



THE ECONOMIC IMPACT OF THE AGRI-FOOD SECTOR IN INDONESIA

2022



TABLE OF CONTENTS

Executive Summary	2
1. Introduction	6
1.1 The structure of this report	6
1.2 How we frame our analysis	6
2. The agri-food sector's impact in Indonesia	10
2.1 The total economic impact of the agri-food sector	10
2.2 The agri-food sector in detail	11
2.3 The evolution of the Indonesian agri-food sector	12
2.4 Trade in agri-food products	15
3. Demand outlook for the agri-food sector	16
3.1 Outlook for employment and tourism will underpin recovery	17
3.2 Four negative factors that may constrain the pace of recovery	20
3.3 Conclusion	22

EXECUTIVE SUMMARY

The Southeast Asian economy is enjoying an economic revival in 2022 as borders reopen, social distancing measures are ratcheted back, and businesses return to more “normal” operations in the transition to a post-pandemic environment. Sat at the heart of this national economy is the agri-food industry, which has played a crucial role in the country’s resilience throughout the past two years of the pandemic and is central to its future trajectory, too. The sector not only puts food on the table for the region’s population, but also provides income and employment for a large portion of its workforce and a multitude of opportunities to businesses at each stage of the agri-food value chain.

As the industry looks forward, it faces significant risks on the horizon that threaten its growth. From inflationary pressures to demographics and policy risks, the implications matter not only to the livelihoods of agri-food industry entrepreneurs and employees but, given the size of the sector and its role in supply chains, the wider economy too.

Oxford Economics was commissioned by Food Industry Asia (FIA) to assess the total economic impact in 2021 of the agri-food sectors in five major Southeast Asian economies: Indonesia, Malaysia, the Philippines, Thailand, and Vietnam. In this report, we unpack the importance of the sector’s contribution to the Indonesian economy, and its future trajectory.

THE AGRI-FOOD SECTOR’S ECONOMIC IMPACT

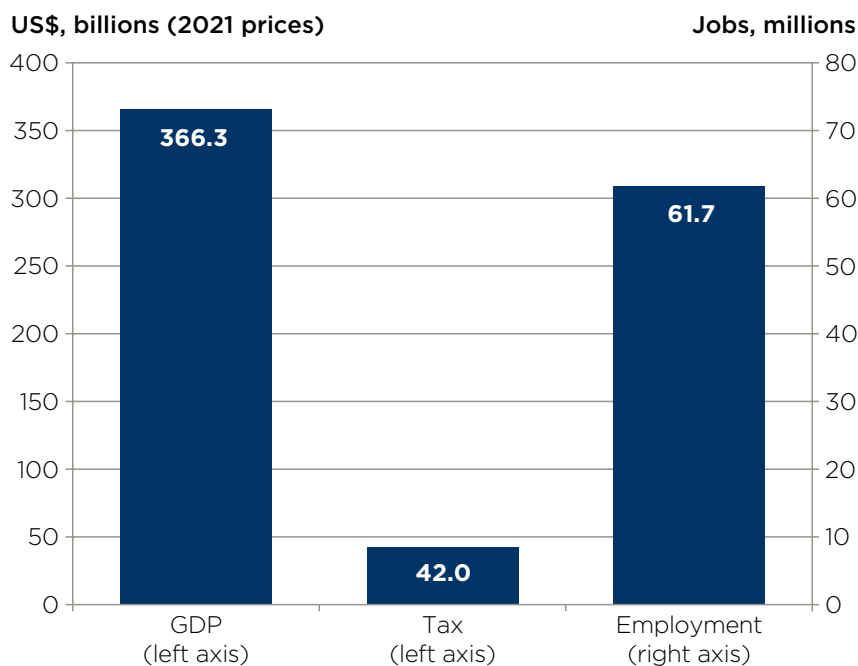
In this analysis, we define the agri-food sector as the combination of three components: agricultural production; food and beverage (F&B) manufacturing; and F&B distribution (including wholesale, retail, and hospitality services).

Indonesia’s agri-food sector contributed USD 366.3 billion to Indonesian GDP in 2021, equivalent to approximately 31% of the total domestic economy that year. The agri-food sector employed 61.7 million people as a part of this economic footprint, which accounted for nearly half the jobs in Indonesia in 2021. In addition, activity in the agri-food sector generated USD 42.0 billion worth of tax revenues in the form of corporation and income taxes.

US\$366 bn

The agri-food sector’s
total contribution to
2021 GDP in Indonesia
(in 2021 prices).



Fig. 1: Total economic contribution of the agri-food sector in Indonesia, 2021

Source: Oxford Economics

62 million

Total number of jobs supported by the agri-food sector in Indonesia in 2021.



More than half of the agri-food sector's economic impact in 2021 came from agricultural production. This included a direct contribution to the GDP worth USD 149.9 billion, plus additional contributions of USD 22.6 billion through indirect, supply-chain impacts, and USD 18.8 billion in induced impacts, caused by wage expenditure in the wider economy. We estimate that agricultural production employed 39.4 million people overall across Indonesia that year.

F&B manufacturing contributed USD 124.0 billion to Indonesian GDP in 2021, representing just over a third of the agri-food sector's economic footprint. The component also sustained a total of 9.8 million jobs in 2021, of which 5.3 million jobs came directly from F&B manufacturing activities. F&B manufacturing is the most productive component of Indonesia's agri-food sector.

F&B distribution represented the smallest of the Indonesian agri-food sector's three components, with an economic footprint worth USD 51.1 billion in 2021. This was largely created by catering and retail activities, which accounted for almost four fifths of the component's contribution to GDP. F&B distribution sustained 12.5 million jobs in 2021.

The COVID-19 pandemic took a significant toll on Indonesia's agri-food sector, slowing the growth of its economic footprint from an average of 5% per year between 2015 and 2019 to 1% in 2021. Both the agricultural production and F&B manufacturing components of the sector endured slower growth during the pandemic. In F&B distribution, the economic footprint of accommodation and catering activities actually shrank from USD 24.9 billion in 2019 to USD 22.6 billion in 2021, during a period in which social distancing measures hindered the tourism and hospitality sector. Total employment sustained by the agri-food sector also fell for the first time in 2020 and contracted further in 2021. This is also indicative of an overall improvement in the productivity of the Indonesian agri-food labour force between 2015 and 2021.

“Indonesia's agri-food sector is benefitting from the broader economic recovery underway, even as global and domestic price pressures have picked up.”

Indonesia has historically been a net exporter of agri-food products and maintained this position in 2021 with net exports worth USD 18.7 billion. This net balance stemmed from total agri-food exports worth USD 36.2 billion and imports worth half of that, at USD 17.5 billion. Indonesia's net export position is effectively driven by agricultural products, which had a trade surplus worth USD 20.3 billion. Meanwhile processed F&B products retained a small trade deficit in 2021.

OUTLOOK FOR AGRI-FOOD DEMAND IN INDONESIA

Indonesia's agri-food sector is benefitting from the broader economic recovery underway, even as global and domestic price pressures have picked up. And the outlook is positive, with an ongoing recovery in domestic activity and inbound tourism likely to support demand for the sector. Against this backdrop, we forecast total spending on food and non-alcoholic beverages for consumption at home to grow from USD 150 billion in 2022 to around USD 170 billion in 2025, in 2021 price terms. But challenges remain—especially in helping the sector deal with climate change, as well as the risk of future exchange rate volatility.



THE AGRI-FOOD SECTOR IN INDONESIA

TOTAL ECONOMIC IMPACT

● Agricultural production
 ● F&B manufacturing
 ● F&B distribution

A total contribution to GDP worth **\$366.3 billion**



The agriculture industry represents **more than three fifths** of the sector's contribution to GDP.

A total employment footprint of **61.7 million**

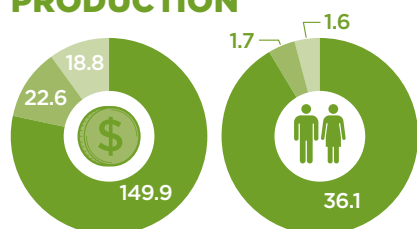


The Indonesian agri-food sector is huge, **employing nearly half of the national workforce**.

