, based on Valoral Advisors' proprietary database.**
- **After several years of relative high prices of agricultural commodities and appreciation across the asset spectrum, a combination of lower crop prices and worsening macro conditions across developed and emerging markets has closed a phase in the life of this emerging asset class.**
- **This context creates attractive opportunities in several asset categories and regions for long-term investors.** Indeed, the asset class has attracted institutional investors' attention: Pension funds, endowments, sovereign funds and a large range of family offices are assessing opportunities and committing allocations to this sector.

### The asset class goes institutional

- **Pension funds across North America and Europe are among the major sources of fresh capital to the sector**, in a trend that reflects an evolution in their investment models and their allocation strategies.
- **Some of the largest sovereign wealth funds have also launched dedicated strategies** to pursue long-term investments across the global F&A value chain. In contrast to previous investments pursued by SIFs in the past that targeted exclusively farmland, this time they are taking a broad view across the entire value chain.
- **Trading houses are also active players:** Besides the "ABCD" group, a new group of Asian regional champions has emerged with the ambition to become global challengers. The group, often called "NOW" includes Noble, Olam and Wilmar. COFCO, from China, is also cementing a leading role after acquiring stakes in Noble and Nidera.
- **The Japanese trading houses have been expanding also their footprint in the global agriculture space.**
- With a much lower profile but with growing appetite for agricultural exposure, family offices from around the globe are increasingly looking to allocate capital to this space.
- **Despite the differences across the institutional capital spectrum in terms of mandates and approaches, all these investors share one thing in common: they are willing to increase their agriculture exposure but they face difficulties in allocating capital and the timeframe to do this will probably extend over the next years.**
- **Asset managers are bringing innovations to tackle investors' concerns** by i) enlarging the pool of available opportunities to increase liquidity, ii) developing innovative capital structures, iii) incorporating direct investing and co-investing into the deals, and iv) building institutional track record and strengthening governance.
- **Sustainability factors are being integrated into asset management practices**, as pension funds and development finance institutions (DFIs) contribute to the discussion of responsible investing across the global agriculture sector.

### The assets' spectrum

- **Listed equities:** In the listed equities' universe, we track 46 funds and ETFs with total AuM of around \$13.6 Billion, which invest across the F&A value chain. 2014 has seen growing appetite for packaged food & ingredients and food traders and processors, against a drop in interest for ag machinery.
- **Agricultural commodities:** In the commodities' space, 2014 has been another tough year as supply and demand factors and a worsening macroeconomic outlook combined to send prices of grains and oilseeds to the lowest levels in many years. Coffee and cocoa were the exception. In this context, we continue to favor absolute return strategies that take advantage of arbitrage opportunities against long-only investments.
- **Farmland:** Farmland assets continue to attract capital - Valoral Advisors tracks over 70 farmland investment funds that manage in excess of \$15 Billion.
- **Interest among institutional investors in global farmland portfolios is high, following the capital appreciation of the last decade.** During those years, farmland prices in the U.S. and in the other major agricultural countries rose driven by a robust growth in global food demand that triggered a rush by global investors to secure land.
- **The rapid appreciation ended in 2014 as the sharp drop in ag commodity prices reduced farm income across major regions.** As we start 2015, current valuations in certain markets imply a fairly to fully priced market.
- **Against this bearish short-term outlook, we believe there are relative value opportunities** in several markets and commodity segments, beyond the mainstream crops and prime regions.
- **But more importantly, in a world of lower farmland appreciation, we believe that farmland investments should not be seen as a way of parking money in a safe asset, but as active investments to deliver income.**
- **We believe that permanent crops can be an attractive component to a diversified agricultural portfolio** for a variety of reasons, including their ability to deliver potential higher income and a long-term investment horizon. Institutional investors are taking notice and are expanding allocations to permanent crops, notably across the U.S. and Australia.

## Executive summary (cont.)

- **Private equity:** The F&A private equity sector, excluding farmland investments, is also expanding: At present, there are more than 40 PE funds specialized in this sector, with close to \$8 Billion in AuM.
- **Paine & Partners, Arlon Capital Partners and NGP Global Agribusiness Partners** are among the North American PE funds that have raised capital in 2014. Other funds are growing across Europe, South America, Africa and Asia.
- **Venture capital:** The ag-tech VC space emerged as one of the hot spots of 2014: The need to produce more food on scarce land resources, the emerging co-existence of food production with biomass for energy or chemicals production, and the convergence of ag-tech with industrial innovations has made agriculture an attractive theme.
- **A compilation of funding rounds closed in 2014 by selected companies that are active in technological innovations along the F&A value chain show 41 companies raised over \$570 Million. Silicon Valley investors were behind much of this capital.**
- **But Ag-tech VC investments go beyond North America:** New funds have set-up recently in Europe, Israel, New Zealand and India, targeting local technological innovations and aiming to expand them internationally.
- **Large ag corporations have also developed their own venture arms to take part of this innovation wave:** Monsanto Growth Ventures, Syngenta Ventures, Dow Venture Capital, DuPont Ventures, BASF Venture Capital, GE Ventures and Intel Capital are some of the big names that are collaborating with entrepreneurs and start-ups.
- **Agriculture trade finance:** Agriculture structured trade finance has expanded quietly during the 2000s as global trade grew dramatically. We track 10 specialized funds with over \$1.2 Billion in AuM.
- **But what happened after the 2008 financial crisis finally positioned the asset category in the global investment universe.** The credit crisis and new banking regulations resulted in a reduction of capital available to the market. At the same time, institutional investors placed greater interest in alternatives such as structured trade finance to compensate for the record low yields in traditional fixed income.

## 2015 Investment outlook

- As we start 2015, the most repeated word to describe the future investment outlook among bankers is “divergence”, referring to the divergent economic paths among the most important developed and emerging economies.
- **While we recognize that the momentum into 2015 has weakened, we continue to see opportunistic entry points to position ahead of expected improvements from 2016 onwards**, as a new investment wave will gradually take shape in the global F&A space.
- We believe investors can take this opportunity to design an investment strategy to profit from the next investment wave – this requires an in-depth understanding of the different dynamics across regions, products and segments in the value chain.
- We also believe that asset managers working in this space should focus on building bulletproof business cases and on providing the institutional platform and institutional capabilities increasingly required by investors.

## South America’s food & agriculture investment outlook

- **In South America, political leaders across the region will have to deal with the end of the commodity boom and the reversion of capital flows, which have already resulted in declining growth.**
- **The food & agricultural sector has the ability to promote investments and sustain economic growth.** In this context, the local policies and the regulatory framework for the sector will largely determine the development pattern in each country.
- **We see Chile, Colombia, Paraguay and Peru as the countries with the best fundamentals and outlook. We also believe that Brazil is an attractive market in the medium term. The Oct’15 presidential elections in Argentina will largely define its future.**
- **Valoral Advisors’ preferred investment themes reflect innovations in the food & agriculture business and the evolving economic landscape across the region. Our five themes for 2015 and beyond span the regional food & agriculture value chain:**
  1. Permanent crops & agricultural frontier development across the Pacific Alliance: Chile, Colombia and Peru.
  2. Regional production hub of high quality beef for export markets in Uruguay, Paraguay and Argentina.
  3. Credit strategies in origination and project / equity finance across the region.
  4. M&A opportunities in the broader food & agricultural value chain in Brazil and the region.
  5. Market penetration of new ag technologies at the confluence of hi-tech, bio-tech and renewable energies.

## The forest and the farm: Opening the gate to institutional investors

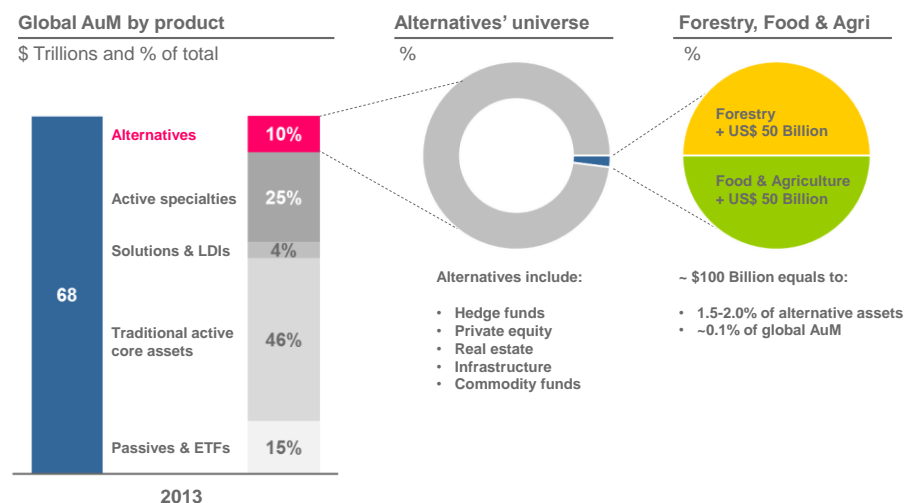


Forestry and agriculture assets have been traditionally considered alternative real asset investments according to institutional allocation models. Despite their similarities, so far institutional investors have privileged forestry assets.

In recent decades, forest investments have grown increasingly attractive to investors looking for asset diversification and competitive risk/return characteristics. A number of timberland investment management organizations (TIMOs) and public timber REITs emerged to tackle this demand.

Nevertheless, timberland is still a small asset class in which close to \$50 Billion is invested by institutions today, a similar amount as the one invested in food & agriculture, as illustrated in chart 1. We can say that both asset classes remain a very small fraction of the alternative investment universe.

**Chart 1: The forestry and the food & agriculture alternative investment space**



Source: BCG global asset management 2014, Valoral Advisors and other sources.



**The comparison between forestry and agricultural investments can bring light to institutional investors to better understand their similarities and differences and thus facilitate their allocation process.**

The two assets have indeed many similarities, with both intrinsically linked to land and depending on biological growth for the larger part of the yield. However, one basic difference is that forestry is less vulnerable to price volatility as the trees can simply be kept if prices are unattractive, while most agricultural products have to be marketed soon after its harvest.

A further significant difference is that the returns on forestry investments have been driven almost entirely by biological growth, with a minor portion driven by changes in the land value. That is very different from farmland, where the returns come from both biological yield and capital appreciation.

Moreover, forestry assets usually enjoy a larger scale as the sector is more concentrated, compared to the highly atomized agricultural business.

All these reasons help to explain why institutional capital was quicker to enter the forestry space. Nevertheless, we notice that the past reluctance to invest in agriculture is giving way to a gradual allocation to the sector, as institutional players understand the attributes of the sector and develop suitable investment models.

## 2014 in review: Investment highlights of the global food & agriculture space

2014 will be remembered as a pivotal year in the global F&A investment space.

After several years of relative high prices of agricultural commodities and solid appreciation across the asset spectrum - including equities and farmland – a combination of lower crop prices and worsening macro conditions across developed and emerging markets has closed a phase in the life of this emerging asset class.

More broadly, commodity prices, oil prices and emerging market currencies, which had climbed to high levels in previous years as quantitative easing across developed nations suppressed volatility and encouraged risk taking, have come down quite dramatically toward the end of 2014.

As we discuss in this study, we consider this context creates attractive opportunities in several asset categories and regions for long-term investors.

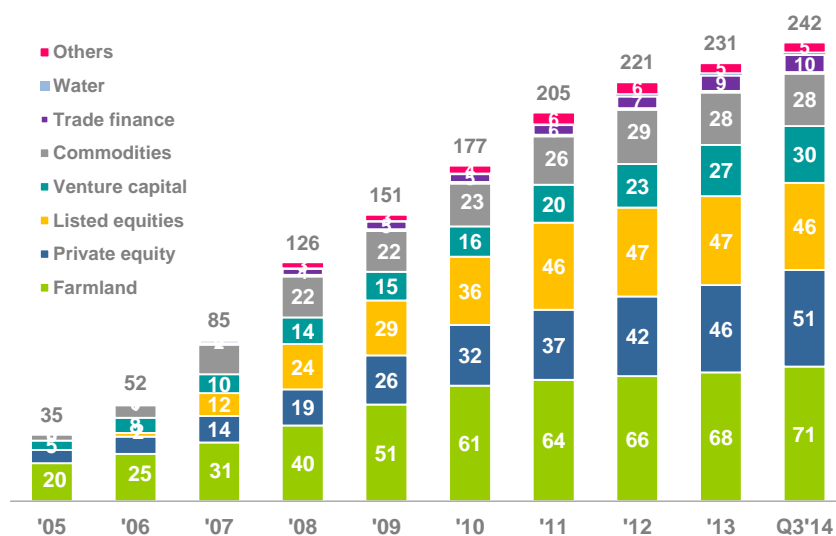
**At present we track 242 funds that invest exclusively in F&A assets around the world, without considering forestry funds. We classify these funds in seven groups according to their main investment targets:**

- **Listed equities:** Funds which invest in listed companies focused on the F&A industry.
- **Farmland:** Funds dedicated to acquire and/or lease farmland mainly for row crops, permanent crops and cattle production.
- **Private equity:** Funds that invest in established companies operating along the F&A value chain.
- **Agricultural commodities:** Investments in grains, oilseeds and other soft commodities through futures markets.
- **Trade finance:** Funds that provide structured trade finance solutions to companies in the sector, mainly to commodities processors and traders.
- **Venture capital:** Funds that invest in start-ups and early stage companies that are developing innovative products and services in the ag-tech space.
- **Others:** Investments in water and mixed strategies.

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We consistently add to our proprietary database new funds that target exclusively the food & agriculture space.

**Chart 2: Food & agriculture investment funds tracked by Valoral Advisors**



Source: Valoral Advisors.

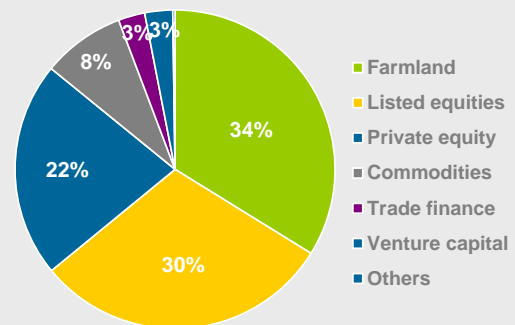
## Farmland funds take the lead...

Investors realize that farmland is one of largest beneficiaries of the structural trends that are shaping the global F&A markets. On the other hand, listed equities retain their attraction as a convenient way to get exposure. At present, both asset categories combined represent 64% of all AuM in our survey.

Next to them, private equity funds are growing steadily as the sector is attracting the largest private equity houses and their investors. In contrast, investors have been fleeing from commodities as the markets continued to slide during 2014.

The last two categories, venture capital and trade finance, are rapidly becoming relevant categories on its own, as both benefit from two strong trends: the convergence of innovative technologies around the ag-tech space and the growing need for working capital finance - especially in emerging markets.

Chart 3: AuM by investment target



Source: Valoral Advisors.

## North America remains at the top...

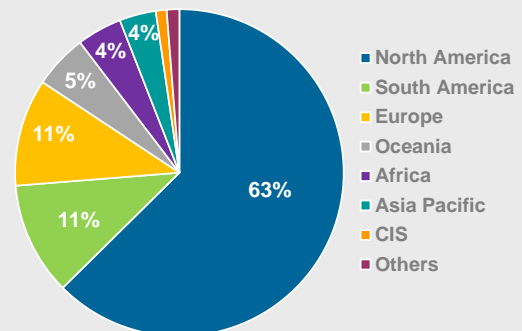
If we look at the main target region by fund, North America is the leading destination with 63% of total AuM in our survey.

North America has consistently represented in excess of 60% of the total AuM that we track over the years. This trend is supported by investments across all major asset categories.

Even as U.S. farmland prices have recently peaked and look like trending downwards and farm income is expected to drop following the lower commodity prices, several U.S. farmland and private equity funds have continued to raise funds.

