China, Import by Product

| Mach and Elec 29.44% | Fuels 15.93% | Chemicals 7.37% | Vegetable 4.82% | | Plastic or Rubber 3.95% | |
|-------------------------|--------------------|------------------------|--------------------------|------------------|-------------------------------|--|
| | Minerals 11.18% | Metals 6.07% | Stone and Glass 3.49% | Animal 2.19% | Textiles | |
| | | Miscellaneous 5.94% | Wood 2.22% | Food Products | 5 | |

China, Export by Product

| Mach and Elec 43.00% | Miscellaneous 12.10% | Metals 7.86% | Transportation 5.17% | Plastic or Rubber 4.85% |
|-------------------------|--------------------------------|--------------------|--------------------------|----------------------------|
| | Textiles and Clothing 9.07% | Chemicals 6.35% | Stone and Glass 2.91% | Wood Fuels Food 1.55% |
| | | | Footwear 2.18% | Hides and Skins |

According to the picture, we can list the types and proportions of the top ten products for both imports and exports. For imports, the top ten products include Mach and Elec (29.44%), Fuels (15.93%), Minerals (11.18%), Chemical (7.37%), Metals (6.07%), Miscellaneous (5.94%), Vegetable (4.82%), Stone and Glass (3.49%), Plastic or Rubber (3.95%), and Wood (2.22%). For exports, the top ten products consist of Mach and Elec (43.00%), Miscellaneous (12.10%), Textiles and clothing (9.07%), Metals (7.86%), Chemical (6.35%), Transportation (5.17%), Plastic or Rubber (4.85%), Stone and Glass (2.91%), Footwear (2.18%), and Wood (1.55%). On the one hand, we can see that several products are listed in both import and export, including Mach and Elec, Miscellaneous, Chemical, Metals, Stone and Glass, and Plastic or Rubber. Mach and Elec holds the highest proportion in both import and export, accounting for 29.44% and 43.00% of imports and exports respectively. Then, Miscellaneous is in the second rank, holding a share of 5.94% in imports and 12.10% in exports. The proportions of other products that existed in imports and exports do not differ significantly, with variances ranging between 1-2%. On the other hand, some products have a prominent position in one of the lists. Fuels and Minerals together contribute to more than 20% of total imports. To be precise, 15.93% of them were Fuels, and 11.18% were Minerals. Vegetable also holds a special position in imports, with a smaller proportion of 4.82%. In terms of exports, Textiles and clothing is in the third position, with 9.07% of total exports, while Transportation and Footwear account for 5.17% and

2.18% respectively.

Now, let's introduce some basic theories of international trade and explain the data presented in the picture. From the perspective of the product, international trade can be classified into two types: interindustry trade (a country imports and exports products belonging to different industry sectors) and intraindustry trade (a country both exports and imports the same type of product within a certain period). Nowadays both inter-industry and intra-industry trade are crucial for the global economy. In the early years, inter-industry trade was prevalent and could be explained by theories such as the absolute advantage theory, comparative advantage theory, and factor endowment theory. However, since the 1960s, there has been a phenomenon in international trade practice that contradicts traditional trade theories. It was observed that international trade primarily occurs between developed countries rather than between developed and developing countries. Additionally, developed countries traded with similar products. To explain this phenomenon, the field of international economics introduced a new theory known as intra-industry trade theory, and it provided four mainstream explanations for the occurrence of intra-industry trade: product heterogeneity, diverse preferences, overlapping demand and economic development levels, economies of scale.

Products: Mach and Elec

Explanation: Mach and Elec is in the predominant position in China's imports and exports. When comparing import and export data, it is clear that China's exports in the Mach and Elec significantly surpass its imports. This trend reflects China's manufacturing and production capabilities in this sector. In reality, China excels in the middle to lower-end segment of the Mach and Elec, demonstrating remarkable competitiveness. This allows China to utilize economies of scale and technological advantages, thereby reducing production costs and enabling substantial exports. However, in the high-end Mach and Elec, due to technological barriers, China still requires imports to meet its domestic needs.

Products: Chemical, Metals, Stone and Glass, Plastic or Rubber

Explanation: Product heterogeneity is the main character in these sectors, meaning they are in various types to cater to the diverse demands of different markets and customers. Therefore, China imports these products from other countries because products manufactured in different countries may be suitable for various

purposes. Likewise, China exports a variety of products to meet the needs of other countries. Furthermore, consumers in different countries may have different preferences for these products. For example, some countries may prioritize environmental sustainability, leading to higher demand for products made from renewable or eco-friendly materials. This can impact trade in sectors such as Chemicals, Plastics or Rubber, as China can produce products aligned with these preferences. Additionally, some countries may emphasize cost-effectiveness, preferring to import low-cost Metals, Stone and Glass, and Plastic or Rubber from China.

Products: Fuels, Minerals, Textiles and clothing, Transportation

Explanation: According to factor endowment theory, the reason why China imports Fuels is mainly that there is a domestic shortage of energy resources in China. Despite being the world's largest coal producer, China's rapid industrialization and urbanization have led to an increased demand for Fuels such as oil and natural gas. China needs to import significant quantities of Fuels to meet its domestic demands. Similarly, while China possesses abundant rare earth elements and resources, it may relatively lack other mineral resources. For cost theory, China maintains its exports partly could be attributed to its relatively lower production costs. With its vast labor resources, China can achieve economies of scale, thus reducing the production costs per unit. This enables China to produce and export Textiles and Clothing at competitive prices. In addition, China has invested heavily in the field of Transportation, fostering advanced technology and manufacturing capabilities. This includes innovations in areas such as high-speed railways, electric vehicles, and new energy transportation. As a result, China holds a technological advantage in these domains, contributing to its ability to export such products.