FROM FARM TO FORK



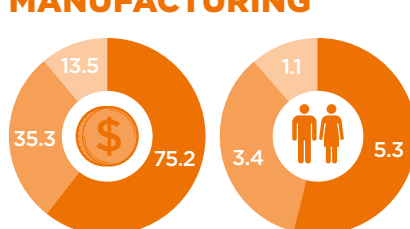
AGRICULTURAL PRODUCTION



\$191.3 billion **39.3 million**

● Direct
 ● Indirect
 ● Induced

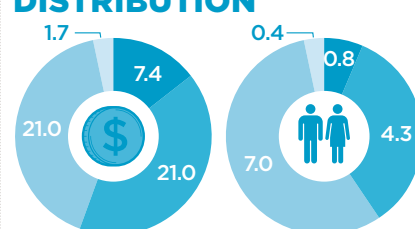
FOOD & BEVERAGE MANUFACTURING



\$124.0 billion **9.8 million**

● Direct
 ● Indirect
 ● Induced

FOOD & BEVERAGE DISTRIBUTION



\$51.1 billion **12.5 million**

● Wholesale
 ● Retail
 ● Catering
 ● Accommodation

TRADE SURPLUS

Indonesia sustains a large agri-food trade surplus, driven by exports of agricultural products.

Net exports in 2021 (US\$, billion)

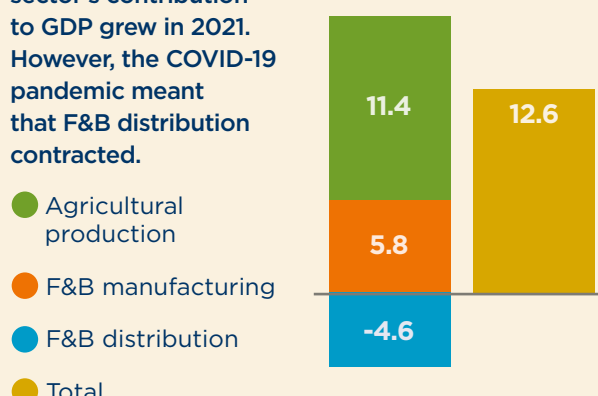


● Agricultural products
 ● Processed F&B products
 ● Total

COVID-19 IMPACT

The agri-food sector's contribution to GDP grew in 2021. However, the COVID-19 pandemic meant that F&B distribution contracted.

Change in GDP contribution (US\$, billion)



● Agricultural production
 ● F&B manufacturing
 ● F&B distribution
 ● Total

1. INTRODUCTION

1.1 THE STRUCTURE OF THIS REPORT

This report presents an analysis of the economic contribution that the agri-food sector makes to the Indonesian economy. It is structured in three parts. This chapter details the approach

that we take in our analysis and how the agri-food sector is conceptualised. We then present a full assessment of the sector's economic impact, focussing on 2021, as well as detailing how it has changed

over the past eight years. Finally, we go on to examine the current economic picture in the country and, critically, the factors that will influence the demand for agri-food products in the near future.

1.2 HOW WE FRAME OUR ANALYSIS

The supply of food and non-alcoholic beverages in a country relies upon a diverse network of activities, covering the production, processing, distribution, and sale of food and beverage products. In this study, we consider the agri-food sector to encompass all of these activities, representing the food value chain from farm to fork. In this respect, the sector is not only the source of essential goods to the population, but also the backbone to the region's economies.

To quantify the contribution the sector makes to the economy, we focus primarily on its "direct economic impact". This refers to the activities of enterprises directly engaged in one of those three components. We augment this analysis with an assessment of the "indirect economic impact" that flows from each component. This refers to activity within their supply chains. Finally, we assess a third tier of impact, the "induced economic

impact". This refers to the activity supported by employees in the agri-food sector and its supply chain as they spend their wages. More detail on these three channels of impact and how they are estimated is provided in Box 1.

Our analysis is focused primarily on the size of the agri-food sector's economic footprint in 2021—the latest year for which complete economic statistics are available—and we evaluate the historical trend from 2015–2020. This provides us with a clear picture of the state of the agri-food sector in each country prior to the impact of the Covid-19 pandemic, and its performance since.

Component 1: Agricultural production

The Southeast Asia region is home to some of the world's major agriculture producers. In each of the five economies featured in this study, agricultural production (including both the agriculture

and fishing sectors) makes up a significant proportion of the Gross Domestic Product (GDP). Rice accounts for the largest share of agricultural output, by gross production value, followed by other key commodities such as coffee, cocoa, fruits, vegetables, and maize. Livestock and poultry farming also play a critical role in the production mix. The region is characterised by large coastal or island-based geographies, and thus also supports large fishing communities, with sizeable seafood production sectors.

Agricultural production also naturally accounts for a huge share of Southeast Asian employment. Despite the sector's moderate wages, agricultural workers typically spend a high proportion of their earnings on local goods and services, thereby creating a significant spending footprint, which manifests itself as a large "induced economic impact" in our analytical framework.

Component 2: Food and beverage manufacturing

The second major component of the region's agri-food value chain is food and beverage manufacturing, which includes production, processing, and packaging. For the purpose of this study, alcoholic beverages are excluded from this category. A significant number of people

are employed in this sector and its supply chain, going on to spend some portion of their income in their local economy, which stimulates a wider induced economic impact.

Component 3: Food and beverage distribution

The third and final stage of the agri-food value chain

is the distribution of food and beverage products to consumers. This involves the wholesale and retail activities linked to distribution, as well as activities in the hospitality sector, such as events catering and restaurants.

BOX 1: OUR APPROACH TO ECONOMIC IMPACT ASSESSMENT

In this report, we use a bespoke economic impact modelling framework to analyse the contribution the agri-food sector makes to the economies of Indonesia, Malaysia, Thailand, the Philippines, and Vietnam. Our assessment captures three channels of impact.

Firstly, we assess **the direct economic impact** of the businesses and workers directly involved in the agri-food sector itself—that includes agricultural production, F&B manufacturing, and F&B distribution,

For the agricultural production and F&B manufacturing components, we also capture two further channels of impact, as summarised in Fig. 2.

- **The indirect economic impact** refers to the economic activity stimulated along the agri-food sector's non-food supply chain, from procurement spending.
- **The induced economic impact** refers to the economic activity that flows from the payment of wages in the agri-food sector and the businesses in its non-food supply chain. Those wages are spent in the local economy, for example in retail and leisure outlets, generating profits and wages for other businesses, which in turn stimulate further spending in their own supply chains and amongst their own employees.

The total economic impact of the agri-food sector encompasses all of these impacts, and we present the impact in three ways:

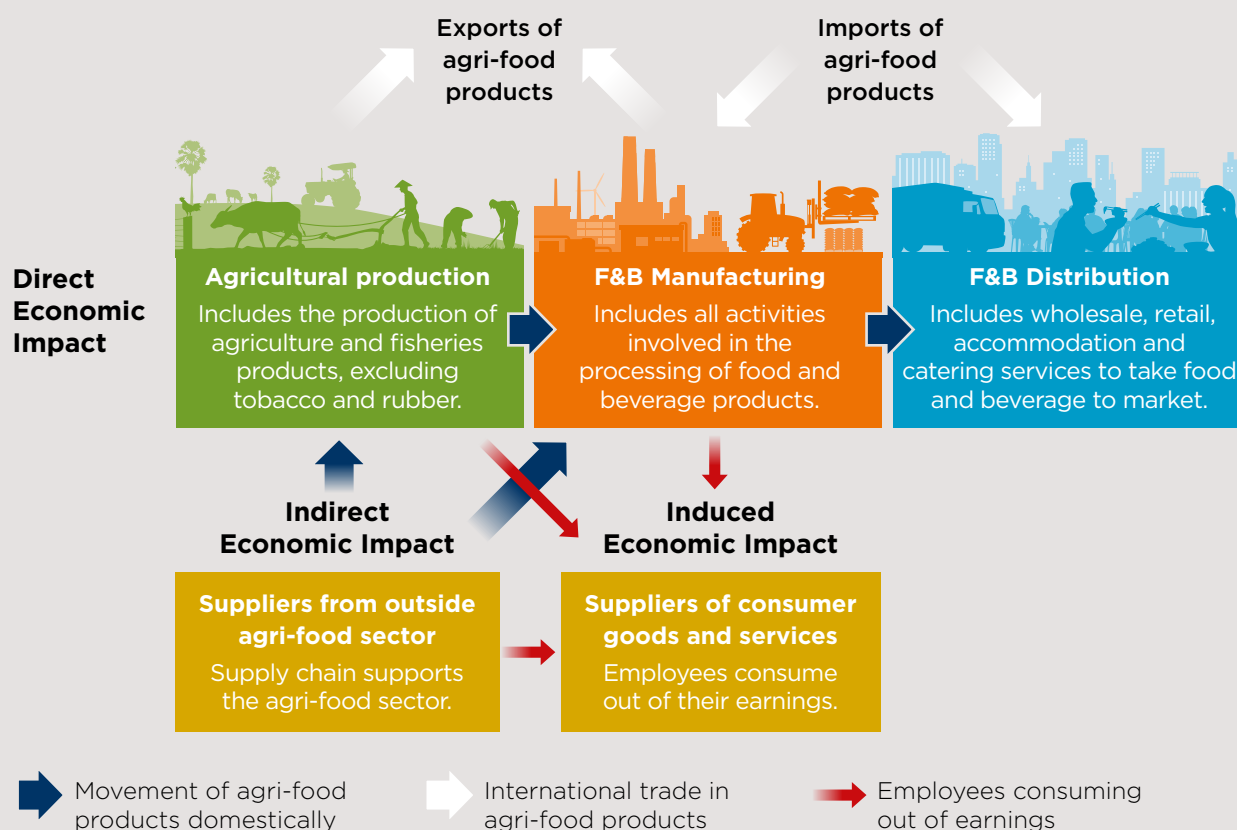
- **Gross value added (GVA) contribution to Gross Domestic Product (GDP).** This is the value of the output produced by a firm minus its expenditure on inputs (goods and services) that are used up in production. Aggregated across all economic operators in the economy, this forms GDP (plus production taxes and subsidies), which is the most widely recognised measure of total economic output.
- **Employment.** This is measured on a headcount basis to facilitate comparisons with national statistical agencies' employment data. It therefore includes anyone who is paid wages regardless of the length of their working week or whether they work all year round. Those who are paid as part of a contract for the provision of services will be considered as part of the supply chain, for the purposes of this study.
- **Tax receipts.** This is an estimate of all income and corporation tax revenues generated by firms and employees that form part of the economic footprint.