Looking into 2015, we believe the private equity and ag-tech VC space will lead the growth in terms of AuM.

Chart 4: AuM by main geographical destination



Source: Valoral Advisors.

## But the asset class continues to expand worldwide.

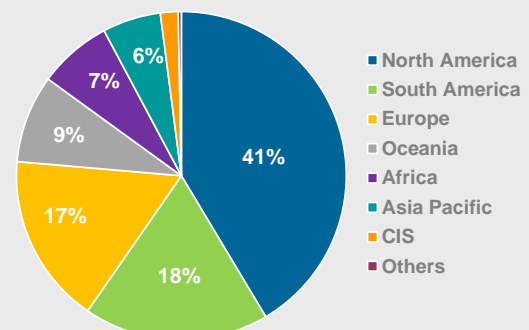
We prefer to exclude commodities and listed equities to look at the evolution of other regions, as these two asset categories are largely concentrated in the North American markets.

North America remains the leading destination for investors, but other regions gain importance. South America remains one of the most pursued markets, despite the recent headwinds from lower commodities' prices and weaker macro conditions.

Europe is consistently attracting interest from both institutional and private investors. Farmland assets across Eastern European countries that are part of the EU28 are in demand and the regional private equity and venture capital sectors continue to grow.

Australia and New Zealand are also growing destinations for F&A investments as they capitalize on their low risk institutional profile and the strategic position as food supplier to China and the Asia Pacific markets.

Chart 5: AuM by main geographical destination excluding equities & commodities



Source: Valoral Advisors.

## The geo-allocation matrix: Tracking global capital flows

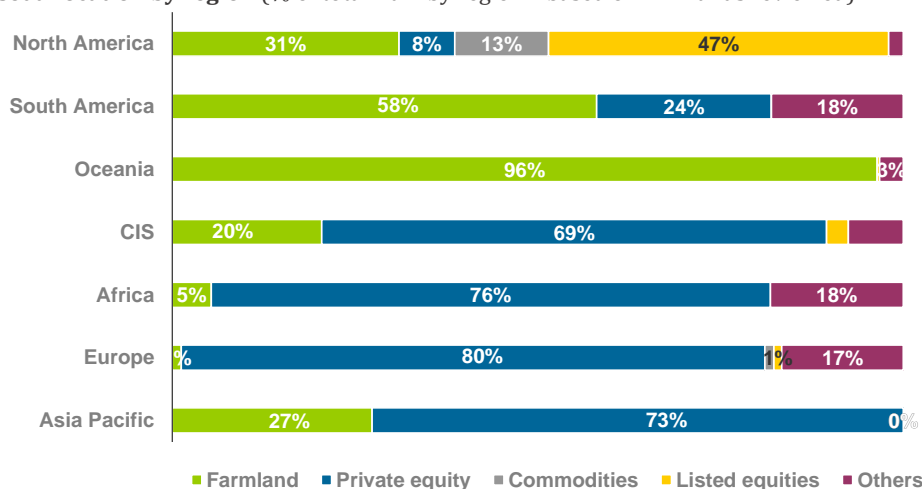
**The F&A asset class is not homogeneous: The major regions around the globe show different allocation patterns that reflect their competitive strengths and their attributes for private and institutional capital.**

The chart below aggregates the asset allocation mix by geographical destination for all the funds analyzed. From this perspective, the U.S. shows a diversified allocation profile, which reflects the relevance of its equities and commodities markets as well as its vast and developed farmland market.

We can identify a second group, which includes South America, Oceania and CIS, all regions that are traditional agricultural exporters, with vast agricultural areas, high productivity and with historically low production costs. We call it the “land of opportunity” as most investments are directed towards farmland. Although the CIS numbers show a higher proportion of private equity investments, this hides two specific aspects of Russian agricultural investments. First, several private equity funds in the country in fact invest also in farmland assets. Second, there are large companies with extensive farmland holdings that are not considered investment funds although they look very much like them.

The third group comprises Africa, Europe and Asia Pacific. There is no doubt these are very different regions, with a high contrast in social conditions, available infrastructure and investment environments. However, they have one thing in common: food & agriculture investments in these regions are mostly oriented towards the associated inputs, services, food processing and infrastructure through traditional private equity strategies.

**Chart 6: Asset allocation by region** (% of total AuM by region – based on 242 funds reviewed)



Source: Valoral Advisors.

“ The asset class is rapidly expanding into every corner of the world.

**Even when the asset class is only now emerging as an alternative for institutional investors, at present it is possible to find a broad array of investment managers and direct investment opportunities across regions.**

As far as allocations are concerned, our analysis points to continued caution among institutional investors and a preference to pursue opportunities in markets with low political risk and clear enforcement of the rule of law.

“ The South American food & agriculture investment landscape is quickly adapting to the new reality in the broader markets.

North America and Oceania remain attractive destinations, not only for farmland investments but also for more traditional private equity deals and ag-tech innovation.

**South America continues to attract interest even if the uncertainty surrounding the emerging markets mean that during 2014 capital flows into regional food & agriculture assets took a pause for the most part.**

Having traveled extensively around the region during the last months and having met with many local managers and farmers, we believe the region is adapting to the new realities in the global markets and the local context – political, regulatory and economic. We expect this process is likely to attract a new wave of investments in food & agriculture assets that will take full shape in the next 6 to 18 months (more on South America from page 36 onwards).

## Global investment news: A roundup of news affecting global food & agriculture investments

### North America

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**ADM paid \$170 Million for Specialty Commodities** - ADM unveiled the purchase of Specialty Commodities in the latest of a spree of deals, which expands the group's exposure to markets deemed higher margin than bulk grains.

**CF Industries called off merger talks with Yara** – The discussions with Norwegian rival Yara International to create a \$30 Billion fertilizer giant ended as the two nitrogen groups had been unable to agree terms on a tie-up.

**Ingredion acquired Penford Corp. for \$340 Million** - Ingredion, formerly known as Corn Products International, agreed to buy specialty ingredient maker Penford Corp. for \$340 Million. Penford, which makes ingredients for food and industrial production, will offer Ingredion the ability to produce new and higher-value added products.



**ADM sold chocolate arm to Cargill** - ADM reached a long-awaited agreement over the sale of its chocolate business to rival agribusiness giant Cargill, which paid \$440 Million, in the latest of a series of investments in the sector.

Late in 2014 ADM also agreed to sell its global cocoa unit to Olam for \$1.3 billion - including facilities in Brazil, Canada, Germany, Ghana and Singapore.

ADM and Cargill are believed to have come close to a deal for the combined operations, for which a value of \$2bn was reported, before fears of triggering antitrust concerns prompted them to focus on the sale of the chocolate operations only.

**Earlier in the year, ADM acquired ingredients group Wild Flavors for \$3 Billion and the outstanding 20% in German grain trader Toepfer International.** The acquisition of Wild Flavors allows ADM to expand up the food chain into higher-value food products, which the company sees as one of the largest and fastest-growing consumer trends in both developed and emerging markets.

**Lindt expanded in the U.S. with their largest ever deal** - Lindt & Sprungli unveiled its biggest and most important strategic acquisition ever, of US-based Russell Stover Candies, increasing its presence in a North American market where it is already growing at double-digit rates. The Swiss-based group said it would greatly enhance its status in North America's chocolate market, the world's biggest, by buying Russell Stover Candies, lifting to third its rank in the region's chocolate makers, behind Hershey and Mars.

**Monsanto considered \$40 Billion Syngenta Deal** - Although the transaction would have allowed the U.S. firm to move its tax location to Switzerland, it also raised concerns about the strategic fit and antitrust issues. Combining the two companies would have created the largest player in the world for both seeds and crop chemicals and a formidable competitor to German rivals Bayer and BASF and Dow Chemical in the U.S.

**Cargill sees stevia sales rising** - Inside Cargill's newly expanded, 40,000-square-foot food innovation lab, a team of chemists and tasters are working to reinvent three of the most basic products in the world: sugar, salt and oil.

The greatest success so far: Truvia, a zero-calorie sugar alternative derived from stevia rather than sugarcane. Launched in 2008, sales are now at \$80 Million. Coca-Cola partnered early on and started selling a new stevia-sweetened drink called Coca-Cola Life in the U.S. in August, with two-thirds the calories of regular Coke. Cargill's stevia sales are seen to eventually reach \$500 Million, which could add a full 5% to Cargill's bottom line.



**U.S. cattle prices remained at record high levels this year** as the U.S. showed the smallest herd on record, at a time when international beef demand continues to grow strongly driven by emerging markets and when China is rapidly growing their imports.

**The cloud over the agricultural machinery sector deepened** as major ag equipment companies continued to report lower sales and worse outlook. Deere & Co, AGCO and Titan Machinery were some of the companies citing a weak demand. A farm machinery sales index compiled by Creighton University from major U.S. agricultural states fell to its lowest since the survey began eight years ago. The sector's malaise has been blamed by cuts to farm spending prompted by lower crop prices.

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**Europe**

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**Nutreco**, the Dutch maker of fish feed and animal-nutrition products, has been at the center of a takeover saga involving SHV Holdings NV and a joint bid by Cargill and private equity Firm Permira Advisors. By end Dec' 2014, Cargill decided to pulled out the bid leaving SHV Holding's bid valuing Nutreco at € 2.99 Billion the only one on the table.

Animal nutrition is a hot spot for M&A, drawing on growing global needs for foods amid limited resources such as water. Mitsubishi Corp. offered \$1.4 Billion for Norwegian salmon farmer Cermaq ASA earlier in 2014 and German chemicals maker Evonik Industries AG explored an acquisition of Nutreco competitor Royal DSM NV.



**Syngenta acquired Lantmännen's winter wheat and winter oilseed rape businesses in Germany and Poland** - The deal will give the company access to germplasm, seeds pipeline and commercial varieties and it will support development of hybrid cereals worldwide, R&D collaboration focused on wheat.

**FMC Corporation acquired Cheminova for \$1.8 Billion** – FMC announced the definitive agreement to acquire Cheminova A/S, a wholly owned subsidiary of Auriga Industries A/S. Cheminova is a multinational crop protection company based in Denmark.

**Germany's Theo Müller group acquired Dairy Crest dairies for £80m**, in another step to consolidate the UK and European dairy sector. This is the second major British acquisition in two years, after the acquisition of Robert Wiseman Dairies in 2012 for £280m.

**Farm machinery sales in Europe, the world's biggest market, fell close to 5% in 2014** - Following the boom of the past three years, demand for agricultural machinery in Europe has weakened in 2014, according to the European manufacturers' association CEMA. The association also projects a potential decline at double that rate in 2015, noting sector sentiment on its prospects at its lowest in nearly five years.

According to CEMA, the French market has performed particularly weakly, while the Italian market, Europe's fourth biggest, has shown a steady decline.

With an estimated volume of €26 billion for 2014, the European market will remain at the top position in the world, ahead of the United States (€21 billion) and China (€14 billion).

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**CIS**

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**Russia imposed food import bans on EU & the U.S.** – After a series of sanctions by the EU and U.S. against Russia in retaliation for the country's involvement in the Ukrainian crisis, Russia banned imports of a wide range of U.S. and European foods in response to Western sanctions.

The products subject to the one-year ban include beef, pork, poultry, fish, fruit, vegetables, cheese, milk and other dairy products from the U.S., Canada, the European Union, Norway and Australia.

The effects of the Russian ban are being felt first in Europe, by far the biggest trade partner with Russia among those targeted. But is also negatively impacting the local Russian population as domestic producers may struggle to make up for the supply gap in the short term. The Russian government has been developing alternative supply sources outside the list of targeted countries – South America is particularly well placed to supply a broad range of products.

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**Africa**

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**The Ebola outbreak in West Africa was a major factor in 2014** - In addition to the tragic loss of human life, the Ebola epidemic had negative effects on West African economies by halting trade, hurting agriculture and scaring investors. The physical markets for certain commodities, including cocoa and palm oil, also evidenced increased volatility.

**The London stock exchange** confirmed it is seeking partnerships with exchanges in Morocco, Egypt, Kenya, and Nigeria to promote dual listing by African companies.

The scheme could open up Africa's agricultural and agribusiness sectors to outside investors on a scale not yet seen and would offer investors the potential to benefit substantially in the long term. Investment in Africa's ag sector is currently dominated by private equity however listings by African agricultural companies are expected to increase in the coming years if recent growth can be sustained.

### China

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**COFCO Corp. invested about \$3 Billion in 2014 buying controlling stakes in Nidera and the agribusiness arm of Noble** – COFCO bought a 51% stake in Dutch trader Nidera late in February 2014 to gain direct access to South American grain and oilseed supplies in a deal that valued Nidera at \$4 Billion including debt.

Later in 2014 the company agreed to pay \$1.5 Billion for a majority stake in Noble Group. The two companies plan to form a JV, in which COFCO will own 51%, to link its grain processing and distribution business in China with Noble Agri's grain sourcing and trading arms.

The Noble and Nidera deals mark the biggest overseas acquisitions in China's grain sector, as China's largest grain trader seeks to strengthen its market position worldwide.



**KKR to Buy China Chicken Producer Stake for \$400 Million** - KKR agreed to acquire a minority stake in China's largest chicken breeder and processor for about \$400 Million. KKR will buy 18% of Fujian Sunner Development Co. The companies will form a partnership to expand Fujian Sunner's operations to provide meat that's safe to eat.

Food quality has become a major concern in China in recent years following a string of incidents in which products were found to be tainted.

Back in 2014, H.J Heinz recalled some batches of flour in the country after one was found to contain high levels of lead. In July, a recall of meat from a Shanghai unit of OSI Group LLC, a U.S. company, prompted McDonald's Corp. to pull some items from its Chinese restaurants.

**Fonterra enters the baby milk formula business in China** – The company established a partnership with leading Chinese baby food manufacturer Beingmate that will provide the company with a fully integrated supply chain, as part of a bid to seize more of the lucrative infant formula market.

### Asia Pacific ex-China

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**Temasek invests into Indian supply chain company** - The Singaporean government investment firm has invested \$41.5 Million into Star Agriwarehousing and Collateral Management, an Indian agri-supply chain company. The funding will go towards developing Star Agri's network of agri-logistic facilities such as agriculture warehouses and marketplaces to sell produce.



**Sime Darby bids \$1.74 Billion for New Britain Palm Oil** - Shares in New Britain Palm Oil soared 79% after it unveiled a \$1.74 Billion bid from Malaysia-based plantations giant Sime Darby – which appeared to have lost interest in the palm oil group.

### Oceania

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**China to cut agriculture tariffs in 'game changer' for Australia** - China will reduce import tariffs across a range of Australian agriculture products including beef and dairy as part of a free trade agreement that may boost shipments to the world's second-largest economy.

**The Chinese-government owned Beijing Agricultural Investment Fund has committed to spend \$2.7 billion on Australian dairy, beef, lamb and aquaculture industries.** The announcement establishes the Beijing Australia Agricultural Resource Co-operative Development Fund in a joint venture with Yuhu Agriculture Investment. The fund is especially keen to produce and export powdered infant milk formula to China, and is therefore committed to investing in local dairy farms and dairy processing.

**Brazil's JBS acquires Australian Primo for \$1.25 Billion to boost Asian sales** - Brazil's JBS, the world's largest beef exporter, announced its \$1.25 Billion purchase of Australian processed foods producer Primo Smallgoods to increase its presence in Asia.

Several asset management firms have been raising capital and investing in Australian and New Zealand farms. Black River Asset Management has been expanding its farmland portfolio, besides their stake in BFB Group.

