# Food trust

Giving customers confidence in your food





### Our purpose

"We'll help you deliver on your promise to customers to source, produce and sell safe and nutritious food that is of the highest quality – without ethical or sustainability concerns – to give people the greatest confidence in your food."

Craig Armitage, Global Leader, Food Supply and Integrity Services

# The global food industry has never faced more challenges

Enhancing trust in food is a growing concern in a climate where public confidence in food producers, processes and sellers – even government regulators – has been rocked by many high-profile scandals.

When horse meat was passed off as minced beef and sold to people all around the world it sparked a scandal that shocked consumers and continues to affect the food industry to this day. This is just one example of many that have rocked consumer confidence – rarely a week goes by without news of another food safety or quality concern.

From melamine in dairy products to genetically engineered contaminated crops, counterfeit wine, incorrect product labelling, cocoa shortages, sustainability and ethical issues – the industry has never faced more challenges.

Trust in food has been destabilised, and as such, people want to know more about the food they're eating and feeding to their families. They no longer trust so readily and question more. It's a public health concern, a significant political issue and a substantial risk for food companies and governments that get it wrong.

# From compliance to competitive advantage

Building trust in food is among the most complex problems that business and society must solve, but it is also one of the greatest opportunities for food companies that get it right.

A more coordinated and strategic approach is needed, one that takes a holistic view to identify, monitor and mitigate weak links in the supply chain from farm to fork.

The world's leading food companies recognise the opportunities and are going well beyond the standards required for compliance to improve their processes and gain a competitive edge. These companies are proactive in understanding, planning and responding to food trust concerns. They show more resilience and agility and are better able to reduce their exposure to costly scandals that may otherwise damage their reputation, or even threaten the very viability of their business.

The game has changed. Regulatory risks are increasing and supply chains are becoming more complex, deeper and harder to track. Your customers are demanding more and the implications for missing the mark are costing dearly from both a revenue and brand perspective.

The question is how trustworthy is your food?

# Global megatrends are driving change... and legislation is making it mandatory

It's not just your customers who are more concerned about food trust issues – new legislation is being enacted by governments committed to protecting their people and improving safety standards.

More stringent food safety regulations with stricter policies in terms of quality standards, supervision and sanctions will impact global food companies already grappling with a wide range of threats.

By far the biggest change disrupting the global food industry right now is the US Food Safety Modernization Act 2011, which is due to begin impacting the global food industry this year.

The FSMA substantially changes compliance requirements and brings increased risk across the food supply chain and market for anyone operating in or exporting to the US.

The FSMA gives the Food and Drug Administration (FDA) the right to recall contaminated foods and hold everyone at each step of the supply chain to greater account. It mandates that companies move beyond simple compliance to develop an effective food safety strategy focused on a preventative, risk-based approach to food safety problems.

Most significantly, the FDA has the authority to ensure imported foods meet the same standards of compliance as domestically produced food. Regulation is having a major impact.

But what is driving this increasing consumer and regulatory pressure calling for change in the food industry?

technological breakthroughs, global economic power shifts, rapid urbanisation, climate change and resource scarcity – it gives a clearer understanding of why the food industry is changing and how it will continue to evolve.



### Top ten

Food trust issues

# Here are the big changes we're seeing in the food industry, impacted by the global megatrends.



### I Globalisation of food supply chains

More food is being traded across borders as business activity becomes more mobile for international food companies entering new markets and looking to source the best prices for their food products.

This is transforming the food industry as regulators, food producers, sellers and consumers demand a more consistent approach to food safety and quality standards across geographies. Risks are increasing and maintaining oversight over food supply chains is becoming more challenging.



### — Integration of supply chains

As global food trade becomes subject to more regulations, food companies are spending millions on the integration of their supply chains to improve safety, traceability and processing facilities. At the same time, governments are issuing policy and strategic announcements to encourage the integration of supply chains to assist in making improvements.



# Scandals and increasing scrutiny

High-profile food safety and quality scandals are damaging public trust in the food industry and increasing consumers' concerns about their food.

With the ubiquity of social media and increasing media and public interest, more food scares are turning into damaging scandals – pushing governments and food companies to improve standards.



### Rising regulatory standards

More stringent food safety regulations with stricter policies in terms of quality standards, supervision and sanctions are being adopted by governments committed to protecting their communities. Challenges are created in meeting multi-country regulations while remaining economically competitive.

