



Cold chain & Refrigeration Conference

THE FUTURE OF COLD CHAIN IN VIETNAM & ASIA

Date: May 2025



What are the potential opportunities and challenges facing the cold chain industry in Vietnam?

How can FiinGroup help investors capture market opportunities and mitigate challenges?

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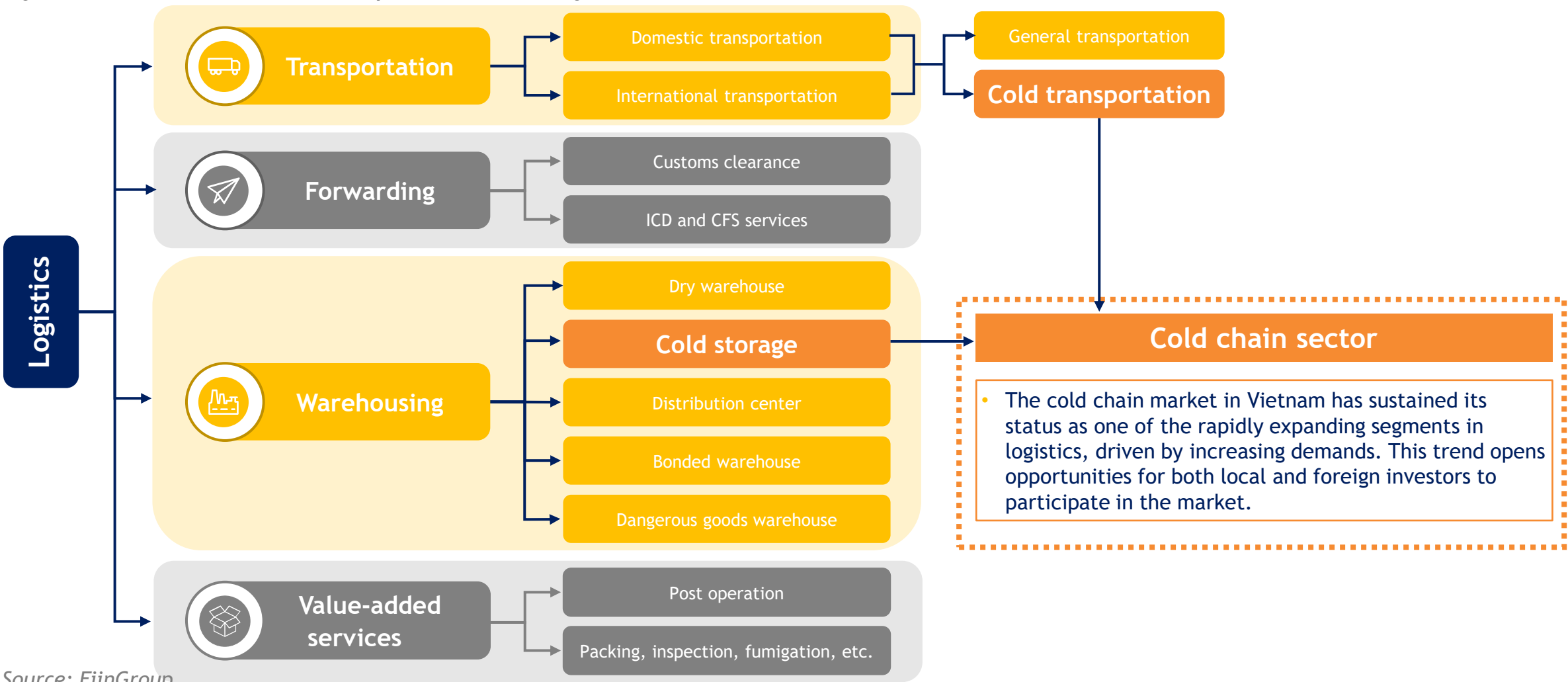
MARKET STRUCTURE AND VALUE CHAIN



MARKET STRUCTURE AND VALUE CHAIN

Cold chain logistics remains one of the most promising segments in Vietnam, propelled by the robust growth of import-export operations, F&B franchised stores, and modern retail trade

Figure 1: Market Structure and Description of Vietnam Logistics Market, 2025

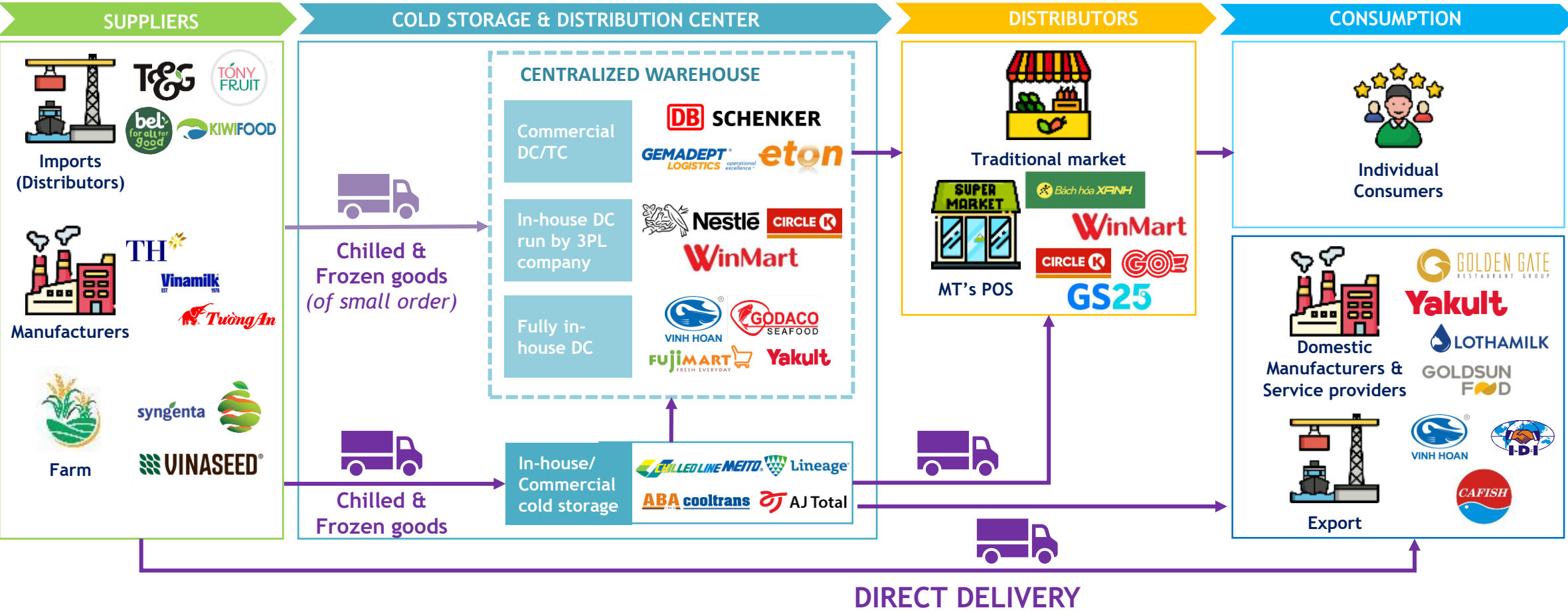


Source: FiinGroup

MARKET STRUCTURE AND VALUE CHAIN

Chilled and frozen goods are delivered from suppliers to cold storage, centralized warehouse, etc., through distributor network, to consumers and export markets

Figure 2: Value Chain of Cold Storage Industry in Viet Nam, 2025



Source: FiinGroup

2

MARKET POTENTIALS & KEY CHALLENGES










Vietnam’s cold chain market is reaching US\$202mn in 2024, with improving pallet density and attractive yield premiums, signaling a move toward more advanced regional benchmarks