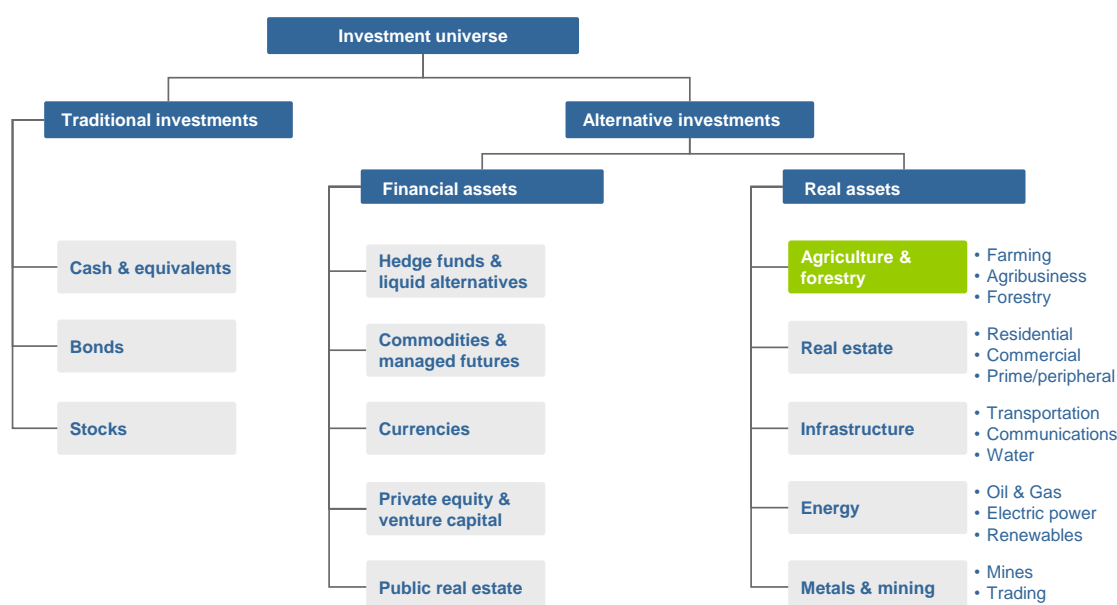
## The food & agriculture asset class goes institutional

For decades, institutional investors have incorporated alternative investments into their portfolios in a quest to manage risk, improve diversification and increase returns. The broader investment universe is shown in figure 1.

Over the last years, institutional investors have increased their interest in real assets, with the focus predominantly on real estate, infrastructure and energy. Investors are pursuing these assets to provide an inflation hedge and diversification, but also as a source of higher yields, in the context of low interest rates.

Investors see real assets' performance as bridging the gap between fixed income and equities. The stable, bond-like payment structure often provided by real assets has the potential to deliver consistent mid- to long-term returns – absolute returns – and as such, can help institutional investors meet their desired rate of return. They also offer the potential for equity-like upside and the ability to respond positively to healthy, growth-induced inflation.

Fig. 1: The investment universe and the alternative investment space



Different types of real assets offer a variety of advantages and disadvantages, as well as having varying degrees of correlation with more traditional asset classes. When combined, however, real assets should prove to be an effective investment for those looking to diversify and add inflation linkage to their portfolios.

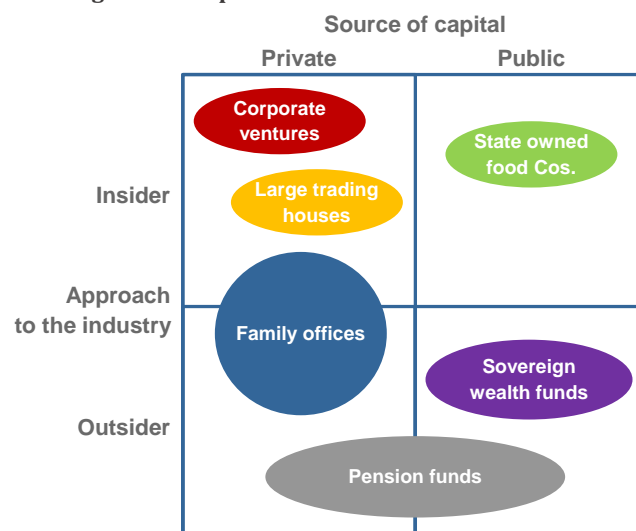
The food & agriculture real assets, in particular, offer compelling fundamental factors, which have been widely discussed in recent years.

As investors become more aware, they are starting to create specific allocations to the sector, albeit at slow pace. Nevertheless, recent activity points to an increasing interest by a broad pool of institutional investors.

The figure 2 illustrates this trend by characterizing six different types of institutional investors, according to their source of capital and their approach to the food & ag industry.

The size and number of institutional investors in each category and their differing patterns in terms of investment drivers and decision making define very different profiles.

Fig. 2: The expanding spectrum of investors in the global food & agriculture space



## Pension funds expand allocations to the broad food & agriculture space

**Pension funds across North America and Europe are among the major sources of fresh capital to the global food & agriculture sector. This is a trend linked not only to the growth of this space, but that reflects an evolution in their investment models and their allocation strategies.**

In the aftermath of the 2008 financial crisis, pension funds faced the challenge to rethink their investment portfolios. The low interest rate environment that has persisted in recent years across the developed world has added pressure as pension funds face the prospect of continued low returns on their fixed income portfolios.

In these circumstances, pension funds around the world are moving towards alternative investments that stand between risky equities and overvalued bonds; but more importantly, they look for assets that have low correlated or uncorrelated returns to the traditional stocks and bonds portfolios, effectively improving the portfolio's diversification.

**Among the alternative space, pension funds are investing in real assets such as forestry and agriculture as they are linked with the long-term theme of resource scarcity. Besides their positive correlation to inflation, these asset classes can provide a strong cash yield and they have performed well with low correlation to equities and bonds as they are deemed relatively insensitive to cyclical fluctuations.**

## Northern European pension funds take the lead

Pension funds from Sweden and Denmark are among those who have taken the initial steps into farmland investing. At the core of their strategic allocation models, pension funds consider forestry and agricultural assets have the potential to generate stable returns, in light of the fact that the underlying trend towards increased urbanization and improved welfare, in combination with a growing global population, is increasing demand for forest and agricultural products.

**AP Fonden 2 of Sweden is one of the most active European funds in this space.**

Back in 2010, the Fund made its first investment in forest and agricultural real estate by investing in an agricultural fund in the U.S. and in two forest funds – one in the U.S. and one in Australia & New Zealand.

In 2011, a joint venture was established with TIAA-CREF for investment in agricultural real estate in Australia, Brazil and the U.S. The pension fund has set an annual return benchmark for its forest and agricultural real estate investments at 8%.



**During 2013, AP Fonden 1 of Sweden increased its investments in agricultural properties in Australia and New Zealand.** The farms in Australia mainly produce grain, meat, wool and milk. In New Zealand, the operations focus on milk production.

The intention is for these agricultural investments to produce a stable and secure long-term return and contribute as a complement to the rest of the portfolio through a differing return pattern.



## North American pension funds bet local and global

**TIAA-CREF is probably the world's largest institutional investor in farmland. Their global agriculture investments' program was established in 2007 and they currently oversee an approximately \$5 Billion portfolio of high-quality farmland diversified across the U.S., Australia, Brazil, and Eastern Europe.**



In September 2010, TIAA-CREF expanded its platform by acquiring a controlling ownership interest in the Westchester Group, Inc., one of the U.S.'s premier independent agricultural asset managers.

Several other North American funds and endowments have made allocations to the sector recently. Among them we highlight the following ones:

- Maine Public Employees Retirement System
- New Mexico Education Retirement Board
- University of Oregon
- Washington State Investment Board
- Alaska State Retirement System
- Alberta Investment Management Company

## Sovereign investment funds expand into agriculture

**In recent years, some of the largest sovereign wealth funds in the world have launched dedicated strategies to pursue long-term investments across the global food & agriculture value chain.**

Incorporated in 1974, Temasek is an investment company based in Singapore with assets over S\$223 Billion portfolio as of 31<sup>st</sup> March 2014.

**The company, which was established to hold and manage investments and assets previously held by the Singapore Government, is an active investor in the global food & agriculture space.**

**TEMASEK**

Earlier in 2014, the company bid for for Olam International. In late 2013, Temasek also invested in China's infant formula manufacturer Yashili, together with China-focused private equity firm Hopu and other investors.

China Investment Corporation (CIC) is a Chinese sovereign wealth fund, established in 2007 to diversify the country's foreign exchange holdings and seek maximum returns for its shareholders within acceptable risk tolerance. The fund had close to \$650 Billion in AuM as of end of 2013.



**Recently, CIC has been shifting its focus to invest in agriculture and global food supplies in a significant strategic move that reflects the priorities of the country's new leadership.**

In contrast to previous investments pursued by SIFs in the past that targeted exclusively farmland, this time it appears that CIC's decision to allocate capital to this space will take a broad view across the entire value chain.

## Agricultural trading houses: China's COFCO joins world's top grain-traders select club

For many decades, the letters ABCD in the global food market have symbolized the group of four companies leading the global agricultural flows: ADM, Bunge, Cargill and Dreyfus. The companies have developed an international network of origination, storage, processing, transport and trading for much of the food produced and consumed globally.

**Now, a new group of Asian regional champions is emerging with the ambition to become global challengers. The group of Asian agricultural trading houses, often called "NOW" includes Noble, Olam and Wilmar.**

**The Japanese trading houses have been expanding also their footprint in the global agriculture space:**

- Mitsui has a global grains operation established in some of the key producing markets.
- Marubeni Corp. acquired the agricultural operations of US-based Gaviola.
- Sumitomo completed a full takeover of Australian-based Emerald Grain in early 2014.
- Mitsubishi Corp. acquired several assets in Brazil back in 2013.

The global picture of agricultural trading houses is completed with other big names such as Nidera and Glencore – which acquired Canadian company Viterra back in 2012.

**The growth in global food trade in recent years caught the attention of sovereign investment funds and of state-owned food companies.**

**One of the most active companies is COFCO, from China, which back in 2014 formed an agri-business joint venture called "Noble Agri" with Noble, taking a 51% on the JV. Also in 2014, COFCO acquired a 51% stake in global agricultural trader Nidera.**



Ultimately, analysts say the Chinese Company envisions a listing of its businesses in the public market, providing additional strength to compete with the other major agricultural traders.

The growth strategy pursued by COFCO seems to be part of a series of strategic initiatives to ensure access to supplies of agricultural commodities crucial for China's domestic market. We also believe that other deals, particularly those related to animal proteins in poultry and dairy, aim at transferring and building consumer food brands specifically within China.

## Family Offices: Growing appetite for agriculture

The growing universe of family offices is another attractive pool of capital for food & agriculture investments.

**With a much lower profile than most pension funds, sovereign investment funds and trading houses but with growing appetite for agricultural exposure, family offices from around the globe and through the whole spectrum of sizes and styles are increasingly looking to allocate capital to this space.**

The fundamental starting point for family offices is that since their portfolios have usually a long-term outlook, they can be best positioned in terms of pursuing trends that are likely to persist for the next ten years or even longer.

With this in mind, the food & agriculture space has the potential to fit very well, besides the attributes in terms of portfolio diversification and inflation hedge, described in the previous section.

Besides the economic benefits to their portfolio, some family offices find that the agriculture space offers them the possibility to address socially responsible or impact investments: they can generate attractive economic returns but at the same time, they can do something good. The rise of the ag-tech venture space reflects this trend (read more on page 29).

In a similar fashion, we also notice that some family offices are increasingly aware of investment strategies in regenerative agriculture, in which regenerative techniques are applied to preserve or improve the fertility of the soil and restore the ecosystems (via crop/livestock rotation, ground cover, erosion prevention, reduced synthetic inputs and reduced mechanical compaction, among other techniques).

**Despite their genuine interest, family offices are also finding it just as tough as institutional investors to achieve exposure to the asset class. One of the reasons is the relative early stage of development of this asset class, which offers limited liquidity. Another reason is that the set of skills and the type of risks involved in food & agricultural assets are different from the mainstream assets in their portfolios, resulting in an increased risk perception.**

In response to these concerns, asset managers are adapting their investment value propositions in different ways. In the next sections, we review some of these innovations and we take a 360° view of the different asset categories that provide exposure to the food & agriculture space.

“

For many family offices, the starting question is: How do we get true exposure to farmland, farming and the broader value chain?



## Four trends that will shape the food & agriculture asset class

Despite the differences across the institutional capital spectrum in terms of mandates and approach to the space, all these investors share one thing in common: they are willing to increase their agriculture exposure but they face difficulties in allocating capital and the timeframe to do this will probably extend over the next years.

In this context, asset managers looking to raise institutional capital have to bear in mind two facts about these investors:

- **They are usually not farmers** – they are not usually aware of how the agricultural world works and this is a source of uncertainty and risk for them.
- **They are only now starting to allocate capital to the sector** – they are taking the first steps, with caution and with gradual commitments. In addition, in the best of the cases a typical institutional investor would not allocate more than 3% to the sector.

These facts pose a challenge particularly to agricultural funds in emerging markets, because the risk perception increases considerably. Therefore, we are seeing gradual innovation by asset managers to overcome these challenges, but also we note the influence that institutional investors are having in shaping the asset class. Below we highlight some of these innovations.

### 1. Enlarged pool of available opportunities to increase liquidity

While interest from private and institutional investors has been growing in recent years, the universe of specialized investment products that are available remains rather limited. Asset managers recognize that until the sector emerges as a relevant asset class, the drawback for investors is that there is a limited number of funds available, especially those with experienced management teams and proven track records.

One of the reasons behind this is that in contrast to some financial assets that can be accumulated and multiplied almost to the infinite, managers cannot do the same with a farm or a cow or a silo. Another reason is that the sector is very atomized and most investments are still done by private owners. Both factors affect liquidity – both to invest in and to exit.

The positive news is that we continue to see new investment funds coming to the market, in several cases ran by established managers. As we explore later in the study, the space is growing across all asset categories. We also expect that secondaries' activity will flourish alongside primary markets, providing much needed liquidity to the space.

“ We expect a surge in the number of funds that invest particularly in cattle raising and other animal protein businesses, betting on the growing demand from Asian consumers.



### 2. Innovative capital structures to respond to investors' needs

As fundraising and investment activity picks-up across the global food & agriculture asset class, investment managers are embracing a range of different structures for private investments.

In particular, different debt structures are emerging as a response to investors' demand for income and lower risk profiles. Usually these structures offer mezzanine financing, with a combination of convertible debt, different seniority and preferred dividends.

One of the effects of these new structures is the expansion of the investor universe, as alternative credit hedge funds are keen to consider these opportunities. In the same way, family offices who are not fond of long-term commitments, find these structures as a feasible way to get a taste of the business.

### 3. Growing appetite for direct investing and co-investing

**This is a recurring topic among institutional investors: Many surveys point to the fact that many of these investors are willing to take control of their destiny and manage more of their assets in-house, or at least they have a growing intention to co-invest rather than allocate capital to blind funds.**

Indeed, the performance of certain closed-end farmland funds in the recent decade left several investors disappointed, prompting investors to rethink their investment models.

**Even when setting up co-investment programs and executing co-investments has its challenges, it seems likely that investors will plan to allocate a greater proportion of their assets directly, as they look to reduce their costs and gain more control over the risk profile of their portfolios.**

**We already see some action on this front in the food & agriculture space:**

- Sovereign investment funds and state-owned food companies are entering the space almost exclusively through direct investments.
- Some farmland managers are offering club deals and co-investment structures to their family office investors.
- Private equity managers are also offering co-investments to LPs, for those who want to co-sponsor and/or underwrite deals, and those who just want to pick up a piece of equity post-syndication.

**The other side of this trend is that local operators will need improved skills to provide dedicated management solutions to these investors. Asset managers and farm operators can differentiate themselves in this area and gain a competitive advantage.**

“ Investments in permanent crops – including different sort of nuts, apples, grapes and stone fruits, to name a few – have proven to be a fertile area to establish club deals and co-investments by family offices.



