

www.pwc.com

Global Agribusiness Deal Activity

May 2016



pwc

Table of contents

Section	Overview	Page
1	Agribusiness news & multiples	1
2	Food trust	6
3	Markets update	9
4	Our team	14

Agribusiness news & multiples



Dairy

Red meat

Pork



Dairy

M&A News

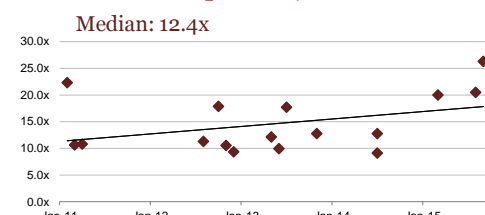
US: Swiss dairy Emmi has acquired Californian cheese manufacturer Cowgirl Creamery Swiss. This transaction is Emmi's third Californian acquisition since 2010.

Australia: Inner Mongolia Fuyuan Farming is to acquire a majority stake in dairy processor Burra Foods.

Management News

No relevant news.

Transaction multiples (EV/EBITDA)



Bidder/Target 1: Pershing Square Capital/Mondelez, 2: Groupe Lactalis/Lactalis Puleva, 3: Pepsi-Cola/Wimm-Bill-Dann Food, 4: Bank Hapoalim/Parmalat, 5: Société pour le Financement de l'Industrie Laitière/Parmalat, 6: Suntory/Cerebos Pacific, 7: Savola Group/Almarai, 8: Triun Fund Management/ Danone, 9: Saputo Cheese Morningstar Foods, 10: Prominent Achiever / China Mengniu Dairy Co., 11: China Mengniu Dairy Co./Yashili International, 12: FB Participações/Vigor Alimentos, 13: Qurain Petrochemical Industries/Saudia Dairy & Foodstuff, 14: First Pacific & Wilmar International /Goodman Fielder, 15: Qurain Petrochemical Industries/Saudia Dairy & Foodstuff, 16: Qurain Petrochemical Industries/Saudia Dairy & Foodstuff, 17: First Pacific Company / Gooform Fielder Ltd, 18: Warrnambool Cheese and Butter / Lion Dairy & Drinks, Everyday cheese business, 19: Management / China Huishan Dairy, 20: Centre Laboratories / Ausnutria Dairy.

Trading multiples (EV/EBITDA)

	2015A	NTM
Nestlé S.A.	14.5x	14.1x
Unilever PLC	15.0x	13.6x
Unilever N.V.	15.0x	13.3x
Mondelez International, Inc.	18.3x	17.0x
Danone	12.5x	12.1x
Fonterra Co-Operative Group Ltd.	10.5x	n.a.
General Mills, Inc.	13.4x	13.7x
Mead Johnson Nutrition Company	15.4x	15.3x
Dean Foods Company	6.1x	5.4x
Want Want China Holdings Ltd.	10.2x	9.9x
Median	13.9x	13.6x
Average	13.2x	12.7x

Red meat

M&A News

Brazil: JBS announced it plans to transfer its international assets to JBS Foods International, a new company that it plans to list on the NYSE.

Australia: QIC is to acquire an 80% stake in North Australian Pastoral Company.

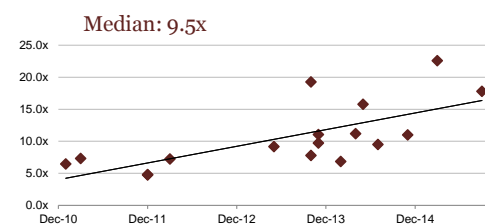
Chinese retailer Dashang Group has expanded its Australian beef operations by acquiring a 3,500ha station and its herd of 1,110 cattle.

Management News

No relevant news.



Transaction multiples (EV/EBITDA)



Bidder/Target 1: West Face Capital/Maple Leaf Foods, 2: Boparan Holdings/Northern Foods, 3: NA/Astarta Holding, 4: Leucadia/National Beef Packing, 5: TMK Holding/National Beef Packing, 6: NA/Zhongpin, 7: Henan Shineway/Smithfield Foods, 8: Darling Ingredients/VION Ingredients, 9: NA/People's Food Holdings, 10: Sigma Alimentos/Campofrio Food Group, 11: L Sigma Alimentos/Campofrio Food Group, 12: JBS S.A., 13: Condoct Opportunity / Campofrio Food Group, 14: Tyson Foods / The Hillshire Brands, 15: Nutresa / Aldage, 16: ITOCHU Corporation / C. P. Pokphand Co., 17: H. J Heinz Holding Corp / Kraft Foods Group, 18: Bright Foods / Silver Fern Farms.

Trading multiples (EV/EBITDA)

	2015A	NTM
Associated British Foods plc	16.3x	14.7x
The Kraft Heinz Company	26.9x	16.6x
BRF S.A.	8.9x	8.1x
Tyson Foods, Inc.	9.2x	8.7x
Henan Shuanghui Investment &	11.5x	10.0x
Kerry Group plc	19.3x	18.0x
Hormel Foods Corporation	14.0x	12.5x
JBS S.A.	6.1x	5.2x
Uni-President Enterprises Corporation	11.9x	10.7x
Universal Robina Corporation	19.3x	16.9x
Median	12.9x	11.6x
Average	14.3x	12.1x

Pork

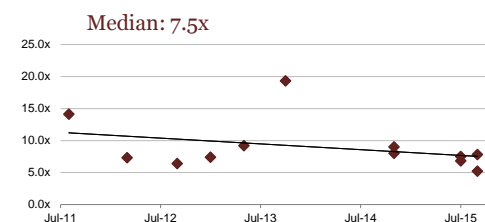
M&A News

No relevant news.

Management News

US: The National Pork Board announced five board appointments.

Transaction multiples (EV/EBITDA)



Bidder/Target 1: Talley's Group/ AFCCO Holdings, 2: Premium Brings Holdings / Pillar Sausages & Delicatessens, 3: Harim Holdings/ Sunjin Holdings Co. 4: LBO / Zhongpin Inc. 5: Mitsubishi Corp / Yonekyu Corp. 6: Henan Shineway Industry Group / Smithfield Foods Inc. 7: LBO / People's Food Holdings Ltd. 8: Sigma Alimentos / Campofrio Food Group, SA. 9: JBS Australia Pty / P&M Smallgoods Pty. 10: Swift Pork (JBS) / Cargill Pork. 11: Cedrob SA / Polski Koncern, 12: JBS S.A. / Moy Park Ltd., 13: Itoham Foods / Yonekyu Corp.

Trading multiples (EV/EBITDA)

	2015A	NTM
Seaboard Corp.	13.7x	n.a.
BRF S.A.	8.9x	8.1x
Marudai Food Co., Ltd.	7.2x	n.a.
The Kraft Heinz Company	26.9x	16.6x
Shandong Longda Meat Foodstuff Co.,	36.2x	n.a.
Shandong Delisi Food Co., Ltd.	56.4x	n.a.
SunJin Co., Ltd.	14.6x	n.a.
JBS S.A.	6.1x	5.2x
WH Group Limited	7.9x	6.9x
Median	13.7x	7.5x
Average	19.8x	9.2x

Sources: S&P Capital IQ, Factiva, PwC research

Poultry

Forestry

Fruit, vegetables & nuts



Poultry

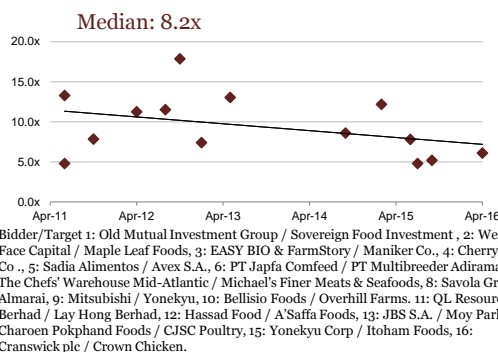
M&A News

Australia: ASX-listed TasFoods is to acquire Nichols Poultry and Shima Wasabi farm.

