

# ***Global egg industry outlook 2035***

**Long-term egg market and investment perspectives**





# ***Content***

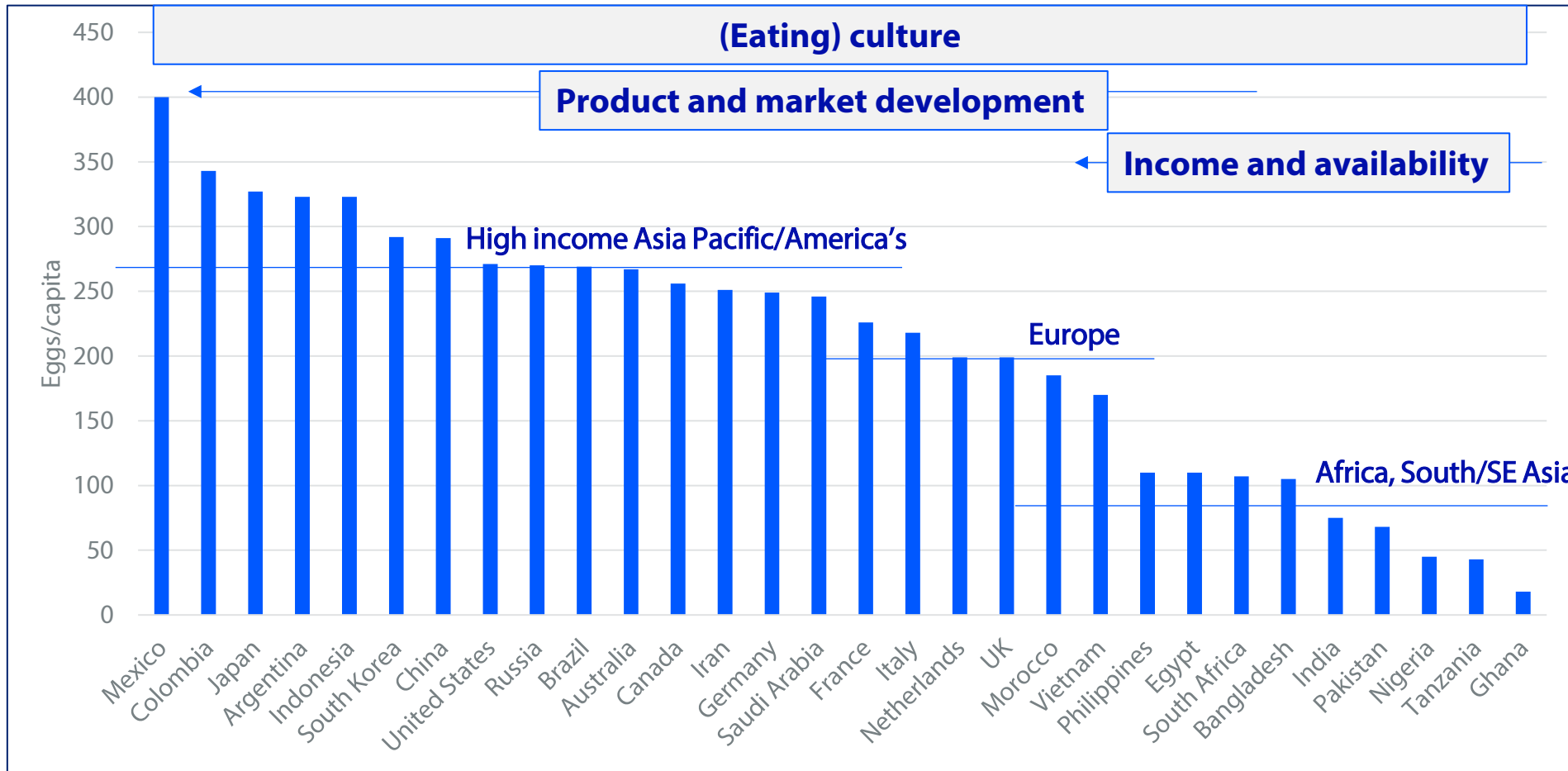
- 1. Global egg market outlook 2035**
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- 3. From volume to value**
- 4. The operational perspective**



# Big differences in per capita consumption

Income growth is a driver in low-income countries, but less in high-income countries

Consumption of eggs per capita by country (2024) and key drivers for growth



Higher income and availability is especially in lower income countries a trigger for growth

Gradually other factors more important:

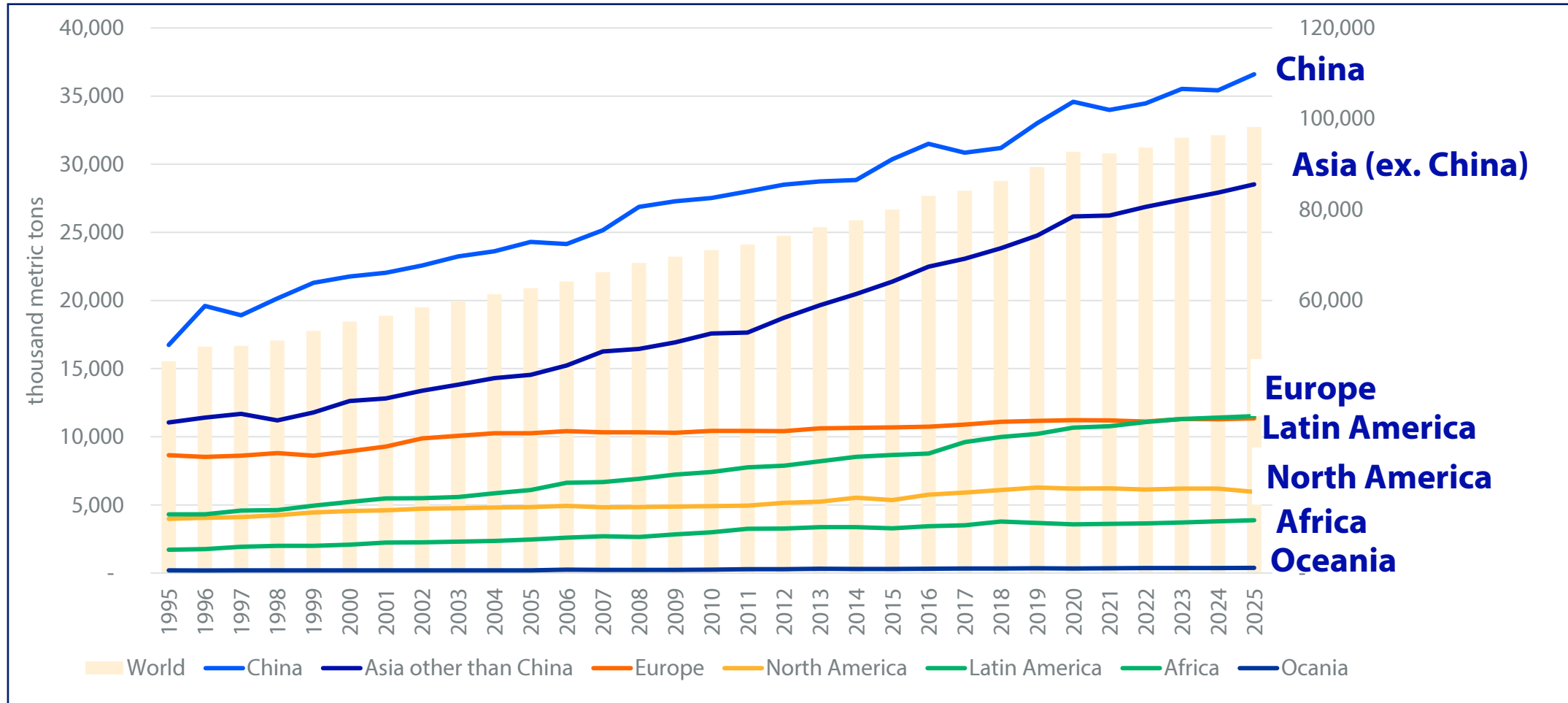
- Marketing
- Product development
- Egg products

Source: RaboResearch estimate based on WEO, FAO, regional statistics, RaboResearch 2025

# Emerging markets drive global egg market growth

Asia and Latin America have captured more than 80% of global market growth

Global egg market growth by country/region 1995-2025



Source: Rabobank estimate, and projections based on FAO, WEO, regional statistics, 2025

# What drives egg consumption growth?

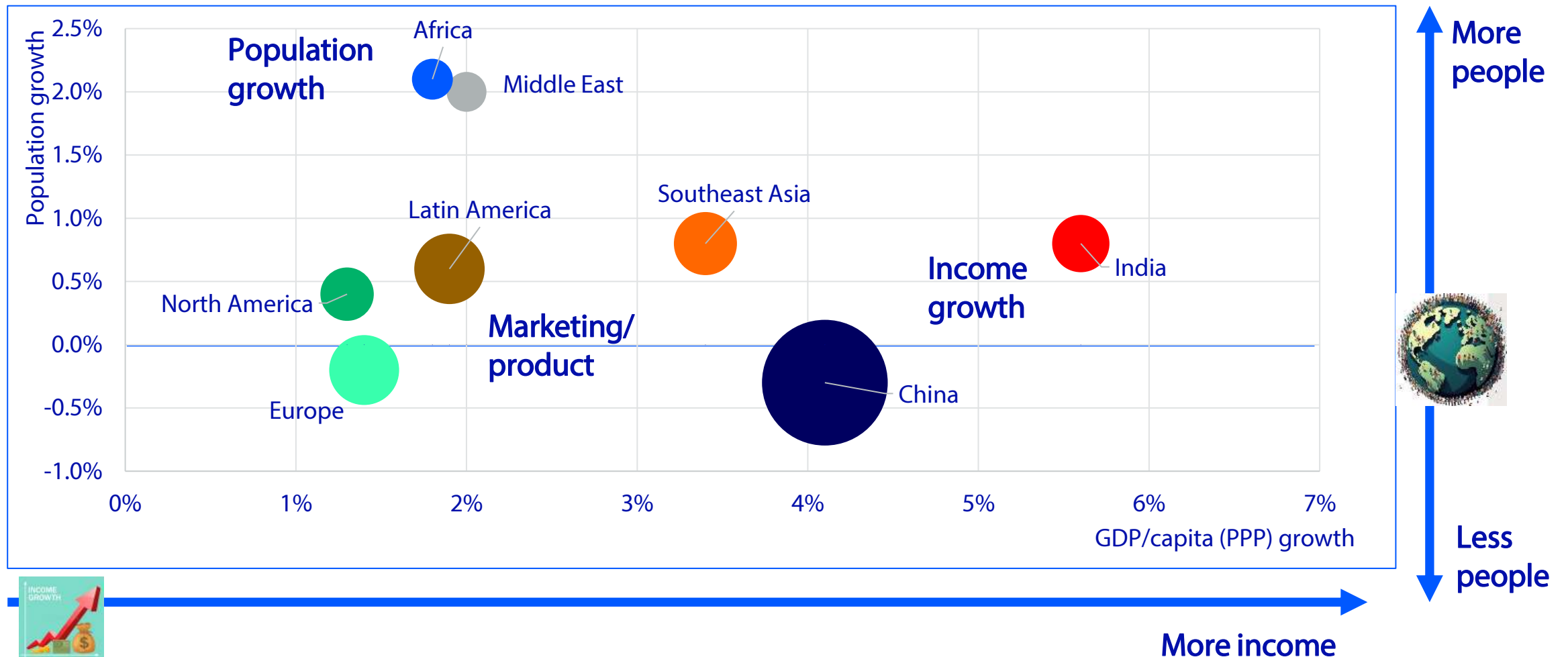
Key drivers next to population and income growth – industry supply and marketing



# Population and income growth: significant differences

Growth drivers are different in MEA region, Southern Asia and high-income countries

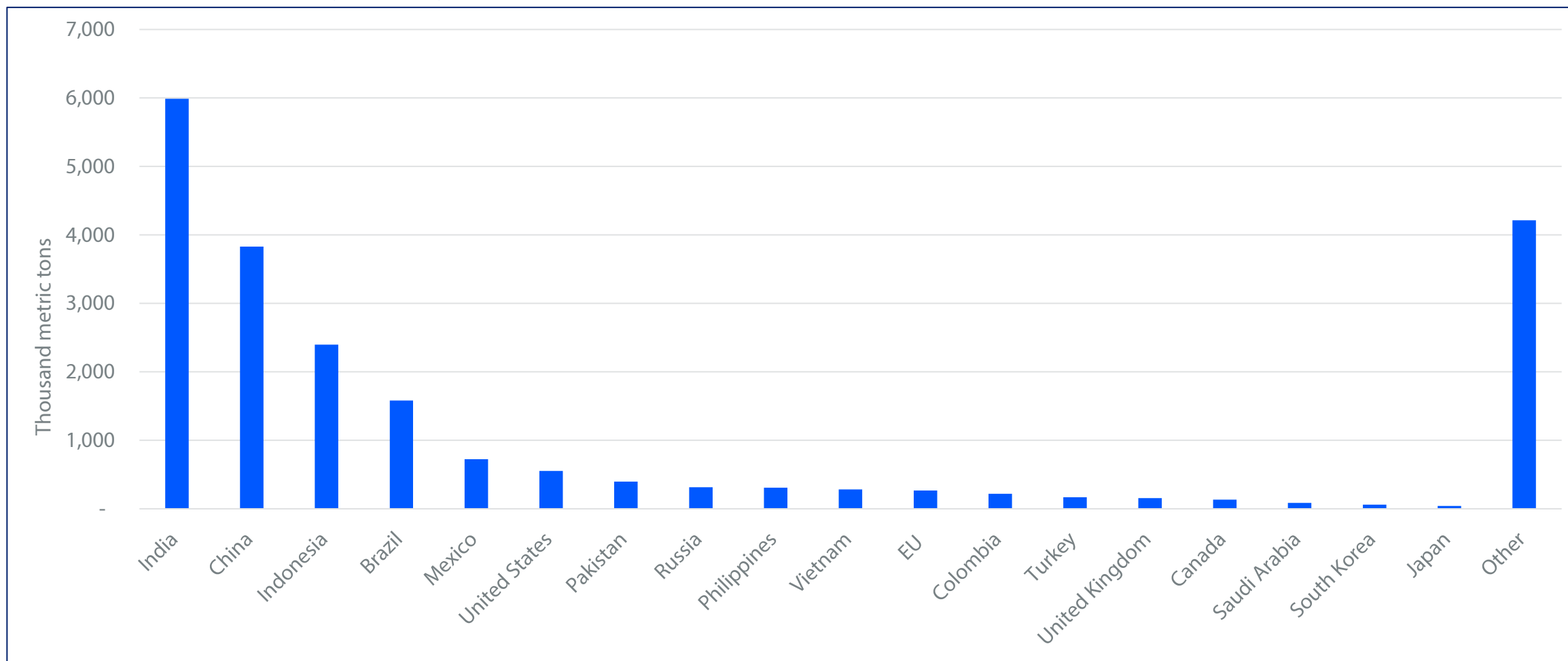
Population growth vs. GDP per capita (PPP) growth, 2025-2035f



# Growth outlook 2035: further shift to emerging markets

## China growth to slow, South/Southeast Asia and Latin America to capture more growth

*Change in consumption by country 2025-2035f*

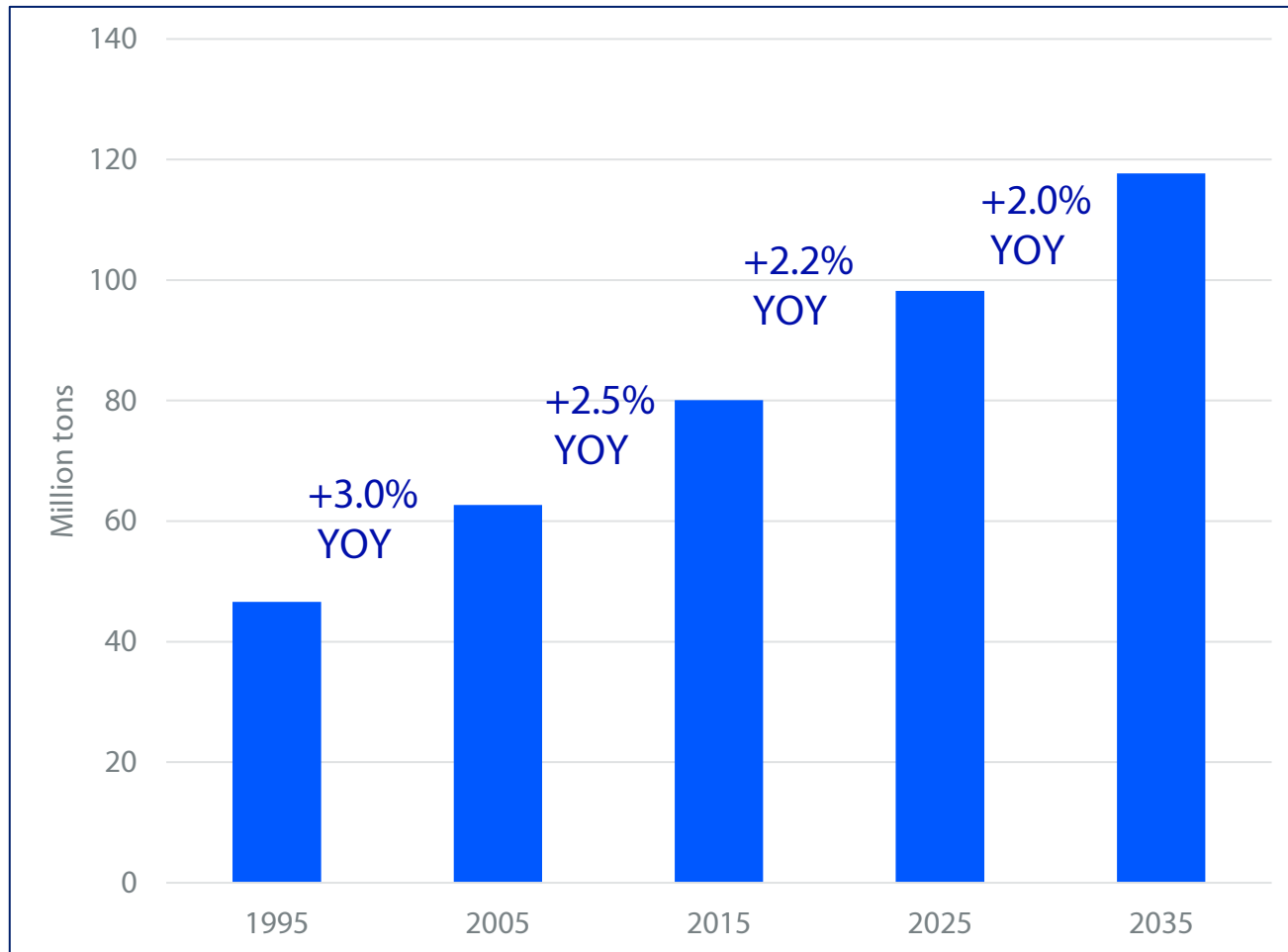


Source: Rabobank estimate, and projections based on FAO, WEO, regional statistics, 2025