### 4. Demand for institutional track record and strong governance

**When it comes to investing in real assets, and particular agricultural ones, institutions value the expertise of their asset managers to an extent rarely seen in other asset classes. The premium on expertise reflects both institutions' unfamiliarity with real assets and the inherent complexity associated with these investments.**

However, the food & agriculture space is a nascent asset class, which typically lacks institutional track record and realized returns.

Institutional investors also put emphasis on governance as regulatory scrutiny intensifies. Governance in the food & agriculture investment world includes formal aspects of the investment management (tax, accounting), but also aspects about sustainability and responsible farming.

## Investing responsibly in food & agriculture assets

In recent years, pension funds across the world have started to integrate sustainability factors into their asset management practices. Environmental, social and governance (ESG) factors are considered among the main concerns in measuring the sustainability and ethical impact of an investment.

Development finance institutions (DFIs) have also contributed to the discussion of responsible investing across the agriculture sector, as key players in providing financing in countries with limited access to credit and poor rural areas.

Funded by the European Commission in partnership with the International Corporate Governance Network (ICGN) and the European Federation of Financial Analysts Societies (EFFAS), the Principles for Responsible Investment ("PRI") include a group of signatories that have developed *The Principles for Responsible Investment in Farmland*, known as the 'Farmland Principles'.

In September 2014 the *Farmland Principles* were incorporated within the PRI as **Guidance for Responsible Investment in Farmland**. The signatories as per August 2014 included: AAG Investment Management (Australia), ABP (Netherlands), Adveq Management (Switzerland), AP1 (Sweden), AP2 (Sweden), APG (Netherlands), Aquila Capital Green (Germany), Insight (UK), PFZW (Netherlands), PGGM (Netherlands), Rabo Farm (Netherlands), Southern Pastures Management (New Zealand), TIAA-CREF (US), Treetops Capital (US), UFF Asset Management (South Africa) and Valiance Advisors (UK).

In the same line, back in September 2014 the UN Global Compact launched the *food & agriculture business principles*. The UN Global Compact is a strategic policy initiative for businesses that are committed to aligning their operations and strategies with ten universally accepted principles in the areas of human rights, labor, environment and anti-corruption.

The *food & agriculture (FAB) principles* establish the attributes of well-functioning and sustainable global food & agriculture systems, and articulate a common understanding of the resources, ecosystem services and socio-economic impacts needed to build resilience into these systems and the markets that they serve. The six principles are designed to complement existing initiatives that advance sustainability in food & agriculture, and serve as an umbrella over voluntary standards and technical compliance platforms.

The six principles are a response to the outcome from the Rio+20 conference and are presented below:

### *The U.N. Global Compact Food and Agriculture Business Principles*

#### **Principle 1: Aim for Food Security, Health and Nutrition**

Businesses should support food and agriculture systems that optimize production and minimize wastage, to provide nutrition and promote health for every person on the planet.

#### **Principle 2: Be Environmentally Responsible**

Businesses should support sustainable intensification of food systems to meet global needs by managing agriculture, livestock, fisheries and forestry responsibly. They should protect and enhance the environment and use natural resources efficiently and optimally.

#### **Principle 3: Ensure Economic Viability and Share Value**

Businesses should create, deliver and share value across the entire food and agriculture chain from farmers to consumers.

#### **Principle 4: Respect Human Rights, Create Decent Work and Help Communities To Thrive**

Businesses should respect the rights of farmers, workers and consumers. They should improve livelihoods, promote and provide equal opportunities, so communities are attractive to live, work and invest in.

#### **Principle 5: Encourage Good Governance and Accountability**

Businesses should behave legally and responsibly by respecting land and natural resource rights, avoiding corruption, being transparent about activities and recognizing their impacts.

#### **Principle 6: Promote Access and Transfer of Knowledge, Skills and Technology**

Businesses should promote access to information, knowledge and skills for more sustainable food and agricultural systems. They should invest in developing capacities of smallholders and small- and medium-sized enterprises (SMEs), as well as more effective practices and new technologies.

## The food & agriculture investment universe: Framing the opportunities

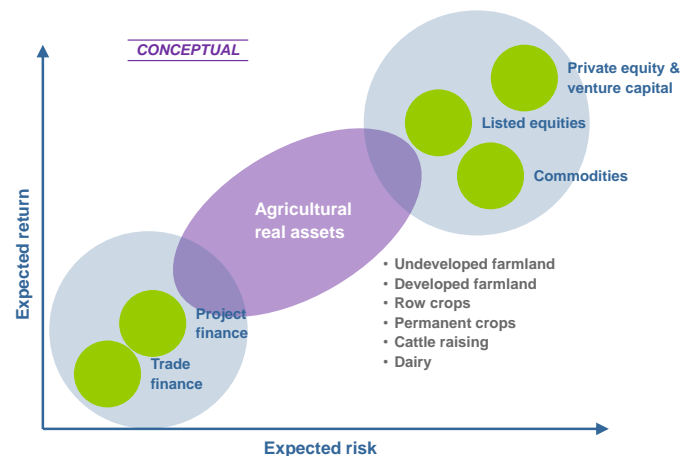
With strong fundamentals and historically attractive risk and return characteristics, agricultural investments have become increasingly compelling for institutional investors over the last years.

Still, developing an exposure to this relatively new institutional asset class requires an understanding of certain basic characteristics and structures.

Indeed, the food & agriculture investment universe is constituted by a broad range of assets with different breadth of styles.

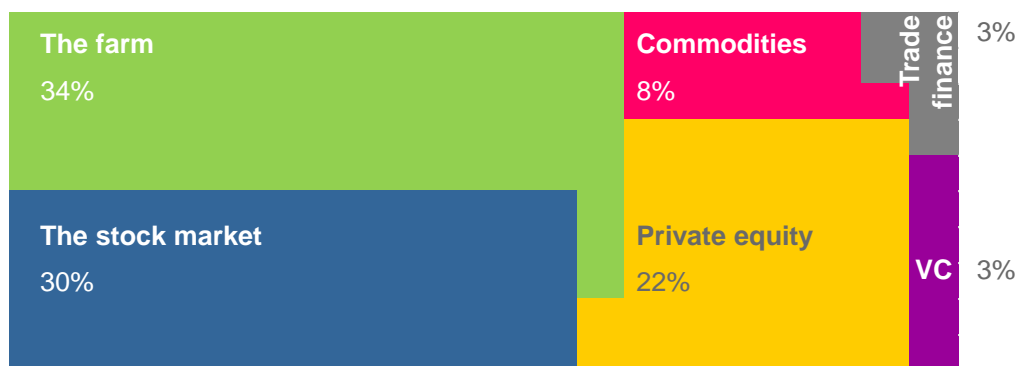
So in order to design an investment allocation into this space, it is critical to understand the differences among them and how they may perform in different market environments.

Chart 7: The spectrum of opportunities in the global food & agriculture asset class



The chart 8 shows a proxy of the resulting implied allocation by main asset category, according to the AUM of the 242 specialized funds we presently track. We can notice that traditional equities and farmland are the major categories, representing close to two thirds of all AuM. Over the last few years, private equity has been growing steadily and the most noticeable growth in the last year has been the VC space.

Chart 8: AuM by type of asset (% of total AuM based on 242 funds reviewed, as of Q3 2014)



Source: Valoral Advisors.

Readers should take precaution, as this is only a partial picture of the asset class: the pool of funds analyzed is not exhaustive and companies and investors do many investments in the asset class as direct investments. Please read our methodological notes and disclaimer in the back cover of this publication.

In the next pages we zoom into each these asset categories to review the latest trends and the outlook for 2015.

## Listed equities: Multiple opportunities across the food & agriculture value chain

Investing in equity funds or individual stocks of publicly listed companies active in the food & agriculture industry is an attractive and cost-effective way to gain liquid exposure to the sector. At present we track 46 funds and ETFs with total AuM of around \$13.6 Billion.

Based on a group of 15 equity funds tracked by Valoral Advisors for which we have available details, the top 10 holdings by fund were consolidated and the resulting top 20 holdings based on their net asset values is displayed figure 3.

The size of each box represents the relative weight of each sector in the total sample.

The fertilizer sector is still the largest represented in the sample, although its weight has decreased from 2013.

The farm machinery sector also saw its weight reduced, as lower farm incomes affected farmers' sentiment regarding equipment purchases in North and South America, among other regions.

The packaged foods & ingredients sector saw the highest increase in weight as global demand for animal protein and food ingredients continues to expand. Food traders & processors also had a good year. A number of large deals also added momentum to these sectors.

On the other side, we find no farmland equities in the top 20 holdings. This is no surprise as there only few companies listed, typically operating in emerging markets and with limited size.

Based on the group of 15 funds analyzed, the aggregate top 20 holdings represent 40% of the total AuM. The annual return in 2014 of the theoretical top-20 portfolio with equal weight among the 20 equity holdings was 9.7%, slightly lower than the S&P (11.4% return) and higher than the MSCI world index (5.5% return).

Fig. 3: Equity sector map (based on 15 equity funds reviewed)



Table 1: Theoretical equity portfolio based on selected equity funds (As of December 31<sup>st</sup>, 2014)

Sector / Company	Market / Ticker	Currency	Market cap, Billions	P/E	Value, \$	Variation YTD	12 months high	12 months low
<b>Fertilizers</b>								
Agrium Inc.	NYSE:AGU	USD	13.5	16.3	94.7	3.5%	103.9	82.0
CF Industries Holdings	NYSE:CF	USD	13.6	10.0	272.5	16.9%	282.8	220.1
Mosaic	NYSE:MOS	USD	16.9	20.5	45.7	-3.4%	51.3	40.3
Potash Corporation	NYSE:POT	USD	29.0	22.1	35.3	7.2%	38.6	30.1
Yara International	NOK:YARO	NOK	92.0	15.8	333.2	28.0%	339.3	236.7
<b>Seeds &amp; crop protection</b>								
KWS Saat AG	FRA:KWS	EUR	1.8	24.1	270.1	8.5%	283.7	244.0
Monsanto	NYSE:MON	USD	57.6	24.3	119.5	2.5%	128.8	104.1
Syngenta AG (ADR)	NYSE:SYT	USD	28.6	18.2	64.2	-19.6%	79.9	58.7
Vilmorin & Cie.	EPA:RIN	EUR	1.6	22.6	84.6	-12.8%	105.0	70.5
<b>Farm machinery &amp; equipment</b>								
AGCO	NYSE:AGCO	USD	4.2	9.2	45.2	-22.8%	58.5	41.6
Deere & Co.	NYSE:DE	USD	30.0	10.5	88.5	-3.1%	94.9	78.9
Kubota	TYO:6326	JPY	2.2 Tn	16.9	1761.0	3.2%	1940.0	1267.0
<b>Food processing</b>								
Archer Daniels Midland	NYSE:ADM	USD	33.5	17.8	52.0	19.8%	53.9	37.9
Associated British Foods	LON:ABF	GBX	0.0	0.0	3.2	29.0%	3.3	2.4
Bunge Ltd.	NYSE:BG	USD	13.1	23.1	90.9	10.7%	93.2	73.1
<b>Packaged food &amp; ingredients</b>								
Andersons	NASDAQ:ANDE	USD	1.5	16.1	53.1	-10.6%	69.9	44.7
BRF SA (ADR)	NYSE:BRFS	USD	20.1	49.4	23.4	11.9%	27.3	16.5
Cal-Maine Foods	NASDAQ:CALM	USD	1.8	11.1	39.0	29.6%	48.3	24.5
Keuring Green Mount.	NASDAQ:GMC	USD	21.8	35.4	132.4	75.3%	158.9	74.4
Tyson Foods, Inc.	NYSE:TSN	USD	14.9	16.7	40.1	19.8%	44.2	33.4
Top 20 equally-weighted portfolio						9.7%		
S&P 500						11.4%		
MSCI world index						5.5%		

## Listed equities: Growing innovations for investors

### The rise of food & ag equity indices

With the growing interest in food & agriculture investments, asset managers are developing alternative solutions to provide exposure to this sector.

**One of these solutions is the development of highly targeted indices that aim to provide exposure to specific segments of this space, which can be farmland, water or technology, among others.**

We have also seen indices that offer exposure to companies that are better placed to capture growth opportunities related to food and water scarcity or that can better withstand scarcity-related price volatility.

One of the attractive attributes of these indices is that they facilitate the exposure to specific sub-sectors through a single, liquid and cost-effective investment.

We believe the development of indices can provide alternative equity investment opportunities and can serve as benchmark against which investors and managers can measure their own investment performance in this space.



### Listed equities: Are they a proxy for real assets?

As investors' interest in real assets gained traction in recent years, investment managers have been thinking ways to provide exposure to these assets while providing much demanded liquidity to their investors.

**A growing number of managers with expertise in real assets are focusing on liquid solutions based on a combination of listed equities, REITS and commodities. Their objective is to create long-term thematic strategies with monthly liquidity or similar terms.**

These strategies are able to provide potential long-term capital growth and some of them can offer a dividend yield, replicating the return of a diversified portfolio of direct real asset investments.

However, we should highlight that from a portfolio's point of view, these strategies do not provide the exact attributes pursued in real assets. In the next pages we review other asset categories with closer ties to real assets.

## Agricultural commodities: Out of favor but still important to a diversified portfolio

**2014 has been another tough year for commodities as supply and demand factors combined to push prices of grains and oilseeds to the lowest levels in many years.**

Weak global growth, particularly a slowdown in China, cooled down the broader commodity complex. Moreover, a strong U.S. dollar, deflationary pressures across the world and expectations that the U.S. Federal Reserve may increase interest rates sometime in 2015 has reduced enthusiasm for commodities.

In this context, the U.S. delivered a record harvest in 2014, which helped to refill global stocks and sent prices to the bottom range seen in many years. As we move into 2015, increasing attention will turn to global demand and to the weather in South America, especially for corn and soybean trade.

Several traders predict that this rout in agricultural commodities is ending, as in many cases prices reached levels below production costs. As we start 2015, some say it looks like the sector is starting to underprice event risks. But one thing looks clear: The broader markets seems to be far from a potential start of a new commodities super cycle that can provide the type of tail wind that the ag complex used to enjoy in previous years.

The chart 7 shows the price evolution of selected agricultural commodities in the last years.

**Chart 9: Agricultural commodities' prices – CBOT Futures continued contract (first month)**

**Corn, US\$/Bushel**



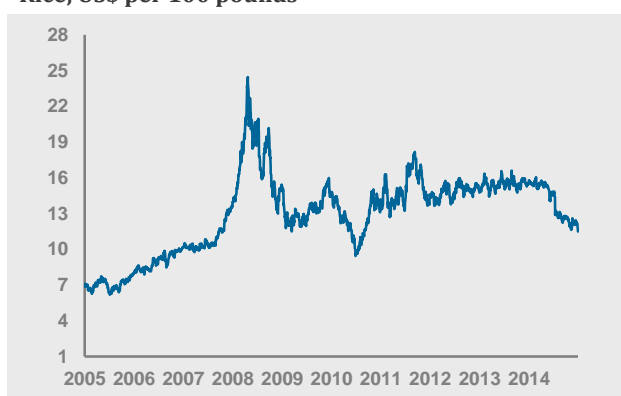
**Soybeans, US\$/Bushel**



**Wheat, US\$/Bushel**



**Rice, US\$ per 100 pounds**



Coffee and cocoa are the exceptions among the broader agricultural commodities. Both soft commodities continue to enjoy a strong demand from growing middle classes in emerging markets, notably in Asia. Coffee futures were standout performers among commodities last year, arabica contracts in particular, lifted by the dent to Brazilian production from persistent drought.