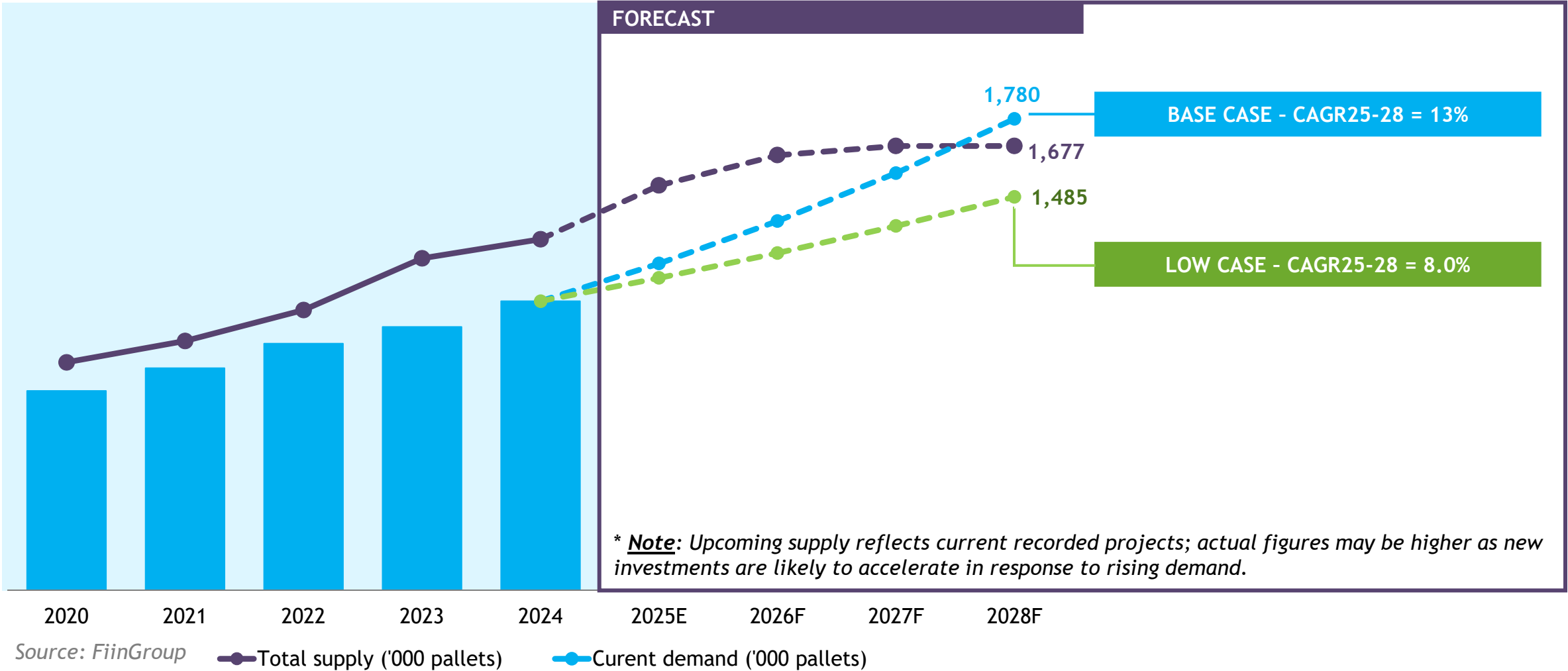
Figure 3: Vietnam Cold Chain Logistics Market Size by Segment: Cold Storage and Cold Transportation, 2024



While Vietnam is advancing toward modern cold chain standards, its storage density still trails regional peers – highlighting strong investment potential

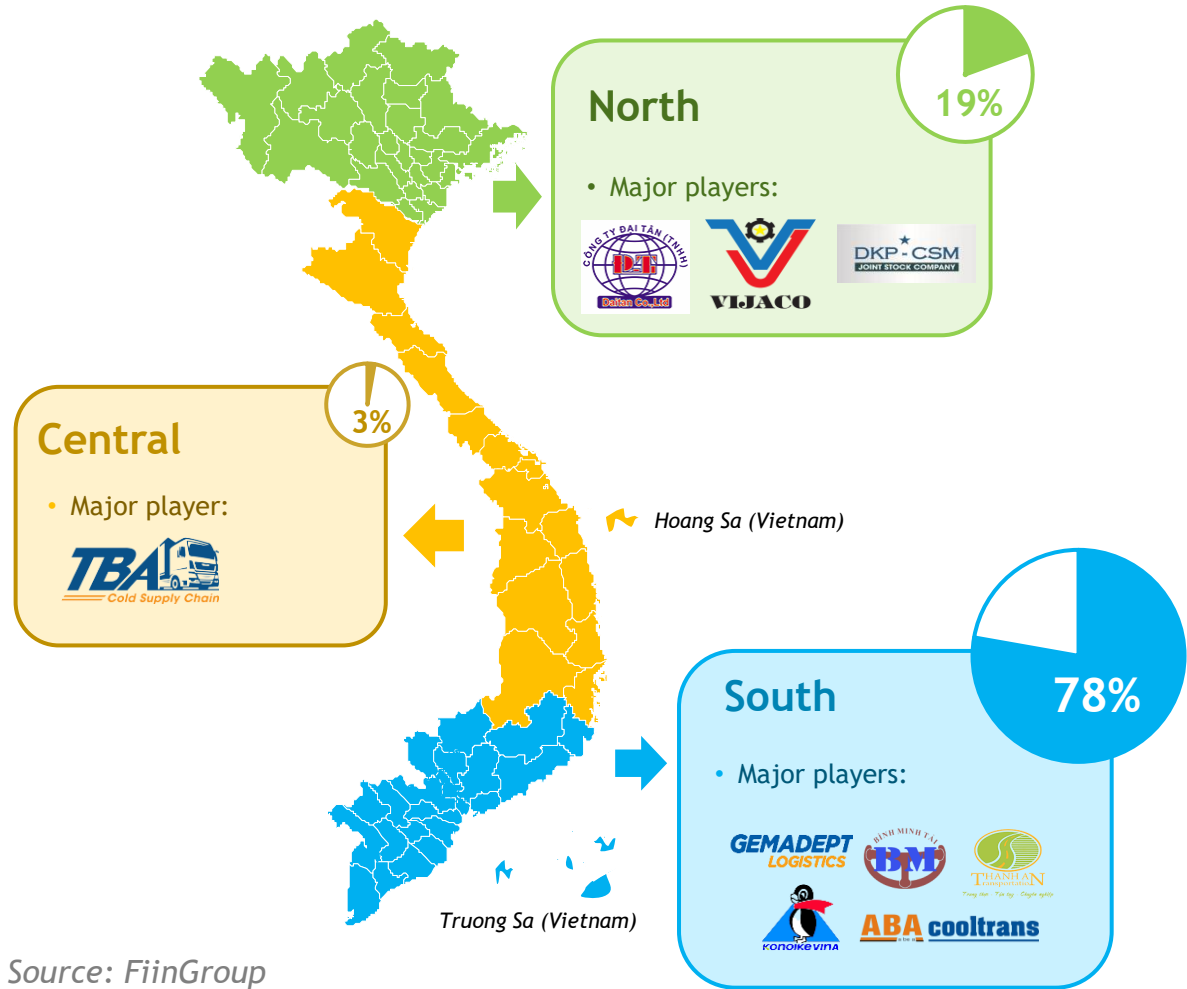
	 Cambodia	 Philippines	 Indonesia	 Vietnam	 Thailand	 Japan	 China
Number of Pallet Spaces	27,150	682,000	820,500	1,325,543	1,464,000	19,587,000	128,865,000
Pallet Spaces Per 10,000 People	16	58	30	132	204	1,592	913

Vietnam’s cold storage market is poised for steady growth (CAGR 8-13%) through 2028, driven by F&B demand and facility upgrades, though US tariff risks may temper export-led expansion