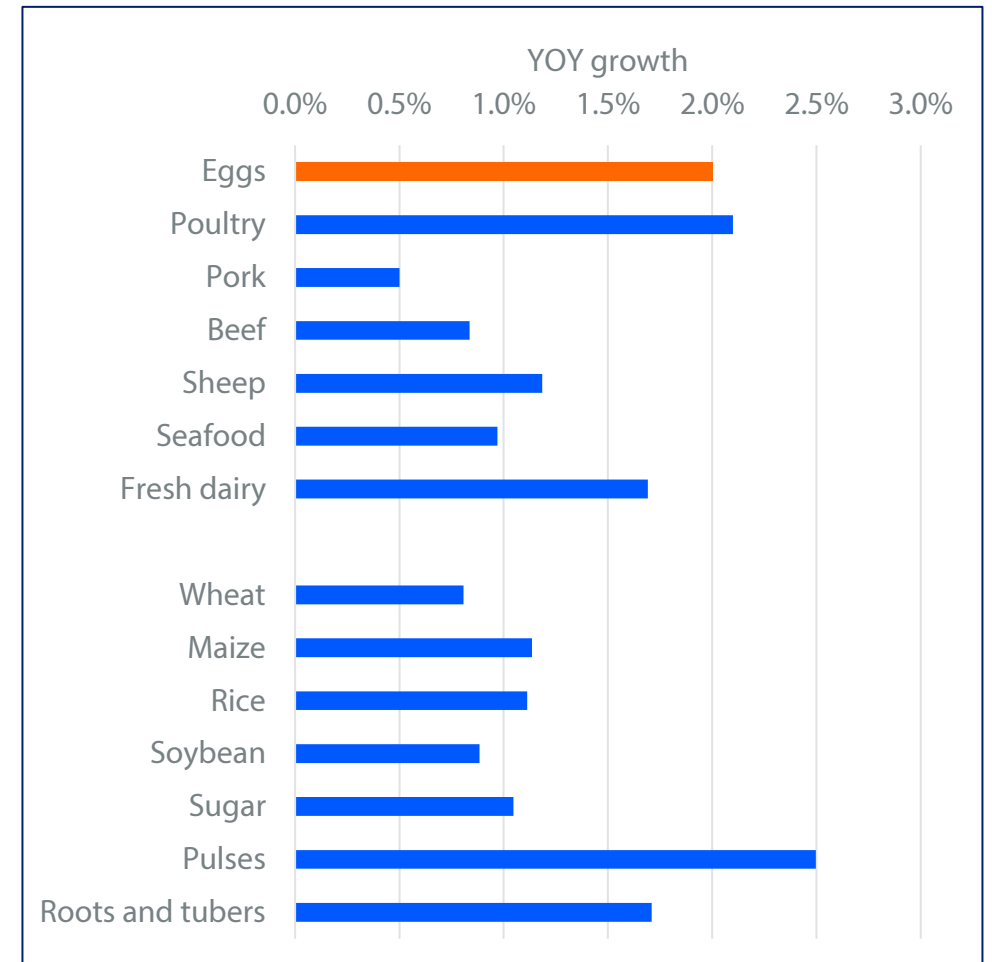
# Global egg demand to grow 2% per year in next decade

Eggs is a top 3 growth market in agricultural products

## Global egg market outlook



## YOY Growth for different agricultural products



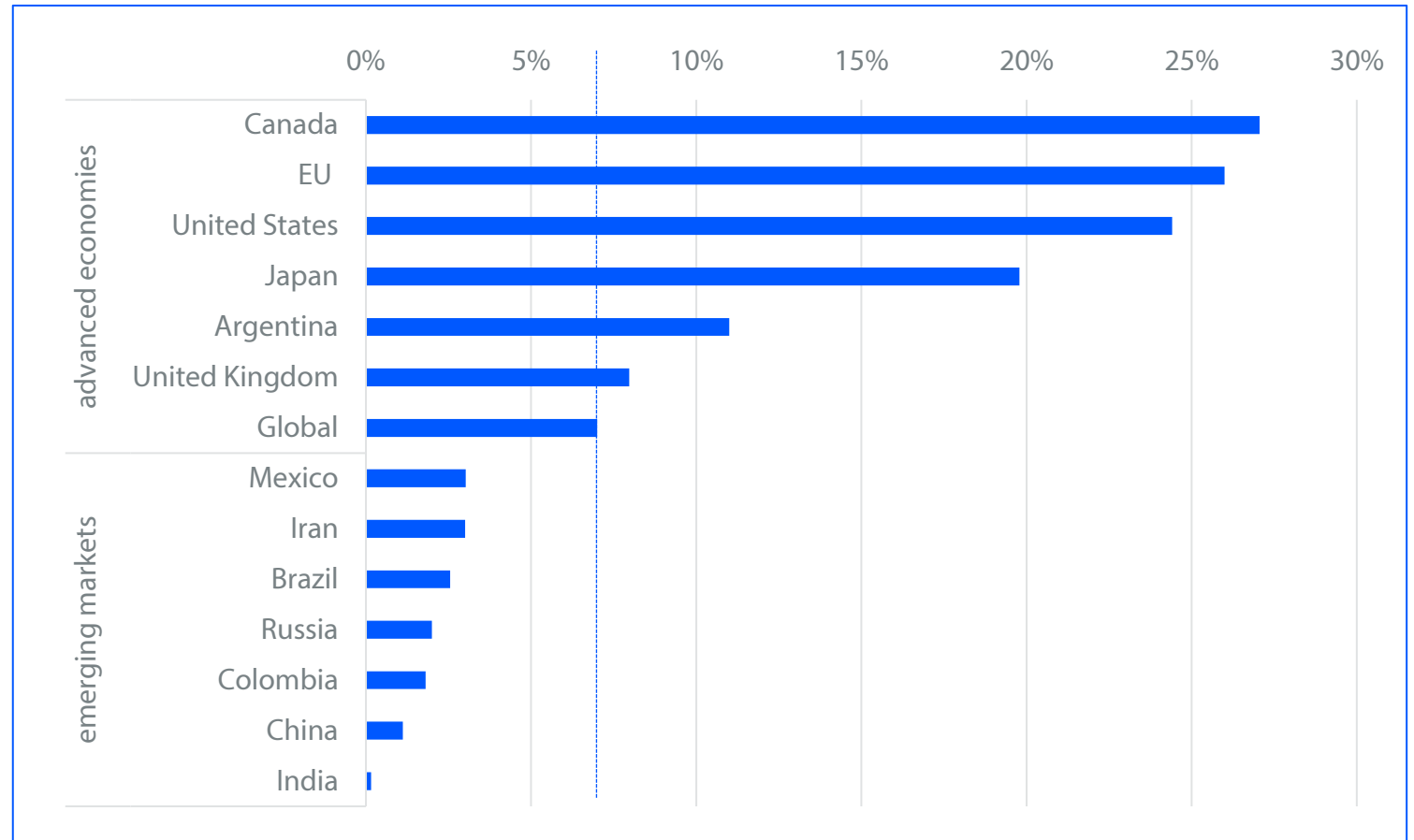
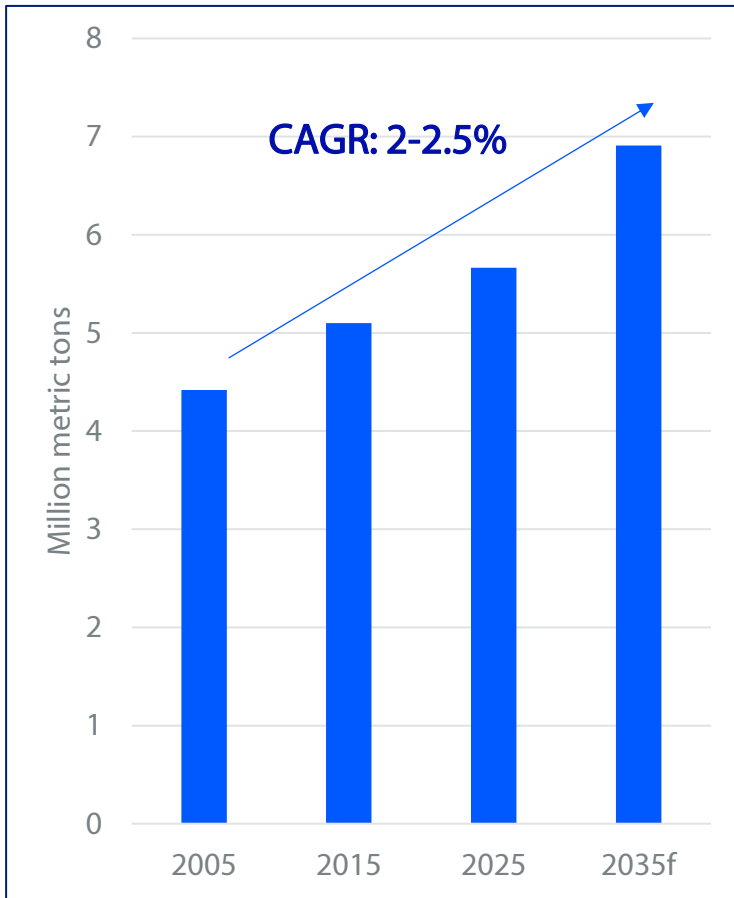
Source: Food and Agriculture Organization of the United Nations, USDA, OECD, local statistics, RaboResearch 2025

# Egg products to grow by 2 to 2.5% per year

Take-off of growth in emerging markets, 80% of industry still in develop countries

Global egg products market outlook

Egg products' estimated share of total egg consumption in 2024



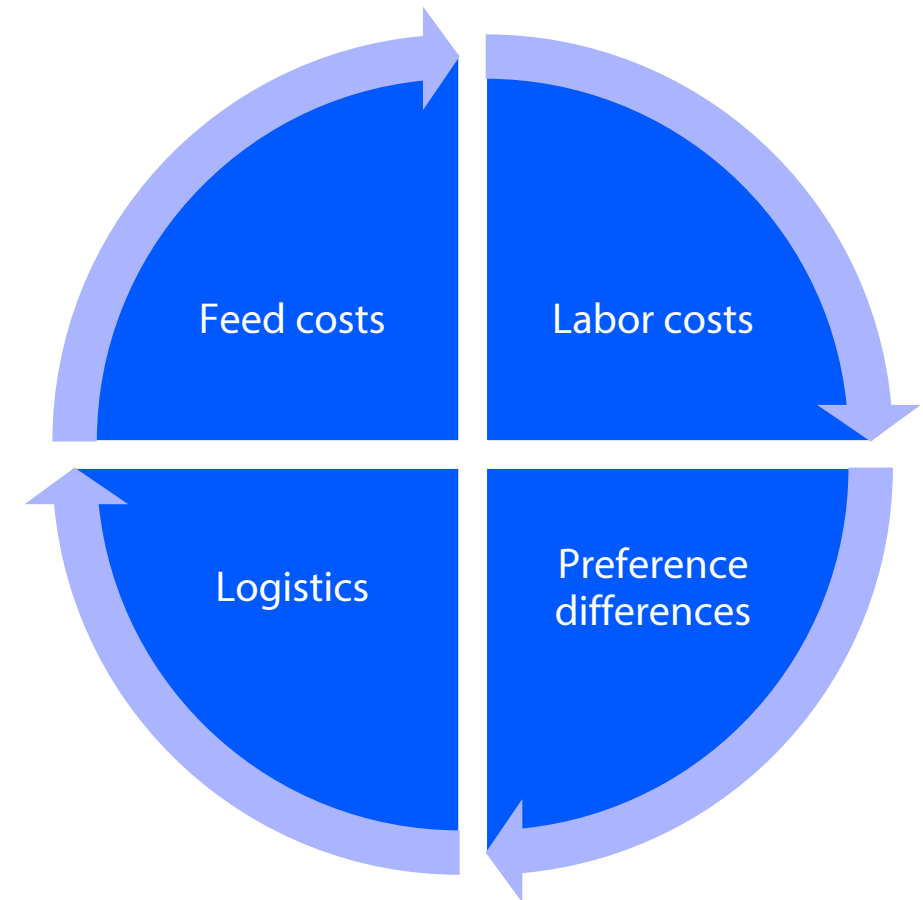
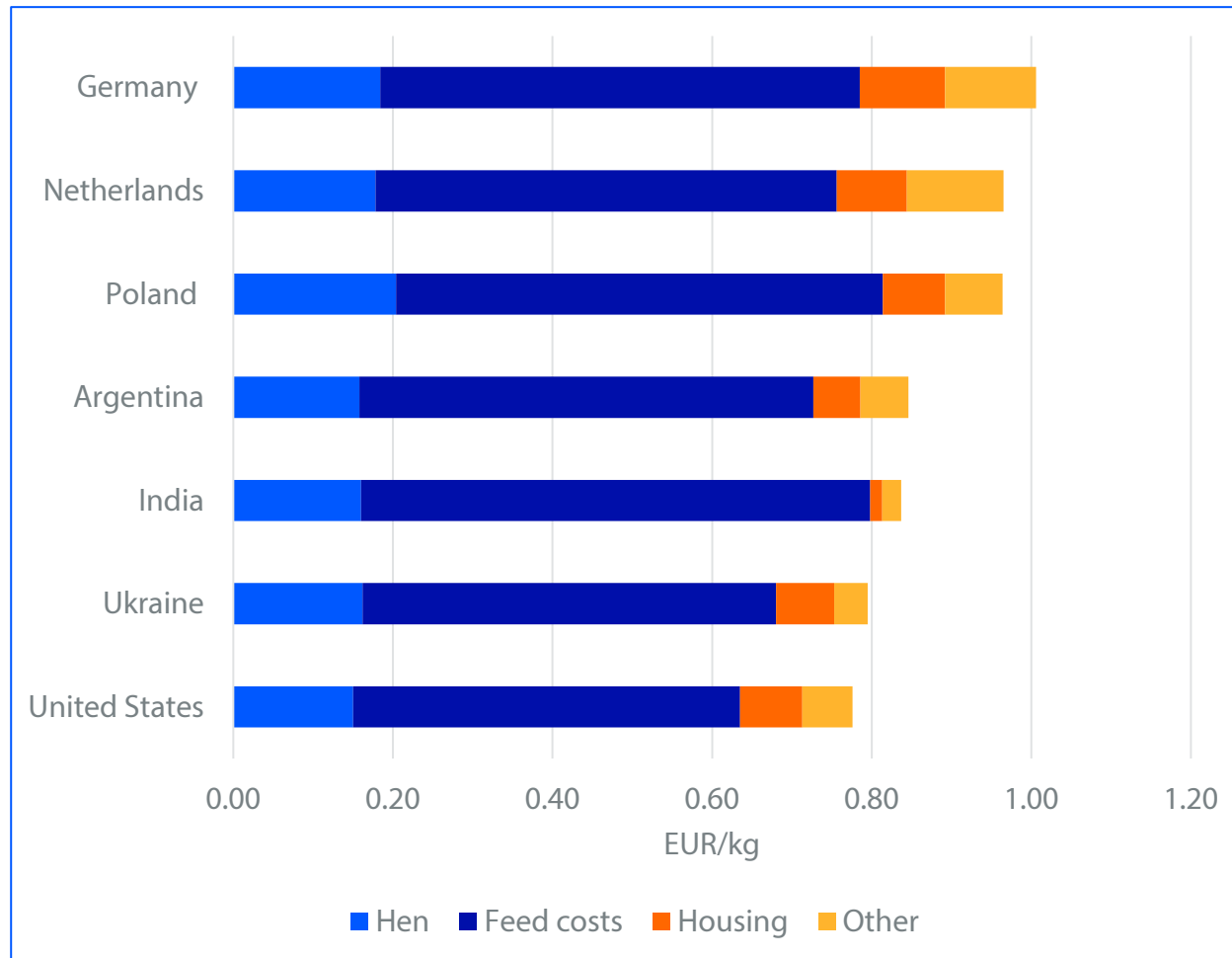
Source: RaboResearch estimate, and projections based on FAO, WEO, regional statistics, RaboResearch 2025

# Where to produce? Local or in exporting countries?

## Big differences in cost-of-production and preferences between countries

Cost of production, 2021

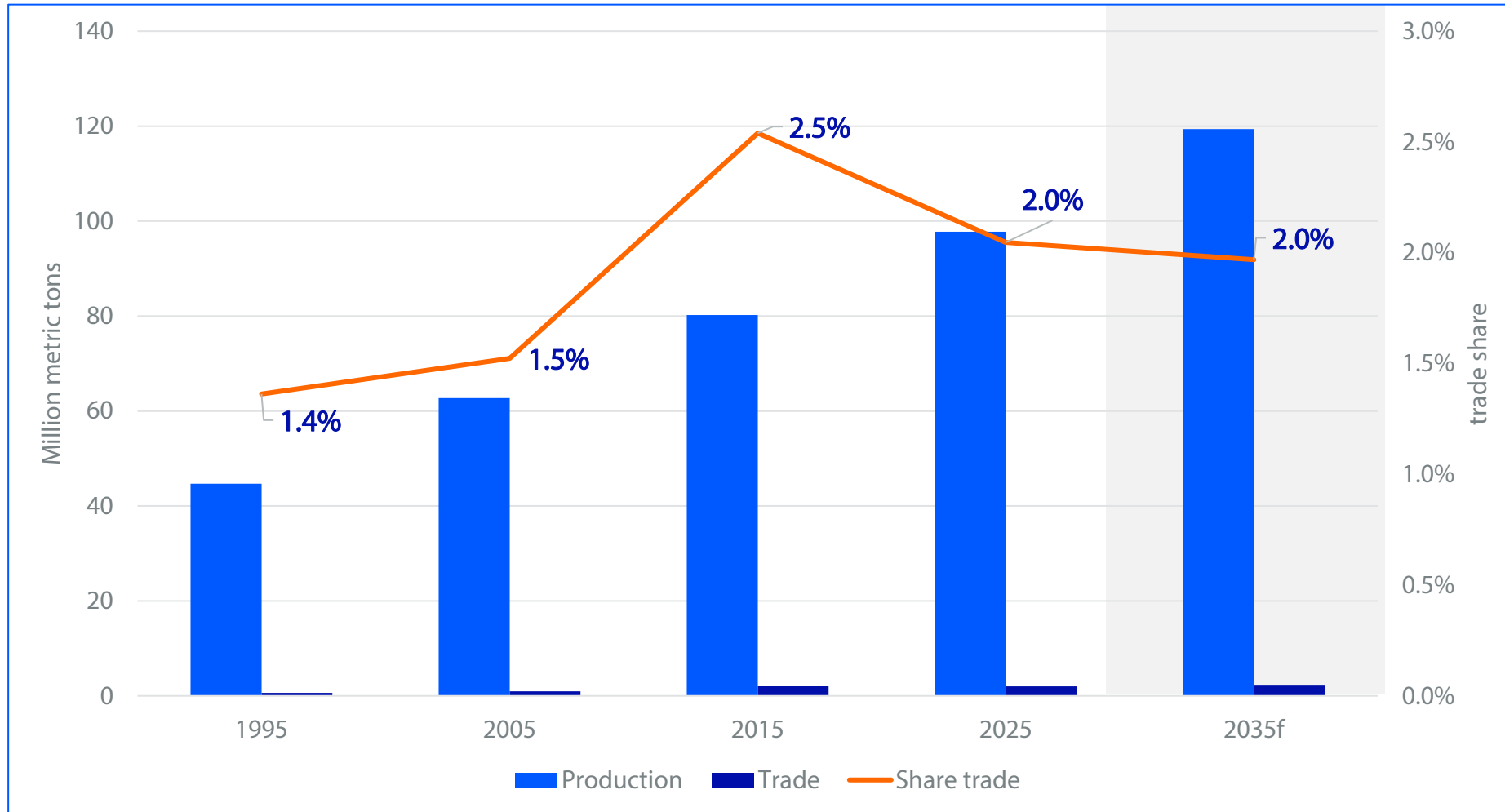
Key drivers for global competitiveness



# Only 2% of eggs are traded globally

Shell eggs only 1.2% trade, egg products have higher trade share: 14.4%

Global egg production and trade: most growth in local markets, trade share is declining