Indeed, both commodities are exposed to several supply issues: From extreme weather, pests and disease to speculation and political instability in producing countries. In 2014, Brazil faced an extreme drought that affected their coffee yields. The 2014 Ebola outbreak in West Africa risked bringing disruptions to cocoa supplies from Ivory Coast, the world's largest producer.

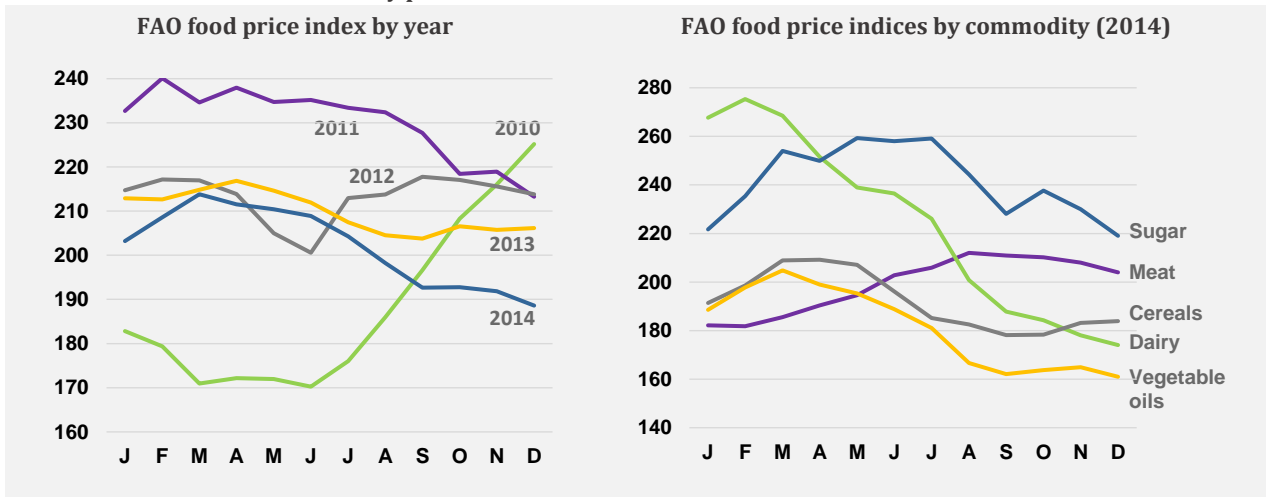
## Inflation, deflation and the search for absolute returns

Three years of downbeat commodity prices have seen investors become increasingly disillusioned with agricultural resources - a trend that has continued during 2014 amid fresh lows. Investing in commodities looked set to be a decent hedge against inflation a few years ago which, given the record amount of cash being minted by central banks.

This rush to hard assets saw record inflows into all aspects of the commodities world, something that was facilitated by the expansion of ETF products that provided eased access to commodities markets.

Fast forward three years and a combination of low growth, absent inflation and record harvests resulted in a sharp retreat of commodity prices. This trend, combined with overall friendly equity markets, has seen continued outflows from commodity funds. According to FAO food price and the food commodity price indexes, prices of the main food categories have dropped during 2014 with the exception of meat.

**Chart 10: FAO food and commodity price indices**



In this context, investors are right to ask why agricultural commodities are good for their portfolios. It is often suggested that agriculture commodities offer several benefits to a well-constructed long-term portfolio. Among them, it is said that they have historically generated equity-like returns and exhibit low, typically negative, correlations with bonds & equities. Moreover, they are liquid investments and can potentially provide inflation-hedging benefits as they are positively correlated with inflation.

Investors who want a cost-effective way to invest in agricultural commodities usually choose funds or ETFs, which are typically rules-based indexes, made of futures contracts on some of the most traded agricultural commodities. For those who think that buy-and-hold strategies generally will not work, there are still ways to take advantage of swings in prices.

Hedge strategies can provide an alternative way to capture value from the agricultural commodities' sector, moving away from the traditional ETFs and indexes. The depth of the agricultural markets, with substitute products, counter seasonal harvests, and multiple production and consumption centers mean that different trading strategies can be developed to capture alpha.

**A growing number of specialist managers are developing relative value strategies, which involve trading futures spreads or futures and options spreads, in one or more markets. Indeed, the higher volatility in energy prices during the second half of 2014 has offered opportunities to arbitrage energy and oilseed commodities.**



## Farmland: Continued correction in the short term, but compelling fundamental factors support long-term outlook.

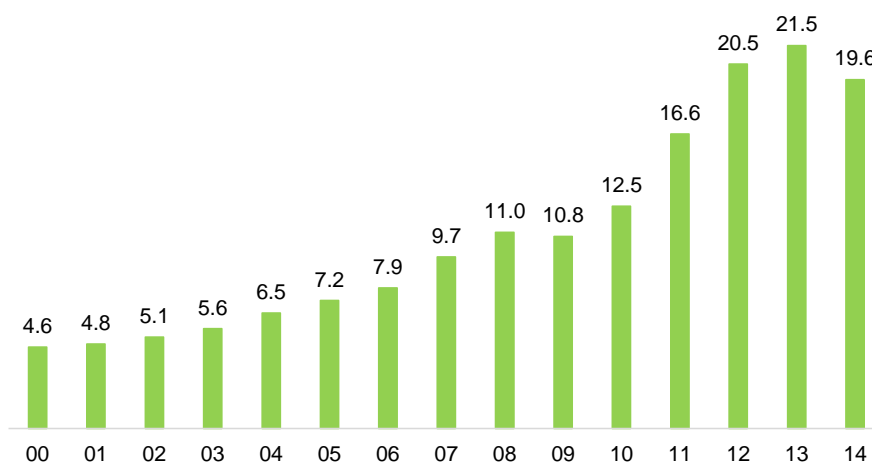
As of the end of 2014, Valoral Advisors tracks over 70 farmland investment funds that manage in excess of \$15 Billion. This space has reached a stage where investors can already find a broad range of investment strategies across regions and commodities.

Interest among institutional investors in global farmland portfolios is high, following the solid capital appreciation seen in the last decade. Farmland prices in the U.S. and in the other major agricultural countries rose sharply driven by a robust growth in global food demand, which triggered a rush by global investors to secure land. The chart 11 shows the evolution of farmland prices in Iowa state, heart of the U.S. agriculture farming.

Chart 11: Weighted average value per hectare of Iowa farmland by grades of land (\$/Hectare, nominal values)

Agricultural farmland values soared in the last decade amid strong growth in food demand from emerging markets.

But as we start 2015, the global farmland market faces short-term downward pressure.



Source: 2014 Farmland Value Survey Iowa State University

## Bringing innovation to farmland investment models

The rapid appreciation during last decade ended during 2014 as farm income across the major regions started to suffer from the sharp drop in agricultural commodity prices. As we start 2015, current valuations in certain markets imply a fairly to fully priced market.

Against this bearish short-term outlook, we believe there are relative value opportunities in several markets and commodity segments, beyond the mainstream crops and prime regions. But more importantly, in a world of lower farmland appreciation, we believe that farmland investments should not be seen as a way of parking money in a safe asset, but as active investments to deliver sustainable income.

Indeed, farmland prices do not need to appreciate for this to be a good investment: High efficient farms along the world can generate attractive cash returns at current crop prices. We highlight three major ways to improve potential returns:

- **For developed farms, active management can improve yields:** Investors may consider stepping away from passive “buy-hold-lease” strategies and actively managing the assets. The farming business has a high dispersion in performance, much of it driven by managerial capabilities and technology introduction.
- **Equally, land conversion and production mix can also improve returns:** There are opportunities to improve land and to change the production mix of farms, usually by bringing technology and eventually irrigation. Investors may also consider permanent crops.
- **Explore integrated strategies along the value chain:** With the premise that the fundamental asset remains the farm, investors can evaluate alternatives to integrate downstream to add more value to the primary production. This may be achieved by building synergies between farm products (i.e. crops as feed for animals), by adding logistics infrastructure, by incorporating processing activities or by expanding into marketing and distribution activities. Usually these activities can be offered to other farmers to reach an optimal scale.

## Investing in permanent crops



Avocado tree



Almond blossom



Apple trees

Crop land and cattle land have been the major receptors of institutional capital chasing farming opportunities, particularly across North America and Oceania. Now investors are discovering the attributes of permanent crops.

2014 has seen several deals by institutional investors to diversify into permanent crops: fruits and nuts that grow on trees and vines that can deliver higher returns than row crops and can provide a longer time horizon.

**We believe that permanent crops can be an attractive component to a diversified agricultural portfolio for a variety of reasons. Below we provide a brief review of this asset category and some examples of recent investment activity by large institutional investors:**

- The produce of permanent crops looks set to benefit from strong demand trends for most of the food produced in these systems.
- The nut group - almonds, pecans, pistachios and walnuts - is particularly strong thanks to health-conscious consumers and exports to a growing middle class in emerging markets.
- The potential returns of permanent crops are usually higher than row crops, for a variety of reasons.
- First, permanent crops usually command a higher operational income: part of the higher income required to permanent crops comes from the fact that, in comparison to row crops, permanent crops usually require a considerable investment on depreciating assets – including the plants, irrigation system, machinery.
- Indeed, the investment in the trees or vines is considerable - anywhere from 50 to 80% of the value of the farm.
- Another factor is that permanent crops come with higher risks: It takes years for a tree to become productive, and consumer tastes may change in the meantime.

**Institutional investors have been particularly active in this space during 2014:**

- **TIAA-CREF** has a long-term strategy to split crop investments 70-30 between row and permanent crops – which include wine grapes, almonds, walnuts, pistachios, citrus, apples, avocados and cranberries.
- In terms of business models, with row crops TIAA-CREF buys the land and leases it back to farmers who assume the risk, but it manages permanent crops itself via Westchester.
- **UBS AgriVest**, another large institutional investor, manages a diversified portfolio of row, vegetable and permanent crop farmland, with plans to put close to 20% of its total capital into permanent crops.
- UBS AgriVest leases all of its land back to farmers. The lease structure differs for permanent crops, though: The firm gets a percentage of gross income.
- **Hancock Agricultural Investment Group**, another North American institutional investor, is focused on leased row crops and directly operated permanent crops.
- **Adveq**, a leading asset manager founded in 1997 and investing in private equity funds and real assets globally on behalf of investors and through co-investment schemes, entered the permanent crop segment with the acquisition of 18,000 hectares of almond orchards in Australia for A\$211 Million in partnership with co-investors.
- Their investment approach considers the acquisition and lease-back of the plantation to Olam, who will continue to operate it.
- Adveq has invested in this plantation through the Harvested Resources Fund, a \$300 Million specialist agricultural vehicle.

## Private equity: Investing beyond the farm.

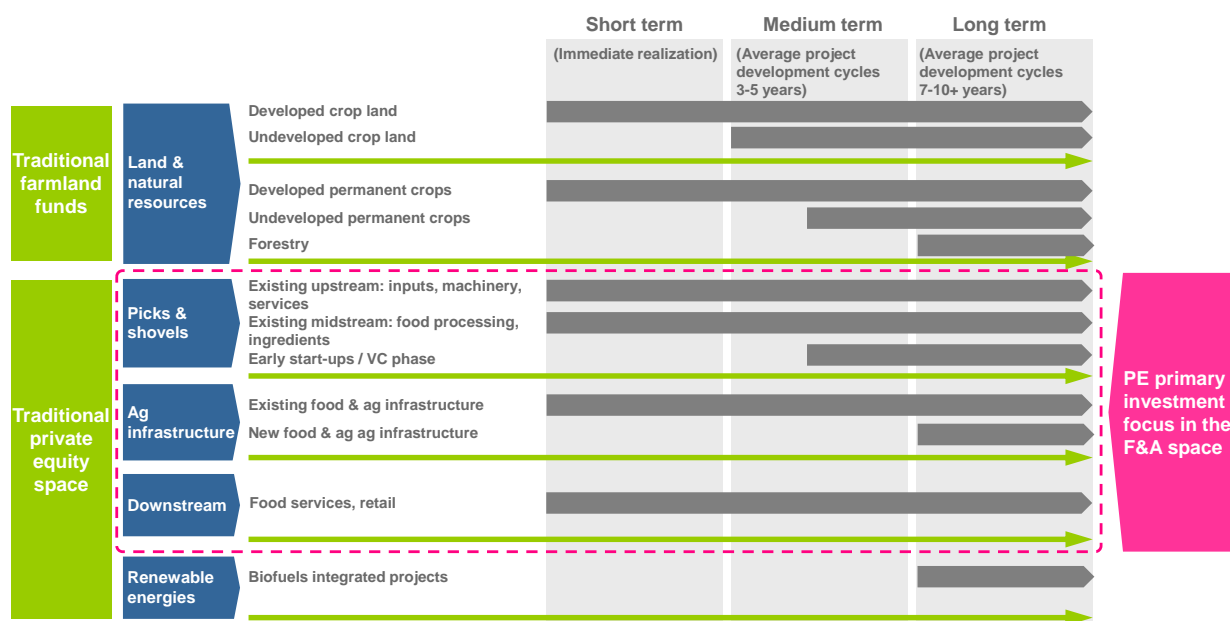
The food & agriculture (F&A) private equity sector, excluding farmland investments, is also gradually taking shape. At present, there are more than 40 PE funds specialized in this sector, with close to \$8 Billion in AuM. The global F&A private equity market sector is poised to grow considerably over the coming years as private and institutional investors discover the sector's attributes and the pool of opportunities lying in the PE space.

The F&A value chain, with its multiple activities and sub-sectors, provides a broad spectrum of investment opportunities. Although PE Firms can find investment opportunities all across the value chain, in practice most of them frame their investment space in the following terms:

- **Picks & shovels** rather than farmland: Most PE Firms are shy of investing in tracts of land and instead prefer to focus on the associated inputs, equipment and services to support farmers. Still, there are certain PE Firms invested in farmland and permanent crops.
- **Midstream and downstream:** This is one of the other major areas of investment for agri PE Firms. Some of them look more into the processing side, while others focus on consumer-packaged goods.
- **Ag infrastructure:** PE funds were quick to realize that ag infrastructure is missing or limited across many agricultural regions in emerging markets. Being infrastructure a major theme for the broader PE market, agri PE funds are focusing increasingly on building the infrastructure to enable larger production and trade volumes.
- **Renewable energies:** In a similar fashion, PE Firms also look at biofuels and other sectors in the renewable energy space. Lately, however, there has been less appetite for these investments.
- **Ag-tech:** While ag-tech is still the preferred space for agriculture VC funds, PE managers are also looking at ag-tech companies that are in more mature stages. Most pursued sectors include bio-tech, bio-chemicals and precision agriculture.

The figure 4 describes the primary investment space that food & agriculture PE funds look at.

Fig. 4: Private equity opportunities pursued by food & agriculture funds



While F&A PE funds have diverse investment mandates in terms of sectors and types of deals, most of them focus their attention on picks & shovels, downstream businesses and infrastructure assets.

## Private equity: Set to grow across the world

The private equity space is one of the beneficiaries of the major trends that took place in the global food & agriculture sector over the last decade. The figure 5 summarizes the main factors that contributed to this process.