For example, the FSMA has changed the game by shifting the FDA's regulatory focus to the prevention of food safety problems that cause illness. The FDA now has a mandate to hold everyone at each step of the supply chain accountable for adopting preventative controls to decrease the likelihood of food safety problems – raising the compliance bar for all global food companies operating in and exporting into the US.

In maturing economies governments are committed to legislating to improve food safety and confidence in locally manufactured products – reducing their people's need for expensive imported products.

In China, several government departments previously responsible for food safety, with fragmented powers and responsibilities, have been brought under the powers of the China Food and Drug Administration. After naming food safety a top priority, the Chinese leadership now has a far greater ability to improve standards.



# Shift in global economic power

The growth of emerging economies is creating huge consumer markets where none existed before. Consumption power is shifting to wealthier, more demanding and newly urbanised middle classes.

This is resulting in greater expectations of safety, quality, integrity and traceability of food by consumers across emerging economies. Demand for safe and high-quality food is increasing across the world.

This year the middle class in the Asia-Pacific region will outnumber the middle classes in the US and Europe combined<sup>1</sup>. And by 2030, we estimate the purchasing power of the world's seven largest emerging economies' – the E7 – will overtake the established economies of the  $G7^2$ . More people want the best and can afford to buy it.

The customer base is changing as more economies move up the value chain and become core consumer markets for global food companies – no longer core producers of cheap labour.

<sup>&</sup>lt;sup>1</sup>PwC analysis of OECD projections, 2010 <sup>2</sup>PwC, The world in 2050 Projections, 2015



# Technological and scientific breakthroughs

Scientific advances are creating a greater understanding of food health and safety and the early detection of hazards, while technological breakthroughs are helping improve standards and manage risk.

These advances are opening up opportunities for companies to gather more information about the safety and quality of their food across the supply chain. We're using technology-enabled solutions to improve traceability and provide regulators and consumers with critical information about safety and quality.

Imagine novel technologies that allow consumers to scan products on the shop floor that link to social media and cloud based devices to bring up information about its origin and journey to the customer? Or isolating the negative impacts of a product recall by using advanced monitoring, testing and traceability capabilities?

Thanks to the latest on-farm GPS mapping and crop management technologies, IT systems that support vast data gathering and reporting to the real-time analysis and monitoring for contaminants on the production line, these innovations are now a reality.

At the same time, greater technical literacy and awareness of food safety issues are increasing consumer expectations that companies should use technology to improve standards, traceability and transparency.



### / Changing food demand

Improving living standards across emerging economies are changing diets and driving growth within the food industry and the amount spent on meat and processed foods.

In emerging economies the consumption of protein is increasing as populations grow wealthier and people have a greater concern not just with the safety of their food, but with quality, choice and aesthetics.

Traceability and the demand for more choice, such as organic and halal products, are creating new standards for compliance, testing and certification across the world.



# 8 Empowered consumers

Consumer issues are becoming more complex and open as social media gives every customer that wants it an opportunity to share their views on the safety and quality of food products.

Consumer expectations are also increasing with the growing knowledge of food safety and quality issues.

Through words, pictures and videos customers have a powerful medium on the phone in their pocket to expose food companies and create damaging food safety scandals.

Indeed, it's not just consumers food companies need to be concerned about; employees, activists, media and other stakeholders could all expose food companies not following best practice. As such, food companies are investing more resources in risk management and prevention.



# From compliance to competitive advantage

The bar is rising in terms of safety and quality for global food companies wishing to gain an edge and differentiate themselves in the market. Leading food companies are going well beyond the standards required to be compliant and setting their own independent standards and using them as a measure to control risk, production efficiency, protect brand value and create import trade barriers. Food companies can see the benefit of progressing to higher levels of compliance.



# 10 Population growth and food scarcity

As the world becomes more populous and prosperous, demand for food and other natural resources will rise.

Food consumption is expected to increase 35% over the next 15 years¹ as we add another billion people to the world's population by 2025². Agricultural production will need to increase by 70% to feed the world's people by 2050³, yet climate change and pressures on water and energy availability will impact supply.

So, how will we feed all these extra people and meet rising consumption demands in the face of increased food scarcity? Governments and food companies are urgently assessing the risks they face in food supply chains and finding alternative suppliers, producers and products. Contingency planning may involve finding alternative growing areas, making acquisitions or divestments and sourcing from new markets.