## LOCAL VS. TRADE

### SHELL EGGS

- 98.8% local-to-local
- 1.2% trade

### EGG PRODUCTS

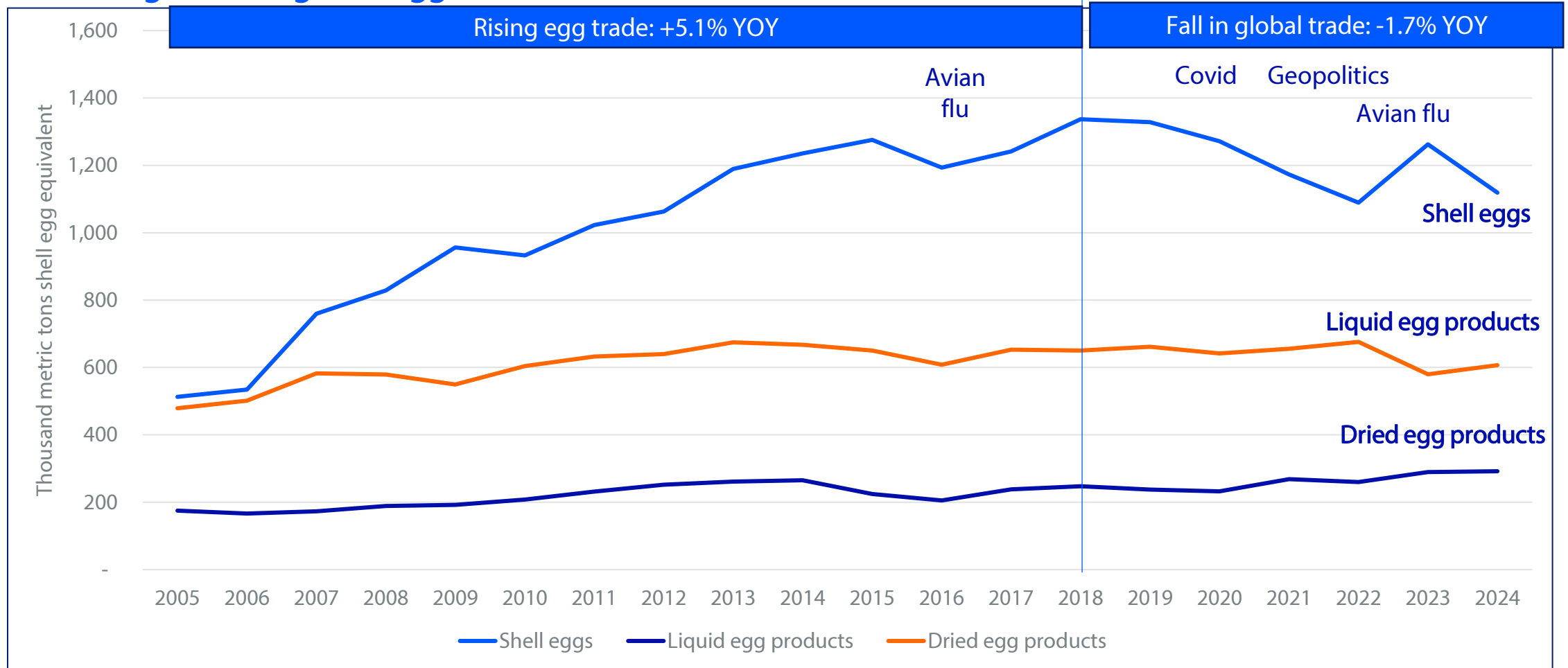
- 85.6% Local-to-local
- 14.4% trade

Source: RaboResearch estimate and projections based on FAO, WEO, regional statistics, RaboResearch 2025

# Global trade has slowed since the 2010s

Slower growth amid limited market openings together with disease restrictions

Market segments in global egg trade, 2005-2024

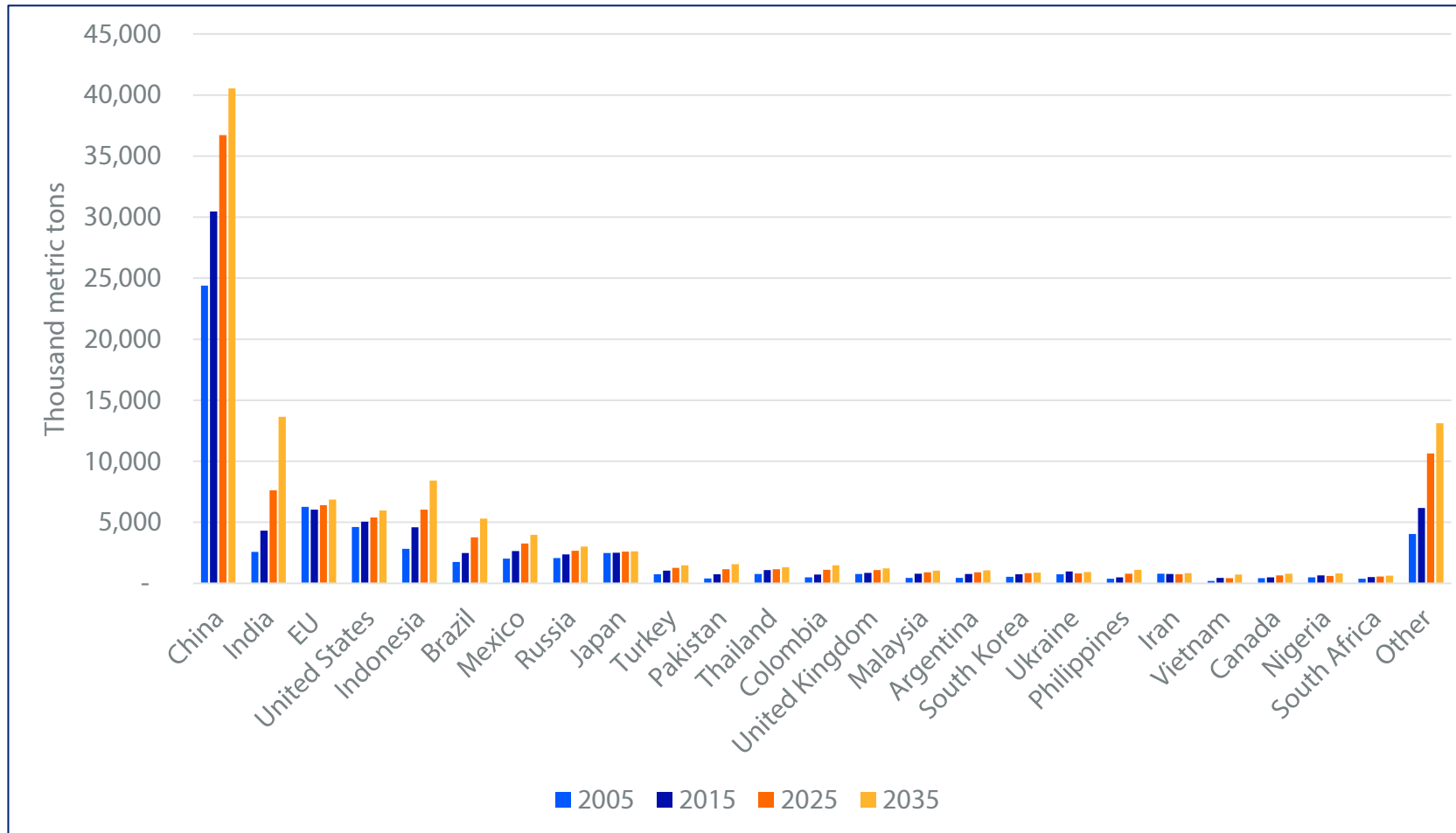


Source: RaboResearch estimate and projections based on FAO, WEO, regional statistics, RaboResearch 2025

# 70% of growth in egg production to be in Asia

## India and South/Southeast Asia fastest growing region, followed by Latin America

Global egg production growth, 2005-2035f



### Global growth 2025-2035f

**ASIA 70%**

- **India: 25%**
- **China: 20%**
- **Other Asia: 25%**

**AFRICA: 7%**

**LATIN AMERICA: 20%**

**NORTH AMERICA: 4%**

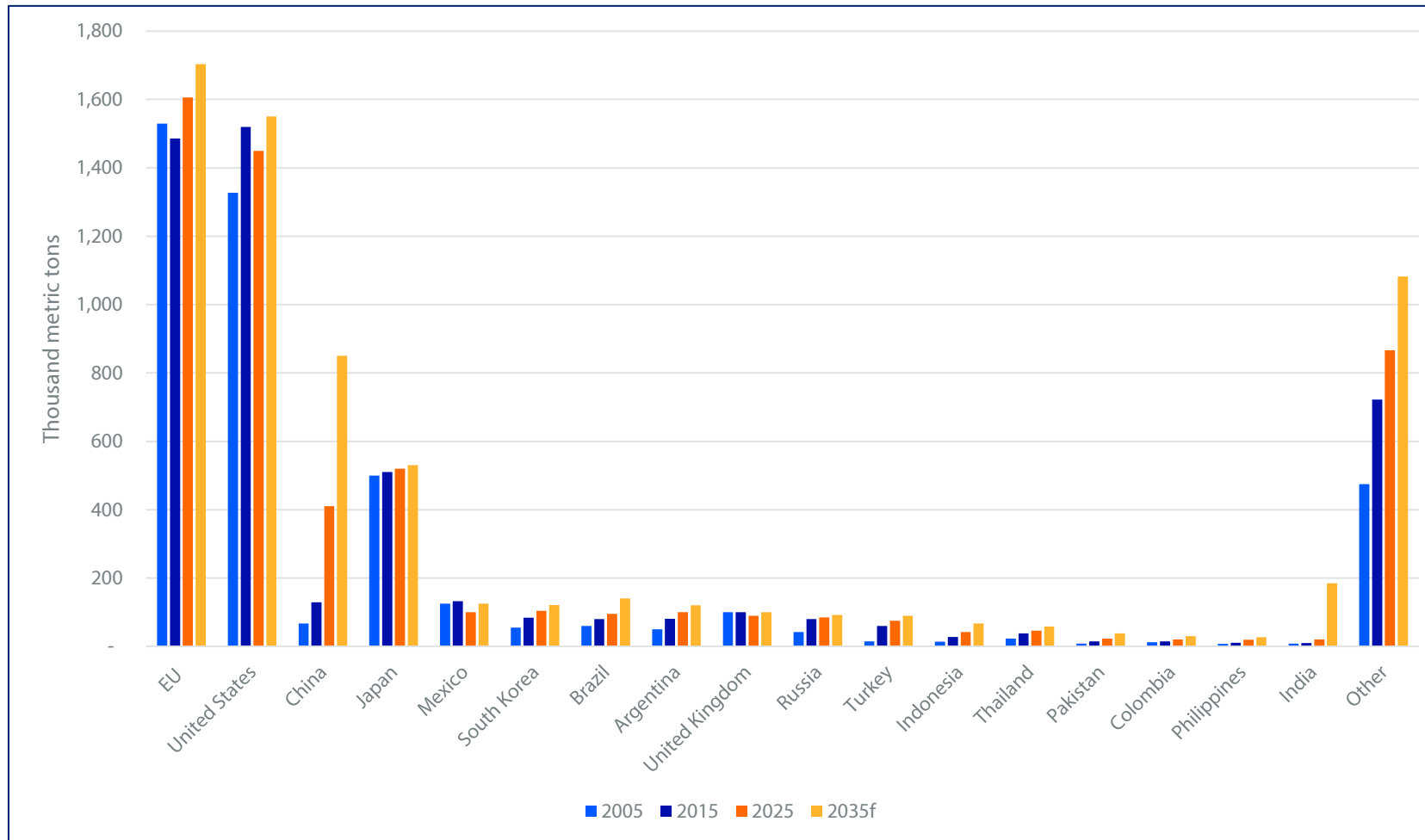
**EUROPE: 4%**

Source: Rabobank estimate, and projections based on FAO, WEO, regional statistics, 2025

# Global egg product production to grow by 2-2.5% YOY

Fast rising demand in emerging markets, especially China and India

Global egg products production growth by country, 2005-2035f



Source: Rabobank estimate, WEO, regional statistics, 2025

Egg product share in total egg consumption

Advanced economies:  
20-25% of market

Developed countries:  
<3% of market

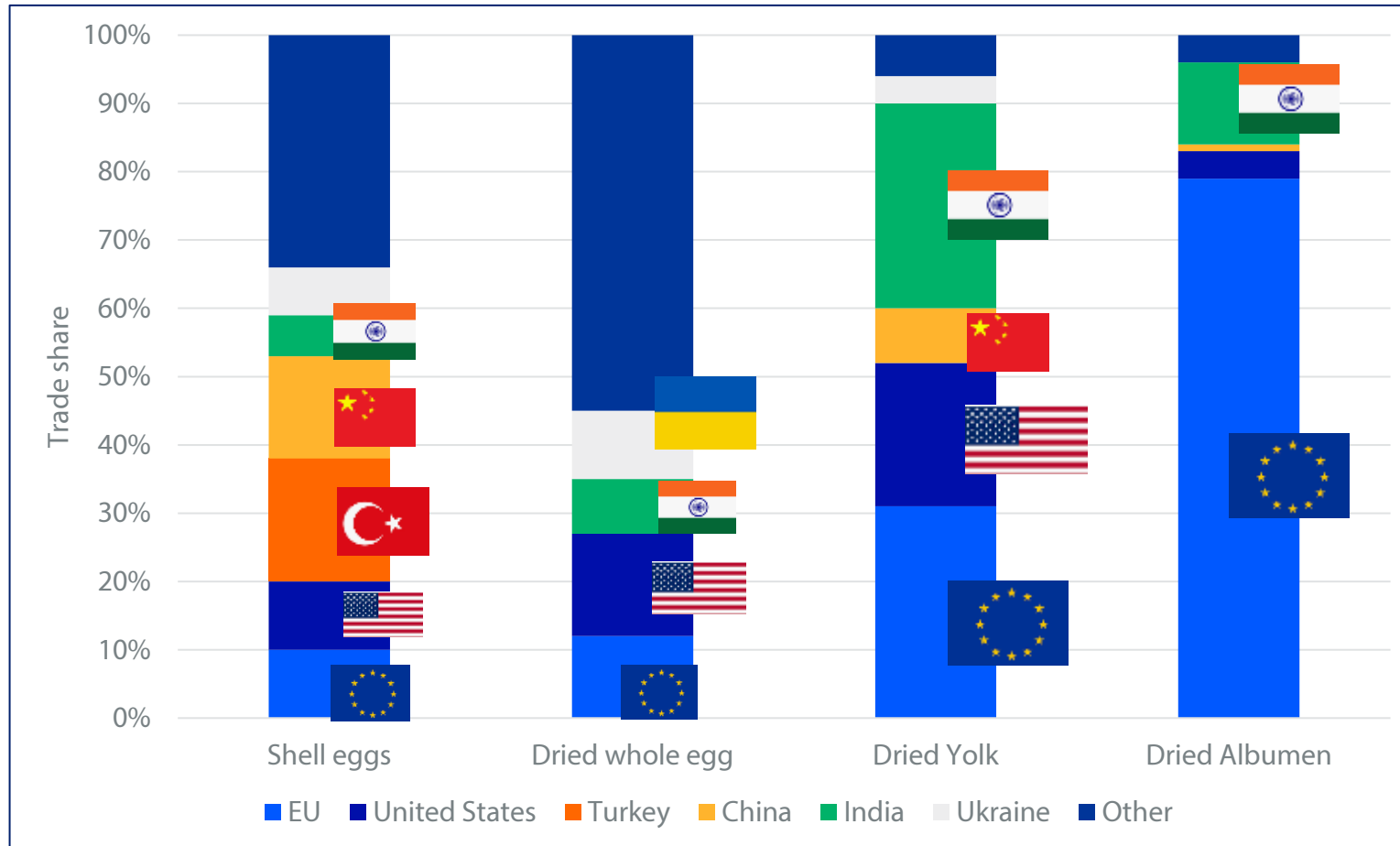
Key drivers for growth:

- Availability
- Food safety
- Labor costs
- Consumer trends

# Global egg product trade: big global differences

EU dominates albumen market, China, India and Turkey steam up in yolks + shell eggs