**Fig. 5: The evolving food & agriculture PE landscape**

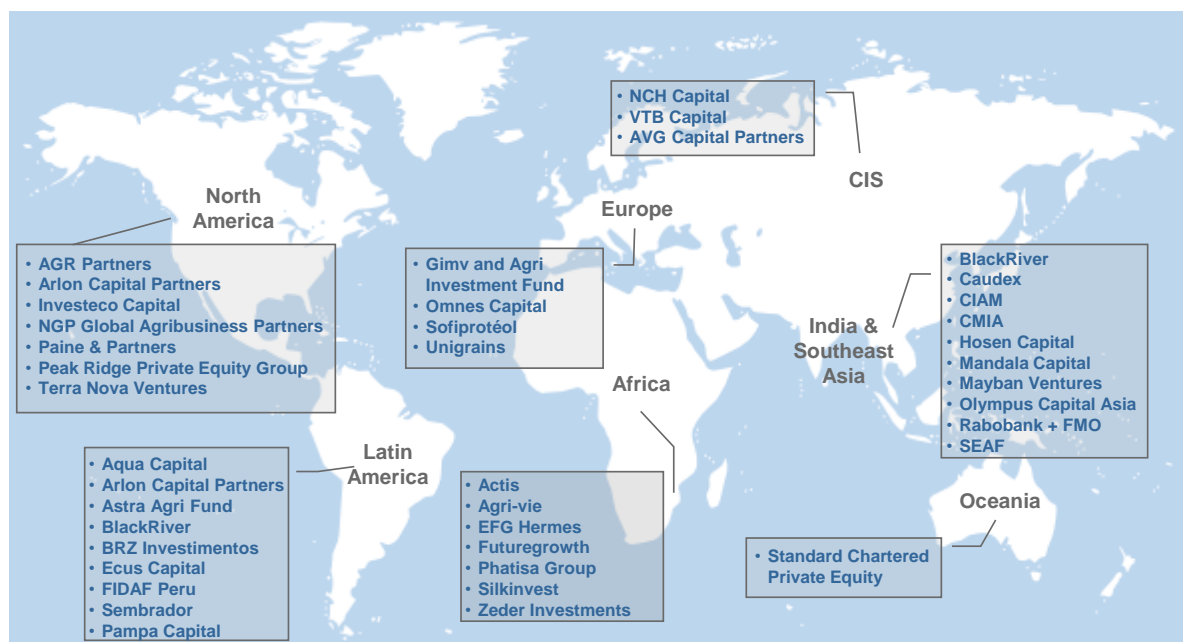


As a testimony to the raise of this sector, Paine & Partners, one of the leading PE firms in this space, announced early in January 2015 the closing of Paine & Partners Capital Fund IV, L.P. at \$893 million in capital commitments.

Late in 2014, Carlyle joined as co-investor to the NGP Agribusiness Fund, a PE fund specialized in food & agriculture assets in North America and an affiliate of NGP Energy Capital Management.

While both funds will be primarily focused on North America, there are other established players and a growing number of new private equity funds that are building portfolios in the major food & agriculture regions. The map 1 shows some of the existing F&A private equity funds across the globe.

**Map 1: Relevant food & agriculture PE Firms by region**



## Venture capital: Silicon Valley comes to the farm

In 2014 the ag-tech VC space has been one of the outstanding sectors in the global F&A investment space.

The need to produce more food on scarce land resources, the emerging co-existence of food production with biomass for energy or chemicals production, and the convergence of ag technologies with industrial innovations has made agriculture an attractive theme for investors.

**As in all investment trends, timing is a critical factor. 2014 has been probably the year when all the pieces were in place to see a considerable rise in capital allocation to this space.**

After several years of increasing farm income, the farm sector was well capitalized to try new technologies. At the same time, several technologies including satellite imagery, drones, remote sensors, big data and cloud services looked more mature, starting to look out of Silicon Valley and into other industries.

In this context, many entrepreneurs around the globe, and especially in North America, realized the importance of advanced agricultural technologies in meeting global food demand, and the opportunities this presents for the investment community to engage with and support the development of agricultural innovation.

### Biotech & precision ag: a happy marriage

Biotechnology used to be the major category across the VC ag space in past years; now precision agriculture has become the hot space.

**Precision agriculture encompasses farm and site-specific management systems to optimize inputs and outputs. These systems target different tasks such as guidance, control, monitoring, interpretation, decision support and communication, and include a combination of different technologies, including high-resolution satellite imagery, drones, remote advanced sensors, auto steering and variable rate controls for inputs and artificial intelligence, all supported and enabled by mobile technologies and big data.**

Essentially, farmers use GPS, sensors and big data analytics to better understand and adjust for spatial variability in their fields such as soil variability, nutrient requirements, moisture levels and yields. Rather than treating the farm as a uniform block, the goal is to break it down into smaller plots, tailor the agronomical work to each plot accordingly, and gain real-time decision support as well as predictive capabilities.

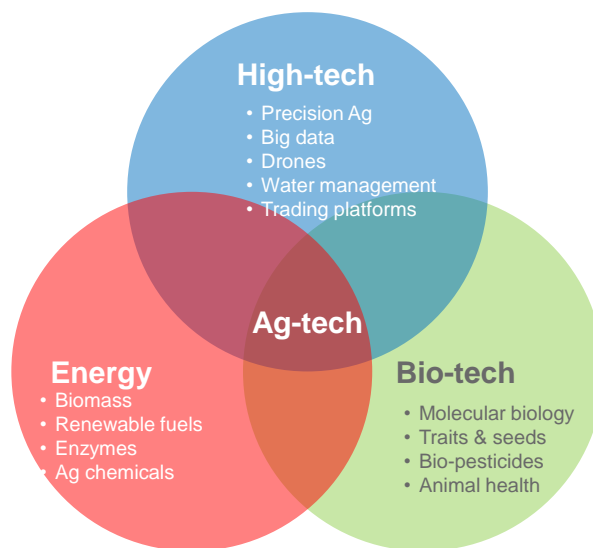
**Although farmers are increasingly tech-minded, the challenge will be to expand the adoption and use of precision agriculture technologies by farmers worldwide.**

### Ag-tech VC funds: Fresh capital for ag-tech entrepreneurs

**As the ag-tech VC space takes shape, we notice different type of funds building portfolios across the sector:**

- There are some established firms invested in the space for several years, including Avrio Capital and Cultivian Sandbox.
- Funding is also increasingly coming from new firms being formed that are specifically focused on investing in technology related to agriculture and others that have broader mandates in sectors spanning from life science, through energy to hi-tech and are now targeting the ag-tech space.
- So far generalist funds have been reluctant to enter this market – but there are some distinctive cases of active VC such as Khosla Ventures and Kleiner Perkins.

Family Offices have been the most active investors to support ag-tech VC funds. Impact investors have also started paying attention to the positive effect these technologies can have on a greater scale. There are social impact investors that have invested in energy related opportunities where the carbon footprint is reduced and now are taking a broader definition to include water and agriculture.



## Venture capital: Ag-tech funding on the rise.

During 2014 we have seen some major ag-tech investments. Below we present a compilation of the funding rounds closed by selected companies that are active in technological innovations along the food & agriculture value chain. Based on this list, 41 companies raised over \$570 Million during 2014.

Table 2: Selected funding rounds by ag-tech companies.

Company	Country	Market segment	Capital raised	Series	Lead investors	Date
AbCelex	Canada	Food Biotech	\$2M	Series A	Cultivan Sandbox Ventures	Apr-14
Advanced Animal Diagnostics	USA	Livestock health	\$15M	Series C	Cultivan Sandbox and Kansas Bioscience Authority	Dec-14
AgLocal	USA	Food marketplace	\$1.3M	Venture	Chicago Ventures	Apr-14
AgSquared	USA	Farm software	\$1.4M	Unknown	Undisclosed	Jan-14
Agworld	Australia	Cloud technology	\$6M	Series C	Reed Elsevier Ventures, Yuuwa Capital	Aug-14
Airware	USA	Drones	Undisclosed		GE Ventures	Nov-14
Arcadia BioSciences	USA	Biotech	\$33M	Series D	Mandala Capital	May-14
Aseptia	USA	Food tech	\$28M	Series C	F.B. Heron Foundation, SFJ Ventures, Prudential Capital Group, and Lookout Capital	Mar-14
Awhere	USA	Big data	\$7M	Series A	Elixir Capital	Sep-14
Beyond Meat	USA	Food tech	Undisclosed	Series D	DNS Capital, WTT Investment, S2G Ventures, KPCB, Obvious Corporation and others.	Jul-14
BioConsortia	USA	Ag biotech	\$15M	Series B	Khosla Ventures, Otter Capital	Apr-14
Blue River Technology	USA	Precision ag, robotics	\$10M	Series A	Data Collective Venture Capital	Mar-14
BrightFarms	USA	Greenhouse farms	\$7.4M	Series B	WP Global Partners, NGEN Partners, Emil Capital Partners	Jun-14
Chromatin, Inc	USA	Seed technology	\$36M	Series E	Wood Creek Capital Management	Jan-14
Cool Planet Energy Systems	USA	Cleantech	\$100M	Series D	UBS, Goldman Sachs	Mar-14
Cropx	New Zealand	Adaptive irrigation service	\$7M	Expected new funding round	-	-
Door to Door Organics	USA	Organic food	\$25.5M	Series B	Arlon Group, Greenmont Capital Partners	Nov-14
Enterra Feed	Canada	Nutrients	\$5M	Unknown	WheatSheaf Investments Ltd.	Sep-14
Enterra Feed	Canada	Nutrients	\$5M	Unknown	Avrio Capital	Mar-14
Farm Business Network	USA	Big data	\$4.6M	Seed	Amol Deshpande, Kleiner Perkins	Apr-14
Farmeron	USA	Dairy farm software	\$2.65M	Seed round	Matt Swanson, Andrew Murphy, SoftTech VC, NextView Ventures	May-14
FarmersEdge	Canada	Precision agriculture	Undisclosed	Unknown	Kleiner Perkins Caufield & Byers	Nov-14
Farmlink	USA	Precision agriculture	\$40M	Series B	OpenAir Equity Partners	Aug-14
FarmLogs	USA	Farm software	\$4M	Series A	Drive Capital	Jan-14
FarmLogs	USA	Farm software	\$10M	Series B	Hyde Park Venture Partners, Huron River Ventures, Drive Capital & others	Dec-14
Farmstr	USA	Online food marketplace	\$1.3M	Seed	Unknown	May-14
Freshrealm	USA	Fresh food distribution	\$10M	Venture	Impermanence LLC	May-14
Granular	USA	Farm software	\$4.2M	Unknown	Andreessen Horowitz, Google Ventures, Khosla Ventures, Monsanto Ventures	Feb-14
Grove Labs	USA	Indoor gardening	\$2M	Seed round	Upfront Ventures	May-14
Hampton Creek	USA	Food tech	\$23M	Series B	Horizons Ventures, Cloud Ventures, Khosla Ventures	Feb-14
Hampton Creek	USA	Food tech	\$90M	Series C	Velos Partners, Founders Fund, Collaborative Fund	Dec-14
Illumix	USA	Led technology	\$8.1M	Series B	NEA, Morgan Creek, Mousse Partners, Apex Venture Partners, Syngenta Ventures, Arrow Realty	Apr-14
JDC Phosphate	USA	Fertilizer technology	\$8M	Unknown	Agrifos Partners and Florida Opportunity Fund	Feb-14
Mekitec	Finland	Food quality technology	\$3M	Unknown	Inventure Capital and Finnish Industry Investment	Mar-14
Modern Meadow	USA	Biomaterials	\$10M	Series A	Horizons Ventures	Jun-14
Nutrisin Corporation	USA	Nutrients	\$12.7M	Unknown	Arman Ventures	Aug-14
OnFarm	USA	Farm decision platform	\$800k	Series A	Several investors	Apr-14
PodPonics	USA	Hydroponics	\$3.4M	Series A	New Ground Ventures	Jun-14
Precisionhawk	USA	Drones	\$10M	Series B	Intel Capital, Millennium Technology Value Partners	Nov-14
Silent Herdsman	Scotland	Predictive analytics software	£3M	Unknown	Scottish Equity Partners	March
Surya Power Magic	India	Solar irrigation solutions	\$500k	Seed	Intellicap, Infuse Ventures	Jun-14
Vestaron	USA	Bioinsecticides	\$10M	Series C	Cultivan Sandbox Ventures	Aug-14
Vitalfields	Estonia	Farm management software	€1.5M	Expected new funding round	-	-
WISErg	USA	Nutrients	\$5M	Series B	Undisclosed	Jun-14

## Global ag-tech: New funds set up in Europe, Israel, New Zealand and India

Ag-tech innovation is not unique to North America but is also a global trend: New funds are setting-up across regions, targeting local technological innovations and aiming to expand them internationally.

**Pulsar Network Capital**, a Dutch private equity firm specialized in sustainable food and nutrition has announced the launch of its €75m Sustainable Food Fund. The Fund aims to invest in innovative and growing companies that will make the food and nutrition supply chain healthier, safer, more efficient and more sustainable.

**Israel, a leader in ag-tech innovation, already counts four venture capital funds focused on this space.** We expect more deals to be announced in the country as the technological innovations led by their portfolio companies reach the global markets.

**New Zealand, a major destination for farmland investments, is also taking the lead in the ag-tech innovation space.** BioPacificVentures is a venture investment fund specializing in food, agriculture, health & wellness, operating across Australia & New Zealand. The fund is particularly focused on opportunities rich in intellectual property.

By definition, innovation takes different shapes in different regions. With one of the largest farming structures in the world, but also one of the poorest ones, India represents a unique challenge and opportunity for agricultural innovation that brings applicable solutions that lower costs – as cost is a major factor for local farmers.

**Omnivore Partners is a venture fund investing in early stage agriculture & food technology companies in India.** The VC firm is a leader in the local market, seeking to transform Indian agriculture through technology innovation.

## Corporate ventures: Collaborating with Ag-tech entrepreneurs to enable agriculture innovation.

“There is a growing consensus that innovation & technology are critical to addressing the global food challenge in the decades to come.

The ag-tech space is an integral part of the ag value chain. As such, traditional segments like seeds, crop nutrition & protection, and ag machinery are all becoming integrated.

Indeed, current ag-tech developments are looking to combine innovations in multiple areas, building “integrated farming systems”.

Large ag corporations have developed their own venture arms to take part of this innovation wave by collaborating with entrepreneurs and start-ups. In return, the startups they invest in usually benefit from their vast resources, including brand equity, market knowledge, technology & expertise, strategic relationships and global resources.

Among the companies with active corporate venturing units that are investing in agriculture related start-ups, we highlight the following ones:

- Monsanto Growth Ventures
- Syngenta Ventures
- Dow Venture Capital
- DuPont Ventures
- BASF Venture Capital
- GE Ventures
- Intel Capital

**As testimony to the growing interest by corporate ventures, late in 2014, Google Chairman Eric Schmidt’s Innovation Endeavors and Flextronics Lab IX launched Farm2050, a collective of diverse partners that is committed to advancing the future of food through supporting Ag-tech entrepreneurs and startups.**

Farm2050 will support Ag-tech startups with capital, design, manufacturing, and test farms to try out their inventions. The Farm2050 partnership includes Google, DuPont, Agco, UTC’s Sensitech, and 3D Robotics.

### Led lights from Japan

**Ag-tech innovation is taking place across the world and across applications. A good example of specialized applications is the case of vertical farming and the need for efficient led lights.**

Electronics manufacturers such as Panasonic, Toshiba, and Fujitsu recently expanded their businesses to include hi-tech vertical farms, which produce vegetables such as lettuce, radish, spinach and sprouts.

Panasonic set up a farm in Singapore that uses special LED lights to cultivate vegetables. Toshiba also started cultivating greens like spinach, lettuce and greens in a factory in Japan earlier in 2014.

These initiatives by electronics companies, along with innovative urban farming projects from around the world, are expected to increase access to locally grown food and provide alternative sources of producing food, developing more energy and resources efficient farming methods.