As food scarcity increases, the industry will need to remain vigilant to criminal activity that will compromise the integrity of the food supply chain through the adulteration or mislabelling of products. Food defence is growing in importance. Beyond the economic cost, estimated in 2010 by the US Grocery Manufacturers Association (GMA) to be \$10 billion to \$15 billion a year, food fraud can lead to serious public health risks<sup>4</sup>.

- <sup>1</sup> National Intelligence Council, Global Trends 2030: Alternative Worlds, 2012
- <sup>2</sup>UN Population Division, World Population Prospects, 2012
- <sup>3</sup>FAO, Global agriculture towards 2050, How to feed the world 2050: high-level expert forum, Rome, October 2009'
- $^4\mbox{GMA},$  Consumer product fraud: Deterrence and detection, 2010

# The bottom-line concern

The impacts of these industry changes have real world implications. Global food trust issues are impacting your market as much as any other in this interconnected world of increased trade.

Food fraud, supplier risk management, resource scarcity, the changing food demand and technological advances are just some of the issues we're helping food companies to solve.

Companies are beginning to be more alert to the issues and investing millions to ensure integrity throughout the supply chain – yet the focus is often on reducing cost, not managing risk.

Yet the impacts of a disruption are costly, brand damaging and far reaching. And concernedly, they are happening with increased regularity – accelerated and exaggerated by the megatrends reshaping society.

We know around three-quarters of food companies report at least one significant disruptive event each year<sup>1</sup>, with a major crisis typically costing \$US10 to \$30 million<sup>2</sup>. If a recall is required, food companies report that half cost more than US\$10 million and 5% cost more than \$100 million<sup>3</sup>.

On top of this, a substantial majority of companies cannot confirm whether their key suppliers are ready to respond to unexpected risks. This is concerning considering over 40% of all food companies experience a disruption below tier one in their supply chain<sup>1</sup>.

Following a food trust failure it can take years to finalise losses related to recalls, not to mention the longer-term consequence of lost customers and stock or company value.

A crisis event can even threaten the very viability of the business. For example, when high levels of the industrial chemical melamine were found in Chinese dairy products – including in infant milk formula – consumers lost confidence in China's dairy industry and demand increased for imported dairy goods. Chinese dairy companies have since been working hard to ensure its food safety standards meet the highest international standards to repair reputational damage and win back market share.

Food is an industry where customer trust and confidence is paramount. It's a necessity of life and only the best will do – your customer will not take a perceived or real risk to their own or their family's health. Trust is everything.

### Food safety



### food quality

Food producers rarely separate the themes of food safety and food quality, since both are dependent on comparable measures and processes. Yet the boundary between quality impairments that do not place health at risk and a definite food safety hazard is a fluid one. Incorrect product labelling as an organic or a fair trade product does not generally represent a deficiency in terms of food safety, but it is detrimental to quality since the consumer is being deceived as to the origin or the nature of the processing involved. Another instance is the failure to declare all the ingredients on the product label. Certain ingredients in foods are unproblematic for the majority of consumers, but can cause severe allergic reactions in some people.

Strategy&, Food safety management. Prevention monitoring, traceability & information, 2013.

 $<sup>^{\</sup>rm 1}\, {\rm Business}$  Continuity Institute (BCI), Supply Chain Resilience Survey, 2013

 $<sup>^2\</sup>mbox{AMR}$  Research, "Traceability in the Food and Beverage Supply Chain", 2008

 $<sup>^{3}</sup>$  The Grocery Manufacturers Association, Capturing recall costs: Measuring and recovering the losses, 2011

# Better practices in food trust. Our perspective

Complex consumer needs and rising expectations, regulatory change, globalisation and complicated food supply chains mean food companies face enormous challenges maintaining trust.

Best practice companies recognise the opportunity in planning and responding well to food trust issues. In our experience, the following traits are common to the best performing companies.



A positive culture of safety and quality everywhere from the farm to the shop floor

Through behaviour change and continuous improvement, leading organisations are adopting innovative practices that extend to staff awareness and training across their supply chain and to their suppliers. In addition, organisations are using and analysing lead indicators to identify and manage potential risks – which may extend to customer complaints, media reports and customer trends.



A risk resilient business culture and best practice behaviours start at the top

Business leaders must assume more supervisory responsibilities and be fully informed and engaged with food trust issues. Simple compliance with the rules isn't enough. Participation in industry bodies and thought leadership is essential to develop a culture that is relevant and responsive to current and emerging issues.