Management News

No relevant news.

Transaction multiples (EV/EBITDA)



Trading multiples (EV/EBITDA)

	2015A	NTM
BRF S.A.	8.9x	8.1x
Tyson Foods, Inc.	9.2x	8.7x
Campbell Soup Company	13.5x	12.0x
Almarai - Joint Stock Company	16.4x	14.3x
JBS S.A.	6.1x	5.2x
Uni-President Enterprises Corporation	11.9x	10.7x
Universal Robina Corporation	19.3x	16.9x
Pilgrim's Pride Corporation	5.6x	6.2x
Charoen Pokphand Foods Public Co. Ltd.	16.6x	12.8x
PPB Group Berhad	5.4x	4.2x
Median	10.5x	9.7x
Average	11.3x	9.9x

Forestry

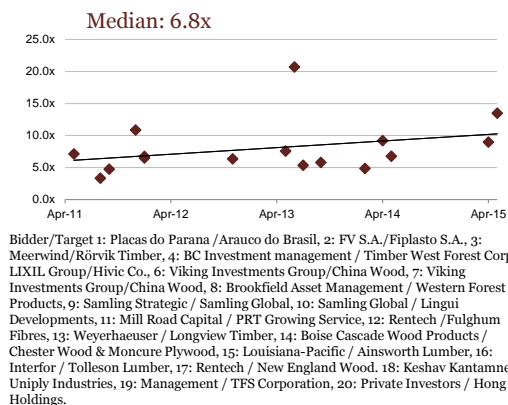
M&A News

No relevant news.

Management News

No relevant news.

Transaction multiples (EV/EBITDA)



Trading multiples (EV/EBITDA)

	2015A	NTM
West Fraser Timber Co. Ltd.	10.0x	6.7x
Canfor Corp.	7.8x	5.7x
Duralex SA	9.2x	7.9x
Deltic Timber Corporation	33.2x	n.a.
Sonae Indústria, S.G.P.S., S.A.	6.3x	n.a.
Stella-Jones Inc.	16.5x	13.1x
Interfor Corporation	15.4x	7.8x
Boise Cascade Company	8.1x	7.4x
Norbord, Inc.	23.3x	7.9x
Suzano Papel e Celulose S.A.	5.9x	5.6x
Median	9.6x	7.6x
Average	13.6x	7.8x

Fruit, vegetables & nuts

M&A News

No relevant news.

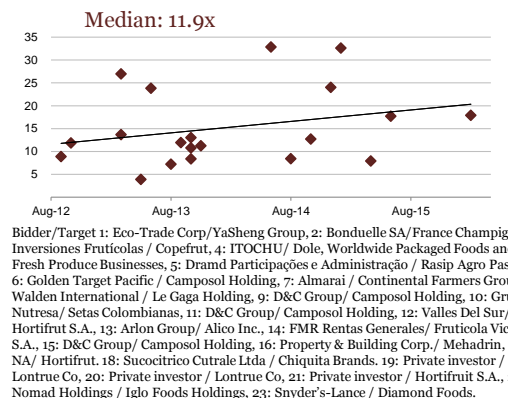
Management News

Australia: Ausveg CEO Richard Mulcahy has retired and Simon Bolles has been appointed interim CEO until the Board finds a replacement.

US: Harris Seeds announced the appointment of Ken Wasnock to CEO following outgoing CEO Dick Chamberlin's retirement.

UK: Fall Creek appointed Oscar Verges to COO.

Transaction multiples (EV/EBITDA)



Trading multiples (EV/EBITDA)

	2015A	NTM
Felda Global Ventures Holdings Berhad	17.5x	14.2x
PT Astra Agro Lestari Tbk	10.8x	8.3x
KWS Saat SE	13.5x	12.2x
Gansu Yasheng Industrial (Group) Co.,	32.2x	n.a.
United Plantations Bhd	12.2x	n.a.
Fresh Del Monte Produce Inc.	12.7x	11.1x
Kulim (Malaysia) Berhad	18.6x	14.4x
Select Harvests Limited	5.7x	10.2x
Sarawak Oil Palms Bhd	9.8x	7.8x
Kaveri Seed Company Limited	13.3x	10.4x
Median	13.0x	10.7x
Average	14.6x	11.1x

Grains & beans

Fertiliser & agricultural chemicals



Grains & beans

M&A News

US: Grain handler Andersons Inc. rejected HC2 Holdings' \$1bn takeover bid. HC2 has since announced it will bid for a number of Andersons' assets.

US grain, fertilizer and farm retail cooperatives are coming under increased pressure to merge to be competitive in the current environment of low farm incomes, globalisation and consolidation.

Switzerland: Glencore is reportedly in negotiations to sell a further 9.9% of its agricultural unit, valued at \$625m.

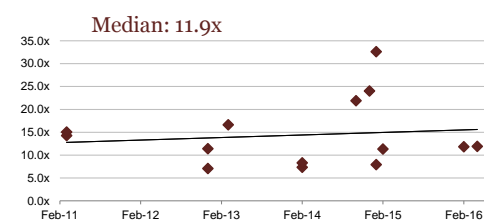
Australia: Rice co-operative SunRice has delayed its ASX listing, stating the need for a review of an existing JV.

Management News

US: The National Association of Wheat Growers appointed Chandler Goule to CEO.



Transaction multiples (EV/EBITDA)



Bidder/Target 1: GrainCorp. / GrainCorp Malt, 2: Tradewinds Malaysia / Padiberas Nasional Bhd, 3: Felda Global Ventures / Tradewinds Malaysia, 4: NA/ Kernel Holding, 5: PT Salim Ivomas Pratama / PT Perusahaan Perkebunan London Sumatra, 6: PT Bakrie Sumatera Plantations / Agri International Resources, 7: Vertical Capacity / IOI Corp., 8: Seaport Terminal (Johor), Acara Kreatif Sdn, Kelana Ventures / Padiberas Nasional, 9: Seaport Terminal (Johor), Acara Kreatif Sdn, Kelana Ventures / Tradewinds Malaysia, 10: Bollore / Plantations Des Terres Rouges, 11: Seaport Terminal (Johor), Acara Kreatif Sdn, Kelana Ventures / Padiberas Nasional Bhd, 12: PT Krishna Kapital / PT Dharma Satya Nusantara, 13: SPC Kappa Co / Kappa Create Holdings Co, 14: Private investor / Longtrun Co, 15: Post Holdings / MOM Brands Company, 16: Private investor / Longtrun Co, 17: Sime Darby Plantation Sdn / New Britain Palm Oil Ltd, 18: Associated British Foods / Illovo Sugar, 19: Canada Pension Plan Investment Board / Glencore, Agricultural Products.

Trading multiples (EV/EBITDA)

	2015A	NTM
Archer-Daniels-Midland Company	10.6x	10.3x
Wilmar International Limited	11.8x	11.2x
Bunge Limited	7.9x	7.2x
IOI Corp.Bhd	18.4x	16.2x
Kuala Lumpur Kepong Berhad	12.4x	14.0x
Golden Agri-Resources Ltd	12.4x	9.9x
PT Astra Agro Lestari Tbk	10.8x	8.3x
First Resources Limited	10.7x	8.9x
Genting Plantations Berhad	26.1x	17.2x
KWS Saat SE	13.5x	12.2x
Median	12.1x	10.7x
Average	13.5x	11.5x

Fertiliser & agricultural chemicals

M&A News

US: Monsanto rejected a \$62bn unsolicited bid from Bayer AG, but announced it was open to further discussions. Bayer is reportedly close to choosing banks to secure short-term bridge financing for another bid.