Shell eggs and dried egg products export market shares, 2024



Major changes in global trade

## Key drivers for trade

- Cost of production
- Distance
- Preference differences

## Winners in global trade

- China in yolks, shell eggs
- India in yolks, shell eggs
- Turkey in shell eggs

## EU egg albumen leadership

## Runner up: Brazil

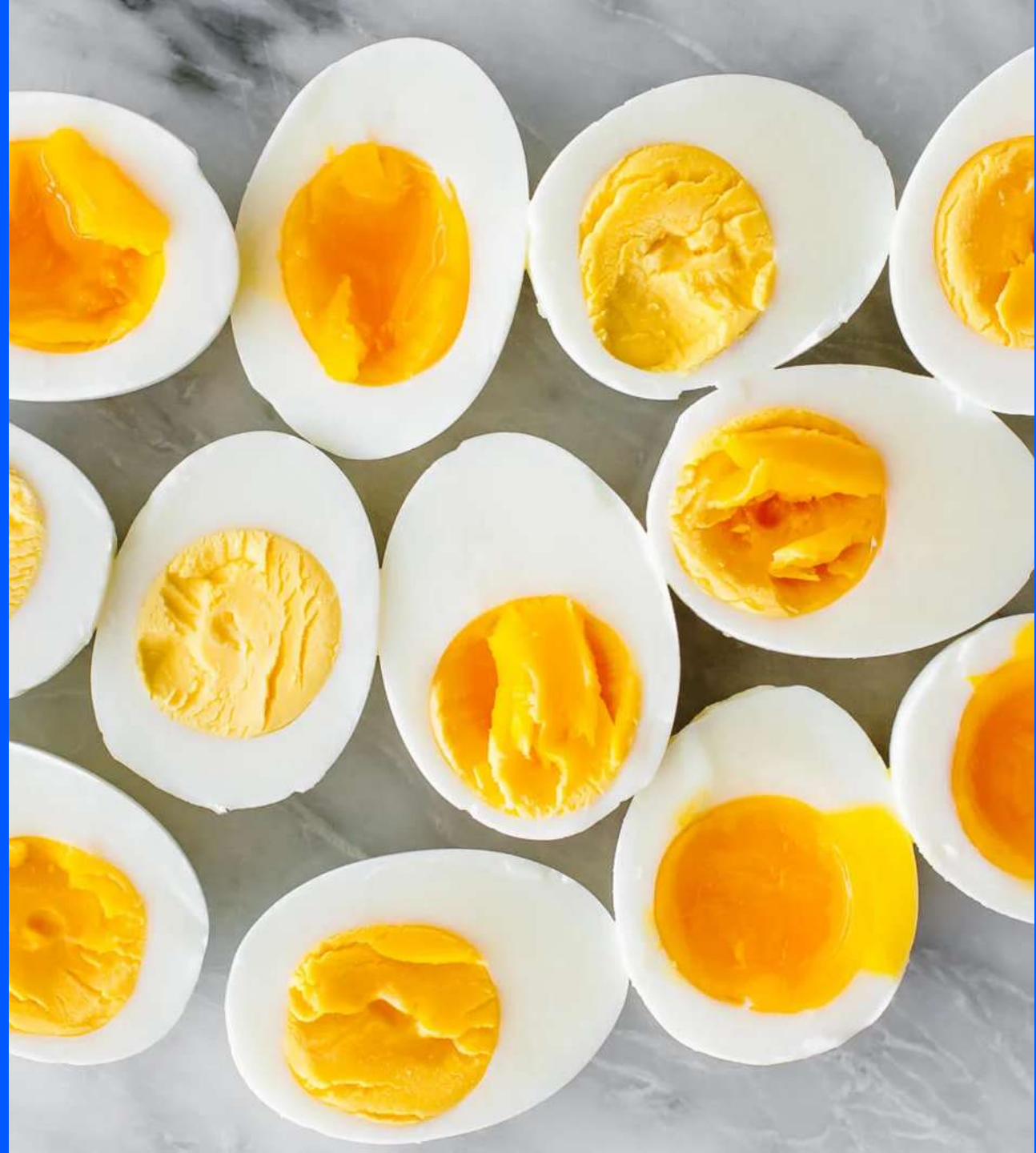
Source: Rabobank, Trademonitor, 2025

**1. Global egg market outlook 2035**

## **2. The investor perspective**

**3. From volume to value**

**4. The operational perspective**



# A changing global environment on investments

From global to local: more food and resource security and more volatile markets

## Global macro-trends for egg production

Global egg demand increase by 2035:  
**+20-25%**

### Shifting growth drivers

- **90%** of in emerging markets
- Western markets from volume to value

### Geopolitical tensions and competition

- Shifting geopolitical and economic power,
- Resource and technology race

### Major sustainability commitments

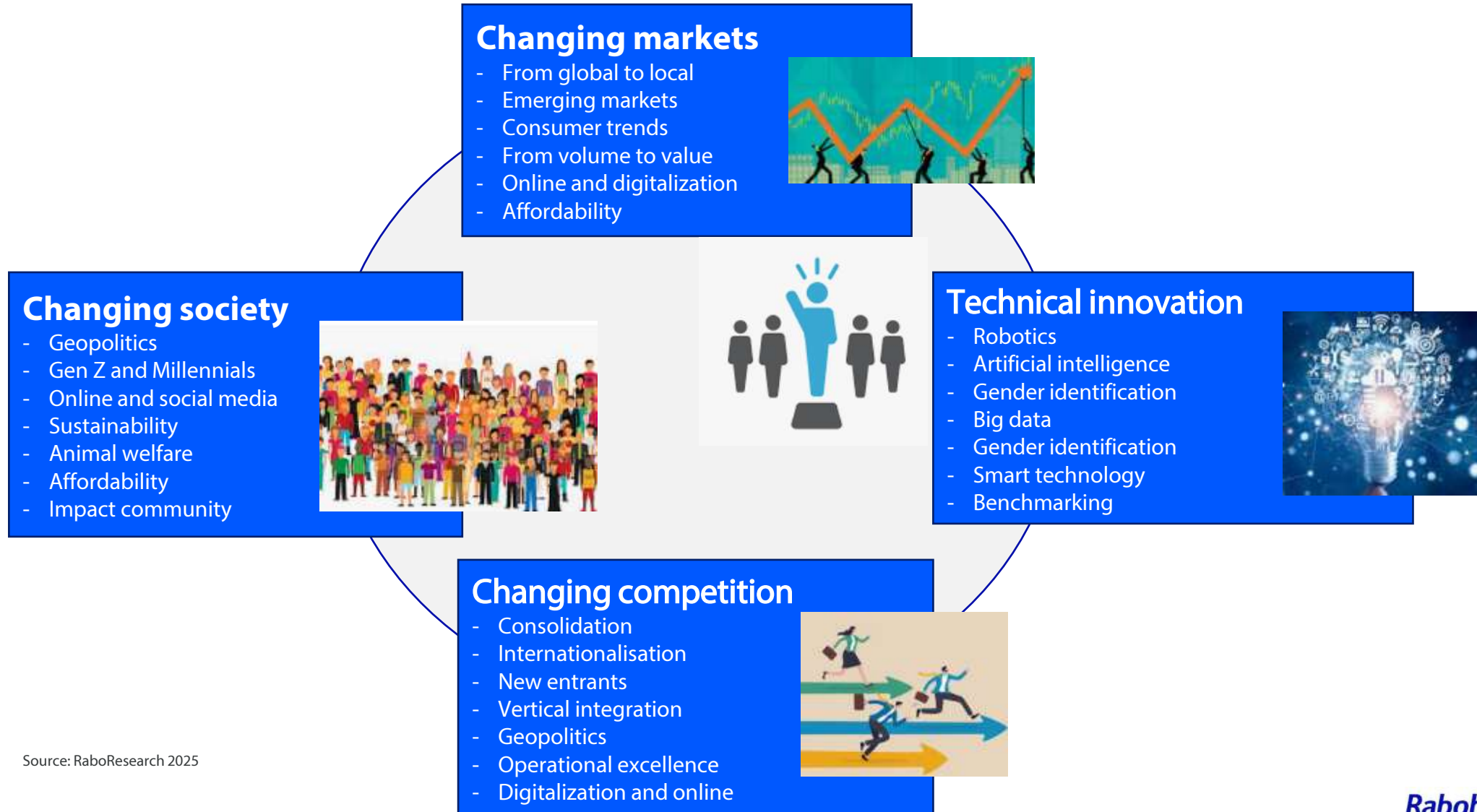
## A changing global perspectives on investments



Source: RaboResearch 2025

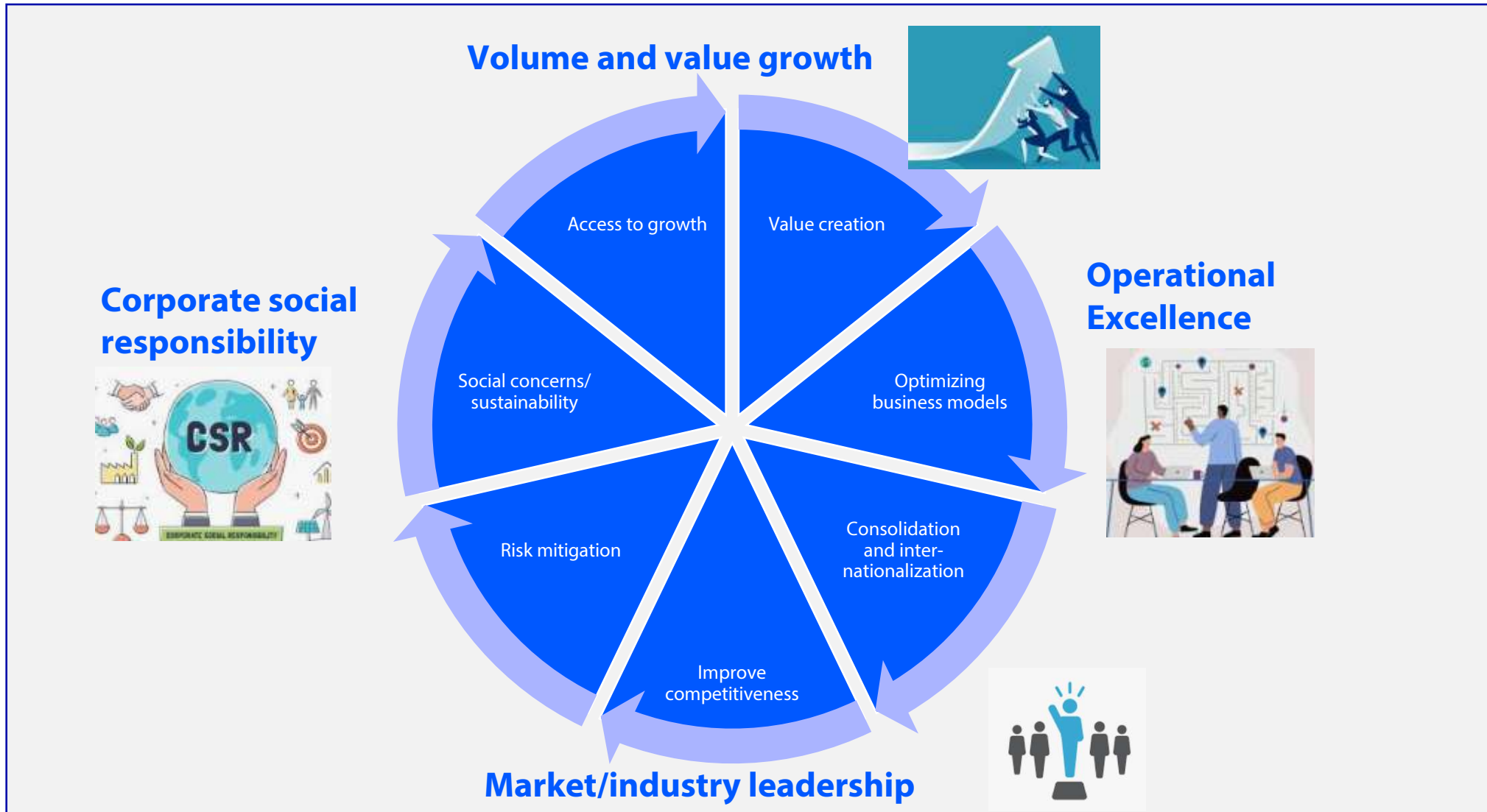
# The journey towards 2035:

## Changing society, markets, value chains and competition - new technology



# Key investment themes 2025-2035

Fine-tuning industry strategies in a fast-changing market and society



# The changing face of the global egg industry

## Large investment opportunities to align industry with changing market and society

### Greenfield expansion

- Market growth.
- Integration versus specialization.
- Industry modernization.
- Shift to different production methods.



### Value-added products

- Branding/preferred supplierships
- Product differentiation.
- Consumer egg products.
- Industry-to-industry egg products



### Consolidation

- National.
- Regional.
- Globalization.



### Value chain modernization

- Operational excellence.
- Smart and digital value chains.
- More vertical integration.
- Access to farm capacity to become strategic.



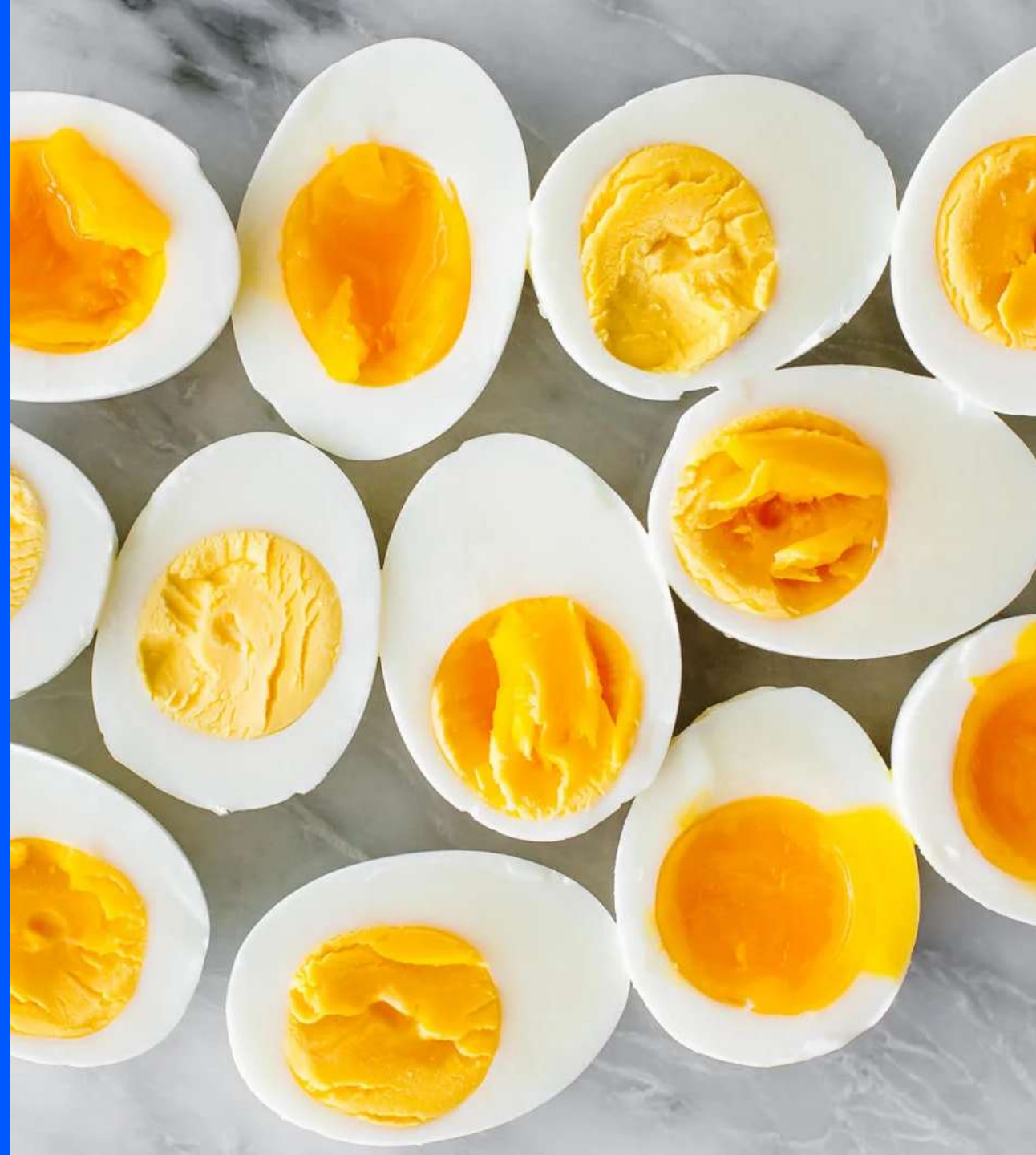
Source: RaboResearch 2025

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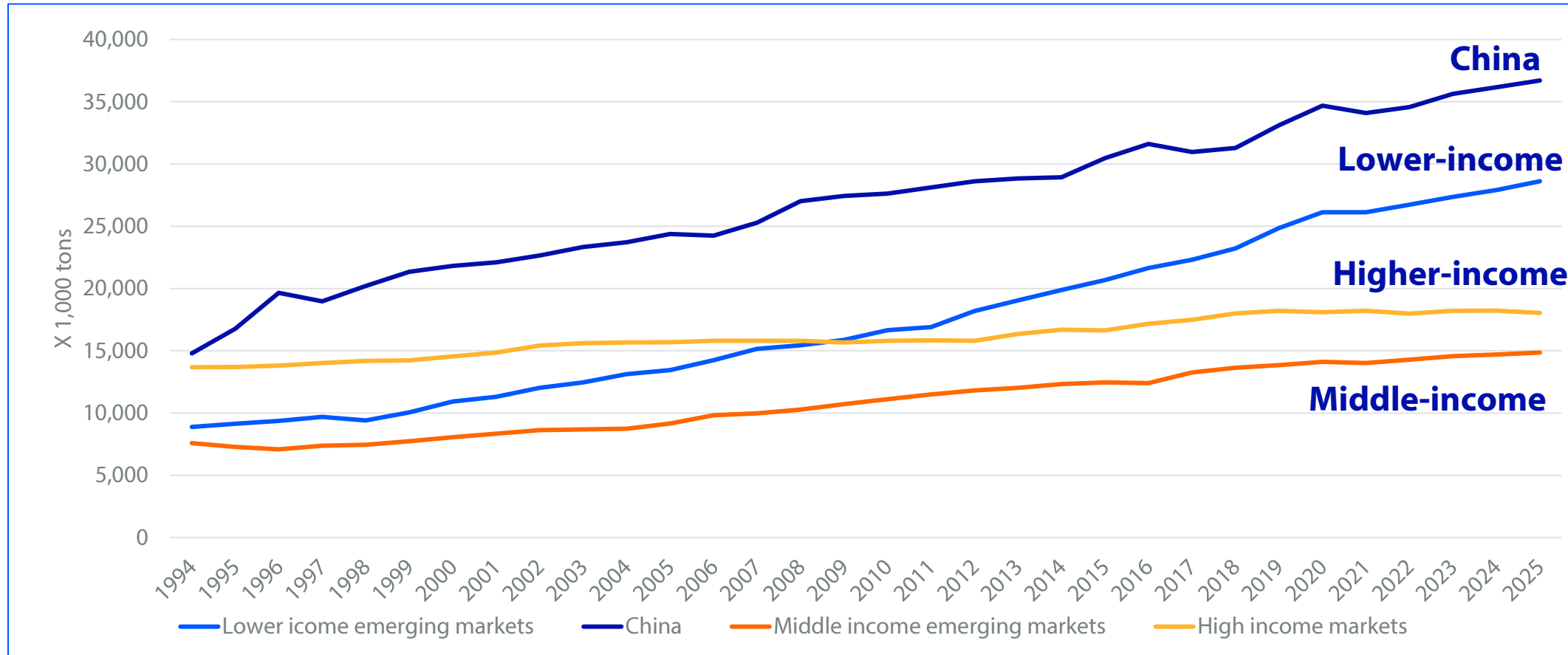
**4. The operational perspective**



# Slower egg market growth in high-income countries

The higher the income the more the necessity to focus more on value as growth driver

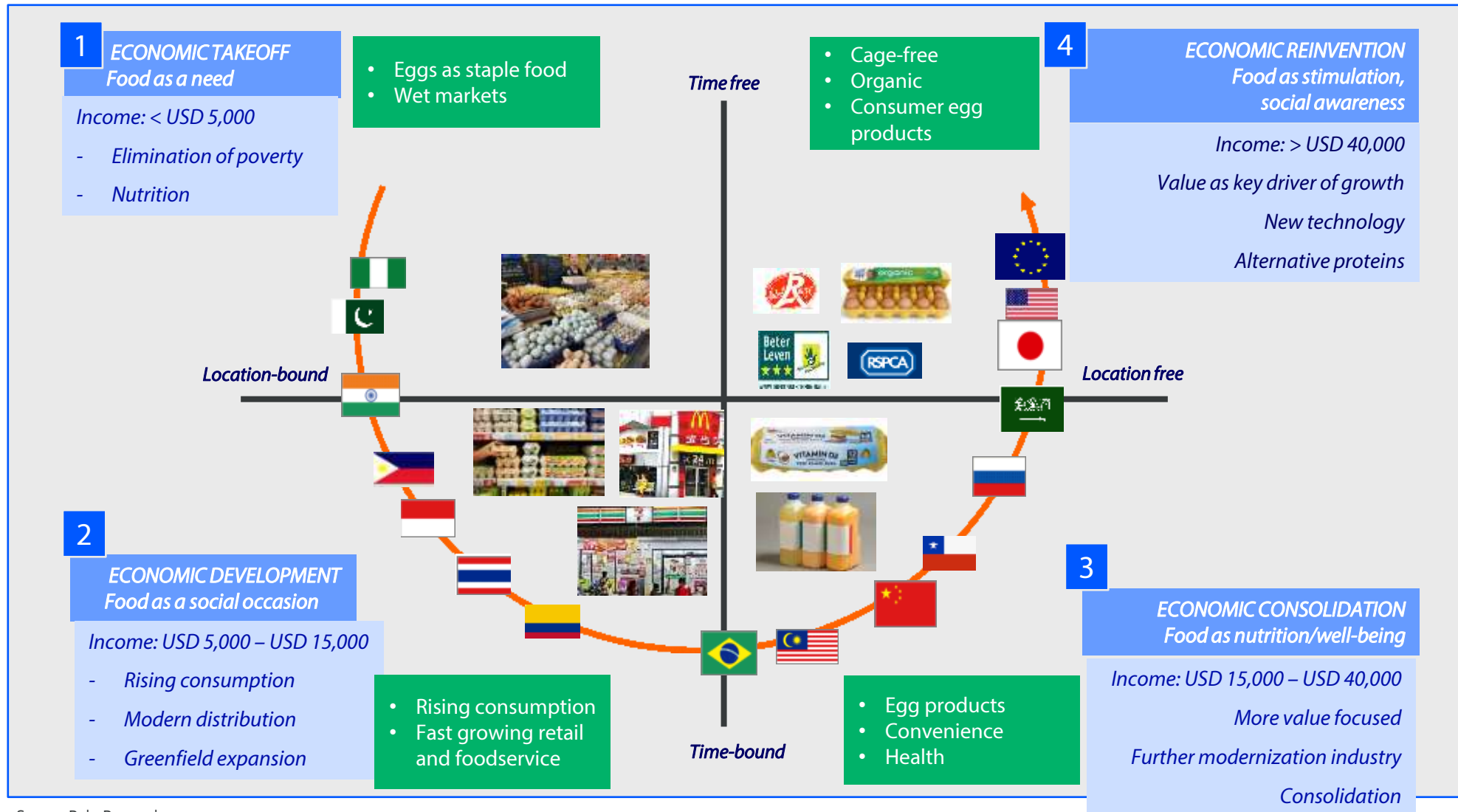
Global egg market 1994- 2025 by averaged income-level of countries



Source: RaboResearch projection based on FAO, WEO, regional statistics, RaboResearch 2025