Our results are presented on a gross basis. They therefore ignore any displacement of activity from other uses of the land, for example. They do not consider what those resources currently used by the agri-food sector, or by their suppliers, could produce in the absence of the sector's activity.

We present our results in real terms, using 2021 price levels and a 2021 USD exchange rate, for the purposes of consistent international comparison. When adjusting prices to real terms, we use official price deflators based on economy wide inflation trends. We are cognisant that inflation rates are not uniform across all sectors of the economy and that if we were to use sector-specific price deflators—especially for the agriculture sector, which is characterised by more

volatile prices than the weighted national average—the implied 2021 value of the agri-food sector's economic footprint would look different. Rising prices mean the value of the agriculture sector's economic impact would rise, even if output remains static. Nevertheless, in our judgement, the soundest approach to normalising price levels is to use the national, not sectoral price deflator. This is because our analysis is designed to capture the ways in which the value that the agri-food sector generates reaches across sectors and permeates through the whole economy. Sector-specific price indices would skew this picture. For the purposes of transparency, when we observe trends in the volume of agricultural output that contradict our analysis of the value of economic output in this study, we caveat our findings appropriately.

Fig. 2. The contribution the agri-food makes to the Southeast Asian economy





2. THE AGRI-FOOD SECTOR'S IMPACT IN INDONESIA

Despite the impacts of the Covid-19 pandemic, Indonesia's agri-food sector has continued to grow consistently, such that 2021 represented its largest ever contribution to GDP, measured in real US dollar terms. The country's agri-food sector is dominated by agricultural production, but with one of Southeast Asia's largest domestic consumer markets, it is also host to vibrant food and beverage manufacturing and distribution sectors, driven by high levels of consumer demand.

In this chapter, we map out the economic footprint of the agri-food sector in Indonesia and its different components. We then go on to analyse its trajectory over recent years and the impact the Covid-19 pandemic had on the sector's performance, before considering Indonesia's international trade position in agri-food products.

All values are quoted in US dollars, adjusted to keep prices and exchange rates constant at 2021 levels. This enables comparability across the years and the five markets in this report. As is detailed in Box 1, we adjust prices based on economy-wide, rather than sector-specific, inflation indices because our analysis is designed to capture the agri-food sector's impact throughout the whole economy.

2.1 THE TOTAL ECONOMIC IMPACT OF THE AGRI-FOOD SECTOR¹

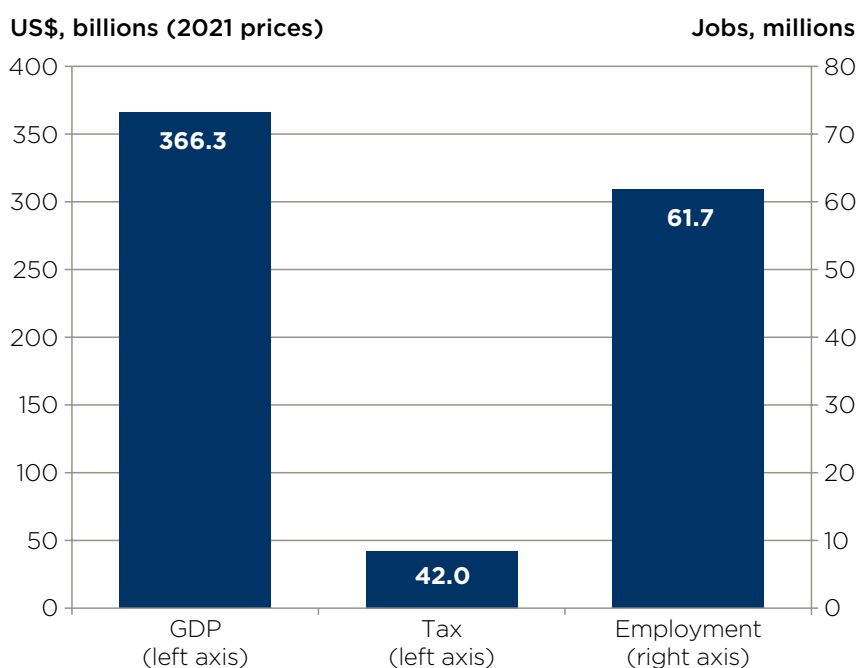
Indonesia's agri-food sector contributed USD 366.3 billion to national GDP in 2021. In real terms, this marked a 26.8% increase from the agri-food sector's 2015 impact, representing an average annual growth rate of 4.0% between 2015 to 2021. In total, the sector's contribution to the economy, equivalent to nearly 31% of Indonesian GDP in 2021.

The sector supported a total of 61.7 million jobs in 2021, equivalent to 47% of the 132.0 million jobs in the entire Indonesian economy that year. The agri-food sector also generates tax revenues for the Indonesian government, primarily in the form of

corporation and income taxes. In 2021, the sector generated a total of nearly USD 42.0 billion in tax revenues, through its direct, indirect, and induced tiers of impact.

The sector's contribution to GDP is worth an average of USD 5,900 per worker employed in its economic footprint. This registers as the second lowest productivity level of any country in this study. It is consistent with the predominance of agriculture in the Indonesian agri-food sector, which is generally the least labour productive component, and the relatively low level of labour productivity in the wider economy.

Fig. 3: Total economic contribution of agri-food sector in Indonesia, 2021



Source: Oxford Economics

¹Please note that our historical estimates for the GDP contribution of Indonesian agriculture sector have changed since our previous publication: "The Economic Impact of the Agri-Food Sector (2021)", due to underlying changes.

2.2 THE AGRI-FOOD SECTOR IN DETAIL

Our analysis focuses on the economic impact of three components of the agri-food industry: agricultural production, F&B manufacturing, and F&B distribution. Of these, agricultural production makes up the lion's share of its impact, accounting for 52% of the sector's GDP contribution, as well as 64% of its jobs, once supply chain and induced consumer spending impacts are included. This is the second-highest agricultural share of the overall footprint in the five countries in the study. F&B manufacturing accounts for roughly 34% of the total GDP impact, and F&B distribution the remaining share.

2.2.1 Agricultural production

Historically, agricultural production has always accounted for the largest share of the agri-food sector in Indonesia. It made a contribution to Indonesia's GDP worth USD 149.9 billion from direct channels alone in 2021. This figure was further augmented by an indirect impact of USD 22.6 billion via its supply chain, and an induced impact of USD 18.8 billion through consumer spending derived from agricultural workers.