CF Industries pulled its \$8bn takeover bid for OCI after US tax incentives were for mergers with overseas companies removed.

Agriculture retailer Brandt has acquired a majority stake in Baicor, a manufacturer and distributor of fertilisers.

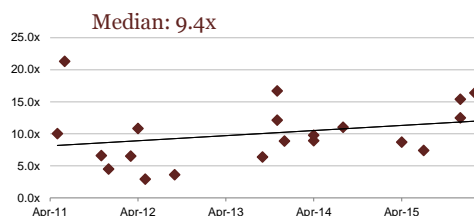
Management News

US: Dow and DuPont have announced the senior leadership appointments for their combined business, DowDuPont and its three business units.

Switzerland: Syngenta appointed J. Erik Fyrwald to CEO, replacing interim CEO John Ramsay.



Transaction multiples (EV/EBITDA)



Bidder/Target 1: Koor Industries/ADAMA, 2: CF Industries/Terra Industries, 3: China National Chemical / ADAMA, 4: Uralkali / Silvinit, 5: Sumitomo Chemical / Nufarm, 6: Mineracao Naque / Vale Fertilizantes, 7: Menoza Trading / OJSC PhosAgro, 8: CJSC Holding / SBU Azot, 8: EuroChem/K+S Aktiengesellschaft, 10: Youngor Investment/Kingenta Ecologic Engineering, 11: Norica / Grupa Azoty, 12: Grupa Azoty Spółka Akcyjna/Zakłady Azotowe Puławy Spółka Akcyjna, 13: ADAMA / Hubei Sanonda Co., 14: Jiang Yin Hanying/Jiangsu ChengXing Phosph-Chemicals, 15: Yara International/OFD Holding, 16: EDAILY Co./ KG Chemical, 17: Adorabella/OJSC PhosAgro, 18: Platform Specialty Products/ Chemtura AgroSolutions, 19: Yara International/Galvani Indústria, Comércio E Serviços, 20: Boulevard Acquisiton / AgroFresh, 21: CF Industries / GrowHow UK, 22: Dow Chemical / DuPont, 23: Compass Minerals / Produquímica.

Trading multiples (EV/EBITDA)

	2015A	NTM
Monsanto Company	13.1x	13.0x
Syngenta AG	14.5x	13.9x
Potash Corp. of Saskatchewan, Inc.	7.9x	10.0x
The Mosaic Company	5.7x	8.4x
Saudi Arabian Fertilizer Company	10.1x	13.9x
CF Industries Holdings, Inc.	6.9x	7.3x
Agrium Inc.	8.9x	9.4x
Yara International ASA	5.5x	5.4x
Israel Chemicals Ltd.	7.1x	7.8x
Public Joint Stock Company Uralkali	8.5x	8.0x
Median	8.2x	8.9x
Average	8.8x	9.7x

Viticulture

Agricultural products & machinery

Fishery

Viticulture

M&A News

US: Constellation Brands is to acquire The Prisoner Wine Company Brands from Huneeus Vintners for \$285m.

Jackson Family Wines is to acquire Copain Wine Cellars from Murano Group and other shareholders.

Agricultural products & machinery

M&A News

Germany: Bayer AG has sold its Environmental Science unit comprising Bayer Garden and Bayer Advanced Business to SBM Developpement.

Singapore: Adani Wilmar, a subsidiary of Wilmar International, and Ruchi Soya Industries are to merge subject to due diligence and regulatory approvals.

US: Kubota Corp is to acquire Great Plains Manufacturing.

Neogen Corp has acquired Preserve International and Tetradyne LLC, manufacturers of food processing industry cleaners and products.

Canada: Crop Production Services Inc's proposed acquisition of WendlandAg has received approval from Canada's Competition Bureau under the condition that it disposes of specific assets.

Management News

US: Bunge CFO Drew Burke announced his retirement, effective 31 December.

Fishery

M&A News

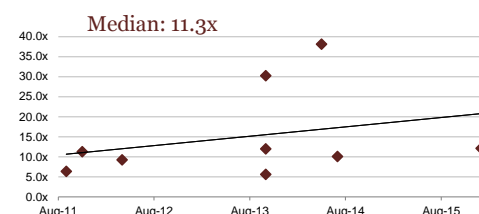
Norway: Marine Harvest sold its recently acquired 25.8% stake in salmon farming company Grieg Seafood for US\$137m.

Management News

Norway: Trond Williksen is to replace Leif Nordhammer as CEO of SalMar ASA.

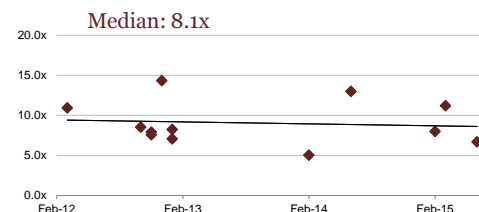
Chile: AquaChile promoted Agustin Preuss to CEO following the resignation of outgoing CEO Petersen.

Transaction multiples (EV/EBITDA)



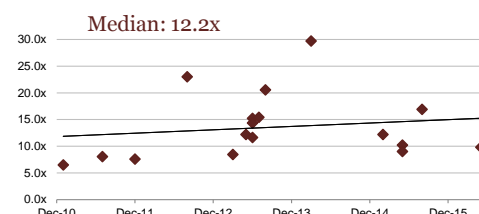
Bidder/Target 1: Advini/Laroche, 2: Nikora/JSC Teliani Valley, 3: Remgro and Zeder Investment /Capevin Holdings, 4: Kirin/Mercian, 5: SVL/Abrau-Durso, 6: Majority shareholders/Magnotta Winery, 7: Sogrape Vinho/Bodegas Lan, 8: Tempo Beverages/Barkan Wine Cellars, 9: FMR Rentas Generales/Viñedos Emiliana, 10: FMR Rentas Generales/Treasury Wine Estates, 11: Kohlberg Kravis Roberts & Co / Treasury Wine Estates, 12: Private investor/ Schlumberger, 13: Private investor/ Pincon Spirit Ltd.

Transaction multiples (EV/EBITDA)



Bidder/Target 1: Woodstream/Zareba Systems, 2: Ag Growth International/Mepu Oy, 3: Converted Organics/TerraSphere Systems, 4: Blount/SpecCo, 5: Kubota/Kverneland ASA, 6: Paine & Partners/Eurodrip SA, 7: Seoul Moongo Co. / Daedong Industrial Co., 8: Danfoss/Sauer-Danfoss Inc., 9: NA/ China Farm Equipment, 10: Silverfleet Capital / Cimbria, 11: P&P Water Holding / Eurodrip S A, 12: MHR Fund Management / Titan International, 13: Private investors / Xinjiang Machinery Research, 14: Bain Capital / Yukiguni Maitake Co, 15: SHV Holdings / Nutreco NV, 16: Paine & Partners / Spearhead International.

Transaction multiples (EV/EBITDA)



Bidder/Target 1: Thai Union Frozen Products/MW Brands, 2: Boparan Holdings/Northern Foods, 3: Corporacion Economica Damm / Pescanova, 4: Luxempart / Pescanova, 5: Orkla Brands / Rieber & Son, 6: Tiger Brands / Oceana Group, 7: Gevevan Trading Co. / Marine Harvest ASA, 8: Profond Holding / Marine Harvest, 9: China Fishery Group / Copeinca, 10: Gevevan Trading Co. / Marine Harvest, 11: RCL Foods / Foodcorp, 12: China Fishery Group/Copeinca, 13: CFI Investment / Copeinca, 14: Hassad Food / A'Saffa Foods, 15: Marine Harvest / Havfisk ASA, 16: Oceana Group / Daybrook Fisheries, 17: Private investors / Sajo Industries, 18: Private investors / Grieg Seafood.