# Impact of economic development and egg demand

Egg consumption and preferences are changing in line with economic development



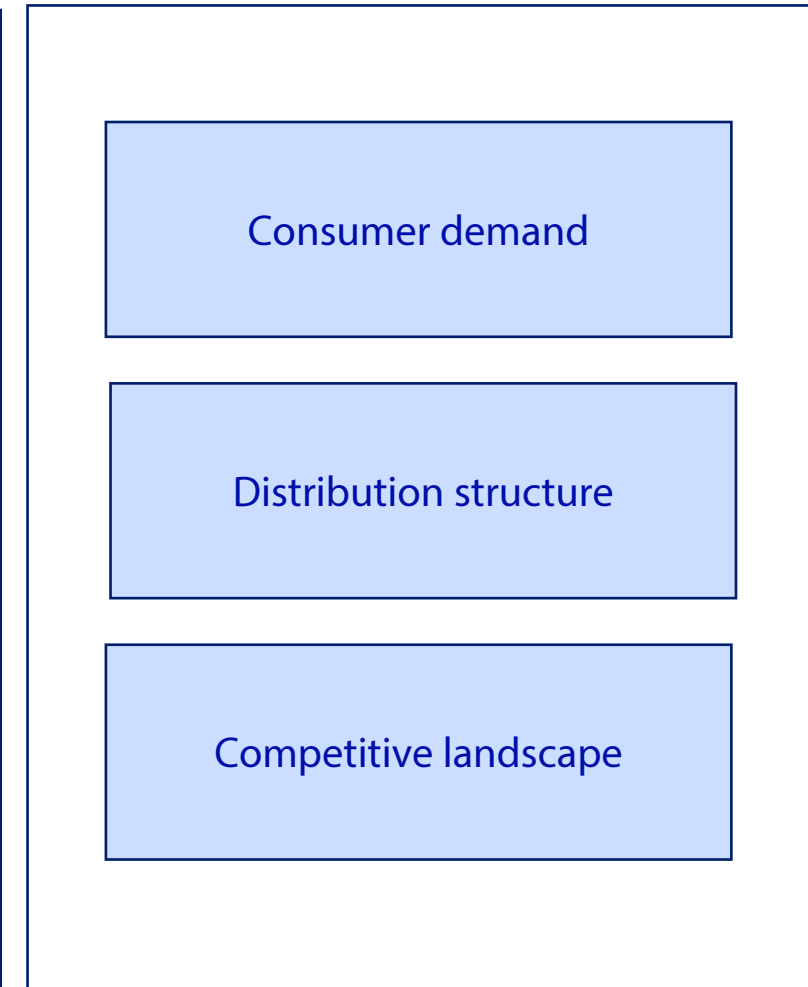
Source: RaboResearch 2025

# From volume to value: a producer perspective

Many untapped opportunities to create more value in the industry

From volume focus to value through marketing and product development

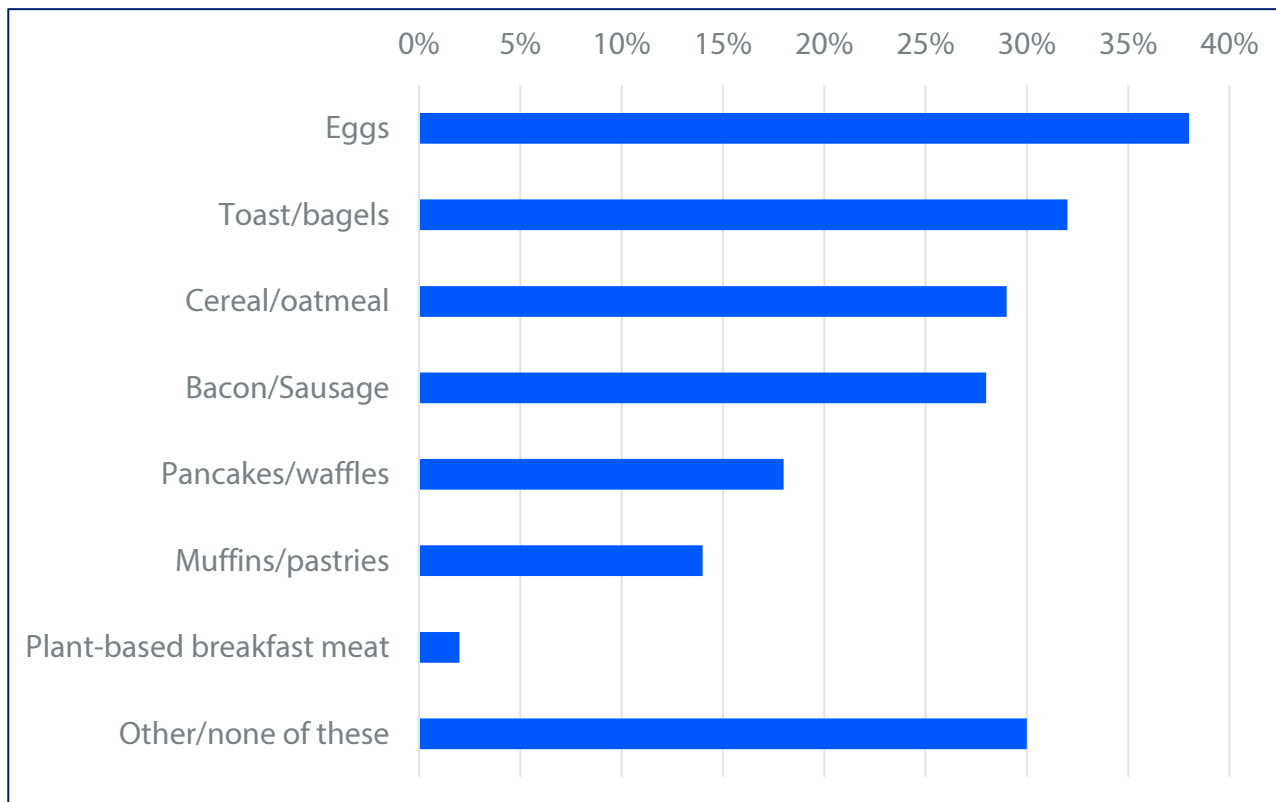
Fine-tune to market context



# Expand number of consumption moments on a day

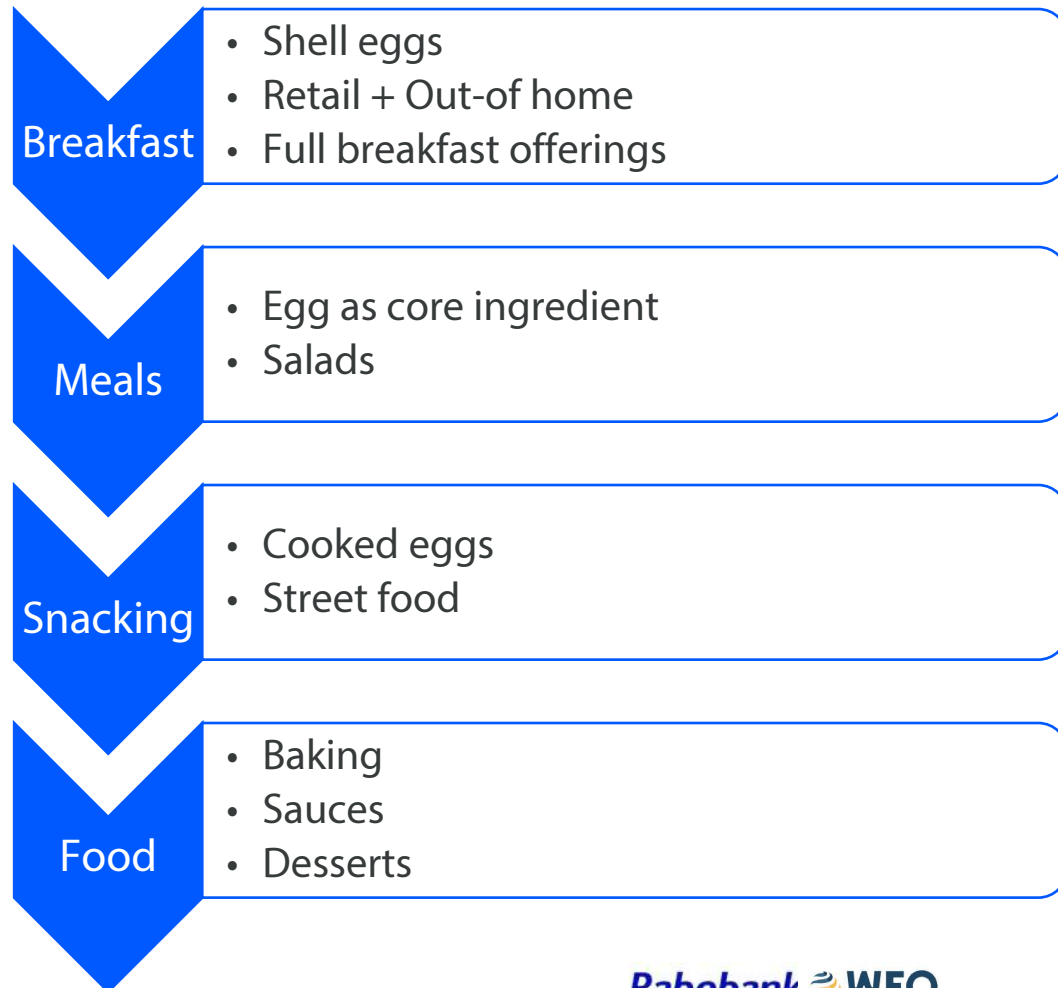
## Many opportunities to create more volume and value for egg sales

### What do you eat for breakfast on a typical day (select all that apply) – United States



Source: CivicScience, Rabobank 2024

### Opportunities to create more volume and value



# From volume to value: more consumer focus needed

Global mega trends will significantly impact future supply and marketing



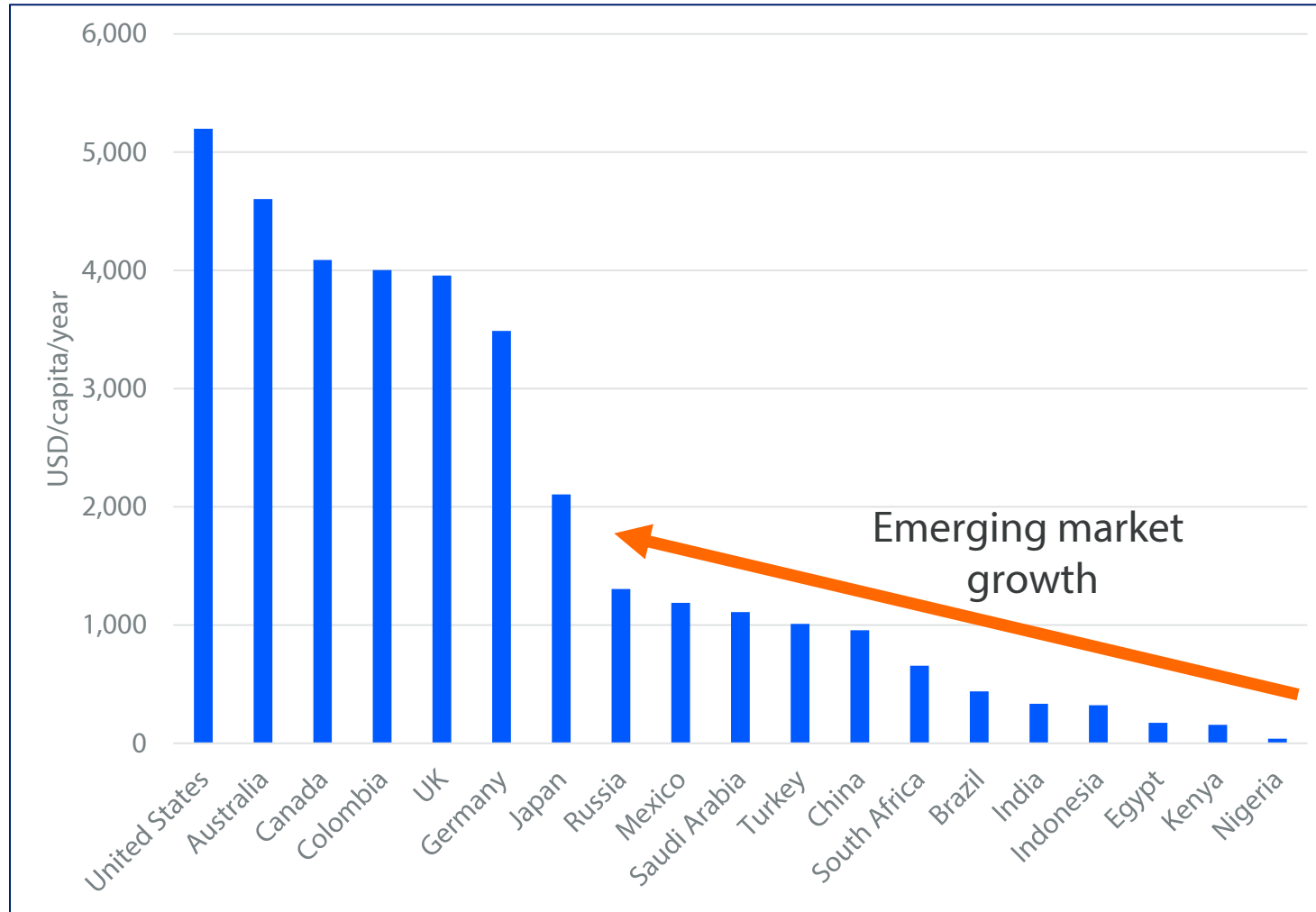
Source: Rabobank, McKinsey, 2025

# Grocery retail growth a key driver for egg market growth

## Strong link between economic development and growth modern grocery retail

### Consumer spending per capita in grocery retail in 2024

### Egg industry opportunities



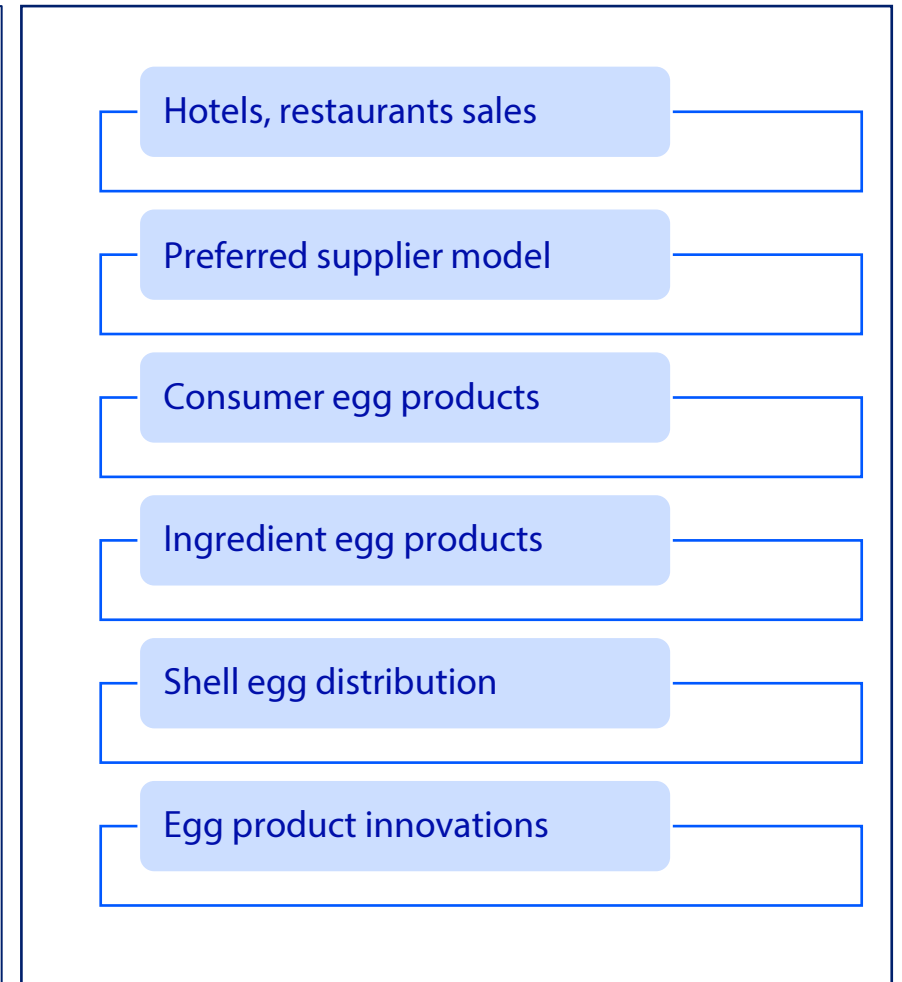
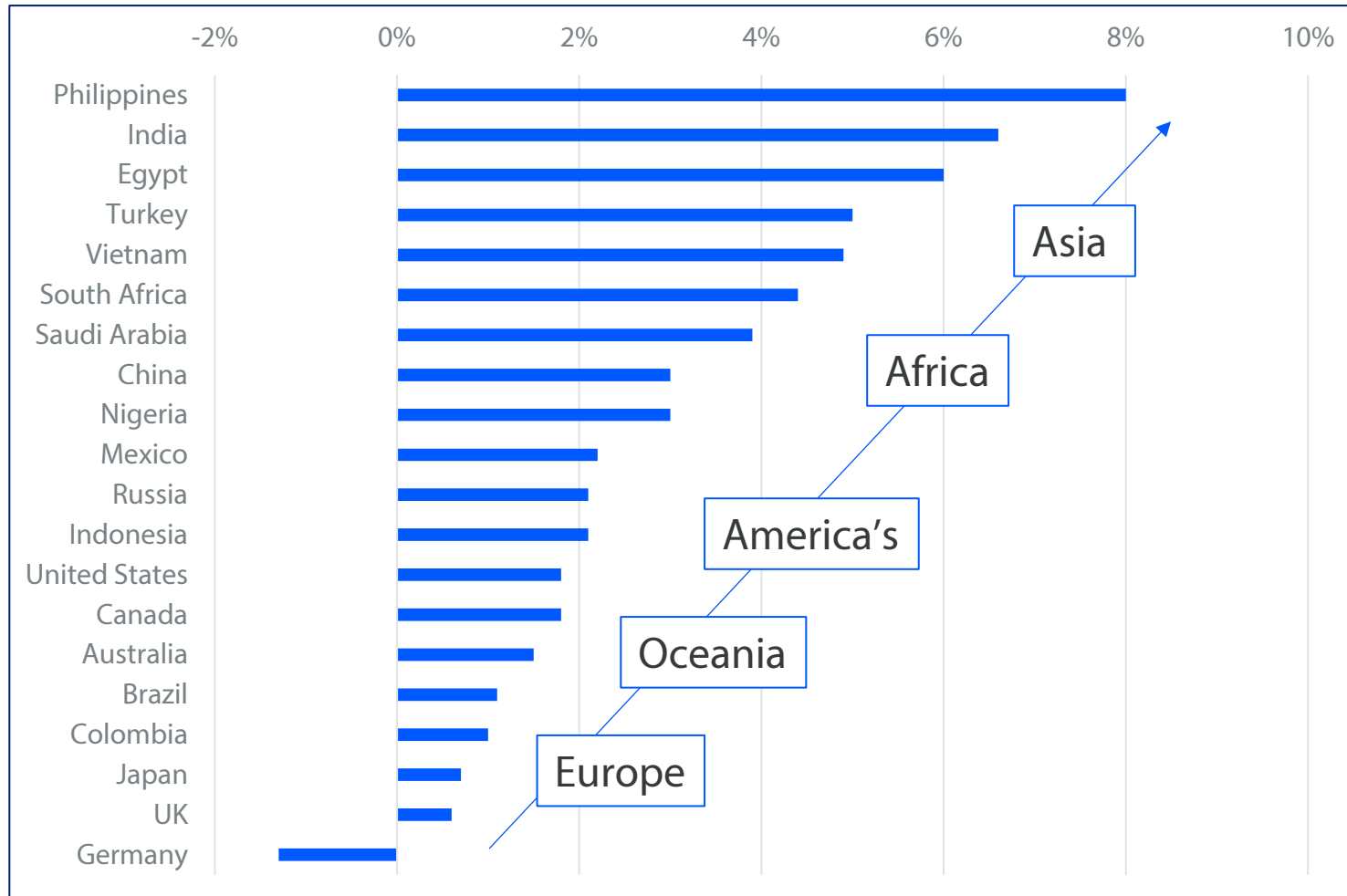
Source: Euromonitor, RaboResearch 2025

