The information and statistics set out in this section and other sections of this prospectus were extracted from different official government publications, available sources from public market research and other sources from independent suppliers. In addition, we engaged China Insights Consultancy for preparing the CIC Report, an independent industry report in respect of the Global Offering. We believe that the sources of the information in this section and other sections of this prospectus are appropriate sources for such information, and we have taken reasonable care in extracting and reproducing such information. We have no reason to believe that such information is false or misleading or that any fact has been omitted that would render such information false or misleading. The information from official and non-official sources has not been independently verified by us, the Joint Global Coordinators, Joint Sponsors, Joint Bookrunners, Joint Lead Managers, any of the Underwriters, any of their respective directors and advisers, or any other persons or parties involved in the Global Offering, and no representation is given as to its accuracy, other than China Insights Consultancy. Accordingly, the information from official and non-official sources contained herein may not be accurate and should not be unduly relied upon. Our Directors confirm that, after making reasonable enquiries, there is no adverse change in the market information since the date of the CIC Report that would qualify, contradict or have a material impact on the information in this Section.

China's economy has experienced significant growth over the past several years, with its nominal GDP increasing from RMB68.9 trillion in 2015 to RMB101.6 trillion in 2020 and is expected to continue growing to reach RMB137.1 trillion in 2025. As China remains one of the fastest growing economies in the world, demands for logistics services remain strong in the domains of both industrial production and consumption evidenced by the growth of value of social logistics goods from RMB219.2 trillion in 2015 to RMB300.1 trillion in 2020.

China's e-commerce market has become the largest in the world and has greatly reshaped and promoted the development of logistics services industry in China. Furthermore, the recent COVID-19 outbreak has contributed to an accelerated shift in consumption from offline to online. As online retail sales of physical goods continue to gain shares in the total retail market in China, an increasing amount and variety of companies from all industries are switching to omni-channel retail strategy, which requires seamless integration of online and offline supply chain enabled by comprehensive supply chain solutions and logistics services. The demands for integrated supply chain logistics services that simplify and speed the process of transporting goods are growing rapidly, and the market is calling for technology-enabled supply chain logistics services providers who have the capabilities in provision of reliable, trackable, on-demand, integrated, and end-to-end movement of shipment, as well as extensive storage solutions and facilities.

#### CHINA'S LOGISTICS MARKET OVERVIEW

According to the CIC Report, China is the largest logistics market in the world in terms of logistics spending. China's total logistics spending reached RMB14.9 trillion in 2020, and is expected to grow at a CAGR of 5.3% from 2020 to 2025. The expected growth in China's logistics spending is generally in line with the growth in GDP, which is expected to grow at a rate of 6.2% from 2020 to 2025 as domestic consumption and trade activities continue to increase, leading to additional logistics demands.



#### Logistics Spending in China, 2015-2025E

Source: CIC Report

Despite its massive market size, China's logistics market is still relatively inefficient compared to other developed markets, evidenced by China's higher logistics spending as a percentage of GDP, which is 14.7% in 2019, compared to 7.6% and 8.5% in the U.S. and Japan, respectively. Logistics spending as a percentage of GDP can be further decomposed into three ratios as illustrated by the following formula, to demonstrate the reasons for China's lower logistics efficiency compared to the U.S.

Logistics Spending<br/>GDPLogistics Spending<br/>Per Unit of Freight TurnoverAverage Length of Haul<br/>Per Unit of GDPFreight Weight<br/>Per Unit of GDP

Where,

Logistics Spending per Unit of Freight Turnover equals to total logistics spending divided by total freight turnover, with a measurement unit of US¢ per ton-kilometer;

Average Length of Haul equals to total freight turnover divided by total freight weight, measured in terms of kilometers;

Freight Weight per Unit of GDP equals to total freight weight divided by GDP, with a measurement unit of tons per thousand US dollars.