Trading multiples (EV/EBITDA)

	2015A	NTM
Diageo plc	17.9x	16.2x
Pernod-Ricard SA	14.0x	13.7x
Brown-Forman Corporation	19.3x	19.6x
Constellation Brands Inc.	19.3x	15.9x
Jiangsu Yanghe Brewery Joint-Stock	14.0x	11.7x
Davide Campari - Milano SpA	15.2x	14.3x
LT Group, Inc.	6.5x	7.0x
Treasury Wine Estates Limited	27.6x	14.3x
Distell Group Limited	13.8x	13.3x
Yantai Changyu Pioneer Wine	13.2x	11.6x
Median	14.6x	14.0x
Average	16.1x	13.8x

Trading multiples (EV/EBITDA)

	2015A	NTM
Deere & Company	16.3x	22.4x
Kubota Corporation	10.1x	9.8x
CNH Industrial N.V.	14.0x	16.3x
AGCO Corporation	8.8x	10.5x
The Toro Company	13.6x	12.0x
Türk Traktor ve Ziraat Makineleri	11.3x	9.2x
Daedong Industrial Co., Ltd.	15.9x	n.a.
Lindsay Corporation	11.6x	12.2x
Titan International Inc.	16.7x	18.1x
Jain Irrigation Systems Limited	8.0x	6.7x
Median	12.6x	12.0x
Average	12.6x	13.0x

Trading multiples (EV/EBITDA)

	2015A	NTM
Charoen Pokphand Foods Public Co.	16.6x	12.8x
Marine Harvest ASA	1.9x	9.0x
PT Indofood CBP Sukses Makmur Tbk	19.3x	16.4x
NH Foods Limited	9.3x	8.9x
CALBEE, Inc.	14.7x	12.2x
Toyoko Suisan Kaisha Ltd.	8.4x	8.2x
Thai Union Frozen Products Public	14.4x	11.8x
SalMar ASA	16.9x	9.8x
Lerøy Seafood Group Asa	13.3x	7.2x
Guangdong Haid Group Co., Limited	18.9x	13.2x
Median	14.6x	10.8x
Average	13.4x	11.0x

Food trust



Food trust

Tracking the source of your food



Food crises are increasing. A daily search of the news shows a number of stories on food borne illnesses, food fraud and the resulting food recalls. Companies are losing money and customers are losing faith

We're now living in a world where our trust in food is being challenged. Agriculture, food and beverage companies and retailers are trying to assure the security, safety and quality of their food. They're trying to keep pace with the demand for greater transparency, reduce risk and position themselves positively in the market. But they have many challenges to overcome.

Within companies there may be complex systems, incomplete or inaccurate information or products that don't lend themselves easily to tracking. Outside companies there are a string of suppliers, potentially a long string, who may face similar problems. Clearly the ability to trace the path of food from farm to fork would contribute to increasing food trust, but the path ahead is often complex and messy.

Food fraud, contamination, resource scarcity and poor safety and quality practices are becoming more commonplace. Organisations have been focusing on all aspects of trust across the value chain for the past 20+ years, but only lately are we witnessing impacts and threats on this global scale.

These are threats that have their roots in global megatrends that are reshaping business and society: demographic and social changes, technological advances, economic power shifts, rapid urbanisation and climate change and resource scarcity, which together, are accelerating change in the food industry. Combine this with expectations that global agricultural production will need to increase by 70% to feed the world by 2050 and an extremely difficult competitive environment is revealed.

Being able to track food and know its whole journey from the farm to the consumer is as much an opportunity as it is a line of defence in good food safety management. It's an opportunity for food companies to differentiate the quality of their products and gain a competitive edge through having more control and visibility over food supply. It will reduce the risk of bad food getting to market and enable efficient recall and crisis management if the worst case scenario were to happen (e.g. faster and focused on the directly impacted product).

Ultimately, traceability and knowing what's in your food means companies can prove to consumers their food is as good as they say it is. And when it comes down to it, isn't trust what we're most concerned about as consumers?

The challenge of tracking food

Today's food supply chains are best described as a system of systems – a multi-layered, opaque and dynamic system that lacks a verifiable view from farm to fork. That is why food risks have increased. And this increasing risk means consumer demand for transparency around where food has come from, what has gone into it and its ethical and sustainable impacts are growing factors in buying decisions. This demand is evident in the growth market for organic food products, now worth almost US\$72 billion globally. People tend to trust organic products more because there are requirements around labelling and specifics about what can be included in the food.

The challenge for food companies is while most have traceability systems in place they are often incomplete and they may not be able to trace their food all the way back to the originating source. Most companies can trace one-step up or one-step down their supply chain. For example, they know who they bought food ingredients from, but they may be in the dark about the quality and testing systems in place at those companies and really unclear on those supplying their suppliers. Further down the supply chain, traceability and supply chain mapping may mean investigating the practices of hundreds of food and agribusiness companies around the world – a complex and expensive process.

Inconsistencies in terminology, numbering systems, formatting, types of data actually collected and the accuracy and completeness of data increase the difficulty in building a consistent system that works across suppliers or even internal systems. It's not uncommon for companies to have numerous internal systems, which match with many more external systems, to create a many-to-many relationship that multiplies as you move up the chain. The tracking chain itself crosses numerous business models, growers, packers, processors, distributors, retailers, restaurants, ingredient suppliers and importers. So, in light of these challenges, is traceability a feasible solution for supply chains that typically cross continents and hundreds of participants across growers, processors, retailers and other food handlers?



Food trust ***Tracking the source of your food***



Traceability and transparency is a good food trust opportunity

Despite the challenge, food and beverage companies need to step up to traceability to begin reducing their risk exposure and meet consumer expectations by increasing transparency and telling customers more about the origins of their food. More extensive traceability of individual ingredients and collaboration with suppliers and buyers is vital.

Given the demand for greater traceability and transparency, combined with rapid technological advances allowing greater oversight, this issue has the potential to disrupt the food industry abruptly. Companies must stay on top of this issue or risk being left behind as competitors innovate and share more information with their customers.

But food companies don't need to do it all at once. Companies must start down the path of traceability and begin the process of transforming their processes. This means considering what they can do today and what their goals are for tomorrow.

So, understanding first of all what the supply chain looks like and having a meaningful dialogue with key suppliers (and their suppliers) and buyers to find out their safety and quality management practices; before considering what their own capabilities are and what they know and trace well; then taking a risk-based view of products and processes by mapping supply chain risks, segmenting the supply base, identifying risk hotspots and assessing and defining improvement opportunities.

A key consideration in planning is the reality and risk layer: understanding what is really possible and what else may have to be done to plug safety and quality gaps where risks are high and traceability isn't achievable. For example, supply chain mapping and supplier risk assessments may identify high-risk food products. But only some foods can be traced back to supplier-tier levels that give you comfort, but for others it is difficult to get accurate information that goes back past your supplier or your supplier's supplier. So what can be done to make up for the fact you can't track?

In this scenario, perhaps there are improvements you or your supplier can make to quality systems and processes to check incoming products from suppliers based on your risk assessment? Could this make up for the fact they can't track their product? Perhaps a more rigorous testing regime and food safety and quality process could be enforced to mitigate risk?

Based on the increasing incidence of issues, and noting that no activity can provide a catch-all solution to improving food trust, companies need to continue on a parallel path to reduce supply chain risk and increase quality control and oversight. The goal should be pursuing broader traceability and a risk-based approach, while continuing to improve quality systems and the cultural environment that enable those systems.