# Fast growth of emerging markets consumer foodservice

## Many opportunities to supply eggs and value-added products

Expected annual growth in consumer foodservice, 2024-2029f

Egg industry opportunities

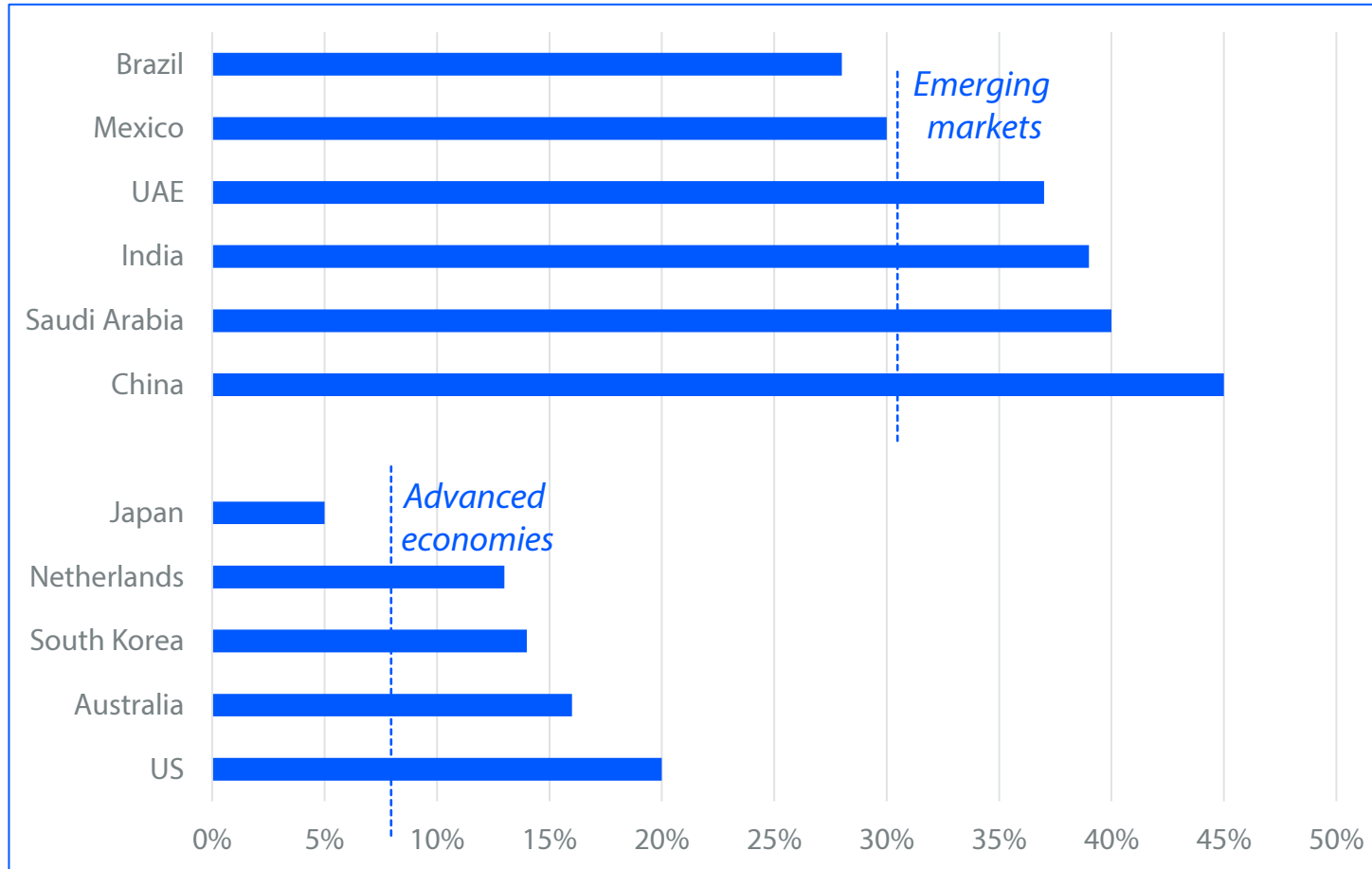


Source: Euromonitor, RaboResearch 2025

# Global bullish development of online food distribution

## Fast growth of online food distribution is a major driver of industry development

Share of consumer purchasing stuff on social media 2023



Source: McKinsey, RaboResearch 2025

Egg industry opportunities

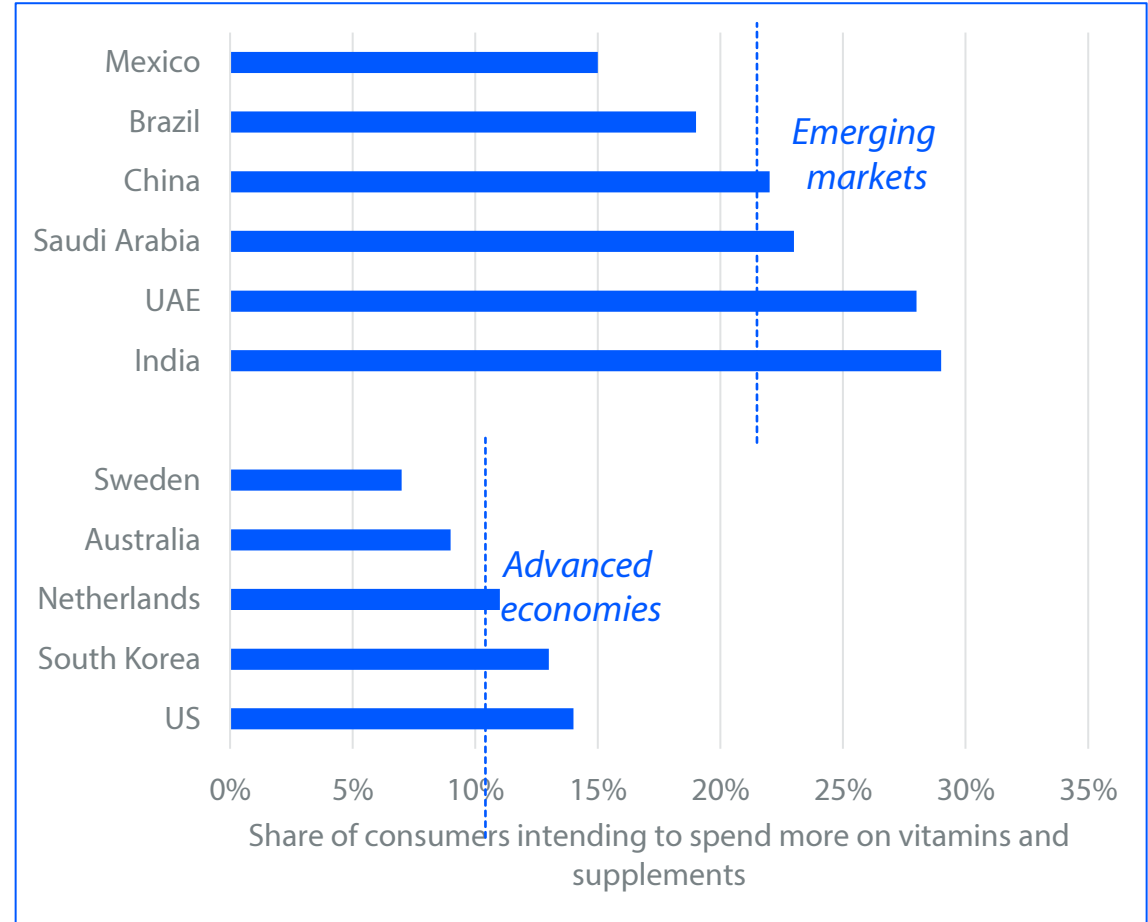
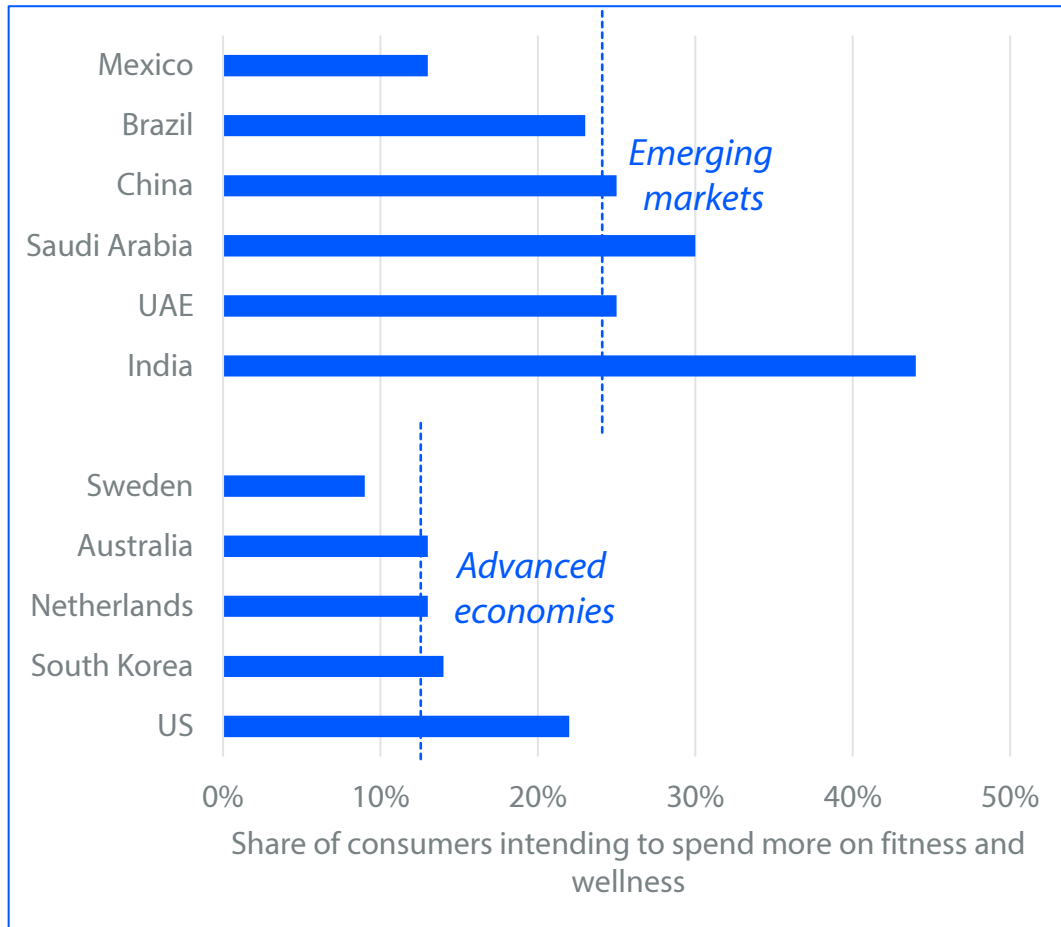


# Big differences in worldwide consumer health focus

## Emerging markets, especially Asia, have relatively high health focus

*Intent to spend more on fitness and wellness in 2023*

*Intent to spend more on vitamins, supplements, and over-the-counter items*



# Rising health awareness: functional foods and health claims

Producers need a strategic approach to capitalize on functional food opportunities

## Omega-3



## Vitamin-enriched



## Probiotic-enriched



## Selenium-enriched



## High-protein



## Less fat/light

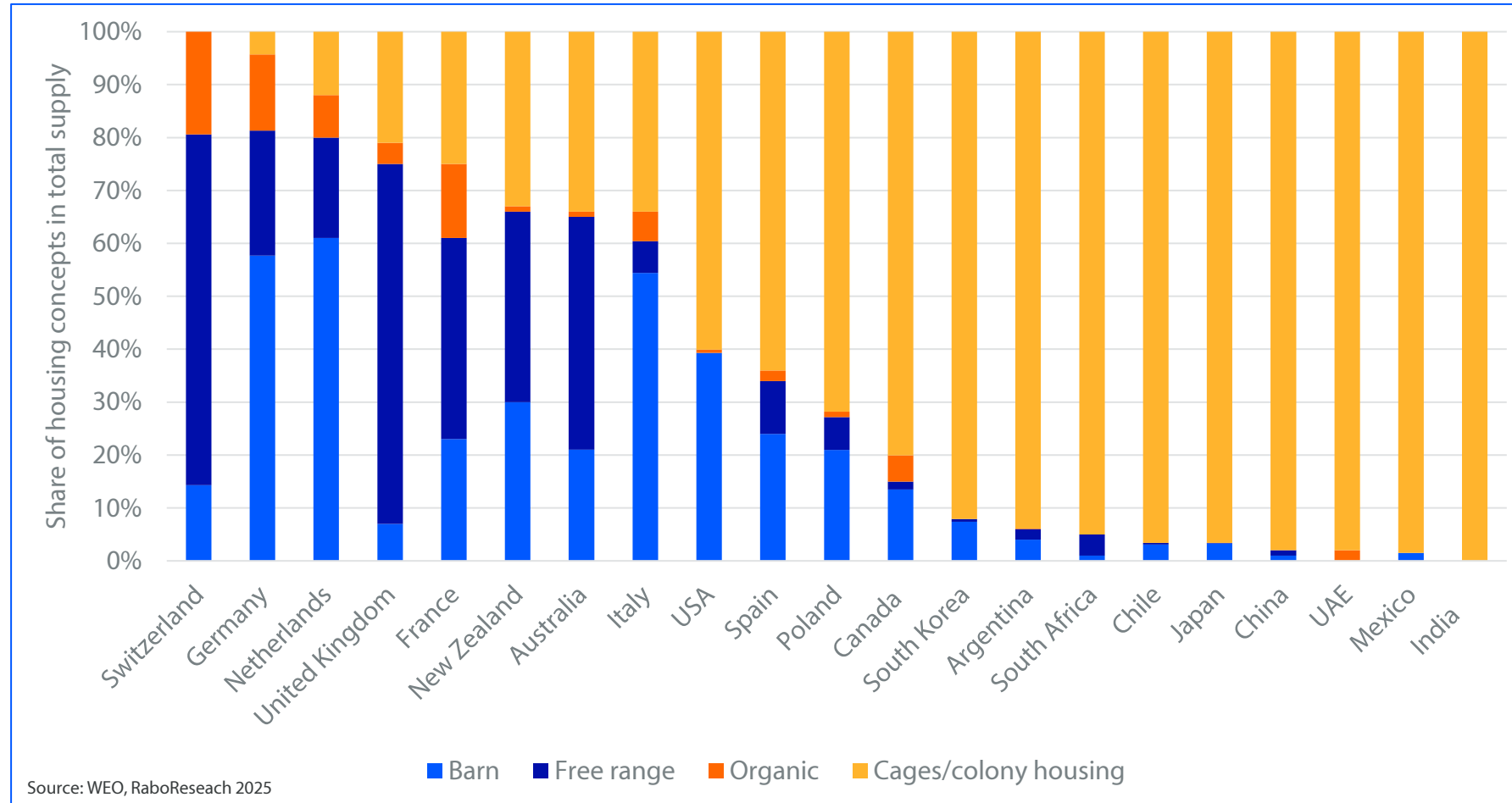


Source: RaboResearch 2025

# Animal welfare, a central theme in Western markets

## Cage-free egg production share to further rise - also in emerging markets

### Share of animal housing systems by country in 2024



Source: WEO, RaboResearch 2025

Government regulations

Producer market strategy

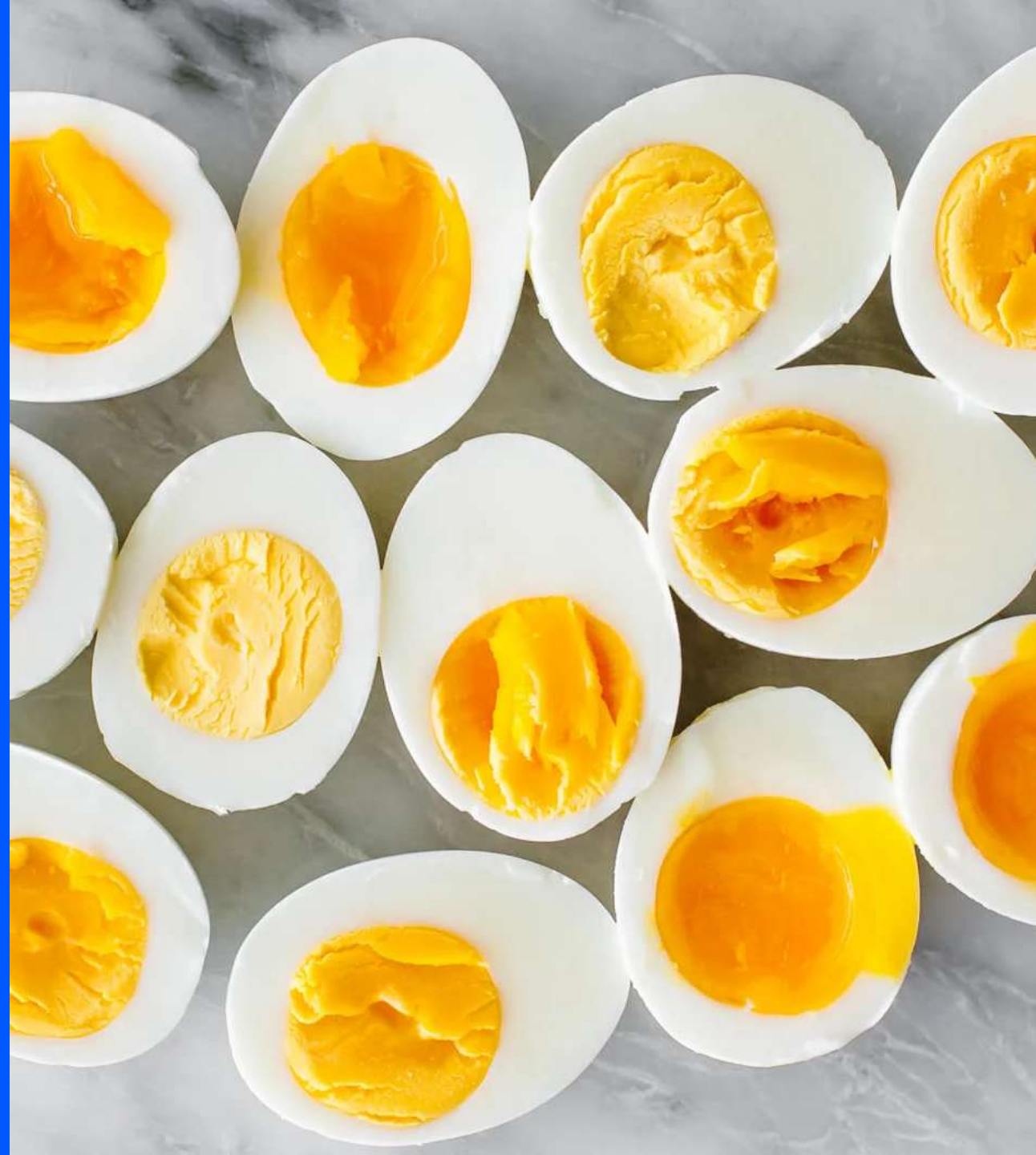
Customer standards/strategy

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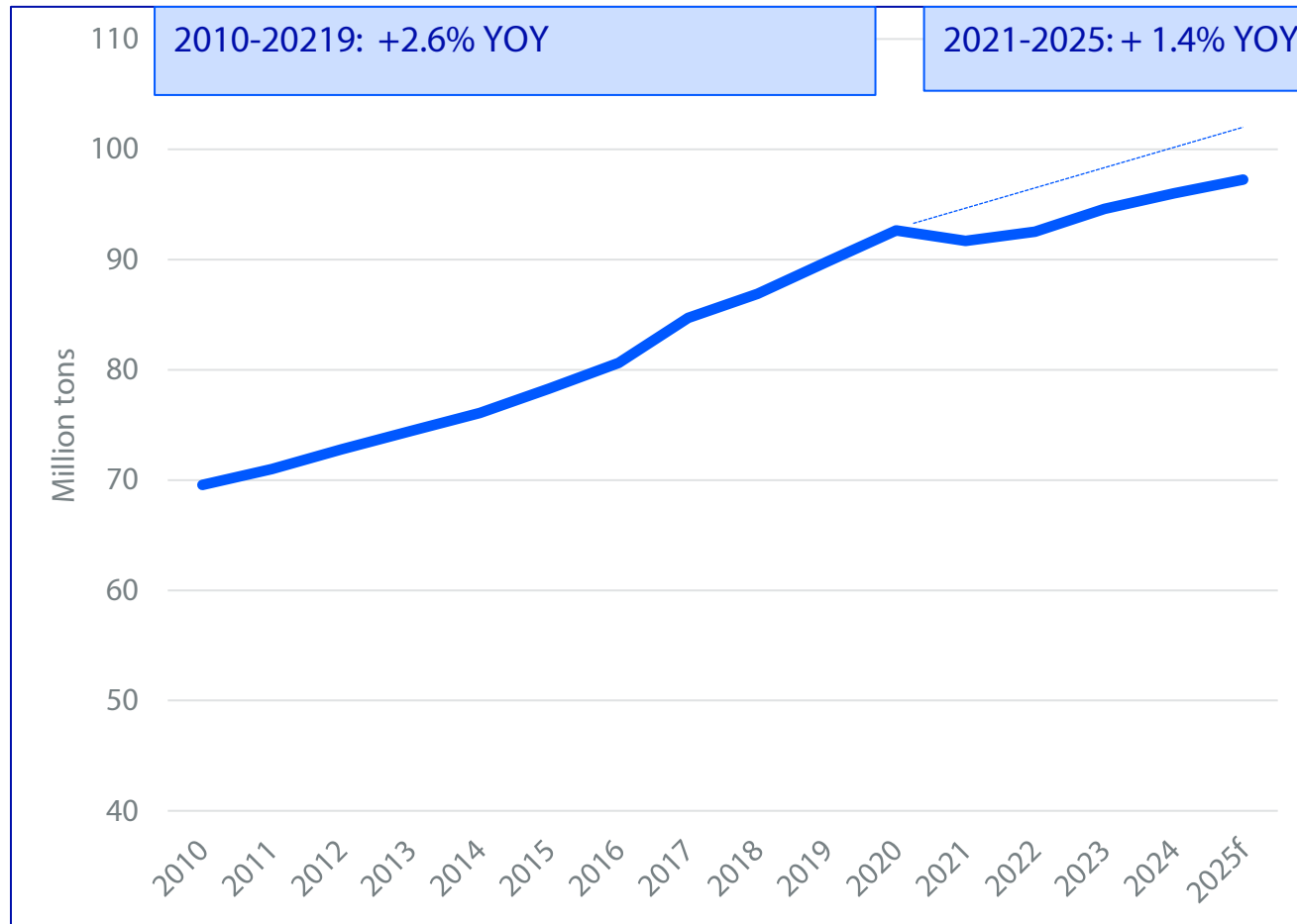
**4. The operational perspective**