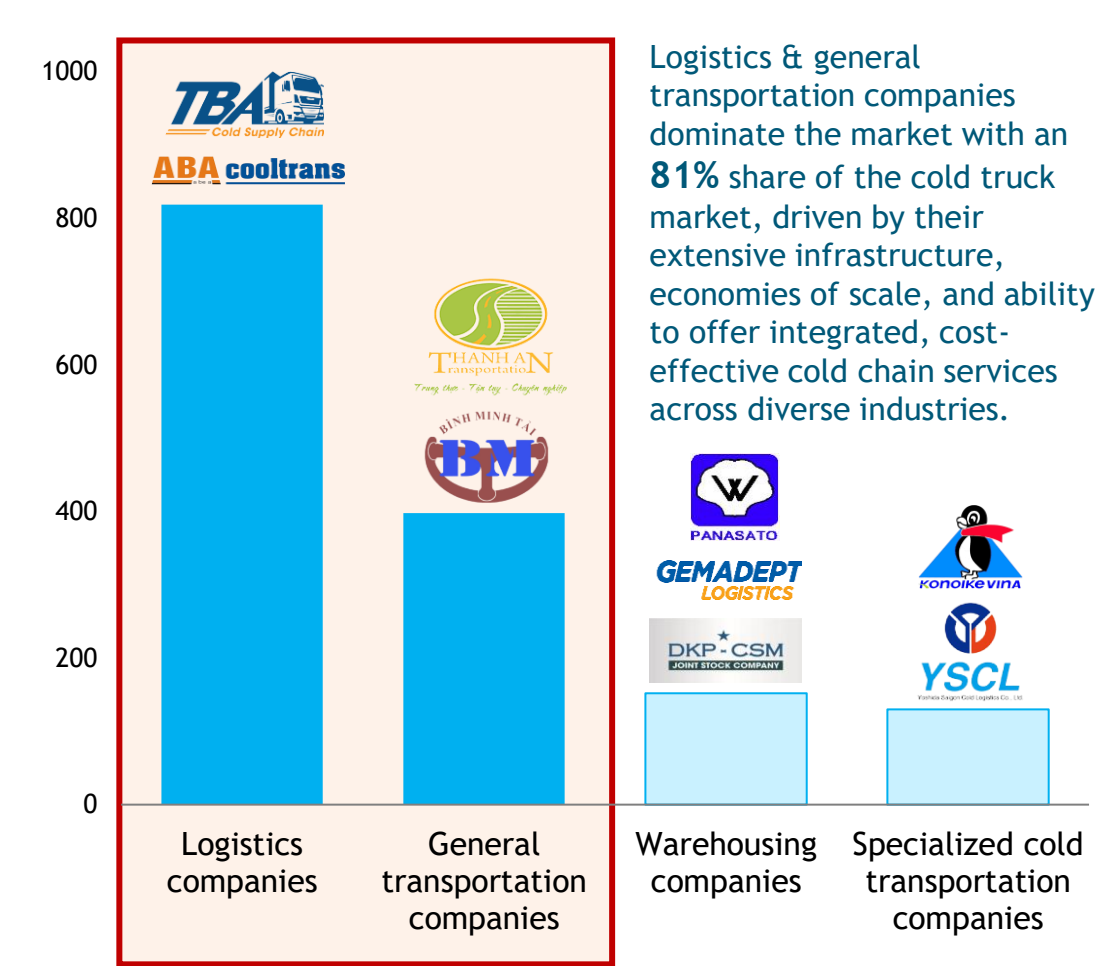
Vietnam cold transportation market size is estimated at 1,499 professionally-managed cold trucks throughout the country in 2024, excluding independent and in-house providers

Figure 4: Number of Professionally-Managed Cold Trucks in Vietnam by Region (Excluding Independent Providers and In-house Truck Teams), 2024



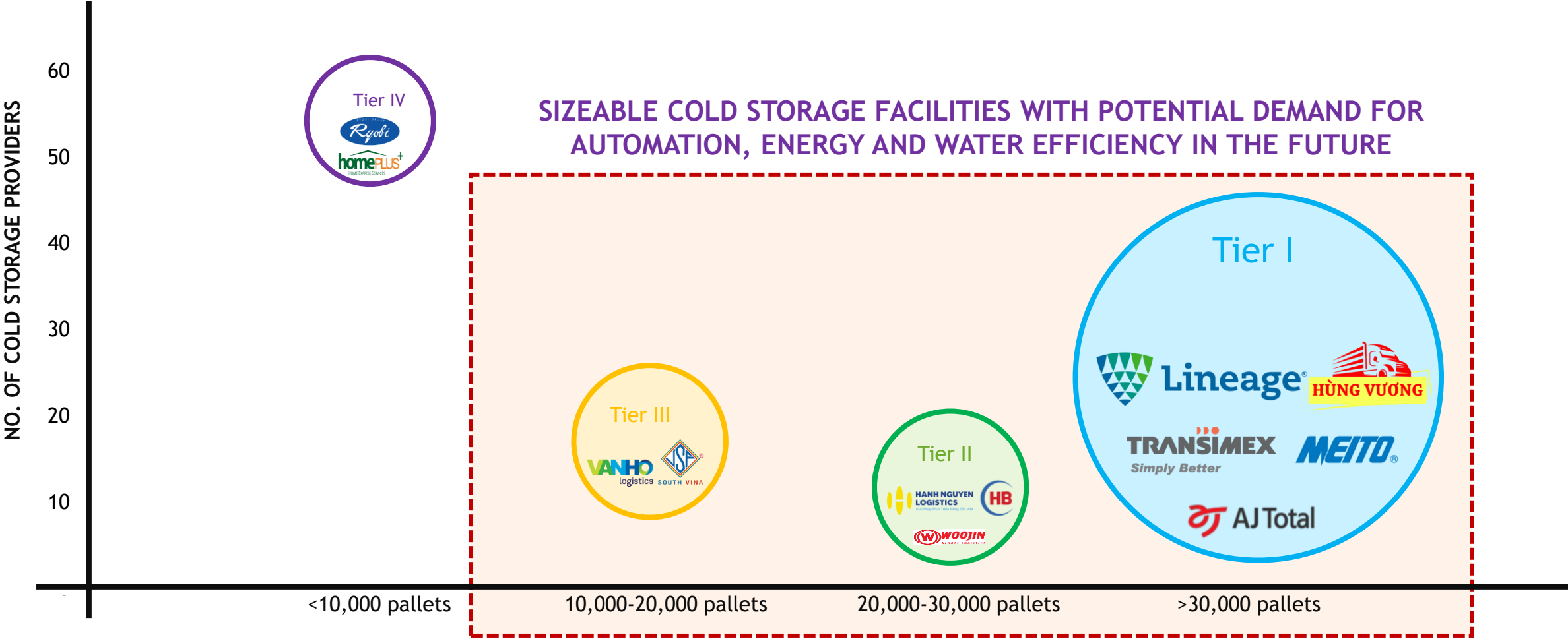
Source: FiinGroup

Figure 5: Breakdown of Cold Transportation Market Size by Company Type, 2024



63.9% of the total cold storage designed capacity in Viet Nam belong to 19 large size players, each with more than 30,000 pallets in designed capacity

Figure 6: Bubble chart of Cold Storage Industry Categorized Grouped by Total Designed Capacity (Pallets), 2024



Source: FiinGroup

COLD STORAGE PROVIDERS GROUPED BY TOTAL DESIGNED CAPACITY

The top 10 players in Viet Nam contributed to 45.2% of the total market share of cold storage by designed capacity in 2024

Figure 7: Market Share of Cold Storage Providers by Designed Capacity in Viet Nam, 2024