Evolving technology will drive innovation

With the right combination of emerging technologies and innovative traceability practices it will make a big difference to improving the quality of your food and gathering information about its journey to the consumer. There are initiatives underway to standardise information being transferred at various transfer points in the value chain. Providers of corporate software and IT infrastructure are integrating modules for traceability into their enterprise resource planning (ERP) systems. Digital solutions, such as barcodes and QR codes, which link to product websites and social media, are opening up new possibilities for customer communication and feedback.

The latest track-and-trace technologies offer great potential for optimising the warehousing and ordering process, while providing regulators and consumers with critical information and optimising recall management processes. The trend is clearly heading towards real-time recording and in-line analysis of entire product batches.

The latest track-and-trace technologies offer great potential for optimising the warehousing and ordering process, while providing regulators and consumers with critical information and optimising recall management processes. The trend is clearly heading towards real-time recording and in-line analysis of entire product batches.

Some companies have set ambitious goals. For example, a sweets manufacturer is looking to achieve seamless traceability of the source of all hazelnuts it uses by 2020. The company has also launched programmes that allow the route of all cocoa beans it uses to be traced back to local growers and individual farms, but these initiatives are all very early stage. The goal of greater traceability was confirmed in PwC's recent study in Germany that looked at how digital transformation is influencing the food industry⁵. Around 40% of all German food retailers and producers we questioned said they aim to trace back all production and transportation steps along their value chains. Given the demand and increased ability to trace food back to its source, it is inevitable that farm to fork traceability will become the industry standard.

Sally Bernstein

Kelvin Harris



Markets update



Macroeconomic & foreign exchange data

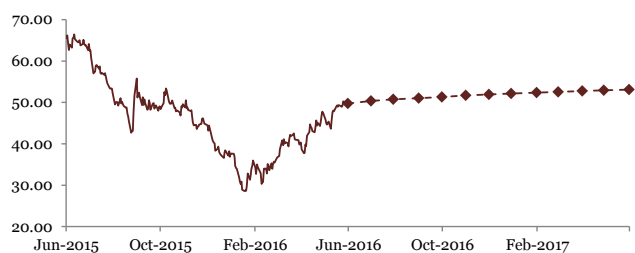


Macroeconomic indicators

Indicator	Australia	Brazil	China	Germany	India	Japan	U.K.	U.S.
Real GDP Growth (YoY)	2.7%	-6.0%	6.8%	1.3%	7.5%	0.8%	2.1%	1.9%
CPI Inflation (YoY)	1.7%	10.1%	1.5%	0.1%	5.4%	0.3%	0.4%	1.1%
Unemployment rate	5.8%	9.0%	n/a	4.4%	n/a	3.2%	5.1%	4.9%
Industrial Production Index (YoY)	1.9%	-12.0%	5.9%	0.1%	1.6%	-3.3%	0.8%	-1.7%
Producer Price Index (YoY)	-0.5%	-7.1%	n/a	-2.3%	-0.9%	-3.6%	-1.0%	-0.1%
Exports (\$US bn)	46.4	40.6	613.0	341.5	64.4	157.5	106.4	350.8
Trade Balance (\$US bn)	-5.6	8.4	174.9	69.3	19.3	3.1	51.1	182.9

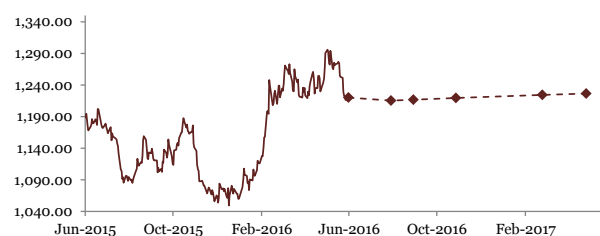
Notes: Figures are the most recently reported quarterly data, as reported by the Economist Intelligence Unit by 20 May 2016 • Current data is for 2015Q4 or 2016Q1 where available • Real GDP growth is calculated as % change year on year • CPI Inflation is calculated as % change year on year • Unemployment rate represents the actual unemployment as a percentage of the labour force • Industrial Production Index is calculated as % change year on year for the index • Producer Price Index is calculated as the % change year on year for the index of prices faced by firms, with the exception of Brazil whose index is based on a general prices • Exports fob in \$US bn • Trade balance is calculated as Exports fob less imports cif in \$US bn • Reported currencies for Exports and Trade Balances converted to \$US at most recent conversion rates at time of writing •

Crude Oil - Brent (\$ per Bbl. – ICE: ^B)



Development - Crude Oil			
Latest price	50.36	Week-to-date	1.38%
52-week low	28.55	Month-to-date	12.70%
52-week high	66.41	Year-to-date	32.60%

Gold (\$ per troy oz. – COMEX: ^GC)



Development - Gold			
Latest price	1,216.70	Week-to-date	-2.89%
52-week low	1,049.60	Month-to-date	-5.72%
52-week high	1,295.80	Year-to-date	14.76%

Note: Straight line shows historical spot prices, dotted marked line shows futures prices. Price development table is based on most actively traded futures contract.

FX – Spot rates

	EUR	USD	BRL	CNY	INR
1 EUR	-	1.1135	4.0003	7.3306	74.8010
1 USD	0.8981	-	3.5925	6.5833	67.1750
1 BRL	0.2500	0.2784	-	1.8325	18.6987
1 CNY	0.1364	0.1519	0.5457	-	10.2039
1 INR	0.0134	0.0149	0.0535	0.0980	-

FX – Week-to-date % change

	EUR	USD	BRL	CNY	INR
1 EUR	-	-0.20%	0.89%	0.21%	-1.00%
1 USD	0.20%	-	1.09%	0.41%	-0.80%
1 BRL	-0.88%	-1.08%	-	-0.68%	-1.87%
1 CNY	-0.21%	-0.41%	0.68%	-	-1.21%
1 INR	1.01%	0.81%	1.91%	1.22%	-

FX – Month-to-date % change

	EUR	USD	BRL	CNY	INR
1 EUR	-	-2.77%	0.90%	-1.25%	-1.62%
1 USD	2.85%	-	3.77%	1.57%	1.19%
1 BRL	-0.89%	-3.64%	-	-2.12%	-2.49%
1 CNY	1.26%	-1.55%	2.17%	-	-0.37%
1 INR	1.64%	-1.18%	2.55%	0.38%	-

FX – Year-to-date % change

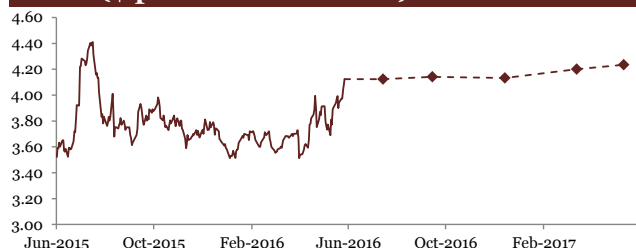
	EUR	USD	BRL	CNY	INR
1 EUR	-	2.53%	-7.02%	3.96%	4.01%
1 USD	-2.47%	-	-9.31%	1.40%	1.44%
1 BRL	7.55%	10.27%	-	11.81%	11.86%
1 CNY	-3.81%	-1.38%	-10.56%	-	0.04%
1 INR	-3.85%	-1.42%	-10.60%	-0.04%	-

Source: S&P Capital IQ

Commodities (1/2)