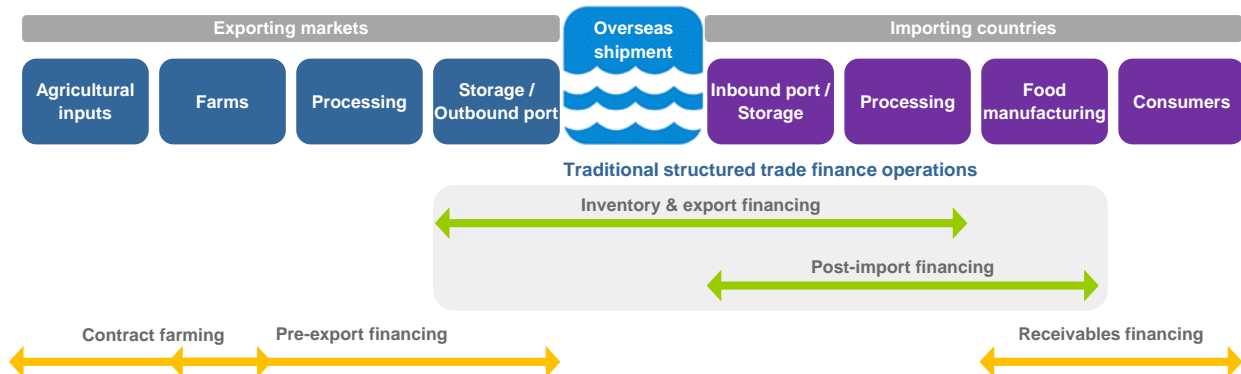


## Agricultural trade finance: Financing food production & trade in emerging markets

**It is an asset category that is not part of most food & agriculture investment strategies, yet it focuses on one of the most critical components of the global food value chain: the global trade.**

Structured trade finance of agricultural commodities is typically required in international trading. Increasingly, pre-export and agriculture finance are also critical areas requiring funding, particularly as the need to expand agricultural production intensifies. The figure 7 shows the financing requirements along the food & agriculture value chain.

**Fig. 7: Financing requirements along the food value chain.**



Agriculture trade finance has expanded quietly during the 2000s as global trade grew dramatically – growth is not only driven by volume but also by value and the rise in ag commodity prices during the 2000s added pressure to the food trade business as working capital requirements increased substantially. But what happened after the 2008 financial crisis finally positioned the asset category in the global investment universe.

### Closing a gap in the global commercial banking

While agricultural trade finance has traditionally been the territory of commercial banks - primarily European ones - the demand for lending far outweighs the capital traditional lenders are willing to commit. Most of the big banks focus primarily on lending to the largest companies.

**The 2008 credit crisis and the 2011 European debt crisis helped make trade finance more attractive as liquidity issues along with new Basel regulations required banks to reconfigure their balance sheets, resulting in a reduction in the amount of capital available to the market, specially to small and midsize companies. This made the sector more attractive to alternative fund managers.**

Even today, international banks continue to dominate the agricultural trade finance market and the growth of alternative trade finance funds has taken so far only a marginal portion. However, the trend continues as banks are expected to face more regulations in the years to come.

**In certain emerging markets, local banks also expanded their market share by filling the gap left by traditional European banks. This has been the case in South America: Banks like Bradesco and Itau in Brazil, and Grupo Galicia in Argentina, became relevant players in the local trade finance markets.**

### Attractive yields

**At the same time that the 2008 financial crisis unfolded and commercial banks retreated from the trade finance markets, institutional investors started to face considerable pressure to find alternatives to their traditional fixed-income investments as yields on highly-rated sovereign debt dropped to record low levels.**

This led to greater interest in such alternatives as structured trade finance, which offer the potential to earn attractive risk-adjusted returns. From a portfolio point of view, these investments not only offer potentially higher interest rates than fixed-income sovereign and corporate bonds but also entail relatively limited risks, as the receivables are usually backed by real goods transactions and may be covered by credit insurance or secured by the importer's bank.

## Agricultural trade finance:

### An investment strategy with strong appeal

In the purest sense, agriculture structured trade finance can be considered an absolute return strategy with a limited degree of volatility related to the broader financial markets, effectively delivering consistent returns throughout market cycles.

A typical deal in a portfolio of an agricultural trade finance fund involves the issuance of a regular credit facility to a food-related business where the commodity is used as collateral to ensure the loan's repayment. Because the portfolio of loans is not directional and the typical portfolio duration is short, these type of investments can be structured in a way that can provide monthly income; indeed, one of the most relevant risks is operational execution.

Below we highlight some of the typical characteristics of these investment funds:

- **Operational skills:** Trade finance requires solid operational skills – a true operational platform is required to be successful. Long-term vision is critical; taking a short term bet on this market is a recipe for trouble.
- **Market segment:** Structured trade finance funds are typically working in the middle market: The large businesses have their own financing or work with large banks and the smaller market is too atomized.
- **Liquidity profile:** The average loan in agricultural trade finance ranges between 60 to 120 days in tenor with the average loan to value ratio depending on the fund's lending criteria.
- **Risk management:** Usually trade finance funds do not take commercial risks: there is always a physical collateral, which can be complemented with company's guarantees. The payment risk by the buyer is usually covered with letter of credits or credit insurance, though for very large companies funds may accept to take the risk.
- **FX and interest rate exposure:** Trade finance funds usually manage all their trades in U.S. Dollars. The nature of trade finance enables the funds to navigate fluctuations in exchange rates: usually a weaker the domestic currency is, the more profitable the export sector becomes. Trade finance funds also enjoy a positive correlation to interest rates: portfolio yields tend to rise as interest rates rise.



### Regional trade flows

Agricultural trade finance funds usually have a regional focus, as commercial relationships with clients are region-driven: Knowing who, knowing how and knowing when is critical to succeed in this business.

Clients include a broad array of food businesses: producers, processors and traders – dealing with grains, oilseeds, animal feed, sugar, dairy products and fruits.

From a regional standpoint, South America is mostly an origination business, financing pre-export (production and processing) while Asia is mostly a consumption business, with almost half the world's population. Africa is the ultimate frontier: as the agricultural production picks up, the demand for trade finance will offer opportunities for managers and investors.



### Finance innovations

As managers chase new opportunities and attractive yields, the sector is expanding into less traditional financing solutions.

Some trade finance funds now include a range of senior, unsecured debt, junior debt and mezzanine debt. Even some funds are now including private equity investments – essentially project finance – alongside the traditional trade finance portfolio.

While trade finance funds can move up the finance ladder and go into project finance and equity finance, these strategies require a different set of skills in our opinion. We rather expect to see new specialized funds focused on specific financing solutions.

“

We expect a transition phase in the food & agriculture asset class that can last for the next 6-18 months.

## 2015 Food & agriculture investment outlook

The past year has delivered mixed results for investors betting on the broad food & agricultural sector. We had anticipated a re-accommodation in certain assets as the sector's recent strong performance was prone to a consolidation.

Going forward, we expect 2015 to continue this transition phase. The expected low crop prices and lower farm income across the main producing regions may have the effect of lowering investment across the sector. Besides, the uncertainty over the future economic growth in key markets and monetary policies and the impact that those factors can have in the financial markets, may likely increase risk aversion.

Nevertheless, we anticipate that in the next 6 to 18 months a new investment wave will gradually take shape. Thus the year ahead may offer attractive entry points for those investors with long-term horizons.

Fig. 8: Key factors that will affect global food & agriculture investments in 2015



“

The widening divergence evidenced among major economies will also influence the performance across the ag space.

As we start 2015, the most repeated word to describe the future investment outlook among bankers is “divergence”, referring to the divergent economic paths among the most important developed and emerging economies.

The U.S. recovery and the likely monetary tightening that the U.S. Fed will initiate eventually contrast with the recessive environment across Europe and the slowdown in many emerging markets.

This divergence will continue to bring volatility in financial assets, rates, currencies and commodities. Besides volatility, a major concern is the expectation for continued pressure on emerging markets, which will remain prone to capital outflows and depreciation of their currencies. We agree with the view of several analysts that we are only now starting to feel the consequences of the currency war.

While we recognize that momentum into 2015 has weakened, we see opportunistic entry points to position ahead of expected improvements from 2016 onwards.

## What does this mean for investors?

### Design an investment strategy to profit from the next investment wave

- **Exposure:** In line with our outlook, we believe that those investors who are willing to build or expand their exposure to the global food & agriculture asset class will have a window of opportunity during 2015 to design and implement strategies taking advantage of more attractive entry points. This will require a good understanding of the opportunities and risks (across assets and geographies).
- **Listed equities:** Lower farm income across major production countries and increased uncertainty across emerging markets will limit pricing power and revenue growth along the agribusiness value chain. Attractive entry points can appear during the year. It is critical to understand the sub-segments as performance may vary considerably. In the same way, a distinction between major global companies and local players is fundamental to find attractive opportunities.
- **Farmland:** Prices in several regions imply a fairly to fully price market, however we see relative value opportunities in certain segments. Specific opportunities will arise in the next 6-18 months in places where a sector of the investment community is willing to exit to cash in unrealized gains or to rebalance their portfolios. Cattle land and permanent crops will remain in demand.
- **Agricultural commodities:** The current low price level across the ag commodity complex could be a good entry point for a long term position, considering that the absolute levels of demand will continue to grow and volatile weather can be expected to bring production shocks again in the coming seasons. The prospect of a strong U.S. dollar is a negative factor to consider. Hedge strategies with absolute target returns remain an attractive spot.
- **Private equity:** The food & agriculture private equity space has still much space to grow in both developed and emerging markets; the challenge is to find fair valuations. If we look at a 5-year horizon, we see revenue growth and regional consolidation as major value drivers.
- **Risk management:** Agriculture investments can have high volatility, with high levels of risk, some of which are out of the control of farmers and investors, such as poor weather and potential geopolitical problems, with a significant proportion of activity taking place in developing nations. The sector is inherently more prone to be affected by unexpected events, including health and food safety issues, as well as trade and regulatory restrictions.

## What does this mean for asset managers?

### Build bullet-proof business cases and provide the institutional platform required by investors

**After the run of the last decade, opportunities in the food & agriculture space are less obvious: building and delivering attractive risk-adjusted returns requires specialized skills. The asset class is also becoming more institutional minded. We suggest asset managers to focus on the following key points:**

- **Investment team & local networks:**
  - Build strong teams at the investment and operational level, developing and acquiring the skills needed to manage increasingly complex projects and developing market & investment intelligence to support the business.
  - Build local networks across the active regions, leveraging on local knowledge and establishing relationships with key stakeholders.
- **Investment opportunities:**
  - Search beyond mainstream assets and regions; take advantage of price corrections in the short-term.
  - Target opportunities along the value chain as some investors choose to monetize their assets.
  - Develop innovative approaches in investment structures and business models to unlock assets' value and to facilitate interest and funding from investors (e.g. local partnerships with farmers, working capital solutions to clients, combination of debt and equity funding).
- **Institutional platform:**
  - Offer to investors value propositions that are supported by institutional-quality infrastructure and processes.
  - From the investment structuring and fundraising, through the investment and management activities to the exit, investors demand solid operational infrastructure, high degree of transparency, rigorous control and risk management and strong corporate governance.

## Regional investment news: A roundup of news from the South American food & agriculture sector

### Companies & deals

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**Singapore Olam will invest \$ 80 Million in dairy processing facility in Uruguay** - Singapore based Olam International's wholly-owned subsidiary New Zealand Farming Systems Uruguay will be investing \$80 Million to establish a new dairy processing facility in Uruguay.

The plant is expected to begin production in 2017 with a potential of a million liters per day. The project will enable Olam to fully integrate its dairy supply chain and make effective the full potential of NZFSU's dairy farming operation by leveraging its global trading and distribution network.



**JBS, the Brazilian meat giant, defeated in the auction for US-based Hillshire Brands in 2014, acquired Céu Azul Alimentos** to extend its reach into the poultry sector in Brazil.

The company paid \$111 Million for Céu Azul Alimentos, which owns two poultry processing plants, incorporating feed mills and incubators, in the state of Sao Paulo, with capacity for 330,000 birds a day.

**Tyson sold its Brazilian and Mexican poultry arms to JBS for \$575 Million in cash** - This sale came after the \$8.55bn purchase of Hillshire Brands, that gave the company a leading position in the local U.S. market.

With this acquisition, JBS is able to extend its reach into poultry for a group whose growth into the world's largest meatpacker was built around beef. The deal happened only few weeks after JBS acquired Brazilian poultry assets from Céu Azul Alimentos.

**Parmalat was close to winning the auction for the Brasil Foods dairy business** in its second recent announcement over an acquisition in the Brazilian market.

Parmalat, controlled since 2011 by France's Lactalis, said it had signed a binding memorandum of understanding over purchasing the Brasil Foods assets for \$805 Million.



The deal came few months after Brasil Foods announced it was selling its dairy division, with the auction reportedly attracting interest from several suitors, including France's Danone, Swiss-based Nestle and Grupo Lala, Mexico's top milk processor.

The purchase of Brasil Foods is the second one for Parmalat in Brazil, after the \$110 Million offer for the UHT milk and cheese operations of Lacteos deo Brasil, which had filed for bankruptcy protection in 2013.



**Brazilian juice maker Grupo Cutrale and investment firm Safra Group** finally won the takeover battle to acquire Chiquita Brands.

The \$682 Million takeover was agreed after several attempts and a previous offer by rival Fyffes. The Cutrale Group will add Chiquita to their tropical fruit business.

**Bayer strengthened its presence in Latin American soybean market** – During 2014 Bayer CropScience acquired Argentinian seed company FN Semillas for US\$ 30M and Biagro Group, dedicated to seed treatment business. These acquisitions marked the company's entry into the soybean seed market in Argentina. The company also acquired Igra Semillas of Paraguay.

**ADM acquired the rest of Toepfer and sold fertilizer operations in Brazil and Paraguay** - ADM announced the purchase of the outstanding 20% in the struggling Toepfer trading house. It also announced the sale of its fertilizer blending and distribution operations in Brazil and Paraguay to Mosaic for \$ 350 Million.

## Regional investment news (cont.): A roundup of news from the South American food & agriculture sector

### Companies & deals



**Marine Harvest is to invest \$26 Million in a new salmon processing plant in Chile**, which will have the potential to increase production to 90,000 metric tons by 2019.

The Norwegian company, the world's largest salmon farmer, announced the investment after having acquired the Pescanova's former salmon assets in Chile, Acuinoval, for \$120 Million back in September 2014.

Acuinoval's assets include a hatchery, a smolt facility, 36 sea water licences and a primary and secondary processing facility that will provide the necessary infrastructure to Marine Harvest to increase production.

**AGRO Merchants Group announced an investment in Brazilian Comfrio, in a partnership with Aqua Capital** - AGRO Merchants Group has entered the Latin American cold chain storage sector through a strategic minority investment in Comfrio Soluções Logísticas. The company is part of the food & agriculture portfolio of PE firm Aqua Capital.

AGRO Merchants Group, one of the world's fastest growing cold chain solutions companies, together with its financial sponsor Oaktree Capital Management, made this strategic investment in Brazil's Comfrio. This investment marks AGRO Merchants' initial investment in Latin America and lays the foundation to build out a broad network across the region.

Earlier in December 2014, Comfrio acquired Stock Tech Logística. With over 650,000 cubic meters in storage capacity, the newly combined Comfrio and Stock Tech form the largest player in the Brazilian controlled-temperature logistics sector.

**Shell & Cosan jointly invest \$1 Billion in Brazilian second generation ethanol plant** - Both companies intend to build 8 ethanol plants over the next 10 years, for an estimated cost of \$930 Million.

The investment will be carried out by Raízen, a leading producer of ethanol from Brazilian sugar cane which is a joint venture between Shell and Brazilian firm Cosan. The plants will produce cellulosic ethanol fuel using sugarcane waste as its primary raw material.

As far as the cost is concerned, producing second-generation cellulosic oil is more costly than that of ethanol produced from other sources as the enzymes needed for production are more expensive to obtain.