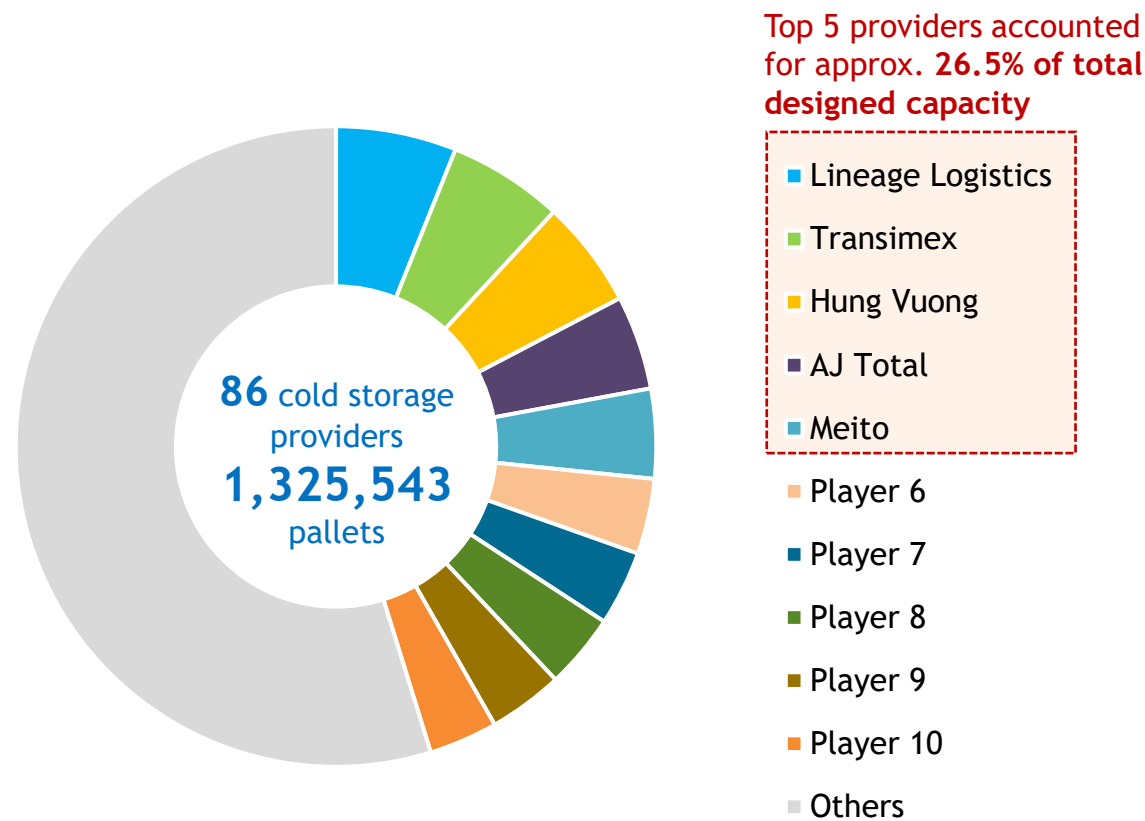
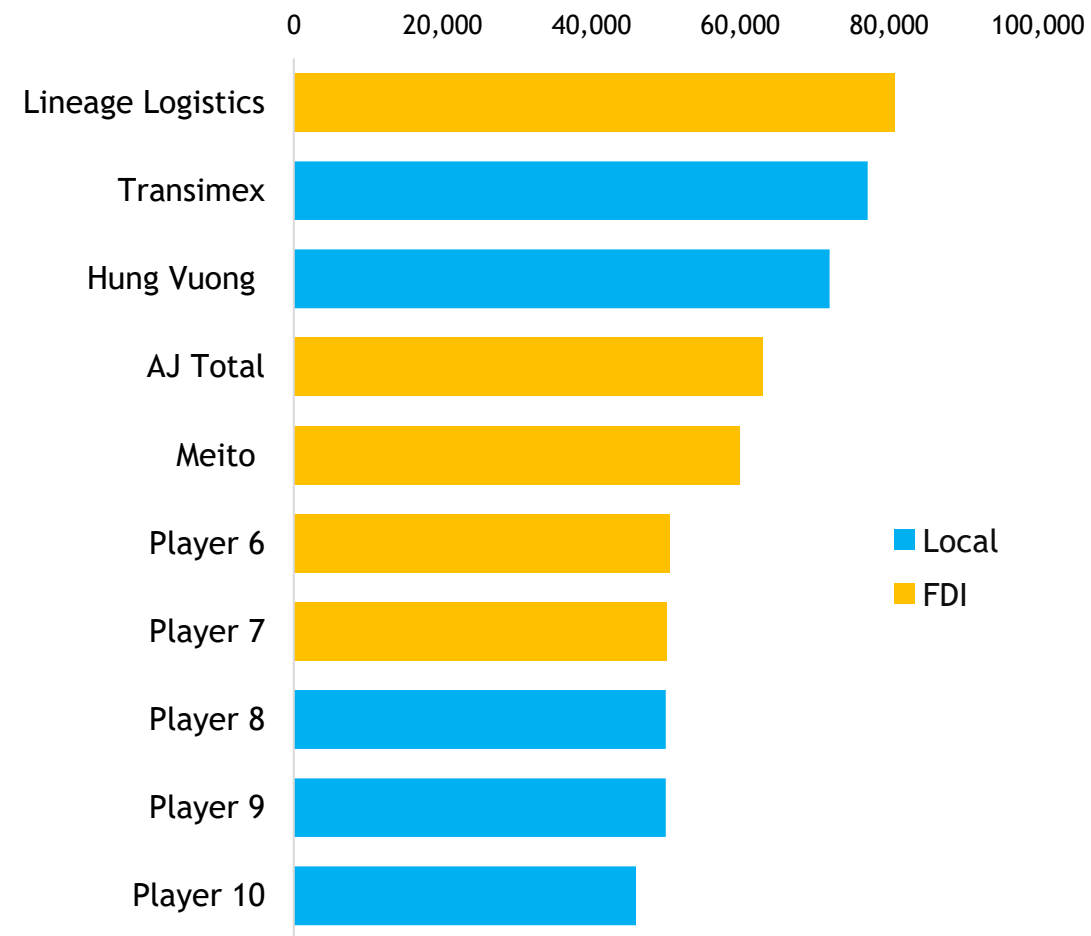


Figure 8: Top 10 Cold Storage Providers by Designed Capacity (pallets) in Viet Nam, 2024



Source: FiinGroup

Given the growth drivers and risks, the cold storage sector will be benefited greatly from the economic recovery and trade development

Growth Drivers



Exploring FTAs with leading economies

- ❑ Viet Nam's extensive network of 17 FTAs is driving rapid growth in food trading. For example, seafood export are expected to reach over US\$10bn in 2024, a 12.1% y-o-y growth.



Robust development of modern trade

- ❑ The number of shopping malls, supermarkets, minimarts, and convenience stores witnessed rapid growth with a CAGR of 17.2% from 2019 to 2024.



Population, income rise & urbanization boost

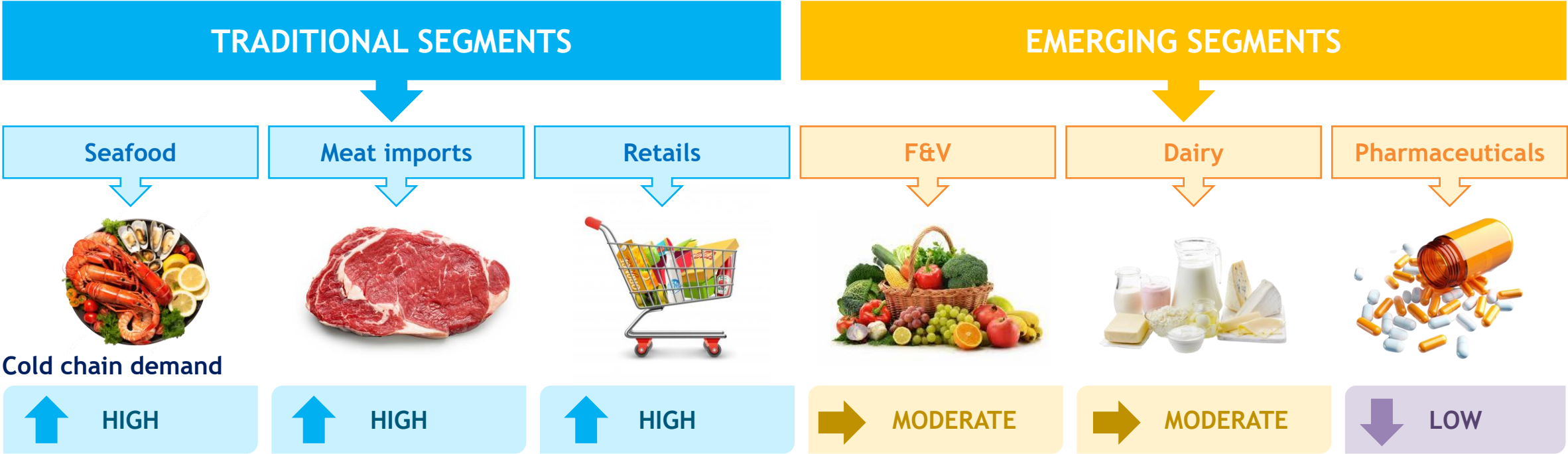
- ❑ With 100M+ people, 12.4% CAGR in disposable income, and >40% urbanization, Vietnam's cold chain demand is accelerating through modern trade and chilled goods demand



Recovery of the restaurant sector

- ❑ The recovery of Viet Nam's restaurant sector post Covid-19 pandemic, with revenues rebounding by over 16% annually post-pandemic, is driving higher demand for cold storage.