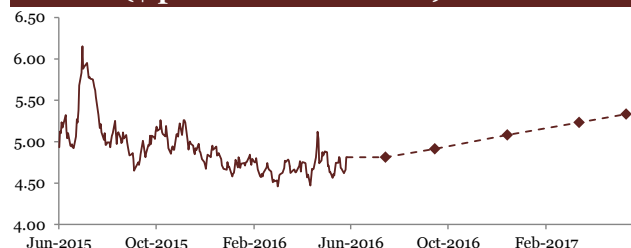


Corn (\$ per bu. – CBOT: ^C)



Development - Corn			
Latest price	4.12	Week-to-date	4.60%
52-week low	3.51	Month-to-date	7.28%
52-week high	4.41	Year-to-date	15.07%

Wheat (\$ per bu. – CBOT: ^W)



Development - Wheat			
Latest price	4.81	Week-to-date	2.97%
52-week low	4.46	Month-to-date	-0.41%
52-week high	6.15	Year-to-date	2.39%

Oats (\$ per bu. – CBOT: ^O)



Development - Oats			
Latest price	1.93	Week-to-date	1.98%
52-week low	1.78	Month-to-date	-7.27%
52-week high	2.77	Year-to-date	-11.11%

Soybeans (\$ per bu. – CBOT: ^S)



Development - Soybean			
Latest price	10.86	Week-to-date	1.13%
52-week low	8.55	Month-to-date	5.74%
52-week high	10.86	Year-to-date	25.71%

Soybean Meal (\$ per T – CBOT: ^SM)



Development - Soybean			
Latest price	402.60	Week-to-date	2.52%
52-week low	260.60	Month-to-date	20.76%
52-week high	409.60	Year-to-date	51.64%

Sugar #11 (\$ per lb – ICE: ^SB)



Development - Sugar			
Latest price	0.18	Week-to-date	2.64%
52-week low	0.10	Month-to-date	10.61%
52-week high	0.18	Year-to-date	14.96%

Note: Straight line shows historical spot prices, dotted marked line shows futures prices. Price development table is based on most actively traded futures contract.

Source: S&P Capital IQ

Commodities (2/2)

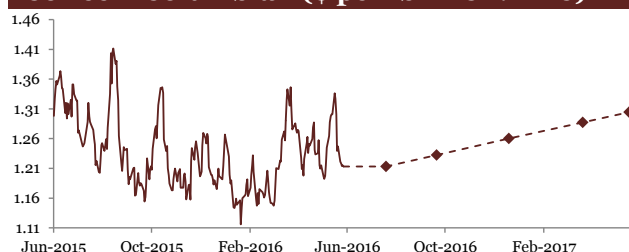


Cocoa (\$ per MT – ICE: ^CC)



Development - Cocoa			
Latest price	3,005.00	Week-to-date	3.19%
52-week low	2,761.00	Month-to-date	-5.80%
52-week high	3,417.00	Year-to-date	-6.42%

Coffee – Colombian (\$ per lb – ICE: ^KC)



Development - Coffee			
Latest price	1.21	Week-to-date	-2.73%
52-week low	1.12	Month-to-date	-0.16%
52-week high	1.41	Year-to-date	-4.26%

Rice – Rough #2 (\$ per cwt. – CBOT: ^RR)



Development - Rough Rice			
Latest price	10.77	Week-to-date	-8.54%
52-week low	9.65	Month-to-date	-2.93%
52-week high	13.40	Year-to-date	-9.04%

Soybean Oil (\$ per lb – CME: ^BO)



Development - Soybean			
Latest price	0.31	Week-to-date	1.91%
52-week low	0.26	Month-to-date	-5.01%
52-week high	0.35	Year-to-date	2.37%

Crude Palm Kernel Oil (\$ per MT – KLSE: ^QF)



Development - Palm Oil			
Latest price	636.75	Week-to-date	1.16%
52-week low	423.25	Month-to-date	-4.41%
52-week high	701.25	Year-to-date	13.47%

Milk – Class III (\$ per lb – CME: ^DA)



Development - Milk			
Latest price	0.13	Week-to-date	2.96%
52-week low	0.12	Month-to-date	-2.13%
52-week high	0.17	Year-to-date	-6.55%

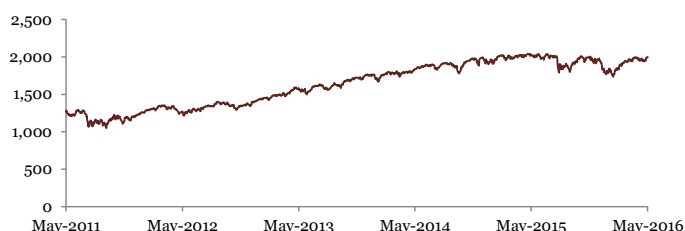
Note: Straight line shows historical spot prices, dotted marked line shows futures prices. Price development table is based on most actively traded futures contract.

Source: S&P Capital IQ

Equity indices

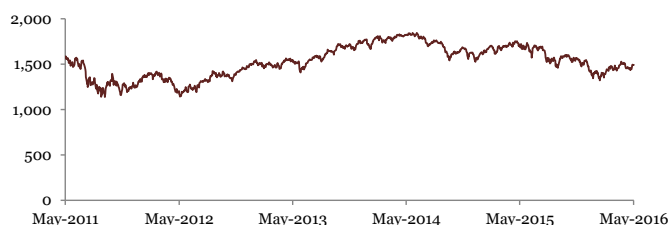


MSCI USA



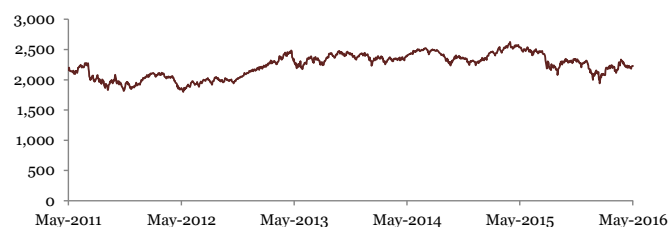
Development - MSCI USA			
Latest value	1,996.91	Week-to-date	2.48%
52-week low	1,734.24	Month-to-date	1.64%
52-week high	2,038.58	Year-to-date	2.42%

MSCI Europe



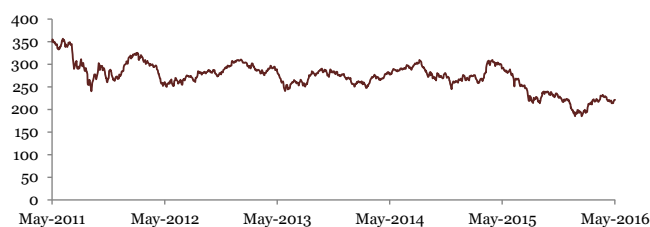
Development - MSCI Europe			
Latest value	1,493.73	Week-to-date	3.51%
52-week low	1,321.56	Month-to-date	-0.52%
52-week high	1,737.15	Year-to-date	-1.90%

MSCI Pacific



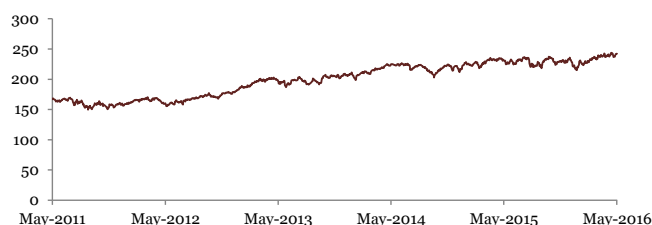
Development - MSCI Pacific			
Latest value	2,228.84	Week-to-date	1.03%
52-week low	1,942.54	Month-to-date	-2.60%
52-week high	2,541.59	Year-to-date	-3.70%