Raízen sugar-cane fields, Brazil

Raízen is planning to boost yield by co-locating its cellulosic operation with a traditional ethanol plant, taking advantage of the sugar cane waste to use as feed.

**IFC to subscribe \$15 Million in Chilean Copeval** - IFC will commit up to \$15 Million to subscribe new shares in Copeval in Chile to support the company's expansion and promote access to financing to more than 36,000 farmers in the country.

This is IFC's second investment in Copeval. On April 2014 IFC subscribed \$45 Million in a securitized bond. Copeval is Chile's leading agricultural input distributor, providing training, certification services, technical support and pre-harvest financing. It reaches farmers through its 27 branches spread across the country's agricultural regions.



**Peru's Olmos irrigation project will increase agricultural exports by \$1 Billion in upcoming years as the project enters into operation in November 2014.**

The project required a \$222 Million investment and once completed, it will provide irrigation to the new 38,000 crop hectares, plus the already existing 5,500. Production will include avocados, quinoa, sugar cane, among other crops. The Brazilian group Odebrecht has a 25-year concession to design, finance, build, operate and maintain the irrigation project.

## Challenges and opportunities in the South American food & agriculture sector

**Countries across the region will have to deal with the end of the commodity boom and the reversion of capital flows.**

2014 marked the end of the commodity boom that drove an important part of the economic growth across South America in the last decade. The drop in commodity prices from crops, through metals to oil has altered the region and now local governments are looking for ways to re-ignite the economic growth and build sustainable growth levers.

As we start 2015, South American nations also confront the global divergence in monetary policies across developed economies, which has the potential to reduce capital inflow into the region and to increase the cost of borrowing. In the last six months, local currencies across the region have depreciated against the U.S. dollar in a range between 10% and 20%.

For our analysis of food & agriculture investments in the region, the macroeconomic outlook is relevant in order to focus on those countries that are better positioned to cope with this new global economy by virtue of their policies and their economic strength.

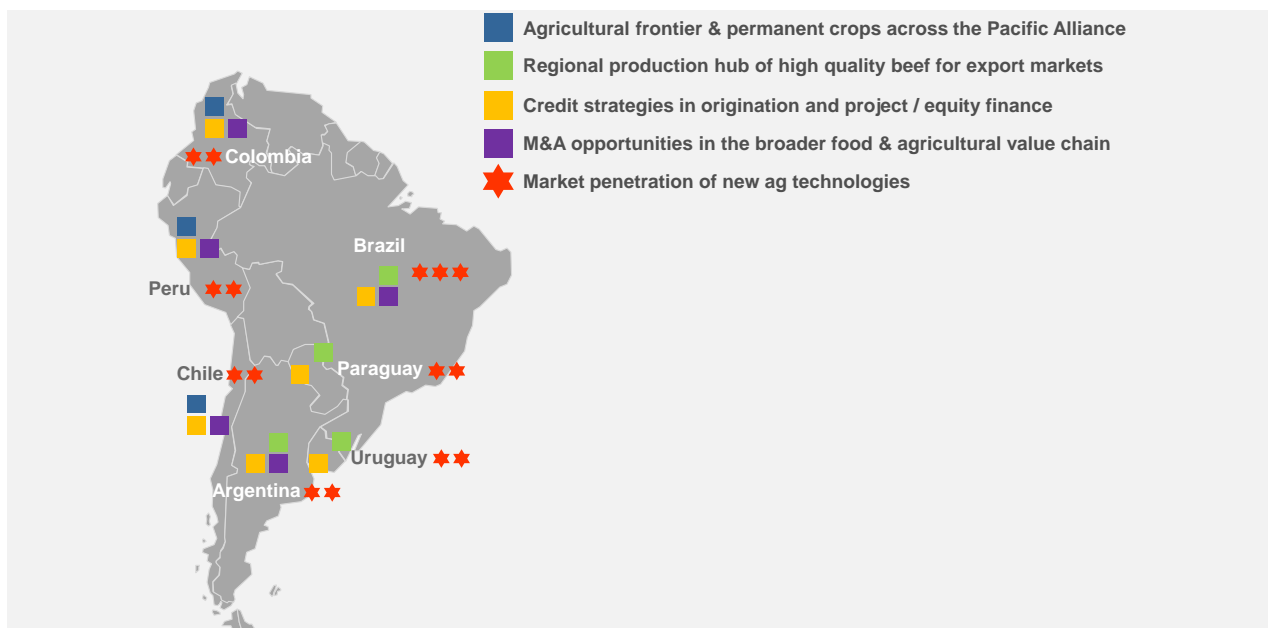
As we mention in our investment & regulatory outlook in pages 40 & 41, we see Chile, Colombia, Paraguay and Peru as the countries with the best fundamentals and outlook. We also believe that Brazil is an attractive market in the medium term. The Oct'15 presidential elections in Argentina will largely define its future.

### **New investment themes reflect innovations in the food & agriculture business and the evolving economic landscape across the region**

Despite the recent economic deceleration across the region, we believe South America should be part of a well-diversified agricultural portfolio. The region is one of the major regional food & agriculture hubs with the potential to export increasing food supplies to the world.

As we start 2015, we are actively working on several projects across the region that span the regional food & agriculture value chain with particular focus on five themes. The map 2 and the next page summarize these themes.

Map 2: Key investment themes across South America.



**Permanent crops & agricultural frontier development across the Pacific Alliance**

*Chile, Peru and Colombia*

- The members of the Pacific Alliance have made a strategic shift to increase trade links with Asian partners – food exports should be a major beneficiary.
- Chile continues to offer attractive opportunities to build production and trading platforms in fruits.
- Peru has weather conditions and water resources that provide strong competitiveness in high-priced crops (grapes, avocado, asparagus), as well as in some of the healthy food and ingredients (quinoa, chia, stevia).
- Colombia has one of the ultimate agricultural frontiers in the region: the Colombian plains or “Llanos Orientales”. There are also attractive opportunities in soft commodities like cocoa.

**Regional production hub of high quality beef for export markets**

*Uruguay, Paraguay and Argentina*

- As global beef demand is set to rise in coming decades, South America is best placed to supply a growing portion of this demand, driven by available land resources, low-cost & highly productive pastures and improving infrastructure.
- While Brazil is the undisputed leader, we believe Uruguay and Paraguay offer relative value opportunities.
- Argentina, which has seen its production and exports drop in recent years because of irrational policies, may offer a unique opportunity in the coming year if a new pro-business government arrives to power.

**Credit strategies in origination and project / equity finance**

*Across the region*

- Lack of financing or expensive financing is one of the factors limiting increased investment and production across the regional food & agriculture sector.
- We believe that the growth achieved by regional trade finance funds and private equity funds will attract new players to develop innovative credit strategies in this space.
- We consider that origination finance, project finance and bridge finance will emerge as attractive niche segments for alternative funds and specialized players.

**M&A opportunities in the broader food & agricultural value chain**

*Brazil, Argentina, Colombia, Chile & Peru*








- If we move away from farming, we find a massive ecosystem of small and medium companies that provide the necessary inputs, equipment and services to enable the broader food and agriculture industry.
- We consider that the private equity space will dominate the next investment wave in the region, as increased competition, undercapitalized balance sheets and generational renewal in the sector attract more investment funds.
- While Brazil will continue offering opportunities – a consolidation wave has a long way to go there – indeed all the other major countries in the region may also enjoy increased M&A activity in the sector.

**Market penetration of new ag technologies at the confluence of hi-tech, bio-tech and renewable energies**

*Across the region*

- South American countries have been pioneers in the development and application of new agricultural technologies, most of them focused on seeds, crop protection and agricultural equipment. Technologies in animal genetics and permanent crops have also advanced over time.
- The new ag technologies that will be adopted in the coming years may come mostly from Silicon Valley though. The technology convergence of hi-tech, bio-tech and renewable energies are creating a growing pool of new ag technologies that offer innovative farming systems.
- We believe that the regional adoption of these technologies and applications is a robust investment theme: Companies who wish to expand into the region will need to understand the broad universe of existing production systems and adapt and optimize these technologies to the particular needs of local farmers.
- It is not only the technological challenge, but companies will also need to establish effective distribution and service channels, all in an efficient way to build and sustain a profitable business.
- Valoral Advisors is establishing a regional network to bring ag-tech companies to the region and to support their regional plans to establish successful operations in key markets.

## Investment & regulatory outlook in the South American food & agriculture industry

Country	Outlook	Key developments to follow
 <b>Argentina</b> GDP '14e: -1.1% GDP '15e: -0.7%		<ul style="list-style-type: none"> <li>• The selective default status triggered by a U.S. court decision on years' long fight against holdouts has prevented the country to raise fresh capital in international markets.</li> <li>• Continued restrictions on capital movement and currency exchange controls are making the country fall apart as an investable choice for most foreign investors. High domestic inflation is also detracting investments.</li> <li>• Political dysfunction exacerbates the negative macro outlook. The 2015 outlook is gloomy in the running to the presidential elections (primary round Aug' 15, general elections Oct' 15).</li> <li>• Worsening profitability along the agribusiness value chain driven by tax burden, export rights, internal market restrictions, domestic inflation and artificially low exchange rate, lack of financing and increasing regulations.</li> <li>• The price drop of agricultural commodities and of crude oil is likely to affect local investments in the short term.</li> <li>• High risk – high return opportunities may arise in the next 6 - 18 months. Cattle is seen as an early beneficiary of an eventual new, business-friendly government.</li> </ul>
 <b>Brazil</b> GDP '14e: +0.2% GDP '15e: +0.7%		<ul style="list-style-type: none"> <li>• Economic growth is expected to improve in 2015-16 following a relatively weak year.</li> <li>• However, the Brazilian economy will remain fragile as the new economic team put by recently re-elected President Dilma Rousseff introduces policy adjustments. At the end, a more business-friendly reform path could provide the basis for future growth.</li> <li>• The drop in crop prices is already affecting farmers' profitability, however the recent depreciation of the Real is beneficial for the agri-industrial sector and provides partial compensation.</li> <li>• The local sugar cane and ethanol market remain affected by subsidies in the local fuel market. An increase in the blend mandate is expected to be approved soon.</li> <li>• Brazil is likely to review the Southern Common Market (Mercosur) framework to increase flexibility in negotiating preferential trade and investment accords with the EU, NAFTA and the Pacific Alliance.</li> </ul>
 <b>Bolivia</b> GDP '14e: +5.4% GDP '15e: +5.0%		<ul style="list-style-type: none"> <li>• Bolivia's economy continues to perform very satisfactory as re-elected president Evo Morales initiates its third presidential term.</li> <li>• Rising natural gas production, which supports government and private consumption, and public investment, should underpin the growth prospects.</li> <li>• However, the current drop in energy prices means that sustaining high growth going forward requires the country to diversify to other economic sectors and attract foreign investment.</li> <li>• The agriculture sector may have the ability to contribute to this diversification and to improve local food security.</li> <li>• Farmland expansion in the region of Santa Cruz de la Sierra has continued, targeting cattle and crop production even when land ownership remains a source of tension.</li> </ul>
 <b>Chile</b> GDP '14e: +1.9% GDP '15e: +3.0%		<ul style="list-style-type: none"> <li>• Under the new presidency of Michelle Bachelet, the country is fighting a deceleration in the pace of economic growth, partially driven by the slowdown in the mining sector.</li> <li>• Declining copper prices have reduced the terms of trade, business confidence and investment. There are also uncertainties surrounding the tax and labor reforms that continue to drag on Chile's outlook. However, the economic outlook remains sound.</li> <li>• The sharp depreciation of the Chilean peso has put upward pressure on inflation, though inflation expectations remain well anchored.</li> <li>• Chile remains an attractive market as it relates to investments in its F&amp;A sector.</li> </ul>

Sources: IMF, OECD, Focus Economics, BBVA.

## Investment & regulatory outlook in the South American food & agriculture industry

Country	Outlook	Key developments to follow
 <b>Colombia</b> GDP '14e: +4.9% GDP '15e: +4.3%		<ul style="list-style-type: none"> <li>• President Juan Manuel Santos was re-elected for a second term and faces the challenge to sustain the pace of economic growth experienced in previous years.</li> <li>• The recent drop in oil prices and the subsequent depreciation of the local currency will add pressure in the short term. However, the depreciation of the Peso may help boost exports in the manufacturing and agricultural sectors.</li> <li>• Despite more moderate growth expectations, the country remains one of the preferred destinations among South American peers to receive foreign investments.</li> <li>• Agribusiness is one of the priority sectors to continue receiving investments to modernize production (tropical fruits, cattle, palm &amp; vegetable oils, etc.), to scale up operations with mechanized technology and to improve ailing infrastructure.</li> <li>• The Pacific Alliance and the LTA with the U.S. also support expectations for increasing investments in agriculture and food production.</li> </ul>
 <b>Paraguay</b> GDP '14e: +4.1% GDP '15e: +4.4%		<ul style="list-style-type: none"> <li>• The president Horacio Cartes is building a business-friendly culture in the country, attracting interest by international investors in a series of key sectors, including infrastructure, real estate and the agribusiness complex.</li> <li>• The economy continues to perform well, supported by a strong agricultural sector and further investments in the country.</li> <li>• The agribusiness sector is one of the priority areas for the country's developments. The country has become the second largest beef exporter in South America - after Brazil - and the local soybean agricultural complex continues to expand.</li> <li>• The sector's potential is still limited by lack of infrastructure, but the future remains very promissory.</li> </ul>
 <b>Peru</b> GDP '14e: +2.9% GDP '15e: +4.7%		<ul style="list-style-type: none"> <li>• 2014 has seen steady decline in the export sector, falling production in the mining industry and waning private investment levels, all of them weighing heavily on growth.</li> <li>• Amid slowdown in growth and investment, the government has announced new infrastructure projects to attract foreign investment, which has been a major growth driver in recent years.</li> <li>• The country has been effective in promoting macroeconomic and legal stability, and tax predictability to generate an investment-friendly climate.</li> <li>• This should be the basis for attracting new investments to the food &amp; agriculture sector in coming years, especially tropical fruits and niche products like quinoa, chia and stevia.</li> </ul>
 <b>Uruguay</b> GDP '14e: +3.3% GDP '15e: +3.1%		<ul style="list-style-type: none"> <li>• Tabaré Vázquez was elected president in November 2014 by a wide margin. The new government is expected to continue with the same macro policies established by the previous President.</li> <li>• Uruguay is not immune to the decelerating trend observed along the region. The challenges faced by its main neighbors – Brazil and Argentina – will likely impact activity levels during 2015.</li> <li>• The country has a well-established, export-oriented and diverse agribusiness sector that should keep attracting investments. The cattle and dairy sectors hold strong competitive advantages to continue supporting the export business.</li> <li>• The challenge is to maintain dynamism in the current context of lower international crop prices and lower appeal of emerging markets.</li> </ul>

GDP data source: IMF, OECD, Focus Economics, BBVA.

### **Methodological notes**

The information and opinions in this publication were prepared by Valoral Advisors Sarl. The information and opinions have been prepared from public sources, including but not limited to fund documents available from fund managers, companies' websites, industry presentations and industry news.

The funds surveyed represent only a limited portion of the available funds in the market. The survey focuses only on investment funds managed by private asset managers that invest in assets related to the food and agriculture industry and which are offered to a range of retail, HNWI and institutional investors.

This survey does not include most commodity and equity hedge funds. The survey does not consider the direct investments by sovereign funds, pension funds and government agencies and funds that are privately owned and not opened to investors.

The results shown may include assumptions and the information and opinions may not be up to date.

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### **Disclaimer**

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## **About Valoral Advisors**

**Valoral Advisors is an independent investment advisory firm focused exclusively on the global food & agriculture asset class and offering advisory, transactional and investment management services to asset managers and investors.**

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