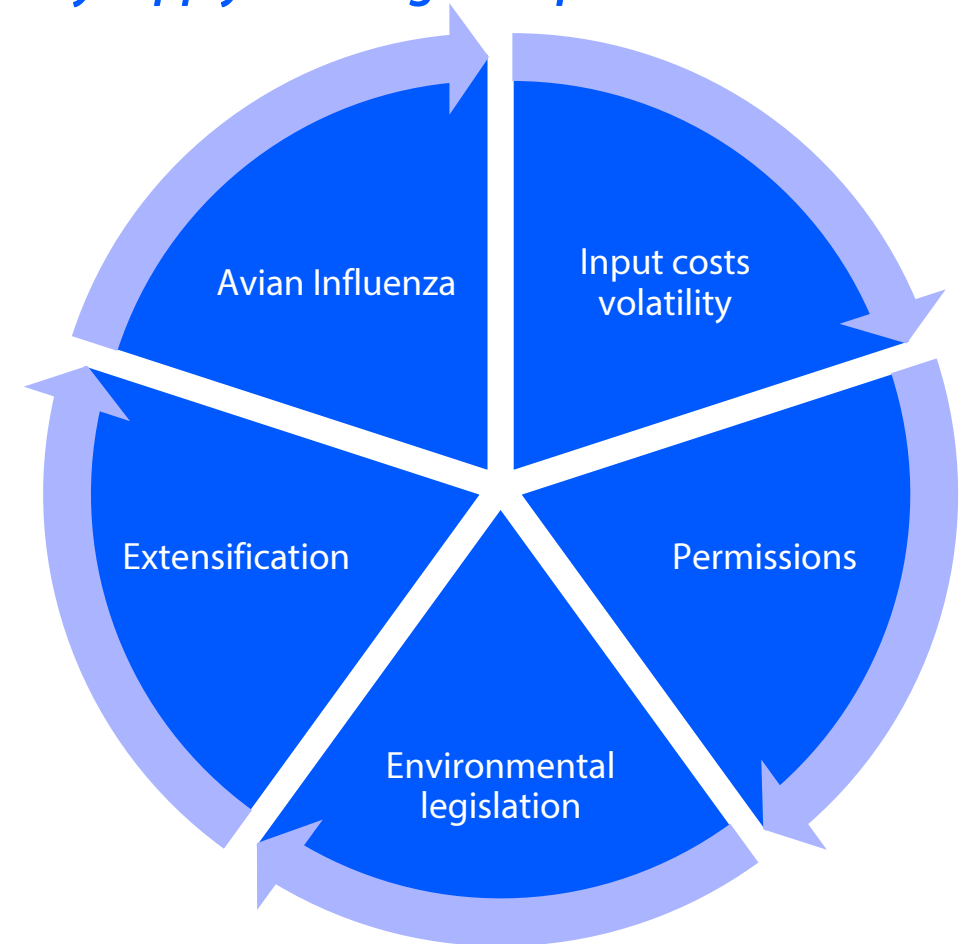
# Supply challenges have reduced egg market growth

Industry has lost 0.5%-1% annual global growth between 2021 and 2025

Global egg production 2010-2025f



Key supply challenges for producers

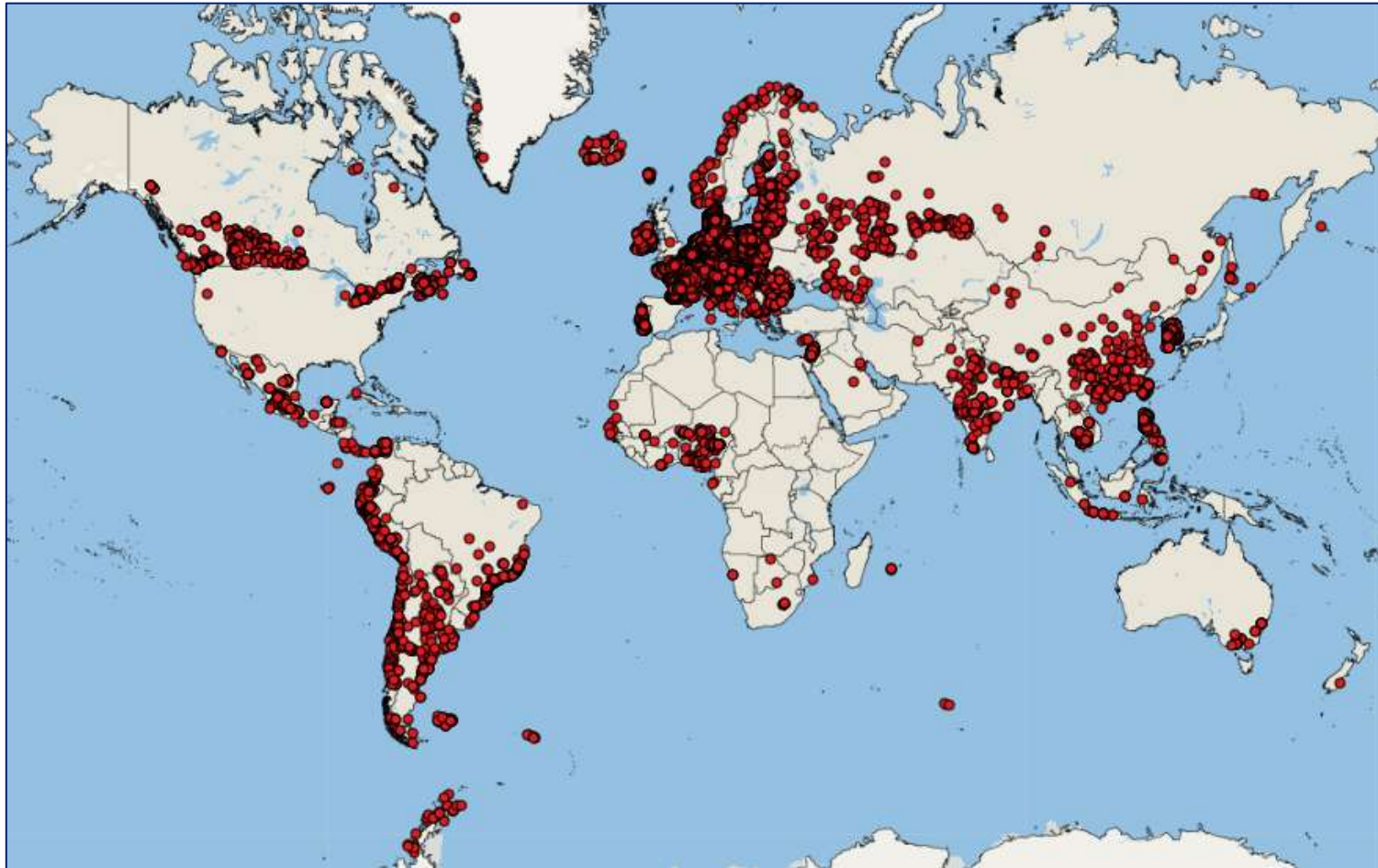


# Dealing with Avian Influenza, a key industry challenge

Avian flu has become a global ongoing challenge with big industry impact

*Outbreaks of Avian Flu in commercial/wild animals 2020- 2025*

*Key Avian-Influenza related themes*



Source: Rabobank, FAO, 2025

## Currently developing themes

- Transmission to other animals
- Potential human strain mutation
- Social costs

## Reducing the impact of avian flu

- Monitoring
- Compensation for industry
- Biosecurity
- Vaccination
- Role input sectors and farm management
- WTO/trade agreements
- Regionalization/compartmentalization

# Keeping the connection with (urban) societies

The society is changing fast with a more pro-active egg industry focus needed

## Changing social context and requirements



## A changing focus

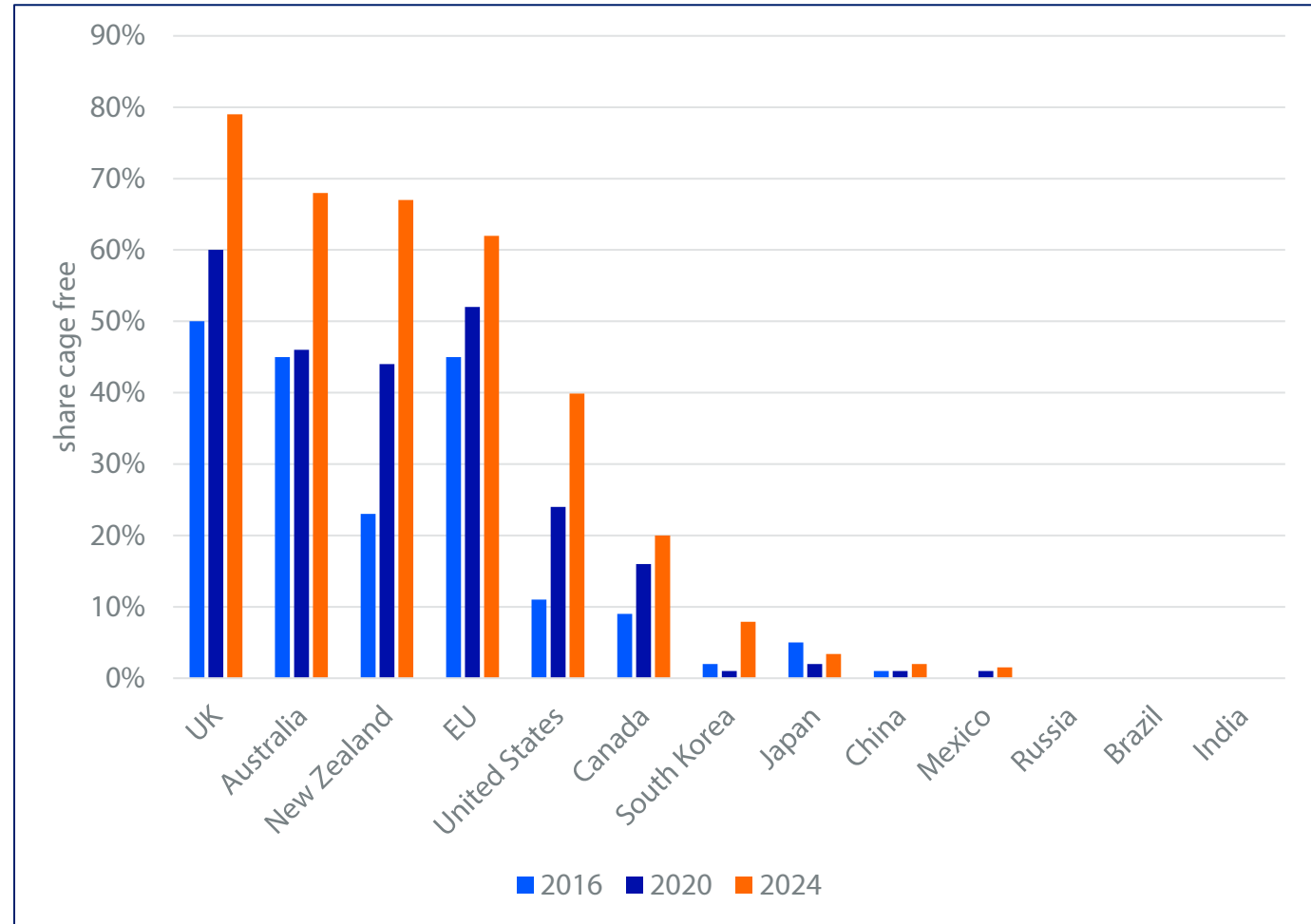
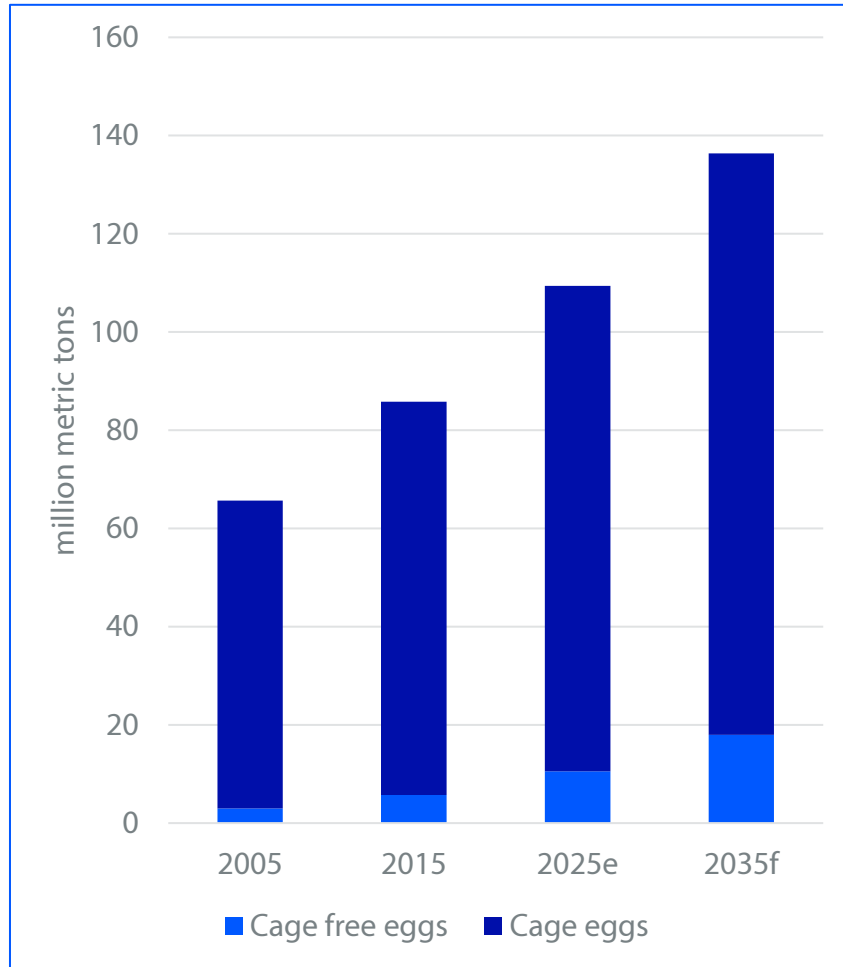


# The share of cage free systems will further rise

Western markets are moving to cage-free while emerging market's share is also rising

Global egg market: cages vs cage free

Share cage free by country 2016-2024

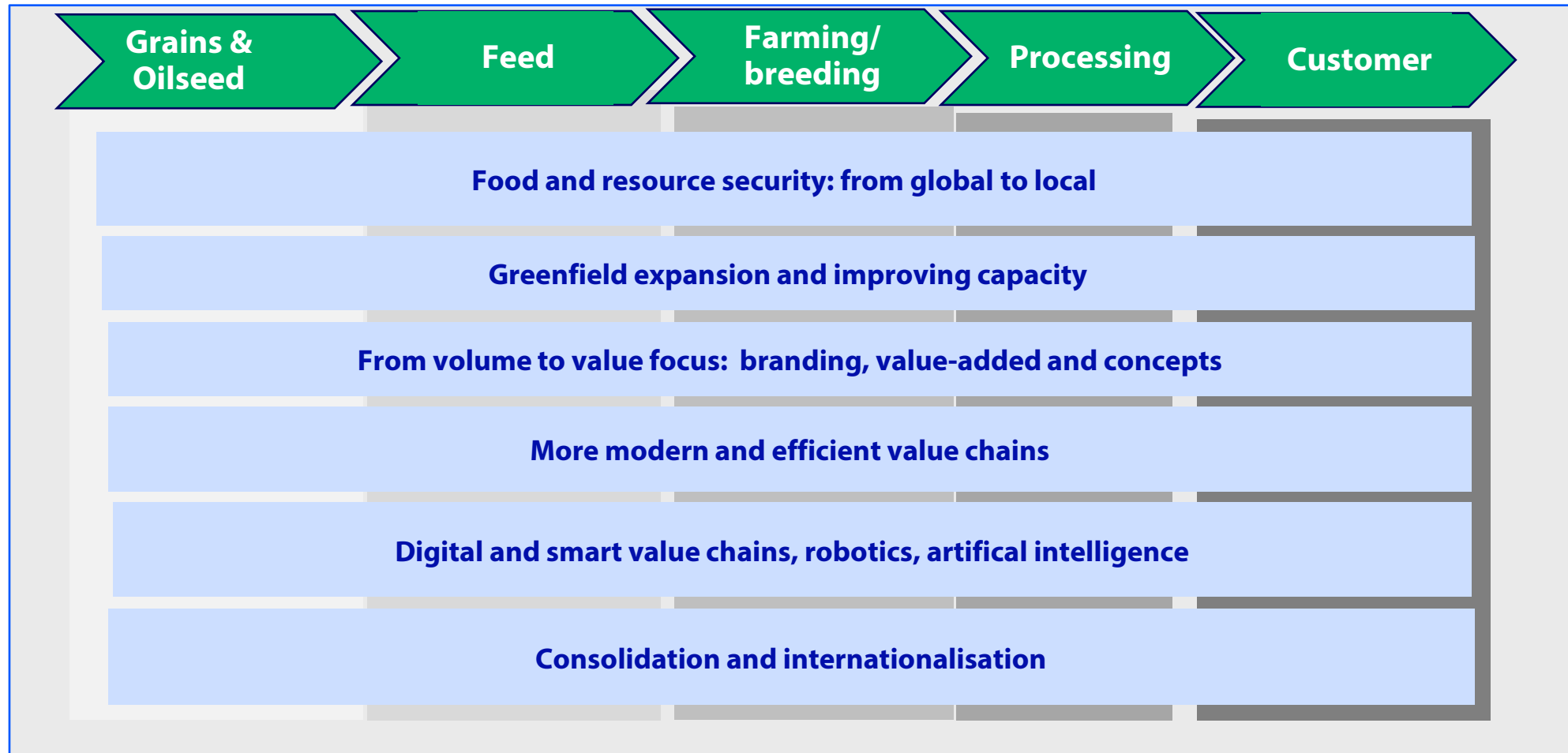


Source: Rabobank, WEO, 2025

# Value chains will be different in a changing environment

Key themes: more local, consolidated, higher value, more efficient, digital and smart