Continuously review supply chain risks and benchmark against best practice

Companies that have complete oversight over all stages of the supply chain and suppliers, with risk management procedures tailored for multiple geographies have a compelling competitive advantage. Proactive behaviour in supplier risk management leads to improved product integrity, reductions in compliance costs, product recalls and an improvement in consumer confidence in your food products.



Performance improvement and strategic alignment focus

Best in class companies ensure their resources and efforts are focused on fighting their biggest threats, and adopt a stringent risk analysis of not only their supply constraints and risks but also areas where food trust issues could arise – assessing the impact to the organisation's value and ability to achieve its strategic objectives.



The end-to-end integration of food supply chains within organisations

The initiative is focused on the need to improve safety, deliver enhanced traceability outcomes and give greater transparency relative to the security of supply. By having more control over their supply chain organisations are able to manage risks in a more structured way and develop risk-based approaches to specific food trust scenarios.



Our food supply and integrity services give a breadth of expertise not usually combined in a service offering to address the urgent need for a fully integrated food trust assurance and consulting business.

# Giving trust in your food. Our services

# From farm to fork, producer to consumer, you've come to the best place to build trust in your food.

We'll make your business more successful by building your capabilities to prevent costly crises.

With our fully integrated suite of consulting and assurance food supply and integrity services, we'll build the resilience, agility and reputation of your organisation. Your license to operate and reputation as a good corporate citizen matter so you can thrive, innovate and continue doing lots of interesting things to grow your business and achieve your goals.

Trust is an asset and differentiator we'll help you protect.

### How we can work with you

Our food supply and integrity services give a breadth of expertise not usually combined in a service offering to address the urgent need for a fully integrated food trust assurance and consulting business.

Our broad scope of services include

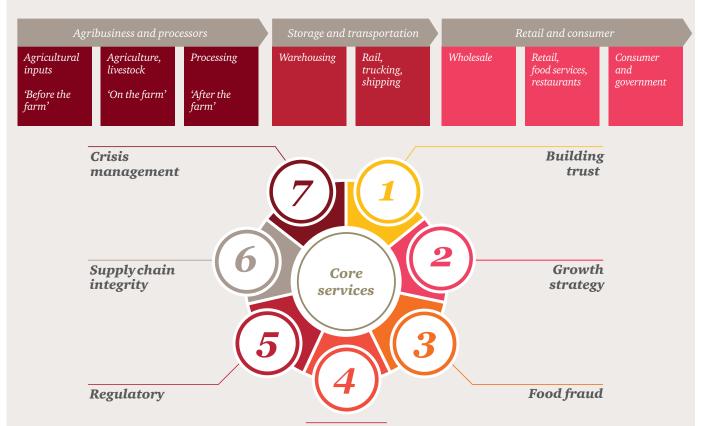
- Building and sustaining trust amongst stakeholders with an interest in the food supply chain (i.e. suppliers, regulators, consumers, producers, manufacturers, investors)
- Enhancing stakeholder confidence in food security, safety and quality at all stages of the food supply chain
- Optimising and enhancing processes and controls (including associated technology and data) designed to maintain food security, safety and quality across the food supply chain
- Enhancing policy and regulatory environments around food security, safety and quality
- Supporting commercial and government clients in post-crisis situations relating to food security, safety and quality.

See the core services we offer across the food trust value chain on the following page.

We feel a duty to take action in the areas where we can make the greatest contribution, and for us, this means offering our best thinking and experience to give you excellence in food supply and integrity services.

We would welcome the opportunity to talk with you about how we can put our many years of experience, knowledge and relationships to work for your benefit. Together, we'll help you give people greater trust in your food.

### Our core services across the food trust value chain



Food safety systems and traceability

- **1. Building trust** A focus on food safety culture, ethics and compliance to give people greater confidence in your food.
- **2. Growth strategy** A suite of strategic growth planning, deal consulting and due diligence services to assist companies position and execute their growth plans.
- **3.Food fraud** We'll help you understand your susceptibility to fraud and act to identify, assess and improve your supply chain resilience.
- **4. Food safety systems and traceability** We'll assist you to develop and implement traceability tools and frameworks to increase your resilience and customer confidence across your supply chain with our traceability and process improvement solutions.
- **5.Regulatory** We'll assist your understanding of the relevant regulatory requirements and industry guidance to design and implement good practice systems and processes.
- **6.Supply chain integrity** We'll help you take control by evaluating your vulnerabilities to disruptive events and food trust failures and suggest improvements to optimise your supply chain models.
- **7. Crisis management** We'll assist your company to manage and build its reputation by preparing for and managing crisis event situations relating to food security, safety and quality (including relevant processes and controls testing, identifying remedial actions and product recall).