The table below outlines such ratios in China and the US in 2019, with brief discussions of the implication for each of the ratios, according to the CIC Report:

	Unit	Unit China U.S.		Discussion	
Logistics Spending per Unit of Freight Turnover	US¢ per ton-kilometer	10.1	18.7	This refers to the logistics spending incurred for each ton-kilometer of transportation of goods. China has a significantly lower expense compared to the US, primarily due to lower labor and operating costs. This ratio has seen a growing trend since 2016 for China. We believe room for further improvement is relatively limited although there is still ample efficiency uplift opportunity from a supply chain perspective.	
Average Length of Haul	kilometer	391.6	454.0	China's average length of haul of freight is slightly lower than that of the US, primarily because China has a higher e-commerce penetration rate compared to the US. The growing e-commerce market leads to fast development of complementary logistics services, which increases regional and last mile truck shipping to accommodate consumer expectations for more frequent and faster deliveries. The growing number of fulfillment centers in China also contributes to the decreased average length of haul.	
Freight Weight per Unit of GDP	ton per thousand US\$	3.7	0.9	Freight weight per unit of GDP indicates the weight of freight is transported to generate one unit of GDP – the higher the ratio, the lower the efficiency of the freight to contribute to national economy. China's freight weight per unit of GDP is more than four times of that of the US, suggesting: the potential of China to pivot its economic structure more to the tertiary sector with higher value-add to national economy, and redundancies in freight transportation such as repeated transportation and deadheading, which leaves large room of efficiency improvement.	

The analysis of the aforementioned ratios shows that from the perspective of logistics, China's higher logistics spending as percentage of GDP is primarily because of the redundant logistics processes. This leaves a large opportunity for logistics service providers to improve overall logistics efficiency through offering of integrated solutions as opposed to isolated logistics services to reduce such redundancies.

#### **OUTSOURCED LOGISTICS SERVICES MARKET OVERVIEW**

The initial form of logistics, known as First Party Logistics (1PL) refers to the logistics activities where buyers or sellers manage the packaging, storage and transportation of goods by themselves. However, as their businesses grow, these buyers or sellers face more sophisticated customer needs, making it more challenging for them to handle the increasing volume and complexity in customer demands. Also, due to constraints in logistics infrastructure and resources, 1PL often fail to achieve the same level of efficiency compared to the services offered by professional third-party logistics service providers who have best-in-class infrastructure and operational know-how. In addition, by outsourcing logistics services to third-party service providers, enterprises can focus on their core businesses without the need to deal with the complex and resource consuming logistics planning process. As a result, the outsourced logistics services market in China has grown rapidly and is expected to grow from RMB6.5 trillion in 2020 to RMB9.2 trillion in 2025, representing a CAGR of 7.1%, which is faster than the growth in total logistics spending during the same period, which is 5.3%.



**Outsourced Logistics Spending in China, 2015-2025E** 

Source: CIC Report

Outsourced logistics services penetration, as defined by outsourced logistics services spending divided by total logistics spending, is also expected to increase from 43.9% in 2020 to 47.8% in 2025, demonstrating the increasing popularity of outsourced logistics services in China. Compared to 1PL, outsourced logistics services enable enterprises to achieve higher logistics efficiency by leveraging third-party professional logistics service providers' expertise in managing and integrating various links in their supply chains, while at the same time avoiding significant upfront costs in building their own logistics infrastructure.

In particular, enterprises in industries with higher requirements for logistics capabilities, such as fresh produce, FMCG, apparel and pharmaceutical products, would be more inclined to adopt an assetlight model and outsource their logistics activities to professional logistics service providers. In 2020, among all industry verticals, fresh produce has the highest outsourced logistics services penetration rate of 85.0%, followed by pharma, apparel and FMCG, with penetration rate of 71.0%, 67.0% and 65.6% respectively.

#### EMERGENCE OF INTEGRATED SUPPLY CHAIN LOGISTICS SERVICES MARKET

Integrated supply chain logistics services are defined as a sub-segment and an advanced form of logistics services, within the outsourced logistics services market. Those services are provided by a

third party services provider, however, unlike isolated supply chain logistics service providers, integrated supply chain logistics service providers possess the competencies of providing a full spectrum of logistics services, ranging from express delivery, full truckload and less-than-truckload transportation, last-mile delivery, warehousing, and other value-added services (such as home installation and aftersales services), which are offered to customers in the form of integrated solutions tailored to their varied needs. Despite the fact that the majority of demand for third-party logistics services comes from single logistics services, demands from enterprises for outsourced supply chain logistics services market outgrowing the outsourced logistics service market in general, primarily because of the following distinctive features of integrated supply chain logistics services:

- More integrated and end-to-end: Isolated supply chain logistics service providers usually focus on providing only one specific logistics service, such as express delivery. Enterprises with more complex and sophisticated logistics demands will have to engage multiple isolated logistics services providers. In contrast, integrated supply chain logistics service providers are able to provide one-stop solutions to cover the end-to-end demands of customers, ranging from manufacturing all the way to distribution, such as warehousing and inventory management solutions. This allows enterprise customers avoid the cumbersome process of engaging multiple services providers.
- Advanced technologies applied and data-enabled: Traditional isolated supply chain logistics services remain largely labor intensive with relatively lower levels of automation, especially for tasks such as loading and sorting, which led to inefficient and error-prone processes. Utilization of data insights for isolated supply chain logistics service providers is limited. Integrated supply chain logistics services players typically utilize technologies and unmanned solutions to improve operational efficiencies. Also, with advanced IT infrastructure, the collection, integration and analysis of data across different links of the supply chain and among different partners are much more sophisticated.
- **Industry know-how and insights**: Integrated supply chain logistics service providers' deep understandings towards various industries (such as end customer needs, unique feature of goods, inventory and sales cycle, among others) enable them to provide tailored solutions to address different industry pain points. Isolated supply chain logistics service providers, in contrast, are typically more industry agnostic as they provide limited scope of supply chain logistics services from a product perspective.
- Ability to empower customers' business operations: Integrated supply chain logistics service providers can offer additional valued-added services and empower customers' business operations in multiple aspects, including sales forecast, production planning, SKU and inventory management, end customer order management, among others, which helps them deepen their relationship with customers, thus increasing customer stickiness and cross-selling or up-selling opportunities.

The market size of the integrated supply chain logistics services industry in China reached RMB2,026 billion in 2020, and is expected to further increase to RMB3,190 billion by 2025, growing at a CAGR of 9.5%. Integrated supply chain logistics services penetration, as defined by integrated supply chain logistics services spending divided by outsourced logistics services spending, is also expected to increase from 31.0% in 2020 to 34.6% in 2025.



## Integrated Supply Chain Logistics Spending in China, 2015-2025E

Integrated Supply Chain Logistics Spending Penetration Rate

Source: CIC Report

## Drivers and Opportunities in China's Integrated Supply Chain Logistics Services Market

We believe China's integrated supply chain logistics services providers will benefit from the following themes and opportunities:

- Increasingly sophisticated customer needs in different industry verticals. As end consumers continue to demand faster and more flexible supply chain logistics services, enterprises are incentivized to upgrade their supply chains in order to improve customer satisfaction. The varying characteristics in the supply chains of different industry verticals will necessitate integrated supply chain solutions which can be tailored to the features of each specific industry.
- Efficiency improvement potential at the manufacturing-end of the supply chain. In the past, efficiency improvements in the logistics industry are more geared towards the distribution-end, namely, the transportation of finished products from manufacturers to end consumers. There remains significant potential on the manufacturing-end for further efficiency improvements, which could be achieved by way of better sourcing and procurement for raw materials and production planning with the help of end-to-end integrated supply chain logistics services .
- Demand for data insights and other value-added services. The massive amount of data generated in each section of enterprises' supply chains are very valuable as the analyses of such data enable them to gain a more comprehensive understanding of the sources of inefficiencies in their operations and allow them to make better business decisions. As integrated supply chain logistics services by nature cover the supply chain more broadly, valuable data can be more easily tracked, integrated and analyzed. Such data insights and the ancillary valued added services, such as warehouse network re-design and sales forecasts, that can be offered by integrated supply chain logistics services providers are also attractive and valuable for enterprises.
- **Favorable policy support for developing integrated supply chain logistics services.** The PRC government has prioritized modern supply chain infrastructure as a key development goal, and implemented favorable policies and reforms aimed at improving supply chain efficiency, lowering logistics costs and promoting the adaptation of advanced

technological applications, which are conduct to the development of integrated supply chain logistics services.