Given the growth drivers and risks, the cold storage sector will be benefited greatly from the economic recovery and trade development (cont'd)



Industry growth & outlook (2020-2024)

- | | | | | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none">• Moderate growth due to US tariff impact, yet cold storage needs remain strong due to strict preservation standards & export-related delays. | <ul style="list-style-type: none">• Steady growth; cold storage demand remains high with rising protein intake. | <ul style="list-style-type: none">• Moderate growth aligned with urban retail expansion and fresh delivery trends, supporting steady cold chain demand. | <ul style="list-style-type: none">• Fastest growth, but storage demand stays modest due to fragmented supply and short cycles. | <ul style="list-style-type: none">• Slowest-growing segment; limited cold storage reliance due to fast turnover cycles and distribution via short-term cold chains. | <ul style="list-style-type: none">• Rapid growth driven by healthcare expansion & stricter temperature control needs; cold storage demand is rising but from a low base. |
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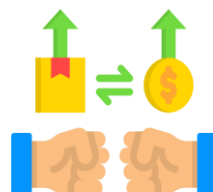
With current headwinds from U.S. tariffs and global slowdown, Vietnam's cold chain sector is entering a phase where resilient operations and selective investment will define the winners

Risks



Global economies slowdown

- ❑ The key drivers for cold storage demand in Vietnam are seafood export and food raw material (i.e. fresh, chilled, and frozen meat). Thus, when the leading international markets face economic slowdown, demand for seafood export from Vietnam also faces a decline which subsequently lead to a decrease in cold storage demand.



Intensive domestic competition

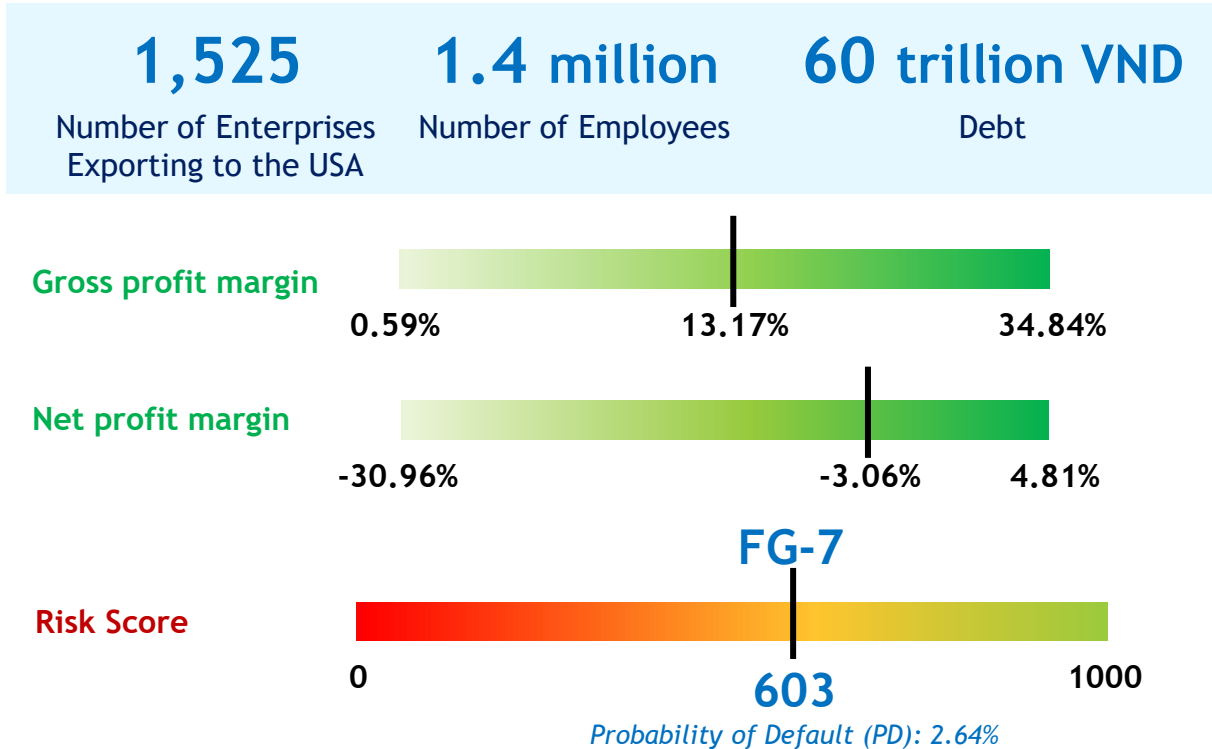
- ❑ The cold storage market in Vietnam is highly competitive, with over 80 players and an abundant supply of storage facilities, leading to intense price competition.



Uncertainty over U.S. retaliatory tariff

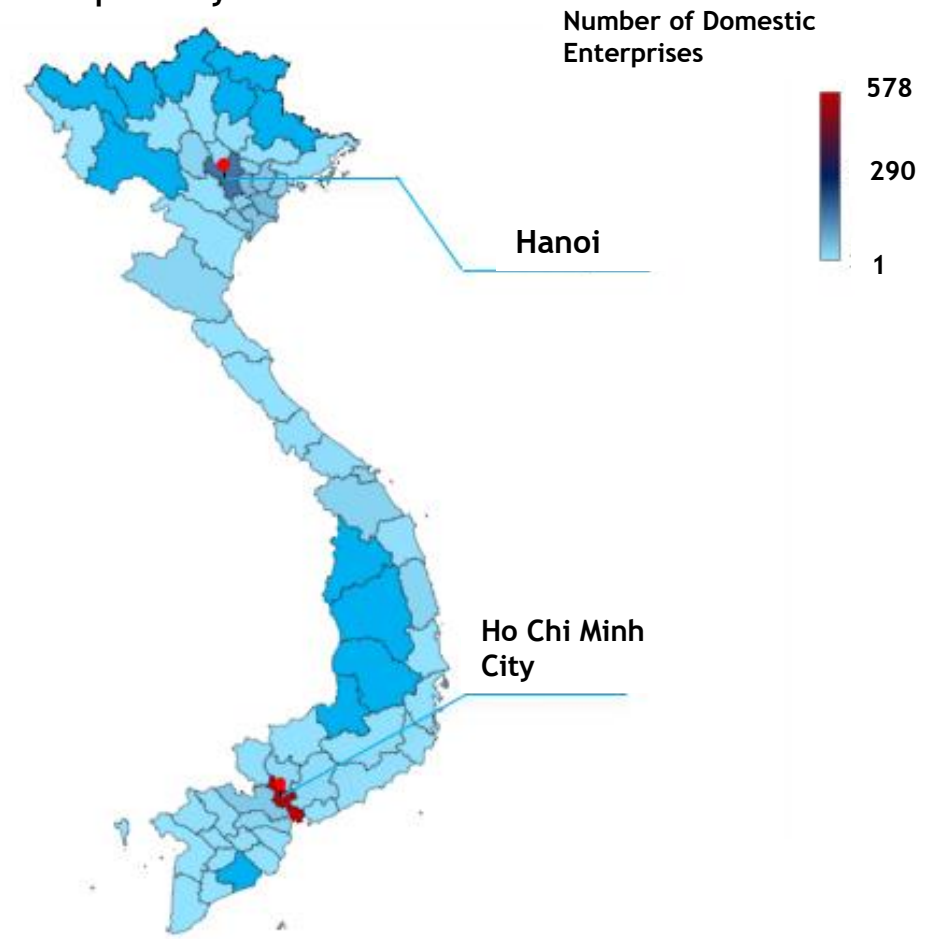
- ❑ U.S. market accounts for approx. 30% of Vietnam's export value, with key export products including seafood and textile & garment, both of which are major drivers of cold chain demand in Vietnam
- ❑ The high retaliatory tariff by the U.S. is likely to reduce overall Vietnamese export volumes, particularly in key sectors like seafood - one of top exports to the USA and highly dependent on cold storage infrastructure.
- ❑ Seafood exporters may be forced to scale back operations, delay shipments or divert goods to alternative markets with lower returns, directly weakening demand in long term

Vietnam's textile & garment exports to the US face margin pressures and moderate credit risk