### Our partner AsureQuality

We're a credible and trusted global network of advisors, with the best people who work with the best partners from strategy through to execution, committed to solving your important problems. That is why through the PwC network we've partnered with New Zealand Government owned food safety and biosecurity provider AsureQuality. With AsureQuality's extensive international accreditations, state of the art laboratory facilities, and practical understanding of global standards – including FDA regulations, FSMA and pre-approvals – we can provide quality assurance and advisory services from the farm to the supermarket shelf.

### Case study

How we've helped our clients. A focus on food trust

# When beef goes horse. A lesson in managing supplier risk

The rising cost of food production, coupled with fierce competition in the retail sector, has driven food companies to aggressively seek cost savings and increase the complexity of their food supply chains.

This is the backstory to the 2013 scandal that saw horsemeat passed off as beef mince and supplied to food producers all over Europe – a problem that continues to afflict the food industry today.

The scandal sparked an international investigation, prosecutions and questions over regulator effectiveness. There were allegations of criminal activity and questions about whether European regulators are capable of coping with an industry whose supply chain has become more complex and international. It caused consumers to question whether they can trust the labels on supermarket shelves.

Our client, an international FMCG company, asked us for help in understanding the key economic, social and environmental risks facing its food and commodity supply chains.

This was a focus on mitigating the risks of food fraud as much as it was assessing food safety and quality across the supply chain. So, how did we help and improve their processes?

Increasingly complex and extended supply chains bringing new and expanded risks, such as reduced traceability and fraud, required a new approach to supply chain management. We supported our client by redesigning their strategy, structure and processes to create a robust supplier risk framework.

We also developed a detailed understanding of retailers' requirements so our client could focus on the key drivers that were pertinent to their relationships.

This is an industry where customer trust and confidence is paramount, and a food safety scare can soon become a high profile and brand damaging scandal threatening a food company's reputation and viability. Successful food companies must demonstrate transparency and reliability by understanding their customers' requirements and effectively manage their supply chain risks to reduce their exposure.

### How did we help?

We developed a range of options for our client, which included:

- Risk profiling to identify and quantify risk in their supply chain
- Forensic investigations to identify what may have gone wrong and why
- Performing controls and supplier audits and due diligence work to provide assurance as required
- Deploying risk monitoring solutions to ensure compliance with standards
- Redesigning the supply chain structure, strategy and organisation to optimise between cost and resilience.



### Case study

How we've helped our clients. A focus on food trust

# Building food trust in Chinese dairy farms

PwC has a vital role to play in rebalancing trust between business, government and communities, and when we work together, the benefits are unquestionable in solving the problems that matter most to society.

In China we're making a real difference in building confidence within its food industry by supporting the country's largest food and agricultural business, COFCO, and its related companies.

We've been asked by COFCO to develop a food trust framework that embeds best practice standards in food safety and quality, drawing on leading international agricultural models.

PwC and food safety and biosecurity provider AsureQuality signed an agreement to that effect with COFCO on the side-lines of the Asia-Pacific Economic Co-operation (APEC) Summit 2014 in Beijing. The significance of this agreement cannot be overstated: COFCO provides food to a quarter of the world's population, with operations stretching across China's agricultural and food sectors and beyond.

This is an example of COFCO coming to the best place for the development of an independent, detailed, transparent, traceable and verifiable process around food origin and production, from paddock to purchase. With the Chinese Government naming food safety as one of the country's top three priorities, this represents a significant milestone by COFCO in achieving its Government's goals.