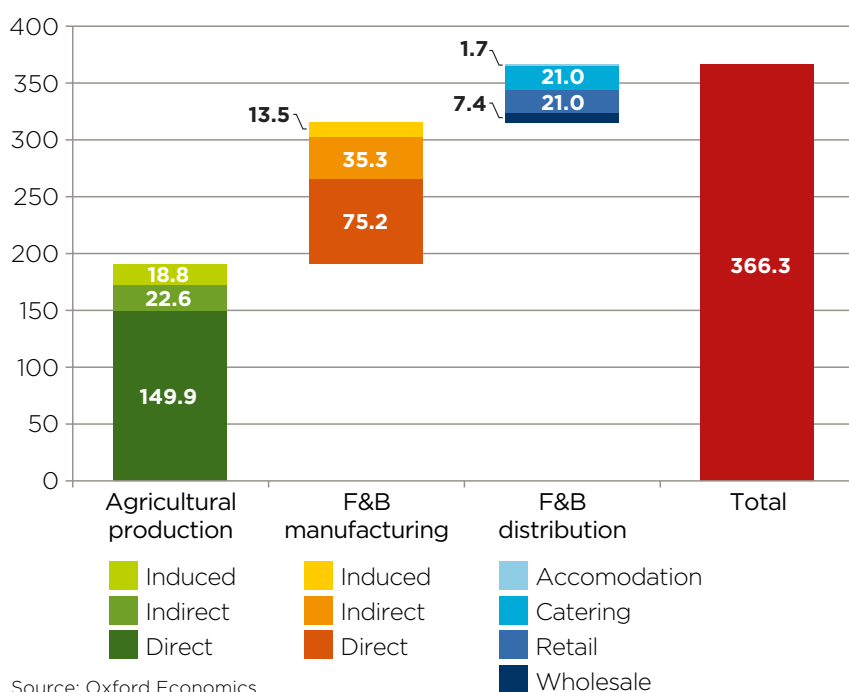
Agricultural production supported 36.1 million jobs directly in 2021, and 3.3 million more jobs via the indirect and induced channels. This is nearly two thirds of the overall employment footprint of the sector, illustrating the importance of agriculture to supporting livelihoods. As a source of public revenues, agricultural production generated USD 14.5 billion in tax payments.

2.2.2 Food and beverage manufacturing

Food and beverage manufacturing is the second largest component of the Indonesian agri-food sector. In 2021, it generated a USD 124.0 billion contribution to domestic GDP. This included a direct contribution from food and beverage manufacturers of USD 75.2 billion, as well as USD 35.3 billion and USD 13.5 billion via indirect and induced impacts respectively. Overall, F&B manufacturing represented 34% of the agri-food sector's total economic impact in 2021.

Fig. 4: Agri-food industry contribution to Indonesia's GDP, by component, 2021

US\$, billions (2021 prices)



Source: Oxford Economics

F&B manufacturing also contributed significantly to Indonesia's workforce, sustaining total of 9.8 million jobs in 2021, of which 5.3 million were sustained through its direct activities. Labour productivity in F&B manufacturing is the highest of any component of the agri-food sector, with a contribution to GDP per worker twice as high as the remainder of the agri-food sector. In addition, it generated USD 21.5 billion in tax revenues that year.

2.2.3 Food and beverage distribution

F&B distribution is the smallest component of Indonesia's agri-food sector, contributing approximately USD 51.1 billion to national GDP in 2021. This component includes F&B wholesale and retail activities, as well as sale of food and non-alcoholic beverages by the hospitality industry (e.g., by hotels, restaurants, and catering businesses).

The largest share of the F&B distribution sector's economic footprint in

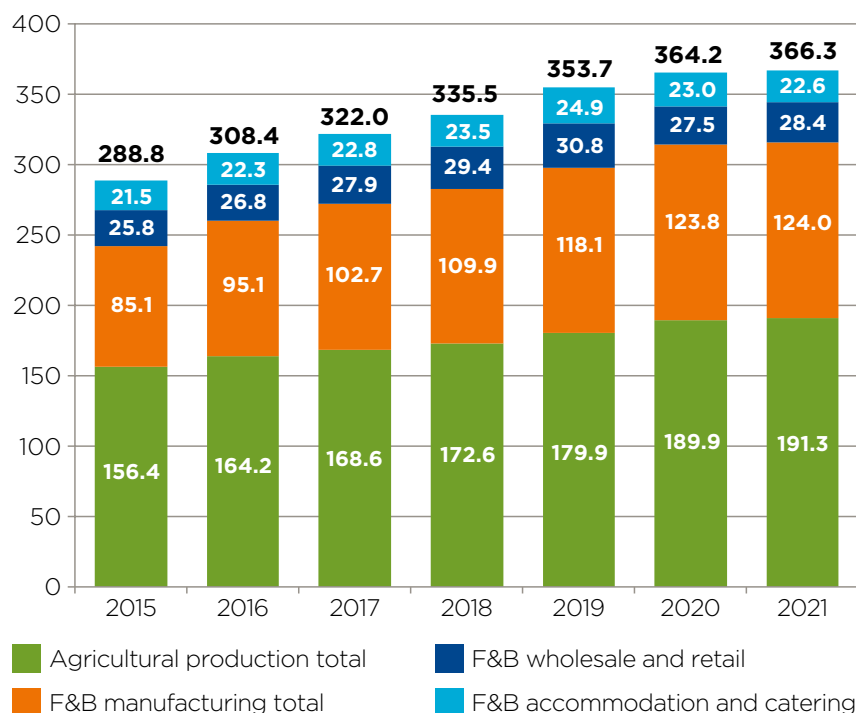
Indonesia came via catering and retail activities. They each contributed USD 21.0 billion to 2021 GDP, together representing 80% of the total impact for F&B distribution. This component of the agri-food sector also sustained 12.5 million jobs in 2021, of which 4.3 million positions came in retail and a further 7.0 million in catering. Additionally, F&B distribution generated USD 5.9 billion in tax revenues for the Indonesian government that year.

2.3 THE EVOLUTION OF THE INDONESIAN AGRI-FOOD SECTOR

As the Covid-19 pandemic took hold in 2020, with tourism drying up, restricted movement, and disruptions to consumer spending, the agri-food sector faced unprecedented challenges. Consequently, the sector's growth slowed from an average of 5% per year in Indonesia between 2015-2019, to 3% in 2020, and 1% in 2021. The sector's rapid growth trajectory leading up to the pandemic meant that the agri-food sector's economic footprint in 2021 still outsized its 2015 footprint by USD 77.5 billion, in real USD terms.

Fig. 5: Change in GDP contribution by Indonesia's agri-food sector, by component, 2015-2021

US\$, billions (2021 prices)



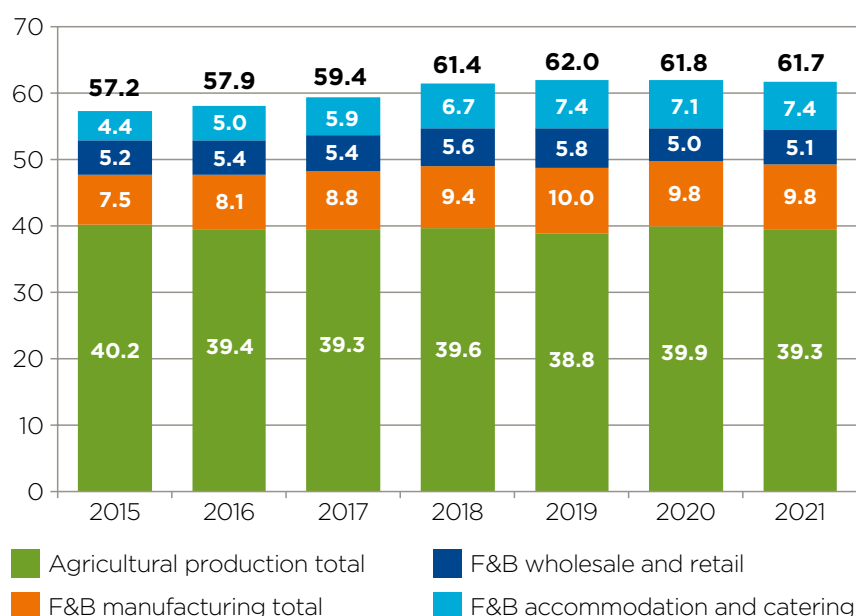
Source: Oxford Economics

The negative impact of Covid-19 on the agri-food sector was even more apparent when employment is taken into account. Employment in the agri-food sector consistently rose by approximately 2% every year between 2015 to 2019. However, this trend ended in 2020, with the number of jobs sustained by the sector falling for the first time since before 2015, followed by a further contraction in 2021. Despite this, the strong growth in employment prior to the pandemic means that 4.5 million more people were employed in the agri-food sector in 2021 than in 2015.