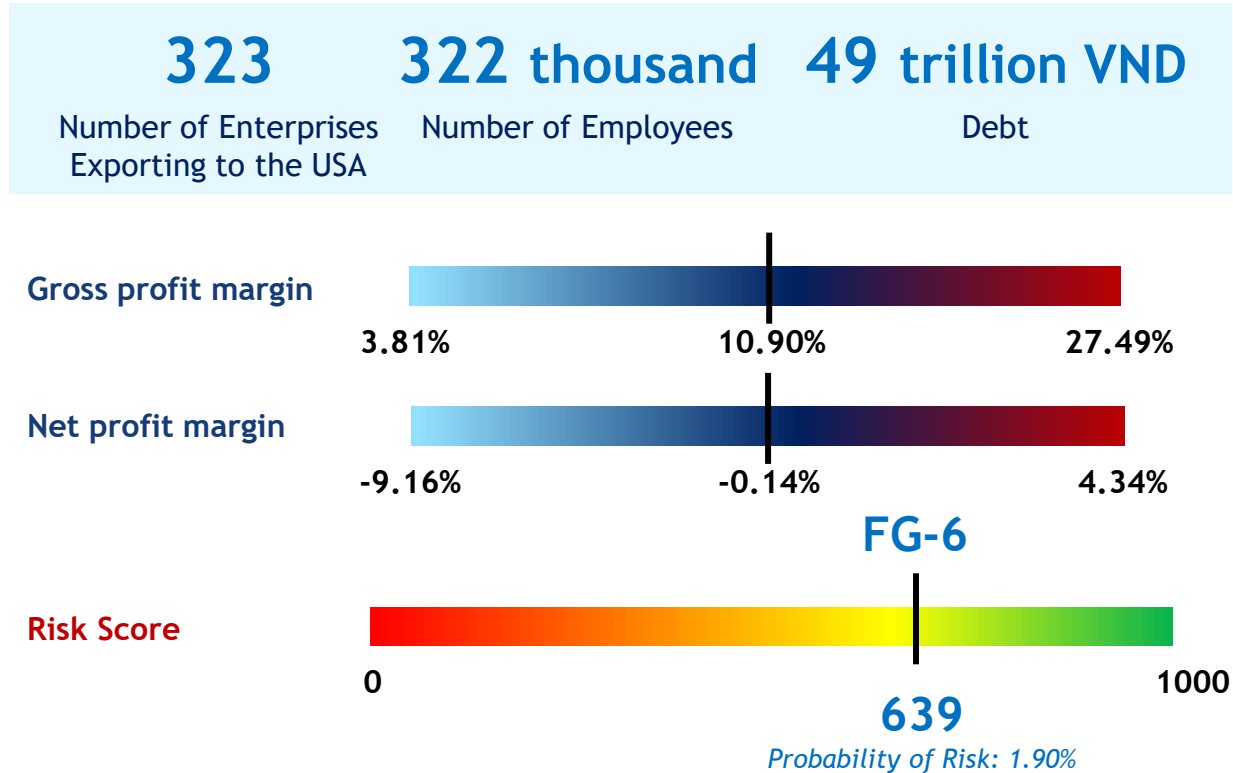
- The export-oriented textiles and garments sector serving the United States comprises 1,525 domestic enterprises, which collectively employ 1.4 million workers and maintain approximately VND 60 trillion in outstanding credit.
- Profitability analysis indicates gross profit margins between 0.59 % and 34.84 % (mean: 13.37 %), contrasted with net profit margins ranging from -30.96 % to 4.81 % (mean: -3.06 %).
- On average, these enterprises are rated FG-7 on FiinGroup's 18-level risk scale, corresponding to a 2.64 % probability of default.

Figure 9: Number of Domestic Textile & Garment Enterprises by Province



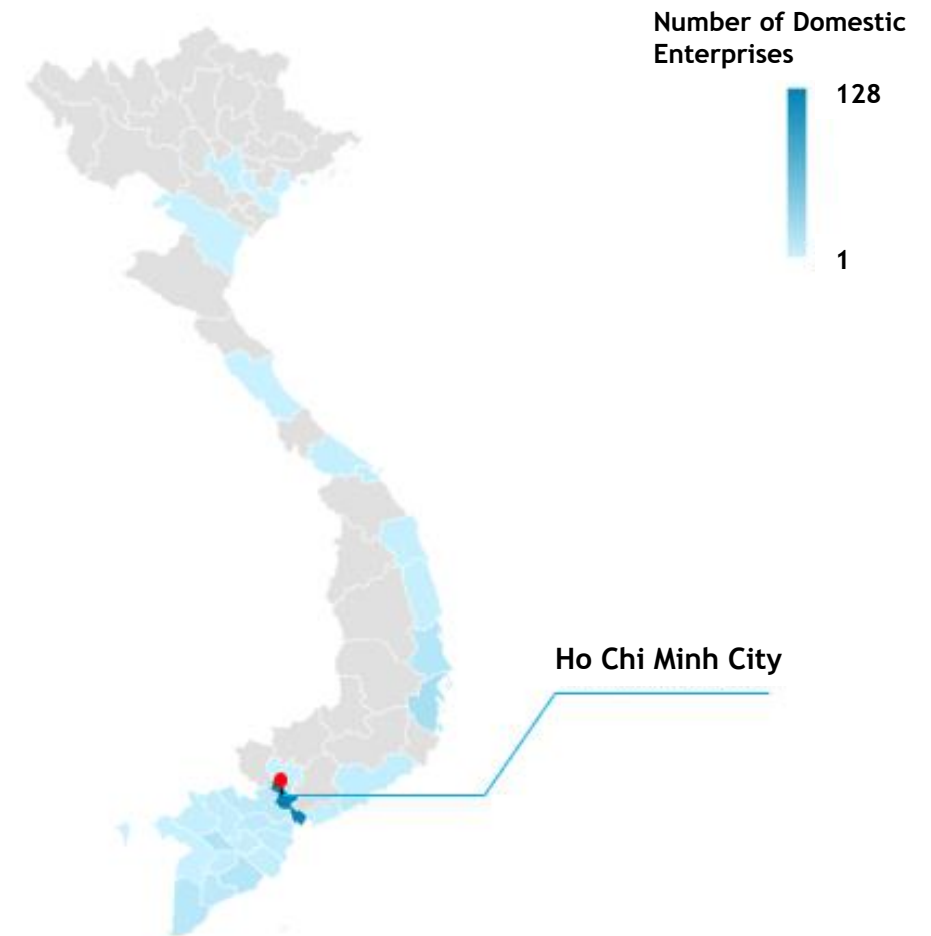
Source: FiinGroup

The same story happens to Vietnam seafood sector



- The aquatic products (Seafood) sector exporting to the U.S. comprises 323 domestic enterprises, employs 322 thousand workers, and carries about VND 49 trillion in credit debt.
- Gross profit margins range from 3.81% to 27.49% (average 10.90%), while net profit margins span -9.16% to 4.34% (average -0.14%).
- Enterprises have an average risk score of FG-6 on FiinGroup's 18-level scale, corresponding to a probability of risk of 1.90%.