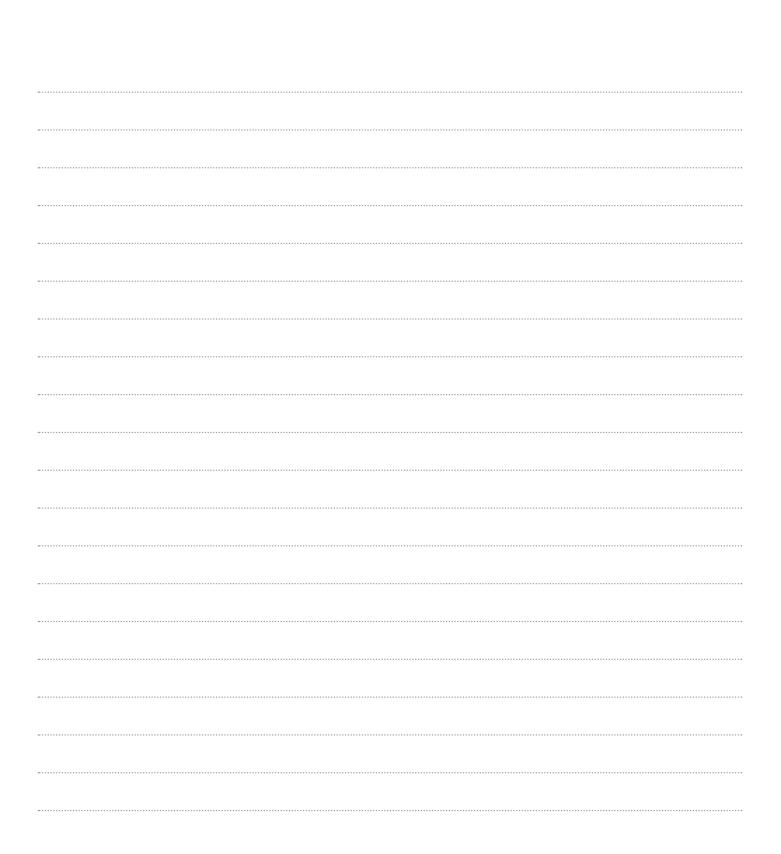
PwC is working with Mengniu Dairy Company (of which COFCO is its largest shareholder) to support their development of a dairy farm assurance program. As one of the world's biggest and fastest-growing dairy companies, Mengniu is committed to becoming the model for dairy farming excellence in China. Our work will support Mengniu by furthering its food safety and quality goals across its supply chain and enable it to benchmark and lift dairy farm supplier performance.

COFCO and Mengniu recognise how critical food trust has become and want to provide confidence to their consumers, regulators and importers so they can continue growing and meet the ever increasing food demand.

This is just the first of many initiatives we're working on with COFCO, Mengniu and its related companies providing a tangible demonstration of our combined ability to build trust in food quality practices in China.



# **Notes**



# Get in touch

### Global

Craig Armitage Global Leader, Food Supply and **Integrity Services** +64 3 374 3052 craig.armitage@nz.pwc.com



**Bruce Baillie** Alliance Leader, Food Supply and **Integrity Services** +64 9 355 8043 bruce.baillie@nz.pwc.com



### Australia

Phil O'Prey Global Advisory Clients & Markets Leader +61 2 8266 1461 phil.oprey@au.pwc.com



Clare Power + 61 3 8603 2360 clare.power@au.pwc.com



### China

Shirley Xie China/Hong Kong Assurance Markets Leader +852 2289 1035 shirley.xie@hk.pwc.com



**Netherlands** 

Hans Schoolderman +31 88 792 7658 hans.schoolderman@nl.pwc.com



Onno Nillesen +31 88 792 6414 onno.nillesen@nl.pwc.com



### **Norway**

Per Røhnebæk +47 95 260483 per.rohnebek@no.pwc.com



South East Asia

Richard Skinner +65 982 3371 richard.skinner@sg.pwc.com



### Taiwan

Sunny Sun +886 2 2729 6666 Ext 23500 sunny.s.sun@tw.pwc.com



Paul Liu +886 2 2729 6666 Ext 26158 paul.c.liu@tw.pwc.com



### UK

David Bishop +44 20 7804 7933 david.c.bishop@uk.pwc.com



### Marco Armitrano Head of Risk Assurance Solutions +44 18 9552 2386

marco.armitrano@uk.pwc.com



### **US**

Sally Bernstein US Leader, Food Supply and Integrity Services +1 617 794 9777 sally.bernstein@us.pwc.com



### Kelvin Harris US Director, Food Supply and Integrity Services +1 404 944 7218 kelvin.harris@us.pwc.com



### Thomas Johnson

+1 612 596 4846 thomas.r.johnson@us.pwc.com



John Maxwell Global Retail & Consumer Leader +1 646 471 3728 john.g.maxwell@us.pwc.com