The growth in the number of people employed in the Indonesian agri-food sector has been slower than the growth in its GDP footprint. This means that real-terms productivity, measured in terms of the GDP footprint per worker, was 18% higher in real terms in 2021 than 2015. This places Indonesia third of the five countries in the study in terms of productivity growth.

Fig. 6: Change in employment footprint of Indonesia's agri-food sector, by component, 2015-2021

Employment, millions



Source: Oxford Economics

2.3.1 Agricultural production

Despite the disruptions caused by the Covid-19 pandemic, the agriculture sector in Indonesia has remained largely robust. The total economic impact of agricultural production was USD 179.9 billion in 2019, growing to USD 189.9 billion in 2020 and USD 191.3 billion in 2021. This meant that the sector's economic footprint maintained a 4% average annual growth rate from 2015-2020. Most recently in 2021, however, the sector's year-on-year growth slowed to 1%, indicating that the negative impacts of the pandemic were delayed in agricultural production, compared to the other components of Indonesia's agri-food sector.

The sector benefited from the Indonesian government's aggressive policies to increase production during the pandemic, including the development of a 165,000-hectare food estate in Central Kalimantan, grants for farming materials and tools; and unconditional cash transfers to 2.7 million farmers². In addition, agricultural revenues were bolstered in 2020 by a 14% increase in minimum rice output prices, which are likely to have inflated the value of agricultural outputs relative to volume.

² OECD, Agricultural Policy Monitoring and Evaluation 2021: Addressing the Challenges Facing Food Systems, 14. Indonesia

Employment generated by agricultural production in Indonesia has fluctuated over recent years, albeit not surpassing its 2015-peak of 40.2 million. The divergence in GDP and employment trends demonstrates consistent productivity growth over this time, something that is highlighted by the OECD as a key reason for growth in Indonesia's agricultural production. From 2007 to 2016, total factor productivity (TFP) grew by 2% annually³. More recently, the Indonesian government has focused on policies targeted at modernising Indonesia's agriculture in 2020, including programmes for smart farming, greenhouses for producing crops off-season, and rural infrastructure.

2.3.2 Food and beverage manufacturing

The food and beverage manufacturing sector had been enjoying a rapid growth trajectory in the years preceding the COVID-19 pandemic. The sector's economic contribution increased from USD 85.1 billion in 2015 to USD 118.1 billion in 2019, with an average annual growth of 9%. Year-on-year growth remained relatively strong in 2020 at 5%, however in 2021 it slowed — almost to a standstill — growing by only 0.1% to USD 124.0 billion.

Despite this slowdown, this component of the sector's contribution to GDP was 46% larger in 2021 than 2015, more than double the growth seen in any other component.

On the employment front, the pandemic's impact was felt slightly earlier by Indonesia's F&B manufacturing workforce. The sector consistently grew its workforce every year from 2015 to 2019, rising from 7.5 million to 10 million jobs in the time period. This total fell to 9.8 million jobs in 2020 and 2021. Overall, labour productivity has risen since 2015, however is has done so more gradually than other components of the industry, especially agriculture.

2.3.3 Food and beverage distribution

In-keeping with a global trend, F&B distribution was one of the sectors hardest hit by the pandemic in Indonesia. The economic footprint of wholesale and retail activities dropped from USD 30.8 billion in 2019 to USD 27.5 billion in 2020, before recovering to contribute USD 28.4 billion in 2021. Accommodation and catering were also affected by the pandemic and the subsequent policy response of social distancing measures in 2020.⁴ The economic footprint of the F&B distribution sector shrank from USD 24.9 billion in 2019 to USD 23 billion in 2020, and even further to USD 22.6 billion in 2021.

Despite this contraction, the economic impact of accommodation and catering was still larger in 2021 than in 2015, the first year of our analysis.

Indonesia's workforce was similarly affected by the pandemic's upheaval. Employment from F&B distribution activities consistently increased from 2015 to 2019, reaching 13.2 million jobs in 2019. This fell quite sharply with the first wave of the pandemic in 2020, to 12.1 million jobs, but bounced back in 2021, to 12.5 million jobs. The bulk of this improvement came from renewed growth in the accommodations and catering sector in 2021, likely due to relaxed COVID restrictions. Again, this component of the agri-food sector boasts a significantly larger economic footprint than it did in 2015.

³ OECD, Agricultural Policy Monitoring and Evaluation 2021: Addressing the Challenges Facing Food Systems, 14. Indonesia

⁴ Strict measures were placed on dining establishments in 2020, as part of the Pemberlakuan Pembatasan Kegiatan Masyarakat or PPKM, and Pembatasan Sosial Berskala Besar or PSBB programmes.

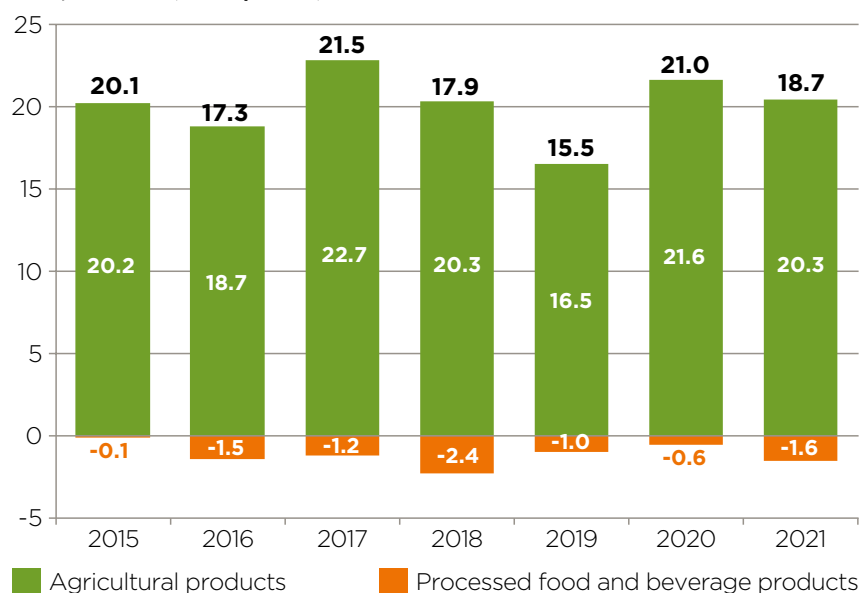
2.4 TRADE IN AGRI-FOOD PRODUCTS

Indonesia retained its strong trade surplus in agri-food products in 2021, with net exports worth USD 18.7 billion. Total agri-food exports were worth over twice as much as imports at USD 36.2 billion and USD 17.5 billion respectively. The key driver behind this positive trade balance was agricultural production, with exports worth USD 28.0 billion and a trade surplus worth USD 20.3 billion. Indonesia runs a small trade deficit in processed F&B products, however this is dwarfed by the large net surplus in agricultural products.

This agri-food trade surplus has fluctuated in size over the past seven years, dipping to its lowest value of USD 15.5bn in 2019, but has remained robustly positive and is an important generator of foreign exchange revenues.

Fig. 7: Net exports of primary and processed food and non-alcoholic beverages, Indonesia, 2015-2021⁵

US\$, billions (2021 prices)



Source: Oxford Economics

⁵ Due to COMTRADE data not being released for all countries at the time of writing, 2021 values are estimated based on available data for trade of broader agricultural and food products.