MSCI BRIC



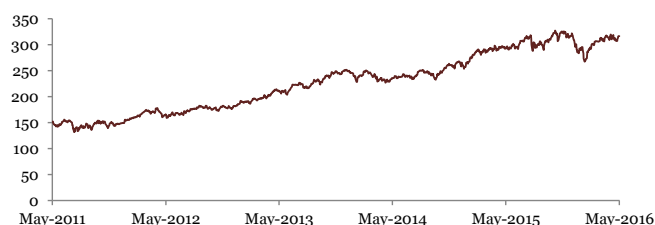
Development - MSCI BRIC			
Latest value	221.51	Week-to-date	3.61%
52-week low	185.14	Month-to-date	-3.05%
52-week high	292.97	Year-to-date	0.23%

MSCI World/Food Products (Industry Index)



Development - MSCI World/Food Products (Industry Index)			
Latest value	242.36	Week-to-date	2.07%
52-week low	215.16	Month-to-date	1.44%
52-week high	243.96	Year-to-date	4.32%

MSCI World/Retailing (Industry Group Index)


































Development - MSCI World/Retailing (Industry Group Index)			
Latest value	316.71	Week-to-date	3.02%
52-week low	0.00	Month-to-date	0.57%
52-week high	0.00	Year-to-date	-0.06%

Source: S&P Capital IQ

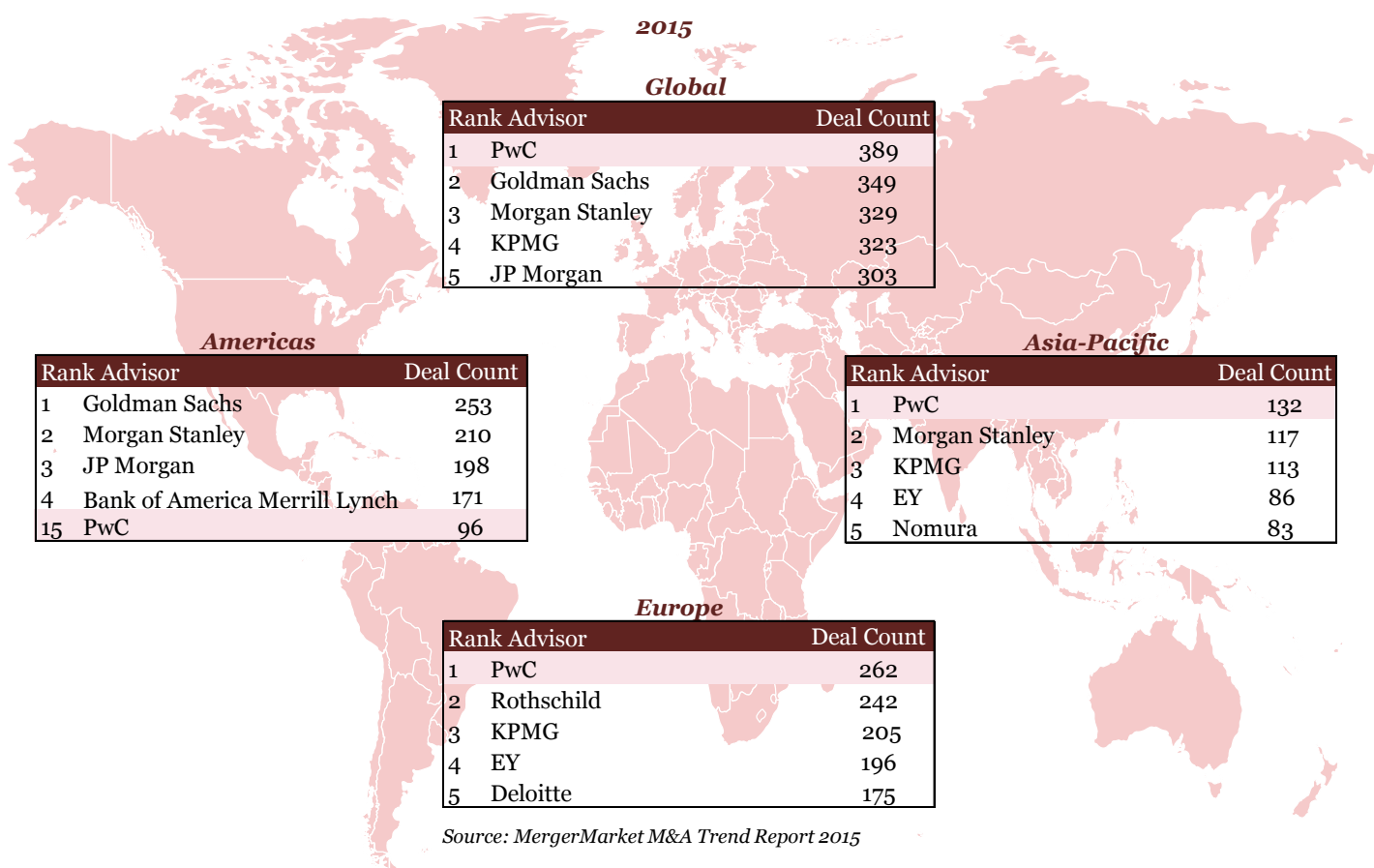
Credentials



 <p>Vendor due diligence for GKN identifying key drivers of investment in agriculture tractors and machinery in Europe, the US, Brazil, Russia and China</p> 	 <p>Undertook a strategic review; Commodity risk analysis; buy-side assistance to Shanghai Maling for their 50% stake in SFF</p> 	 <p>Financial advisor to Oji Holdings and Innovation Network on their US\$890m acquisition of Carter Holt Harvey</p> <p>Buy-side advisory</p> 	 <p>Advisor on acquisition of Coop Farms estate for £249m in one of the largest land sales in Britain</p> <p>Buy-side advisory</p> 	 <p>Financial due diligence for GrainCorp for their acquisition of Allied Mills</p> <p>Financial Advisory</p> 
 <p>Sale of 100% of equity in Manuka Health NZ to Pacific Equity Partners for NZ\$110m.</p> <p>Sell-side advisory</p> 	 <p>Bright Sugar Co. Ltd. Acquisition of 60% stake in Yunnan Yin More Sugar Co. Ltd</p> <p>Buy-side advisory</p> 	 <p>Assisted KS Oils raise second round US\$110m of Private Equity funds</p> <p>Financial advisory</p> 	 <p>Lead advisory for Marlborough Lines in their acquisition of 80% of Yealands Estate</p> <p>Buy-side advisory</p> 	 <p>Advised DLG on acquisition of 43% stake in Team</p> <p>Buy-side advisory</p> 
 <p>Advisor to management on the sale of Provimi to Cargill</p>  <p>Sell-side advisory</p> 	 <p>Advisor to management of Heiploeg on its capital structure Total debt 130m</p> <p>Financial advisory</p> 	 <p>Commercial due diligence of Cimbria, manufacturer of grain handling and seed processing equipment on behalf of Silverfleet Capital</p> 	 <p>Commercial due diligence of Haarslev, one of the leading global meat rendering machinery suppliers</p> 	 <p>Financial and due diligence services on a transaction for Syngenta</p> <p>Financial Advisory</p> 

PwC was the number one global M&A advisor for 2015, achieved through a strong international network

PwC currently has approximately 480 live sale mandates and we advise on average over 300 deals globally per year



PwC M&A Ranking 2015

- Global: 1st
- Global buyouts 1st
- Europe: 1st
- European buyouts: 1st
- Iberia: 1st
- Nordics: 1st
- Asia-Pacific (excl. Japan): 1st
- South Korea: 1st