Year	Policy	Impact / Implications			
2020	Implementation Plan for Promoting Deep Integration and Innovative Development of the Logistics and Manufacturing Industries 推動物流業製造業深度融合創新發展實施方案	<ul> <li>Optimizes supply chain management in manufacturing by improving operational efficiency and forming a smart supply chain network featuring efficient coordination, improved security and sustainability</li> </ul>			
2020	Implementation Opinions on Further Reducing the Costs of Logistics 關于進一步降低物流成本的實施意見	• Improves service quality and cost efficiency of logistics via the construction of a nationwide logistics network and the modernization of supply chain			
2020	Notice of Further Effectively Conducting the Pilot Program of Innovation in and Application of Supply Chain 關于進一步做好供應鏈創新與應用試點工作的通 知	<ul> <li>Accelerates the digitalization of supply chain and the development of smart supply chain by proactively applying modern supply chain management technologies such as block chain and big data</li> </ul>			
2019	Opinions on Promoting High-quality Development of Logistics Industry to Facilitate	• Builds a high-quality nationwide logistics infrastructure system			
	the Formation of a Strong Domestic Market 關于推動物流高質量發展促進形成强大國內市場 的意見	<ul> <li>Promotes the innovation and digitalization of supply chain in order to improve enterprises' operational efficiencies</li> </ul>			
2018	The Notice on the Construction of a Modern Supply Chain System in the Field of Distribution in 2018 關于開展2018年流通領域現代供應鏈體系建設的 通知	• Improves the development of smart supply chain by normalizing data / data interfaces and improving supply chain intelligence			
2017	Guiding Opinions on Vigorously Advancing the Innovation on and Application of Supply Chains 關于積極推進供應鏈創新與應用的指導意見	• Promotes the application of a coordinating supply chain among manufacturing enterprises to bring down operating and transaction costs, and promotes the visualization and digitalization of such supply chain			
		• Accelerates the construction of a global supply chain and encourages the connection of supply chain infrastructure networks with other countries under the "Belt and Road" initiative			
2016	Outline of the 13 <sup>th</sup> Five-Year Plan for the National Economic and Social Development of the People's Republic of China	<ul> <li>Sets the goal of creating a modernized transportation and logistics system, especially in China's rural areas</li> </ul>			

• Supports the development of third-party logistics

中華人民共和國國民經濟和社會發展第十三個五

年規劃綱要

Market Size and Growth of Integrated Supply Chain Logistics Services Market by Industry Verticals



Source: CIC Report

The above chart illustrates market sizes of integrated supply chain services in selective industry verticals and respective growth rates. It can be observed that as of 2020, the largest selective industry verticals include automotive, FMCG, apparel and 3C electronics. From 2020 to 2025, integrated supply chain logistics spending for fresh produce, FMCG and apparel is expected to grow at a higher rate, which are 18.8%, 14.6% and 12.7% respectively. Each industry vertical also has its own unique features, leading to differentiated demands for integrated supply chain services.

- Automotive: Demand for integrated supply chain logistics services in automotive industry is expected to grow from RMB347 billion in 2020 to RMB446 billion in 2025 at a CAGR of 5.2%. Due to high unit value of automobiles and their parts and components, as well as the large number of SKUs involved, higher supply chain management standards are required in warehousing and transportation. In addition, driven by the rapid development of the electric vehicle market in China, lack of supply chain capability of the electric vehicle startups and demands for integrated supply chain logistics services related to electric vehicle parts and components, charging pile solutions, and aftermarket services are expected to increase significantly.
- **Apparel:** Demand for integrated supply chain logistics services in apparel industry is expected to grow from RMB192 billion in 2020 to RMB349 billion in 2025 at a CAGR of 12.7%. Supply chain management in the apparel industry has many complexities given challenges such as large number of SKUs, multiple distribution layers, high seasonality, requirement for prompt response to rapid changes in end customers' tastes, and frequent reverse logistics. Omni-channel sales model also requires apparel enterprises to flexibly and efficiently manage their inventory across offline stores and online sales channels to improve inventory turnover.