3. DEMAND OUTLOOK FOR THE AGRI-FOOD SECTOR

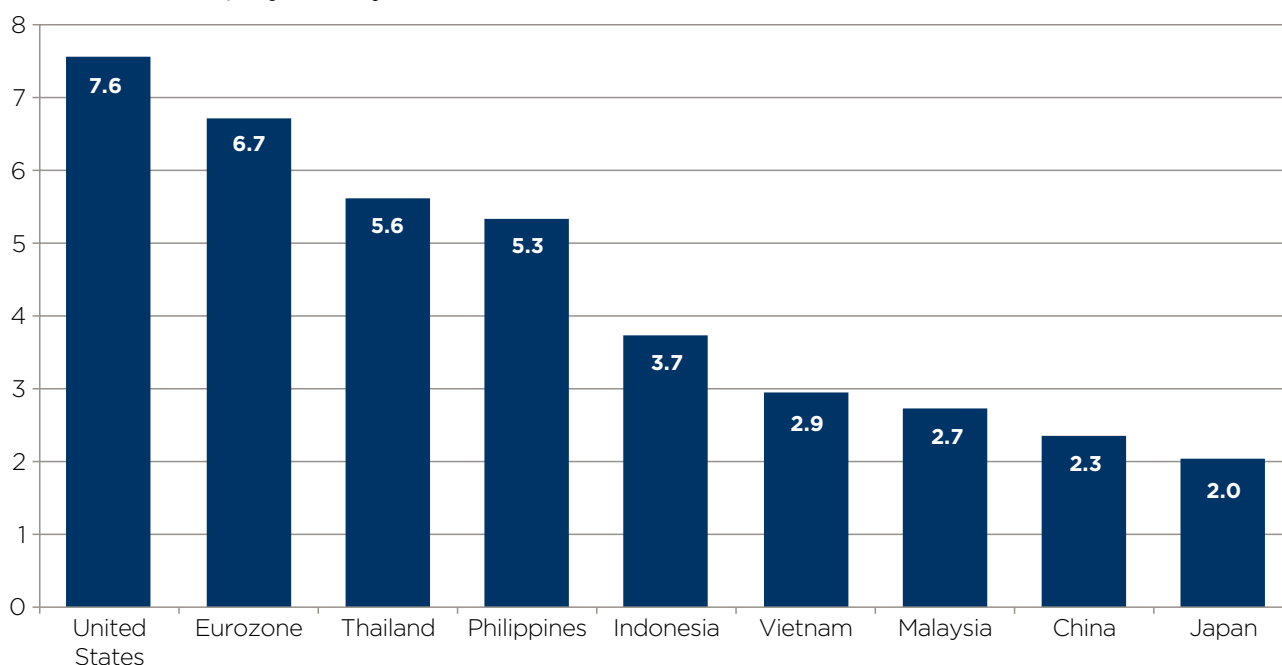
In this chapter, we examine the prospects for post-Covid-19 economic recovery in Indonesia, and the implications this has for the agri-food outlook. We expect Indonesia's economic recovery to continue through 2022 and into the coming years. The agri-food sector will benefit from a normalisation of activities, a reopening of borders, selected fiscal support, and better labour market conditions to support growing food expenditure over the next five years. Inflationary pressures have risen, but less so than in some neighbouring economies, and much more modestly so than in many other parts of the world economy.

The economic rebound from Covid-19 in Indonesia will support household spending power to the benefit of the wider agri-food system, and a recovery in tourism will fuel demand in the hospitality industry and its supply chains. Both factors feed into a positive demand-side outlook for the sector in the coming years. And as prosperity and living standards rise over the longer-term, we expect higher spending on food to drive growth in the agri-food sectors' economic footprint.

However, the sector will face significant macroeconomic threats to this recovery. In this chapter we unpack these opportunities and risks in more detail.

Fig. 8: Consumer price inflation, 2022

2022 CPI inflation, % year-on-year



Source: Oxford Economics

3.1 OUTLOOK FOR EMPLOYMENT AND TOURISM WILL UNDERPIN RECOVERY

3.1.1 Labour market recovery will provide a boost

Indonesia's domestic economic recovery is progressing well through 2022, even as the global outlook has become more challenging, and this is feeding through to a strengthening labour market. As mobility continues to returns to pre-pandemic levels, the normalisation of economic activities, reopening of international borders, and policy support measures will boost employment, especially

in the services sector. We expect this to support solid real wage growth in Indonesia, even as inflation picks up by recent historical standards.

However, unlike many other governments in the region, Indonesia's has tightened fiscal policy in recent months, and despite the pickup in living costs. VAT has been raised from 10% to 11%, and a new higher rate has been introduced for the highest-paid workers. Both will slow spending power growth.

Nevertheless, assuming energy prices normalise and supply chain pressures ease, we expect inflation to slow after 2022 and underpin real wage growth and food spending. Oxford Economics anticipates spending on food and non-alcoholic beverages to grow from USD 150 billion in 2022 to around USD 170 billion in 2025, in 2021 price terms.

Fig. 9: Total employment by country in Southeast Asia, 2019-2025

Total employment (2019=100)

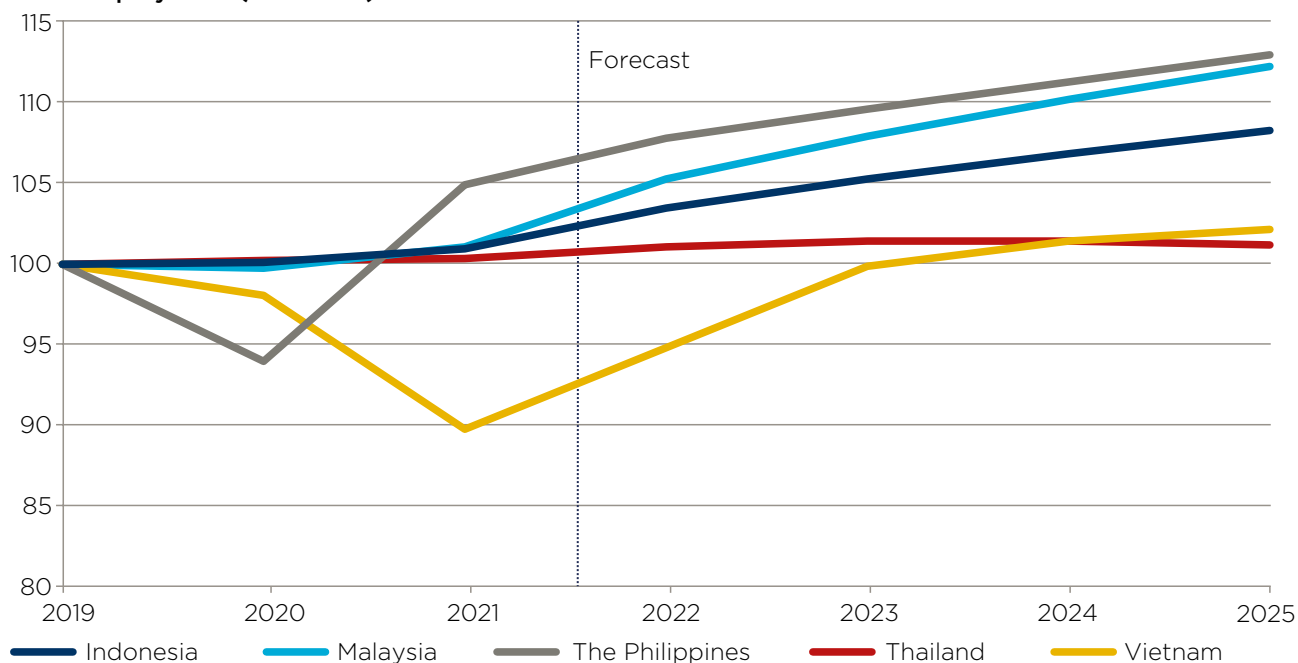
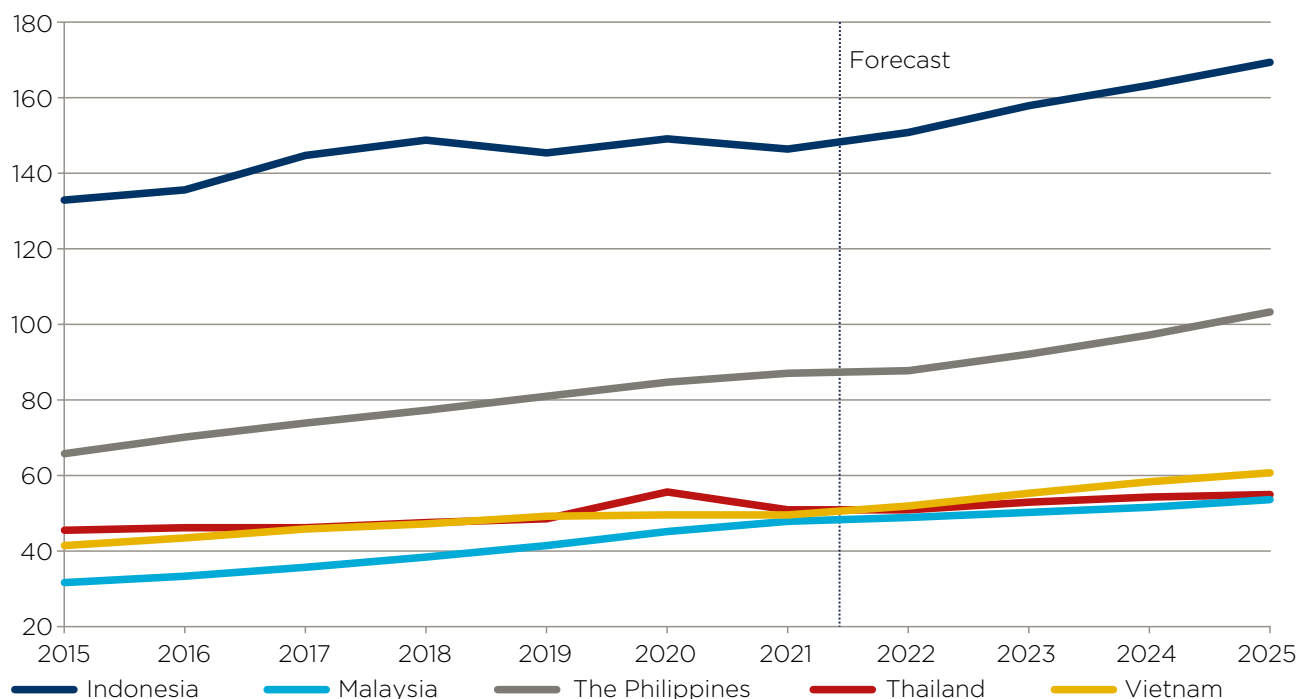