Figure 10: Distribution of Domestic Seafood Enterprises by Province



Source: FiinGroup

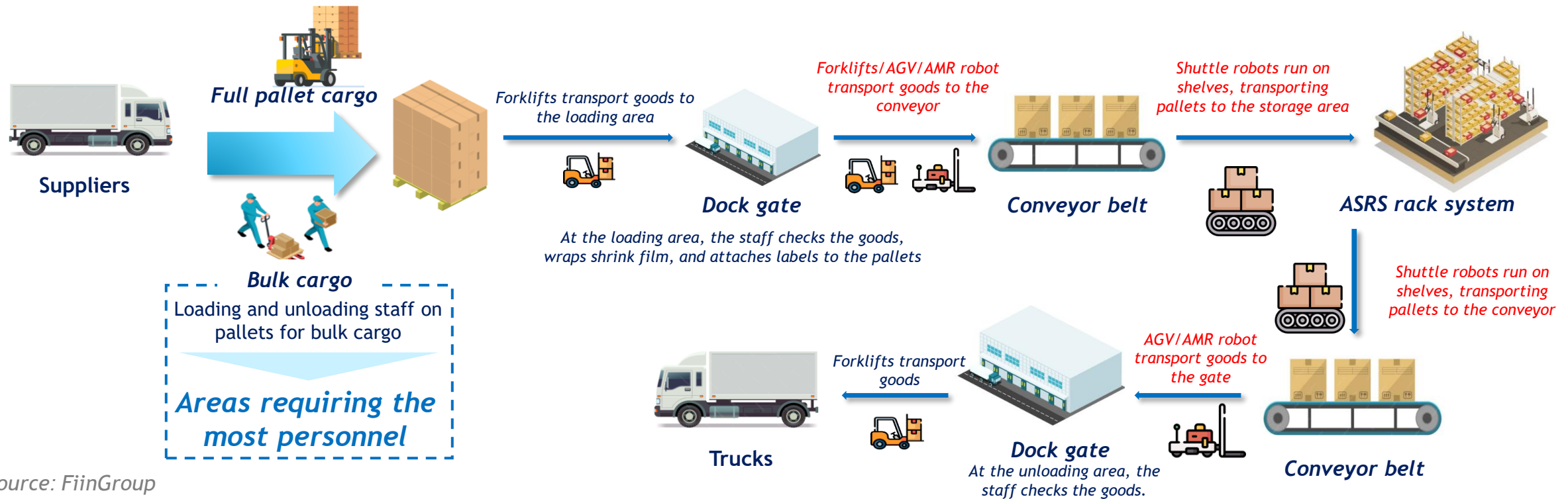
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Application of technology in cold chain



Automation with robotic systems is starting to be applied in Vietnam's cold chain industry to reduce labor requirements while improving accuracy and operational safety.

Figure 11: Typical Operating Model of Cold Storage Facilities in Vietnam, 2025



Source: FiinGroup



Automation with robotic systems helps reduce labor requirements while enhancing accuracy and operational safety.

- ✓ Robot for lifting and unloading operations: shuttle robots, AGV/AMR robot
- ✓ Robots for cleaning tasks

APPLICATION OF TECHNOLOGY IN COLD CHAIN

*Among green solutions, **rooftop solar systems** remain the most widely adopted, while **energy efficiency technologies** are increasingly prioritized by cold storage operators in their investment considerations*

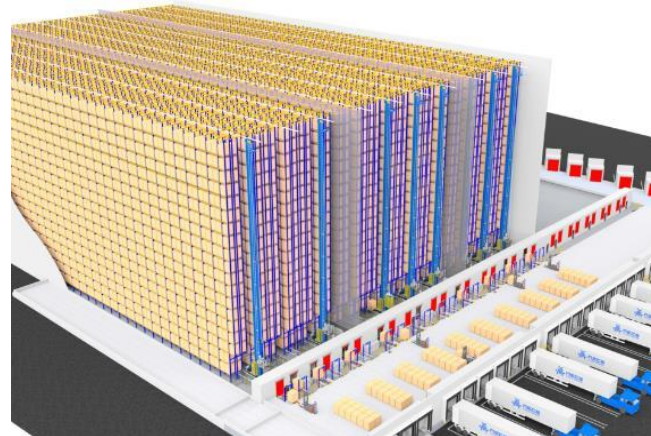
Rooftop solar power systems stand out as the most common choice

ROOFTOP SOLAR



Energy efficiency technologies—especially automation solutions

AUTOMATED STORAGE AND RETRIEVAL SYSTEM



APPLICATION OF TECHNOLOGY IN COLD CHAIN

Energy efficiency technologies and equipment are becoming more prevalent in Vietnam's cold storage sector

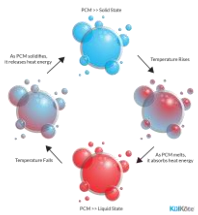
ENERGY-EFFICIENT TECHNOLOGIES



Automated storage and retrieval system (AS/RS)



Energy-efficient blast freezer



Phase-change materials (PCM)



Smart Cooling Technologies

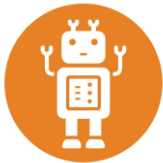
ENERGY-EFFICIENT EQUIPMENT



Drive-through loading dock, temperature-controlled ante-room



Modern cross-docking area design



Automated robots for goods handling and palletizing



LED lighting

APPLICATION OF TECHNOLOGY IN COLD CHAIN

Potential technology could be adopted by cold storage service providers in the future for energy and water savings

ENERGY-EFFICIENT TECHNOLOGIES



Green building - Vacuum Insulation Panels (VIPs)



Energy-efficiency - Heat recovery system

WATER EFFICIENCY TECHNOLOGIES



Water-Efficient Cooling Systems



Wastewater Heat Recovery



Smart Water Management Systems



Greywater Recycling

What are key challenges for the modern technology application in cold chain industry in Vietnam

- 1 High investment cost leading to longer payback period of cold storage facilities
- 2 Need customized solutions: existing robotic systems work well with standardize packaging while less efficiency with irregularly sized or packaged in retail and supermarket warehouses
- 3 Highly skilled labor is required to ensure the proper operation of modern cold storage facilities.
- 4 Integrating heat recovery solutions, VIPs, water efficiency solutions into current cold storage infrastructure can be complex and may need significant modifications.



KEY CHALLENGES

What are the potential opportunities and challenges facing the cold chain industry in Vietnam?

How can FiinGroup help investors capture market opportunities and mitigate challenges?

1



Customer's pain points & FiinGroup's solutions

CUSTOMER'S PAIN POINTS AND FIINGROUP'S SOLUTIONS



PAIN POINTS

I want to know the current situation of cold storage and whether I should invest in the Vietnam market



FIINGROUP's SOLUTIONS

- ❖ Market Assessment on Cold chain industry in Vietnam, including,
 - ✓ Market size & outlook
 - ✓ Occupancy rate & trends
 - ✓ Competitive landscape
 - ✓ Pricing strategy
 - ✓ Etc.

I want to build a new cold storage in Vietnam

- ❖ Location screening
- ❖ Licensing supports
- ❖ Assessment of cold storage demand and potential customers in the project area
- ❖ Revenue projection

I want to find potential target for M&A

- ❖ Target screening to identify potential target
- ❖ Deal engineering
- ❖ Financial advisor
- ❖ Due diligence advisory
 - ✓ Commercial due diligence
 - ✓ Business due diligence



PAIN POINTS

What're our competitors doing?
How is our cold storage's
positioning?



FIINGROUP's SOLUTIONS

- ❖ Market watch on key competitor in the service area
 - ✓ Market share
 - ✓ Operational benchmarking (i.e. occupancy rate, pricing, service offerings, target customers, etc.)
 - ✓ Positioning of customer's warehouse in the market (i.e. market share, key competitive advantages,

How can I increase my
occupancy rate and recruit more
customers?

- ❖ Market watch on key competitor in the service area
- ❖ Screening of potential customers in the service area
 - ✓ Identify potential product category (i.e. seafood, dairy, etc.)
 - ✓ Leading companies in each segment in service area
 - ✓ Customers' criteria for service provider and willingness to switch to new service providers

I want to find potential
investor/partner for our cold
storage

- ❖ Target screening to identify potential investors/partners
- ❖ Deal engineering
- ❖ Financial advisor
- ❖ Business plan development
- ❖ Merger filling supports



A leading industrial conglomerate in Korea

Client's request

- Understanding of cold storage sector in the South of Vietnam and identifying sales strategy for new cold storage facility

Name of service

- Customized Market Research

FiinGroup's deliverables

- ✓ In-depth analysis of the Cold Storage Market in the South of Vietnam (i.e. market size, occupancy rate, competitive landscape)
- ✓ In-depth analysis of Vietnam Cold Storage Market (i.e. total designed capacity in pallets, sales revenue in US\$m, breakdown of designed capacity by region including North, Central, and South)
- ✓ FiinGroup's recommendation on sales strategy, including target segment and target customer base; service offering and pricing scheme; marketing activities and sustainable competitive advantage.