- FMCG: Demand for integrated supply chain logistics services in FMCG industry is expected to grow from RMB221 billion in 2020 to RMB437 billion in 2025 at a CAGR of 14.6%. FMCG products are daily necessities and demand is generally more stable, but sales of FMCG products are affected by frequent promotions and other marketing activities such as the June 18 Anniversary Sale and China's new online shopping festival on November 11 annually and other offline promotion activities, which lead to significant challenges in production and inventory management during sales peaks and troughs. In order to achieve higher operational efficiency and inventory turnover throughout the year, enterprises need specialized integrated supply chain logistics services, comprising of AI and big data analysis, to help them predict orders and manage production and storage accordingly.
- **3C Electronics:** Demand for integrated supply chain logistics services in 3C electronic industry is expected to grow from RMB180 billion in 2020 to RMB316 billion in 2025 at a CAGR of 11.9%. Given the high-value and fragile nature of 3C electronics products, customers in this sector require specialized transportation and delivery capabilities to ensure such products can be reach customers in a timely and secure manner. With increasingly shortened product lifecycle caused by rapid technological advancement, logistics demands in relation to repair, recycling, trade-in, inspection and disposal have also arisen.
- Fresh Produce: Demand for integrated supply chain logistics services in fresh produce industry is expected to grow from RMB62 billion in 2020 to RMB146 billion in 2025 at a CAGR of 18.8%. The transportation and delivery of fresh produce requires cold-chain logistics capabilities and infrastructure such as real-time humidity and temperature control systems, customized packaging capabilities, automated refrigeration equipment, and temperature-controlled vehicles to ensure optimum temperature control during storage and delivery processes. More effective supply-chain management is also required in order to minimize the distance and reduce the number of transits between the product origin of perishable goods and the end customers.
- **Pharma:** Demand for integrated supply chain logistics services in pharmaceutical industry is expected to grow from RMB38 billion in 2020 to RMB60 billion in 2025 at a CAGR of 9.5%. Given the high value, potentially hazardous and fragile nature, pharmaceutical products require greater attention to safety during warehousing, transportation and delivery. In addition, the industry has very strict requirements for temperature control, especially for temperature-sensitive products such as biological agents, vaccines and blood products.
- Home furniture and home appliances: Demand for integrated supply chain logistics services in home furniture and home appliance industry is expected to grow from RMB77 billion in 2020 to RMB117 billion in 2025 at a CAGR of 8.6%. This product category is characterized by its bulky nature, irregular size and dimension of products, and requirement for customized installation and aftersales services. As such, specialized logistics facilities or equipment for transportation and warehousing are required, alongside properly trained to-door delivery personnel, in order to deliver a one-stop experience for end customers.

# COMPETITIVE LANDSCAPE OF INTEGRATED SUPPLY CHAIN LOGISTICS SERVICES MARKET

• The integrated supply chain logistics services market in China is highly fragmented due to the vast size of the market and specific requirements across industry verticals. According to the CIC Report, the top ten players are primarily the logistics arms of large enterprises which were set up initially to serve internal logistics needs but gradually opened up to serve external customers, and supply chain service providers who are dedicated to serve external customers. The top ten players only accounted for 9.0% market share in terms of revenue in 2020. Among the top ten players, we are the largest integrated supply chain logistics service provider with a 2.7% market share in 2020. There is significant potential for consolidation as players who can operate more efficiently and provide better solutions and services at a larger scale will continue to consolidate market and capture more market growth potential. Smaller players, however, are usually regional and industry-focused, which makes it more difficult to scale and consolidate across regions and industries. As such, they are unlikely to pose significant threats to leading players.

Based on the analyses and studies performed by CIC, we do not take into account the business focus of the respective companies set forth below in the ranking of the market players, but take into account the relevant portion of revenue for each market player that can be deemed as integrated supply chain logistics service providers.

Ranking	Company Name	Listing Status	Floor Area (million m <sup>2</sup> )	Revenue (billions of RMB)	Market Share
1	JD Logistics	No	21.0	55.6	2.7%
2	Company A	Yes	6.0	23.0	1.1%
3	Company B	Yes	4.0	19.6	1.0%
4	Company C	No	7.0	14.2	0.7%
5	Company D	No	6.5	14.0	0.7%
6	Company E	No	1.5	13.7	0.7%
7	Company F	No	2.0	13.0	0.6%
8	Company G	No	1.4	10.9	0.5%
9	Company H	No	12.1	10.2	0.5%
10	Company I	No	4.3	9.2	0.5%

### Ranking of Integrated Supply Chain Logistics Service Providers in China, 2020

Source: CIC Report

- Key players within the integrated supply chain logistics services market also have varied levels of integration. Although certain players can provide warehousing and delivery services as a package, there are few players that can provide full-stack solutions that address different aspects of supply-chain logistics, such as supply chain strategic planning and consulting, and have deeply integrated logistics networks for different types of goods.
- The ability to proprietarily develop or adopt new technologies differentiates operational efficiencies among players and their abilities to deliver comprehensive solutions. More technologically sophisticated players are those who can widely apply automation and unmanned technologies throughout all supply chain processes in order to mitigate increasing labor costs, and also best utilize data to track the flow goods and optimize use of resources.