Fig. 10: Real spending on food and non-alcoholic beverages in Southeast Asia, 2015-2025

US\$, billions (2015 prices)



Source: Oxford Economics

3.1.2 Tourism rebound supports the hospitality sector

Despite world-class destinations such as Bali and Lombok, Indonesia is the least-reliant economy on tourism in our study—with tourism accounting for just 6% of GDP. We forecast the number of tourist visitors to Indonesia to rise to 5 million in 2022, although this rebound remains well below the 16 million arrivals pre-Covid-19.

Nevertheless, a recovery in tourism and higher domestic demand will boost spending on hospitality services from 2022 onwards, supporting the broader recovery in domestic demand for the agri-food sector. The rebound in spending on meals out will rebound to pre-Covid levels faster in least tourism-reliant economies such as Indonesia than in more tourism-reliant economies such as Philippines.

Fig. 11: Number of inbound tourists, 2015-2025

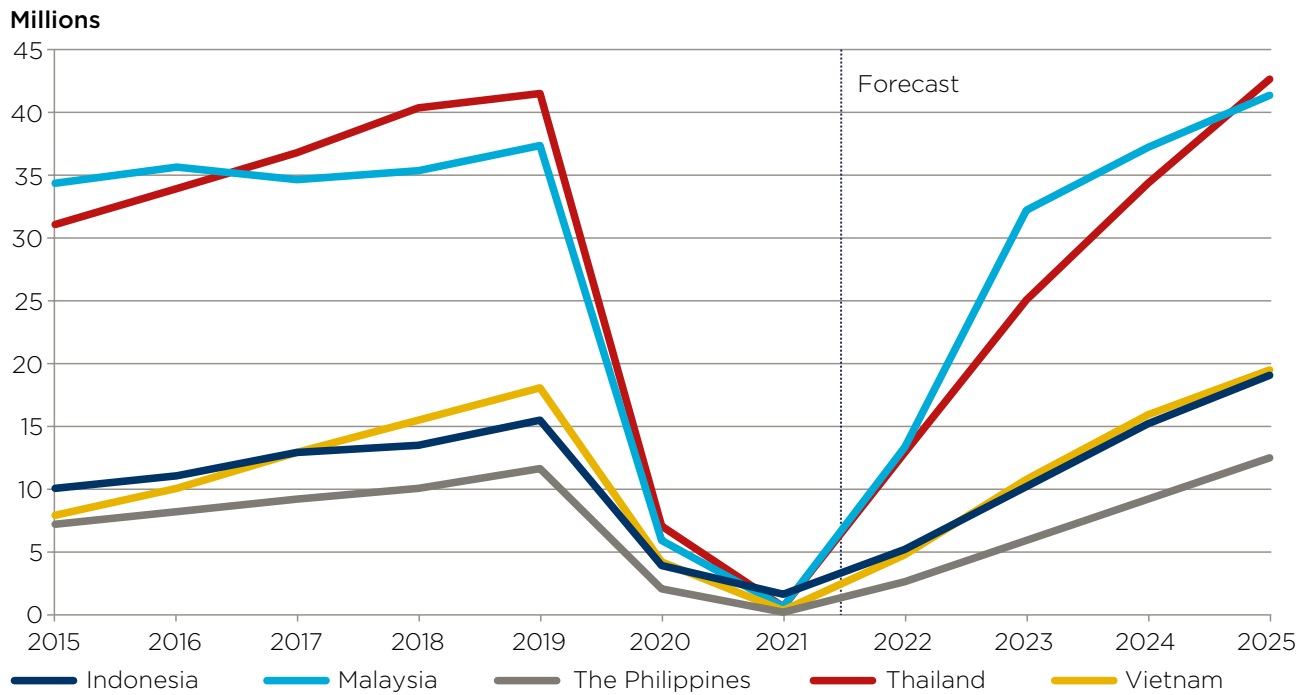
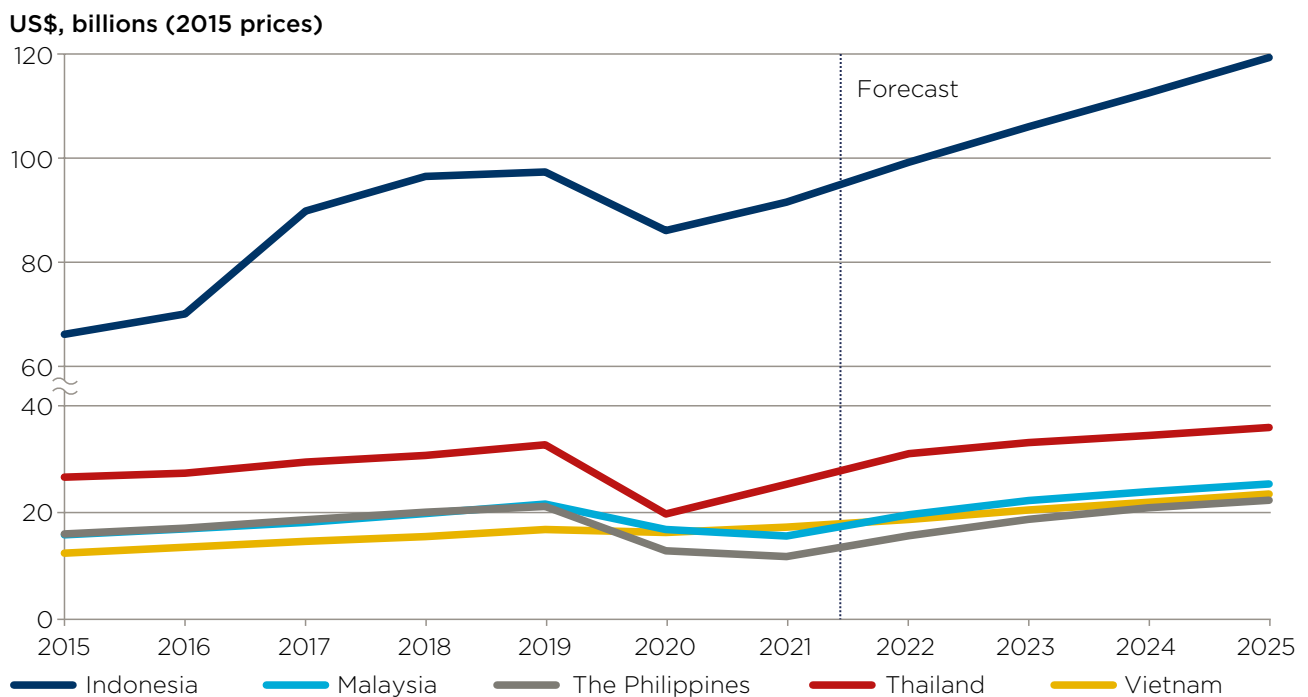


Fig. 12: Real spending on eating out, 2015-2025



3.2 FOUR NEGATIVE FACTORS THAT MAY CONSTRAIN THE PACE OF RECOVERY

Despite the various reasons for optimism, the agri-food sectors in the five Southeast Asian countries will have to adapt to four key negative macroeconomic conditions, which could present major challenges.

3.2.1 Rising inflation will dampen spending

Through the first half of 2022 the Russia and Ukraine war drove commodity prices sharply higher across a range of commodity types. As of May 2022, both maize and

corn prices were around a third higher than at the start of the year, whilst wheat prices were up around 46%—three markets for which both Russia and Ukraine are key global suppliers. Meanwhile oil and gas prices, which are also important cost drivers for food producers given the importance of energy in food manufacturing⁶, have both more than doubled in price so far in 2022.