A leading Japanese Corporation

Client's request

- Understanding of the cold storage sector in Long An Province and to identify potential customers in order to support business development activities of its new cold storage

Name of service

- Customized Market Research

FiinGroup's deliverables

- ✓ In-depth Analysis of Cold Storage in Long An Province, including service charge & occupancy rate of major cold storage facilities,
- ✓ Competitive landscape amongst key players in Long An Province (i.e. market share, operational benchmarking, financial performance)



A leading Vietnamese Logistics Corporation

Client's request

- Conducting a comprehensive study on cold storage market in Vietnam in order to develop a new cold storage in Binh Duong Province (Vietnam)

Name of service

- Customized Market Research

FiinGroup's deliverables

- ✓ To deeply understand the situation of cold storage market in Vietnam
- ✓ To assess competitive dynamics of cold storage market throughout Vietnam, especially in the South
- ✓ To identify potential customers for its new warehouse facilities in the South

Result

- ✓ IFC, a member of the World Bank Group, provided a financing package of US\$70 million to this Corporation. The Corporation was the first Vietnamese logistics firm to receive a financing package from the IFC

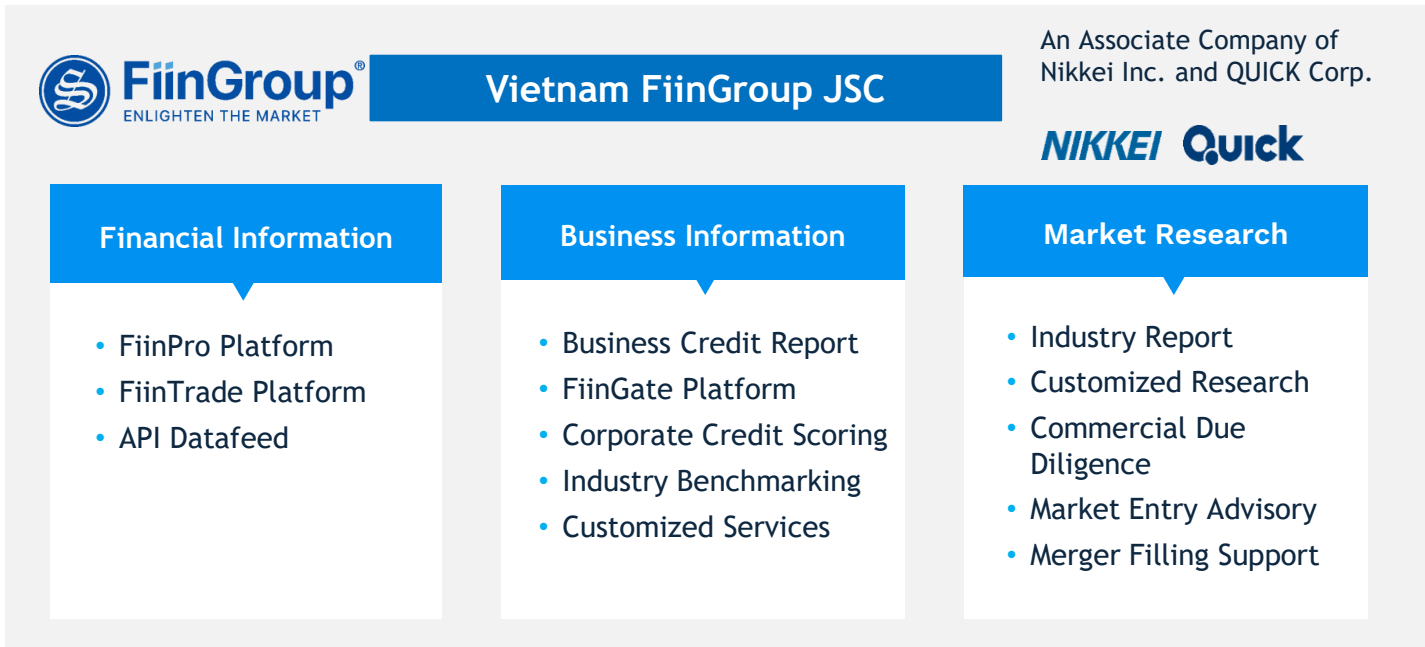
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FiinGroup's introduction

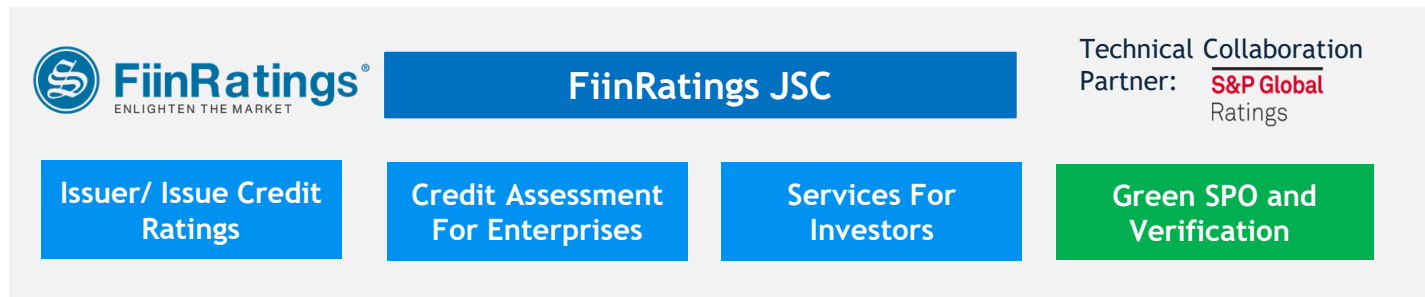


FiinGroup at a glance / Business Portfolio

FiinGroup provides financial data, business information, industry research, credit rating and other data-driven analytics services via Platform as a Service (PaaS), annual package and on-call services.



(wholly owned subsidiary)



Date of establishment
March 11th 2008



Charter Capital
VND 25 billion



Legal Representative
Nguyen Huu Hieu



Auditor
pwc



Shareholders
NIKKEI: 17.55%
QUICK: 17.55%
Management and others: 64.9%



Partners
NIKKEI Quick **S&P Global Ratings**



Personnel

180+

Data Analysts, Financial Analysts, Market Analysts, Risk Analysts with CFA/ ACCA/ CPA Charter holders, IT Engineers & Commercial Staff

Our Research and Advisory Capabilities

Leveraging our in-depth expertise, industry & corporate database, and extensive local business network, we are able to support customers and investors with a wide range of solution to capitalize on the potential in the cold chain and logistics domains

Services Features

Industry Report

On-the-shelf industry reports provide in-depth analysis of key sectors in Vietnam. **For the cold chain sector, we offer coverage spanning the past 10 years.**

Research & Assessment

In-depth assessment of the market identification of potential opportunities areas for in the cold chain and logistics sectors in Vietnam

Target Screening & Deal Origination

Identifying suitable investment opportunities upon the customer's pre-determined criteria to achieve M&A strategy.

Apart from this, we offer our clients deal origination by in-depth discussion with the representatives of these selected companies.

Commercial Due Diligence

In-depth analysis of target company's market environment, competitive landscaping, its business attractiveness, and market positioning in M&A transaction.

Deal Support Services

Transaction support services are related to pre-and post-M&A processes, dedicated for the buyer(s) and the seller(s) by providing valuable insights in order to reduce the risks associated with investment decisions.

Vietnam Cold Chain Market Report 2025

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Client Portfolio

We have earned the trust of renowned Japanese, Korean and multinational corporate clients and been rewarded with long-term, repeat-client engagements

Japanese

Marubeni



Sumitomo Corporation



SMBC
SMBC
CONSUMER FINANCE



TOHO GAS



JERI Japan Economic Research Institute Inc.



SBI SHINSEI BANK



NOMURA



AEON Financial Service



OJI HOLDINGS



DBJ



JBIC

Korean



HYOSUNG

SAMSUNG

ShinhanCard

kotra

Korea Trade-Investment
Promotion Agency



KB Kookmin Card



LOTTE HIMART



LOTTE FINANCE



National IT Industry Promotion Agency

MIRAE ASSET
Finance Company



DASS Tech

Local

TECHCOMBANK



VNG

HOME CREDIT

SHB Finance
TÀI CHÍNH TIÊU DÙNG

mcredit
Cần vay, được ngay

DUYTAN
PLASTICS



EVNFINANCE



XUAN THANH CEMENT



FE CREDIT
VAY TIÊU DÙNG TÍN CHẤP

HD SAISON



Dai-ichi Life Vietnam
Fund Management - DFVN

VietCredit



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