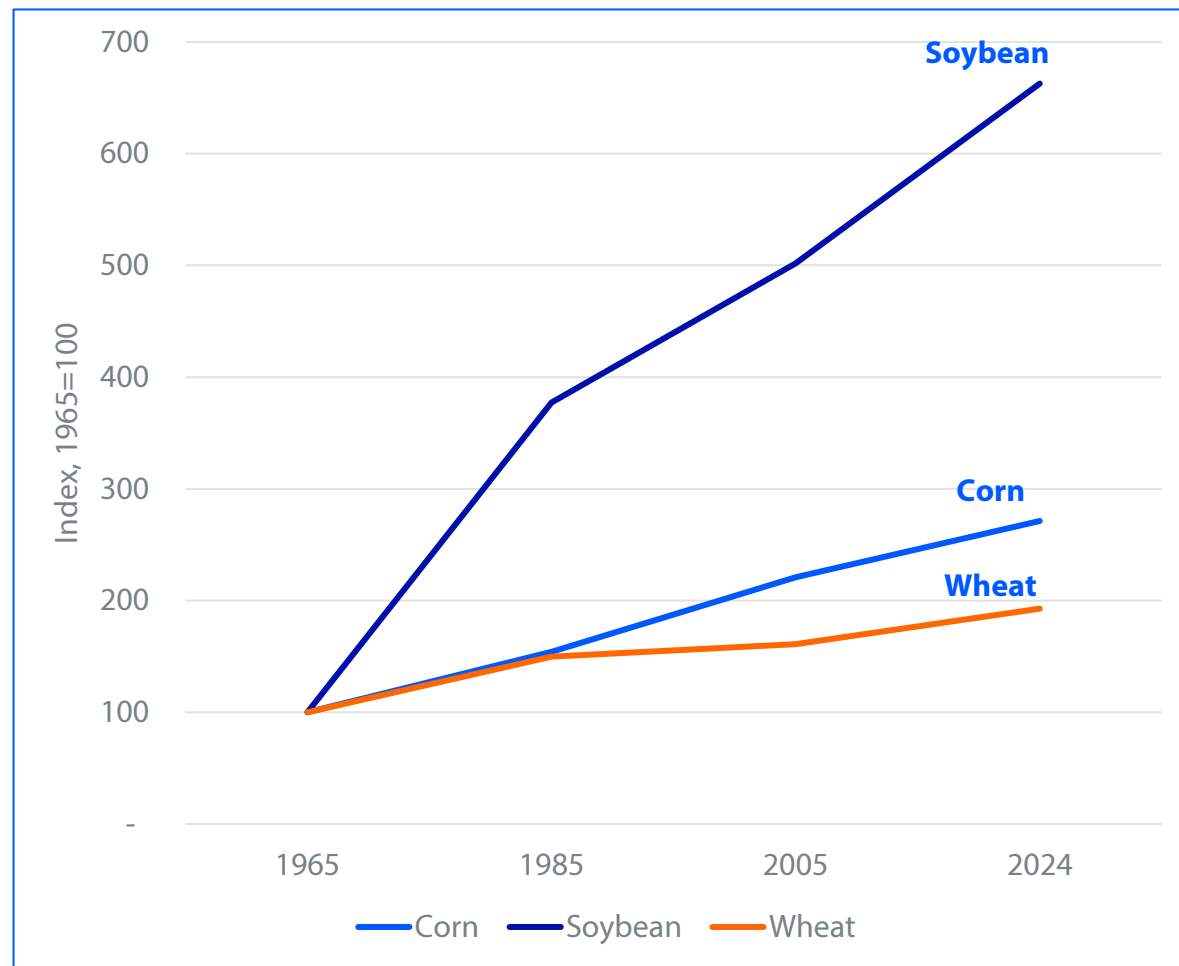
*A fast changing global egg industry between 2025 and 2035*



# Maximize supply with limited resources

Focus is on improving yields, efficiency via a sustainable approach

Crop yield index for wheat, corn and soybean 1965-2024 Technical indicators in US layer farming, 2005-2021



Source: WUR, USDA, RaboResearch 2025

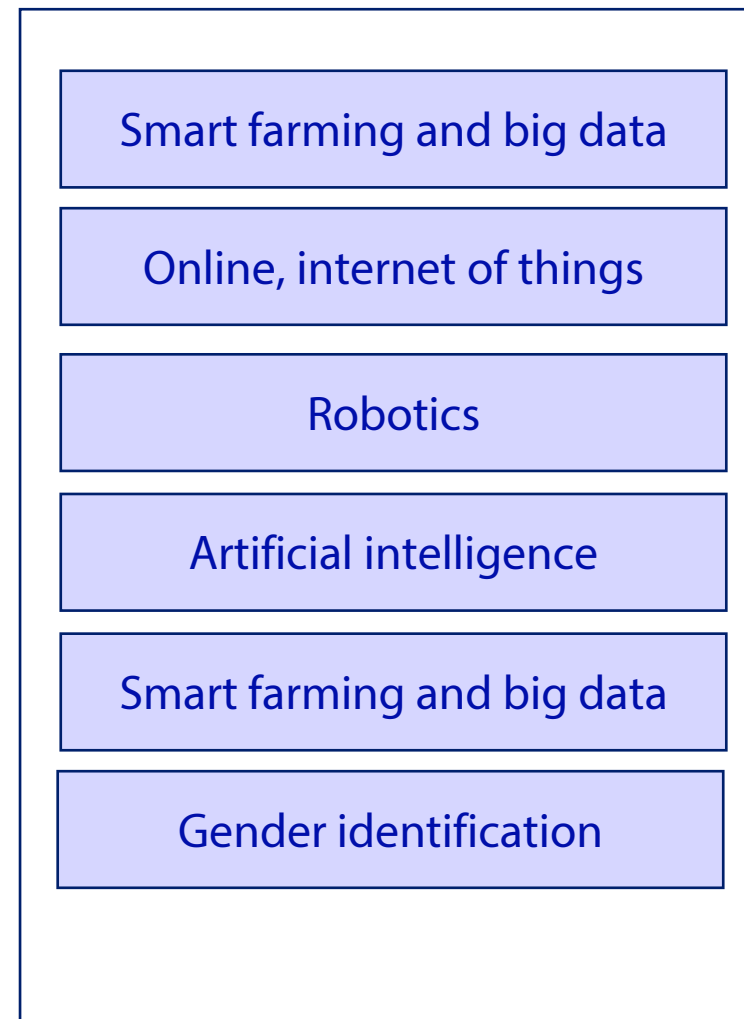
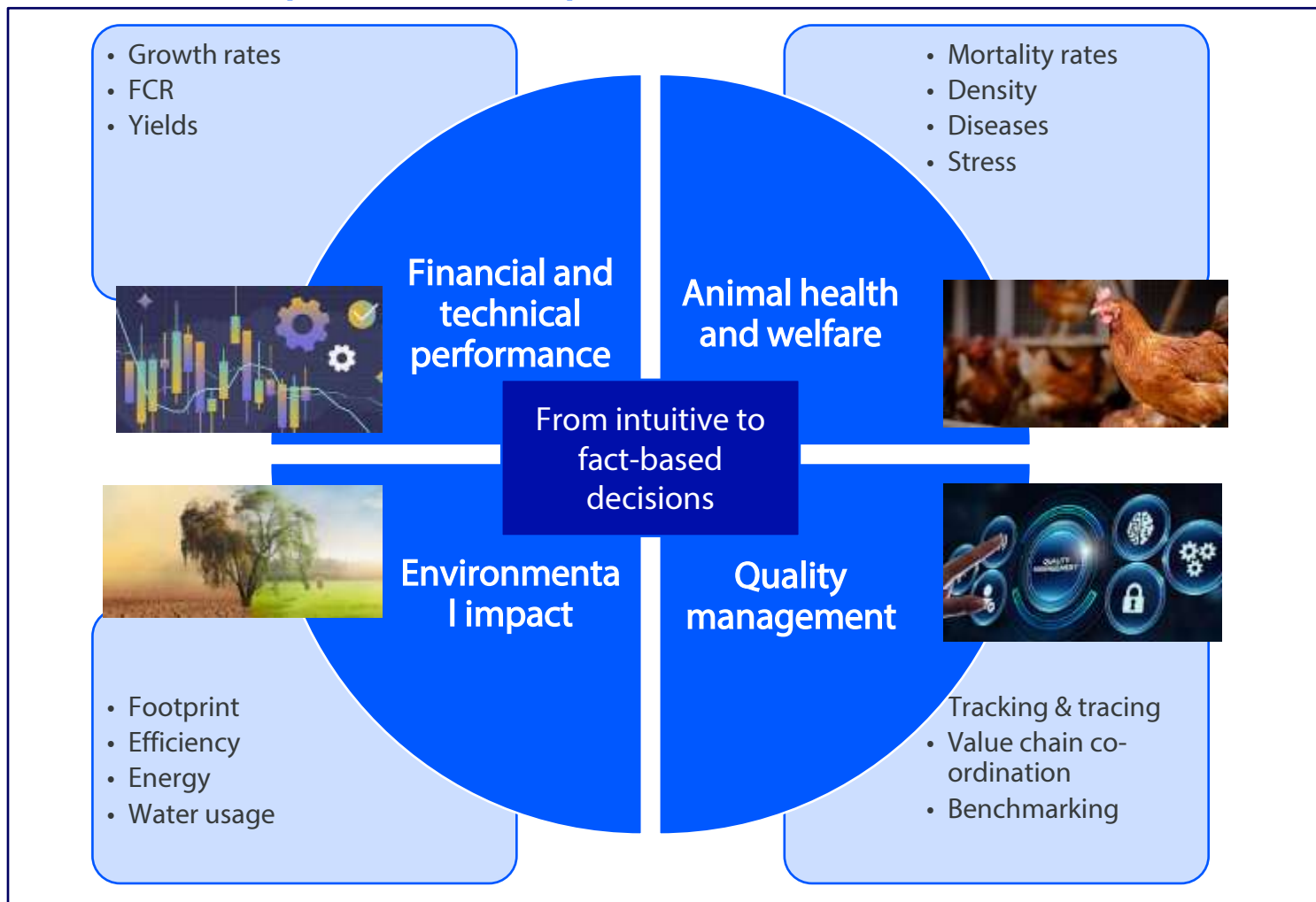
	2005	2008	2011	2013	2017	2021
Laying period (days)	400	415	420	420	490	490
Eggs/hen	324	348	352	352	414	430
Egg weight (gram/egg)	61.3	61.3	60	60	60	60
FCR	2.09	2.05	2.06	2.06	1.98	1.96

# Egg value chains: more digital, smart and high-tech

## Optimizing from multi-disciplinary and both horizontal and vertical

*More multidisciplinary view on production, horizontal and vertical*

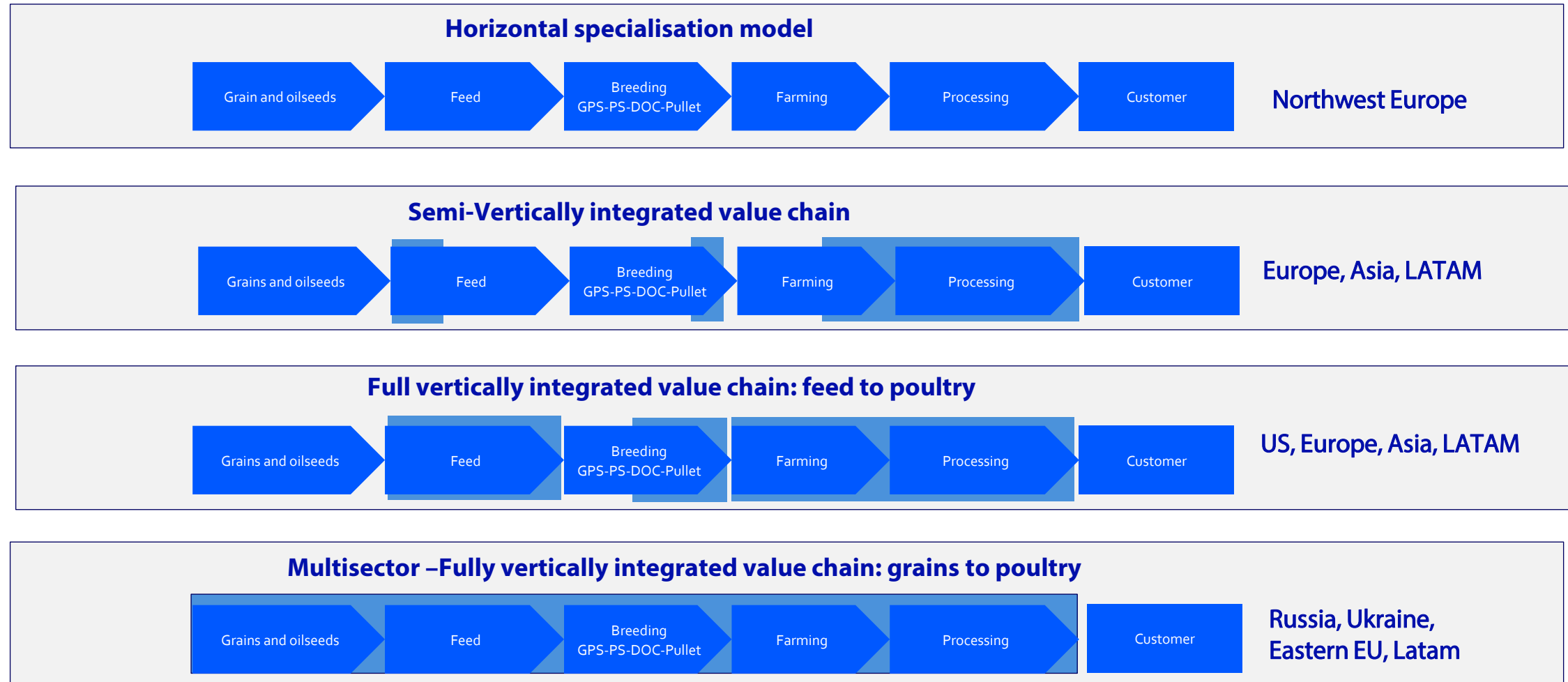
*Adaption new technology*



# Rising share of vertical integrated models

Expanding industries in emerging markets tend to use more integration model

Value chain models in the poultry and egg industries: increasing level of integration

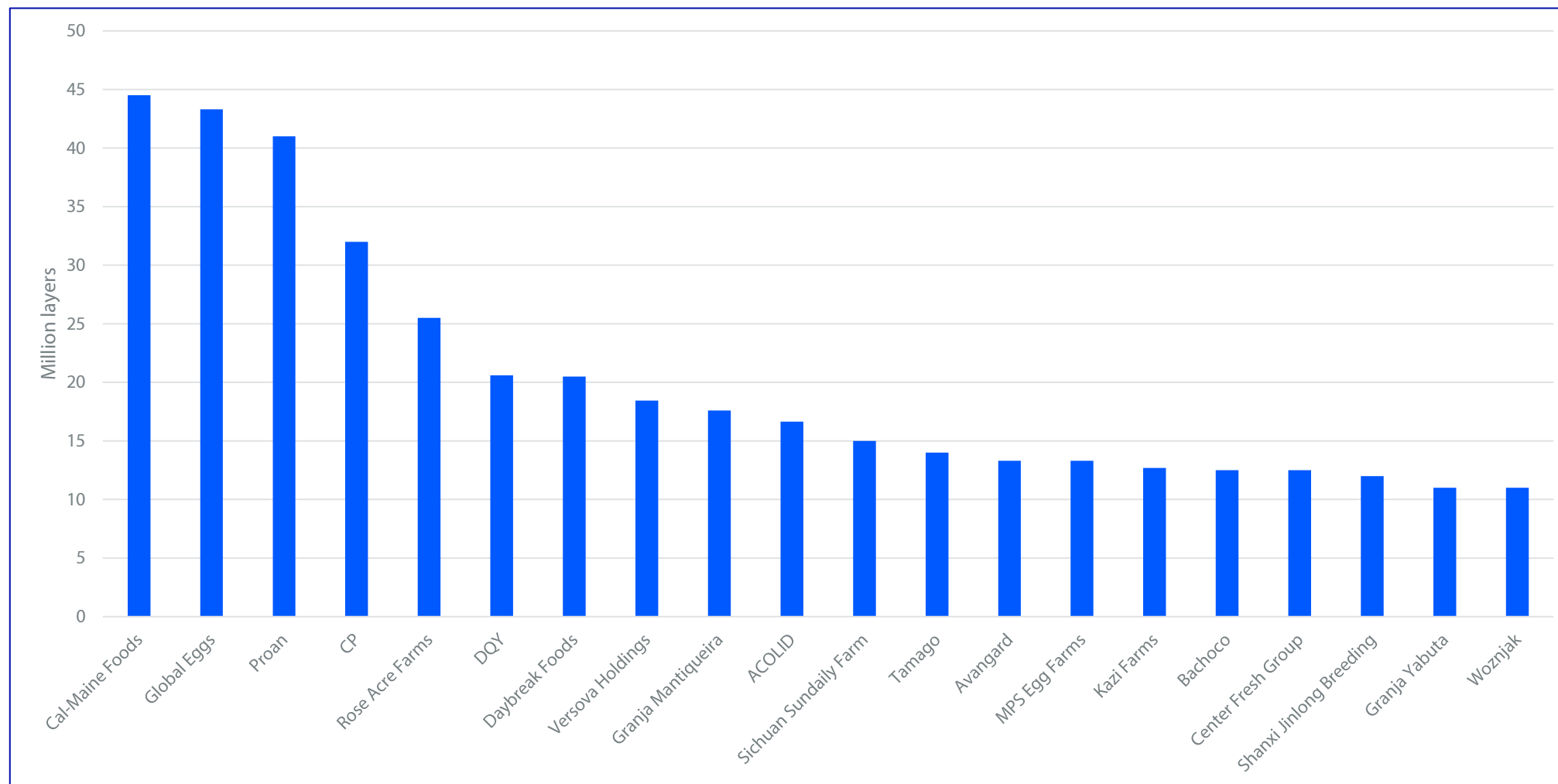


Source: Rabobank analysis, 2025

# The global industry landscape is changing

Industry to become more consolidated, international and value-added focussed

Global top 20 egg producers by number of layers in 2024



More international

Consumer market leadership

Egg processing

New equity: IPOs and private equity

Source: WATT, RaboResearch 2025



# Key takeaways Global Egg Outlook 2035

Global egg market to grow 21% by 2035, with 90% of growth concentrated in emerging markets

Shift from volume to value : more focus on consumer-based egg products, cage-free eggs, and functional eggs

Egg products market is growing at 2%-2.5% annually, with China and India leading industrialization

Geopolitical tensions and resource constraints making food and resource security a more strategic and push localization of industry

Consumer concerns—health, environment, animal welfare, and local sourcing—are driving product differentiation

Digitalization and online food distribution are transforming consumer engagement, and industry business models

High capital expenditure is expected across greenfield expansion, cage-free transitions, vertical integration, and modernization—

Modernization of value chains is accelerating globally, with a strong focus on efficiency, sustainability, and digital transformation.

AI, robotics, and smart farming will be key enablers of efficiency and sustainability.

***Thank you for your attention***

Nan-Dirk Mulder

Senior Global Specialist Animal Protein

Questions? [nan-dirk.mulder@rabobank.com](mailto:nan-dirk.mulder@rabobank.com)