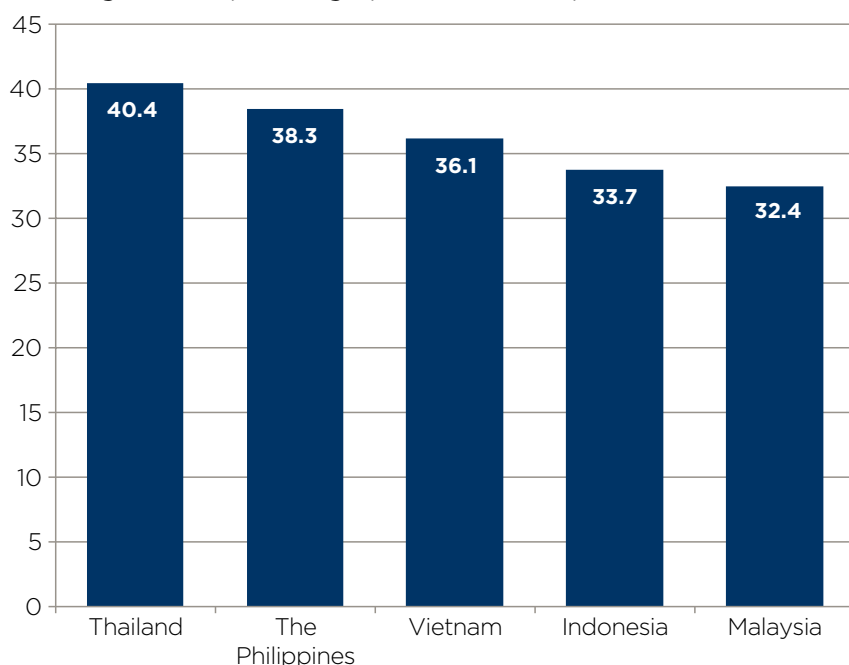
As spending on food, beverages, and restaurants accounts for a relatively large portion of household budgets

in Southeast Asian countries, average households are highly impacted by this shift in global commodity prices. This is especially true for Thailand, the Philippines, and Vietnam, where food and beverages account for 35% or more of household spending (using their respective shares in the consumer price index as a benchmark).

Other inflationary pressures have also worsened through the course of the first half of 2022, impinging on demand for agri-food outputs. Supply chain interruptions from China's continued lockdowns have raised the cost of manufactured inputs, whilst the rebounding hospitality activity (as households "catch up" with social activities) is also pressuring the cost of providing services. Across all the countries in our report the rate of price growth will be faster in 2022 than in the past couple of years, with the acceleration especially sharp in the Philippines, Indonesia, and Thailand (see Fig 14). Faster inflation, in turn, will squeeze real incomes and will weigh on food spending through the course of the year.

Fig. 13: Food and restaurant spending accounts for a third or more of household spending in Southeast Asia

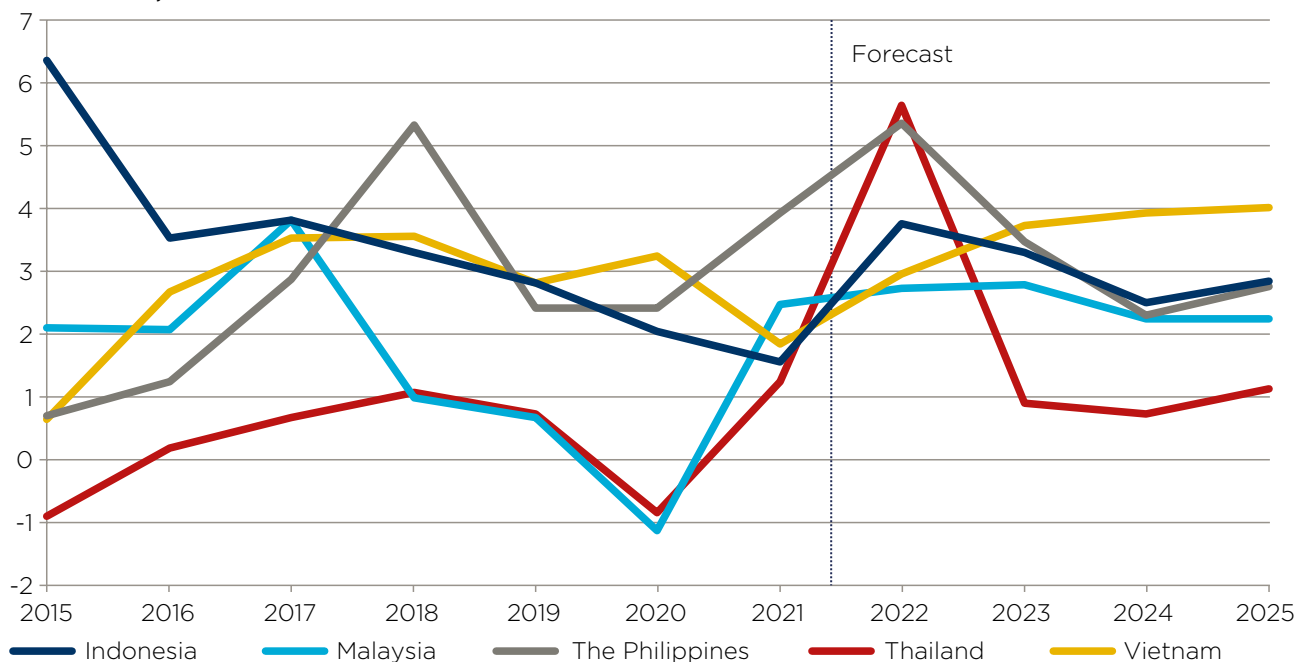
CPI weights: Food, beverages, and restaurants, %



Source: Oxford Economics

Fig. 14: Consumer price inflation in Southeast Asia, 2015-2025

CPI inflation, %



Source: Oxford Economics

3.2.2 Demographics remain positive for Indonesia's labour force

The decline in the working age population in some Southeast Asian countries will mean labour becomes scarcer, necessitating new and faster solutions to grow productivity - both Thailand and Malaysia face challenges in this respect in the years ahead. But Indonesia has a much younger population, and therefore we expect the working age population to continue growing in the decades to

come. This should ensure labour availability is less of a constraint to the sector in Indonesia than in some other ASEAN economies.

3.2.3 Indonesia's historic trade deficit poses risks to currency

Oxford Economics' baseline forecast is for ASEAN currencies to strengthen gradually over the coming years, along with expectations of rising productivity and more stable inflation. But the region has historically been more prone to exchange rate

volatility than other parts of Asia, especially during periods of heightened global financial and economic uncertainty. Exchange rate volatility can transmit to increased food prices through the cost of imported agricultural and energy commodities. Countries with persistent trade deficits, such as Indonesia and the Philippines, are more at risk during such periods than countries with persistent surpluses, such as Thailand and Vietnam.

3.2.4 Impact of post-Covid-19 fiscal measures

Governments in Southeast Asia are under pressure to tackle the fiscal deficits that have widened during the coronavirus pandemic. As we discussed in the 2021 publication with FIA, “*Fiscal Risks in the food sector in Asia after Covid-19*” some governments in the region need to start balancing their books in the aftermath of Covid-19. But at 10% of GDP, the increase in the government debt burden in Indonesia since 2019 is substantially less than in Philippines and Thailand (20% of GDP) or Malaysia (15%). So although the government is currently undertaking measures to cut the deficit, the longer-term fiscal risk may be more modest than in some neighbours.

3.3 CONCLUSION

Indonesia’s agri-food sector is benefitting from the broader economic recovery underway, even as global and domestic price pressures have picked up. And the outlook is positive, with an ongoing recovery in domestic activity and inbound tourism likely to support demand for the sector. But challenges remain—especially in helping the sector deal with climate change, as well as the risk of future exchange rate volatility.



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Food Industry Asia (FIA) was formed in 2010 to enable major food and beverage manufacturers and ingredients suppliers to speak with one voice on complex issues such as health and nutrition, food safety, sustainability, and regulations and trade. From its base in Singapore, FIA seeks to enhance the industry's role as a trusted partner and collaborator in the development of science-based policy across Asia. To do so means acting as a knowledge hub for Asia's national industry associations and affiliated groups, to support with their engagement of public bodies and other stakeholders across the region.

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