We believe integrated supply chain logistics service providers in China will need to obtain the following capabilities in order to remain competitive in the market:

- Extensive logistics networks. As integrated supply chain logistics service providers offer a comprehensive set of logistics service offerings to customers, extensive logistics networks that can support the storage and transportation needs of different types of goods are essential. Such logistics networks require significant capital to establish, and cannot be replicated over a short period of time. Strategic locations for logistics infrastructure are also scarce resources that incumbent players have already secured. Therefore, it is difficult for players without sufficient scale and infrastructure to compete in the integrated supply chain logistics services market.
- Technological capabilities such as data integration and analytics, automation and unmanned facilities and solutions. Advanced technologies are essential in offering integrated supply chain logistics services. Leading incumbent players are equipped with more advanced abilities to gather, integrate and analyze data across the whole supply chain and different logistics networks in order to provide value-added data insights to customers, in addition to basic logistics services. In addition, to reduce labor cost and improve operational efficiencies, a significant range of proprietary technologies such as unmanned warehouse and other robotics solutions have already been widely implemented by leading incumbent players. New entrants will face severe challenges to keep up with the same pace of adopting and implementing advanced technological solutions at the same level of efficiency and scale due to high initial capital expenditure and lack of industry know-hows.
- Industry know-how accumulated through years of operational experience. Integrated supply chain logistics services providers need to design, implement, operate and continuously adapt to the evolving demands of different industry verticals, and also tailor the solutions for different customers. Such industry know-how needs to be accumulated over time, and the approach in providing such integrated services is significantly different from providing standardized and isolated supply chain logistics services. In addition, as customer relationships of integrated supply chain logistics services tend to be stickier due to deeper cooperation, such industry know-how for incumbent integrated supply chain logistics service players is self-reinforcing over time, further raising the barrier of entry for new industry participants.
- Strong brand image and high quality services. Positive brand image of integrated supply chain logistics providers can affect the consumption choice of end consumers. Strong brand image in logistics services industry comes from consistently delivery of high quality service, which is imperative for customers adopting integrated supply chain logistics services. The potential impact on customers' business operations can be significant in the event of service disruptions given integrated supply chain logistics services are more deeply intertwined with such customers' supply chain functions. Successful integrated supply chain logistics services providers are those who can swiftly react to demand changes of customers and ensure timeliness of delivery, thereby attaining low customer complaint rates and high customer satisfaction.

#### **Source of Information**

We commissioned China Insights Consultancy, an independent market research and consulting firm, to conduct a detailed research and analysis of China's integrated supply chain logistics services market. China Insights Consultancy, founded in Hong Kong, provides professional services including, among others, industry consulting, commercial due diligence and strategic consulting. We have agreed to pay a fee of US\$100,000 to China Insights Consultancy in connection with the preparation of the CIC Report. We are of the view that the payment of such fee does not impair the fairness of the conclusions drawn in the CIC Report. We have extracted certain information from the CIC Report in this section, as well as in the sections headed "Summary", "Risk Factors", "Business", "Financial Information" and elsewhere in this document to provide our potential investors with a more comprehensive presentation of the industry in which we operate.

During the preparation of the CIC Report, China Insights Consultancy performed both primary and secondary research, and obtained knowledge, statistics, information on and industry insights into China's integrated supply chain logistics services market. Primary research involved interviewing key industry experts and leading industry participants. Secondary research involved analyzing data from various publicly available data sources. The CIC Report was compiled based on the following assumptions: (1) the overall social, economic, and political environment in China is expected to remain stable during the forecast period; (2) relevant key drivers are likely to drive the continued growth of China's integrated supply chain logistics services market throughout the forecast period; and (3) there is no extreme force majeure or unforeseen industry regulations in which the industry may be affected in either a dramatic or fundamental way. All forecasts in relation to market size are based on the general economic conditions as of the Latest Practicable Date, which would be adjusted if the COVID-19 outbreak persists or escalates and has an unpredicted negative impact on the general economy.