Agribusiness network

Global Agribusiness Deals report

Elisha Nuttall

E: elisha.j.nuttall@nz.pwc.com



Global CF leader

Stuart McKee

T: +44 20 7213 4321

E: stuart.mckee@uk.pwc.com

Argentina

Mariano Tomatis

T: +54 11 4850 4757

E: mariano.c.tomatis@ar.pwc.com

Australia

Craig Heraghty

T: +61 282 661 458

E: craig.heraghty@au.pwc.com

Ryan Jordan

T: +61 732 575 641

E: ryan.jordan@au.pwc.com

Brazil

Ana Malvestio

T: +55 16 2133 6624

E: ana.malvestio@br.pwc.com

Jose Rezende

T: +55 11 3674 2279

E: jose.rezende@br.pwc.com

Daniela Coco

T: +55 19 3794 5400

E: daniela.coco@br.pwc.com

Canada

Clinton L. Roberts

T: +1 403 509 7307

E: clinton.l.roberts@ca.pwc.com

CEE

Stephen Oldfield

T: +44 (0) 771 038 8792

E: stephen.m.oldfield@uk.pwc.com

China

Frank Lyn

T: +86 10 6533 2388

E: frank.lyn@cn.pwc.com

Gabriel Wong

T: +86 21 2323 2609

E: gabriel.wong@cn.pwc.com

Denmark

Thomas Krantz

T: +45 3 945 3140

E: thomas.krantz@dk.pwc.com

France

Yves Pelle

T: +33 (0) 299 231 705

E: yves.pelle@fr.pwc.com

Germany

Norbert Niedenhof

T: +49 (0) 541 330 4330

E: n.niedenhof@de.pwc.com

India

Ajay Kakra

T: +91 124 330 6029

E: ajay.kakra@in.pwc.com

Sunjay VS

T: +91 124 330 6171

E: sunjay.vs@in.pwc.com

Indonesia

Rizal Satar

T: +62 21 5289 0350

E: rizal.satar@id.pwc.com

Ireland

Jimmy Maher

T: +353 (0) 1 792 6326

E: james.maher@ie.pwc.com

Japan

Matthew J Wyborn

T: +81 (3) 3546 8570

E: matthew.j.wyborn@jp.pwc.com

Taizo Iwashima

T: +81 (3) 6266 5572

E: taizo.iwashima@jp.pwc.com

MENA

Mark Webster

T: +966 (11) 211 0400 (Ext. 1555)

E: mark.a.webster@sa.pwc.com

Netherlands

Ruud Kok

T: +31 (0) 88792 6382

E: ruud.kok@nl.pwc.com

Guido Emanuels

T: +31 (6) 2042 0533

E: guido.emanuels@nl.pwc.com

New Zealand

Craig Armitage

T: +64 (3) 374 3052

E: craig.armitage@nz.pwc.com

Justin Liddell

T: +64 (9) 355 8330

E: justin.g.liddell@nz.pwc.com

Romania

Anca Scurtescu

T: +40 21 22 53 871

E: anca.scurtescu@ro.pwc.com

Singapore

Richard Skinner

T: +65 9823 3771

E: richard.skinner@sg.pwc.com

South Africa

Frans Weilbach

T: +27 (21) 815 3204

E: frans.weilbach@za.pwc.com

Switzerland

Dr. Martin Frey

T: +41 58 792 15 37

E: martin.frey@ch.pwc.com

Ukraine

Olena Volkova

T: +38 (0) 56 733 5010

E: olena.volkova@ua.pwc.com

UK

Mark James

T: +44 (0) 7803 858721

E: mark.d.james@uk.pwc.com

Thomas Sengbusch

T: +44 (0) 7725 069448

E: thomas.sengbusch@uk.pwc.com

USA

Thomas Johnson

T: +1 612 596 4846

E: thomas.r.johnson@us.pwc.com

Christopher Nolan

T: +1 646 4717387

E: christopher.w.nolan@us.pwc.com

Sean Gaffney

T: +1 216 875 3275

E: sean.gaffney@us.pwc.com

Food Supply & Integrity Services team



Global Leader

Craig Armitage

E: craig.armitage@nz.pwc.com

Australia

Clare Power

E: clare.power@au.pwc.com

Andrew Wilson

E: a.wilson@au.pwc.com

Christopher Daniell

E: christopher.daniell@au.pwc.com

Rick Crethar

E: rick.crethar@au.pwc.com

Belgium

Marc Daelman

E: marc.daelman@be.pwc.com

Yogesh Nayak

E: yogesh.nayak@be.pwc.com

Brazil

Ana Malvestio

E: ana.malvestio@br.pwc.com

Daniela Coco

E: daniela.coco@br.pwc.com

China

Shirley Xie

E: shirley.xie@hk.pwc.com

Janice Lee

E: janice.lee@cn.pwc.com

Catherine Barie

E: janice.lee@cn.pwc.com

Michelle Meng

E: michelle.meng.@cn.pwc.com

France

Baptisete Bannier

E: baptiste.bannier@fr.pwc.com

Kader Garnier

E: kader.garnier-aw@fr.pwc.com

Sabine Durand-Hayes

E: sabine.durand@fr.pwc.com

Germany

Hendrik Fink

E: hendrik.fink@de.pwc.com

Barbara Johanna Wieler

E: barbara.johanna.wieler@de.pwc.com

Gerd Bovensiepen

E: g.bovensiepen@de.pwc.com

Marcus Messerschmidt

E: marcus.messerschmidt@de.pwc.com

India

Ashok Varma

E: ashok.varma@in.pwc.com

Ajay Kakra

E: ajay.kakra@in.pwc.com

Italy

Gianluca Sacchi

E: gianluca.x.sacchi@it.pwc.com

Japan

Kazu Miyamura

E: kazu.miyamura@jp.pwc.com

Yukinori Morishita

E: yukinori.morishita@jp.pwc.com

Yoshiaki Yoneyama

E: yoshiaki.yoneyama@jp.pwc.com

Malaysia

Josephine Phan

E: josephine.phan@my.pwc.com

Khoon Yean Soo Hoo

E: khoon.yean.soo.hoo@my.pwc.com

Netherlands

Hans Schoolderman

E: hans.schoolderman@nl.pwc.com

Onno Nillesen

E: onno.nillesen@nl.pwc.com

Tom Berendsen

E: tom.berendsen@nl.pwc.com

New Zealand

Bruce Baillie

E: bruce.baillie@nz.pwc.com

Mark Bramley

E: mark.a.bramley@nz.pwc.com

Scott Mitchell

E: scott.c.mitchell@nz.pwc.com

Richard Polson

E: richard.t.polson@nz.pwc.com

Norway

Per Røhnebæk

E: per.rohnebak@no.pwc.com

Qatar

Michael Ferguson

E: michael.ferguson@qu.pwc.com

Russia

Tim Clough

E: tim.clough@ru.pwc.com

Singapore

Julia Leong

E: julia.sw.leong@sg.pwc.com

Desiree Beeren

E: desiree.beeren@sg.pwc.com

Richard Skinner

E: richard.skinner@sg.pwc.com

Switzerland

Michael Ruble

E: michael.ruble@ch.pwc.com

Turkey

Tumin Gultekin

E: tumin.gultekin@tr.pwc.com

Taiwan

Paul Liu

E: paul.c.lin@tw.pwc.com

Garry King

E: garry.king@tw.pwc.com

United Kingdom

Marco Amitrano

E: marco.amitrano@uk.pwc.com

Fran Marwood

E: fran.marwood@uk.pwc.com

Madeleine Thompson

E: madeleine.thompson@uk.pwc.com

United States

Sally Bernstein

E: sally.bernstein@us.pwc.com

Kelvin Harris

E: kelvin.harris@us.pwc.com

Thomas Johnson

E: thomas.johnson@us.pwc.com

Don Reed

E: Donald.j.read@us.pwc.com

Vietnam

Xavier Potier

E: xavier.potier@vn.pwc.com