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Chinese Foreign Direct Investment In Italy:

Regional and Industry Distribution and Financial Performance

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Abstract

As time progresses, Foreign Direct Investment (FDI) from various countries is positively impacting the rapid development of the global economy. This thesis first introduces what FDI is, various theories of FDI, and the impact of FDI on the global economy. It then focuses on the changes in Chinese outward FDI policy and how Chinese FDI in Italy is evolving. We use data from AIDA database to retrieve Chinese ownership in firms located in Italy. We then analyze the regional and industrial distribution of Chinese firms in Italy and we compare with firms under other countries ownership (France, Germany, the United States, the United Kingdom) as well as firms with Italian ownership. Chinese firms appear to be concentrated both in geographical and industry terms. We also analyze the financial characteristics of Chinese owned firms to find that their financial structure is quite peculiar as they appear to be overall much more indebted but specifically much less indebted with banks than other firms. This thesis provides a thorough and updated map of Chinese ownership among firms located in Italy thereby providing a novel picture useful for researchers and policy makers.

Introduction

In an era of unprecedented globalization, the intricate dance of economies has made foreign direct investment (FDI) one of the key factors influencing the dynamics of global economic development. As countries and industries become intertwined, the channels through which investment flows reflect not just financial transactions but also strategic goals, technology transfers and socioeconomic impacts. This study delves into the field of foreign direct investment, focusing on the changing landscape of Chinese foreign direct investment in Italy, as China plays a very important role in the global foreign direct investment field.

Central to any discussion about foreign direct investment is an understanding of its nature. This concept is usually regarded as a complex economic phenomenon, which is essentially a reflection of the strategic interests and pursuits of multinational enterprises. This involves not only capital allocation but also broader themes such as economic integration, technology transfer and job creation. The first chapter of this study explains the basic concepts, theories and types of FDI. By exploring well-known ideas such as Hymer and Dunning's theory, we can gain insights into the motivations behind FDI and its various manifestations. In addition, this chapter also reveals the determinants of FDI and its multifaceted impacts, laying a solid foundation for subsequent in-depth exploration.

The global canvas of foreign direct investment paints intricate patterns of investment, revealing a story of economic aspirations, strategic shifts and geopolitical impacts. Chapter 2 embarks on a journey across this landscape, tracing the trajectory of global foreign direct investment and how the winds of globalization have shaped its course. In this mosaic, the story of China is particularly prominent. From its emergence as an important FDI recipient to its continued evolution as an important FDI exporter, China's story is both fascinating

and instructive. This chapter provides an in-depth look at the reasons behind China' s enormous attractiveness to foreign investment and its growing role in the global foreign direct investment landscape.

However, it is within Sino-Italian relations that this research finds its unique niche. Chapter three is dedicated to revealing the burgeoning relationship between China and Italy. While Italy's rich history, strategic location and dynamic economy make it a coveted investment destination, the emergence of Chinese foreign direct investment in the country is evidence of the changing global economic order. This chapter carefully analyzes the regional and industrial distribution of Chinese direct investment in Italy, revealing patterns, trends and strategic imperatives by using the data from AIDA.

Chapter 4 broadens the scope and places Chinese direct investment in Italy in a comparative context. The study provides a holistic view of the Italian investment landscape by comparing it with investments in other major economies such as France, Germany, the United States and the United Kingdom. Such a comparative analysis not only enriches our understanding of Chinese FDI but also provides insights into the broader investment strategies of major global players in the Italian sector.

An analysis of FDI is incomplete without assessing its economic impact. Therefore, Chapter 5 examines the financial performance of Chinese-owned companies in Italy. The unique financial structures and strategies employed by these companies provide a window into the ethos and strategic goals of their operations in foreign lands.

All in all, this article is not only an academic exploration but also a timely account of the shifting sands of global economic dynamics represented by China and Italy. By providing an up-to-date map of Chinese corporate ownership in Italy, it provides a valuable resource for researchers, policymakers, and anyone passionate

about understanding the nuances of foreign direct investment in today' s connected world.

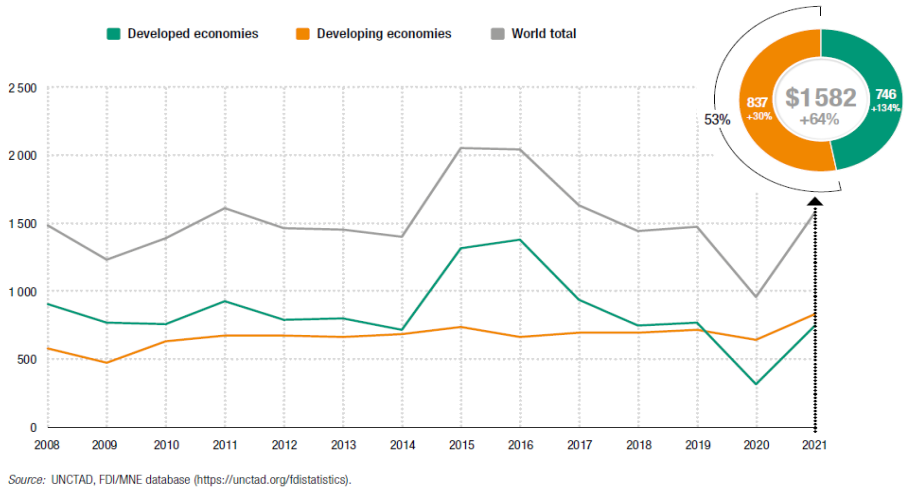
Chapter 1. Introduction of FDI

1.1 Definition of FDI

Foreign direct investment (FDI) plays a significant role in the global economy, fostering cross-border investment and promoting economic growth. It involves investments made by companies or individuals from one country into businesses or entities located in another country. FDI is characterized by direct control and ownership of assets in the foreign country, distinguishing it from other forms of investment. By exploring the concept of FDI in more detail, supported by relevant data and graphs.

FDI can be measured through various indicators, including inward flow, outward flow, and stock. Inward flow represents the value of direct investment made by non-resident investors in a particular country, reflecting the amount of foreign investment received. Outward flow, on the other hand, measures the value of direct investment made by resident investors into foreign economies. FDI stock represents the historical cumulative investment held by investors from one country in businesses or entities located in another country.

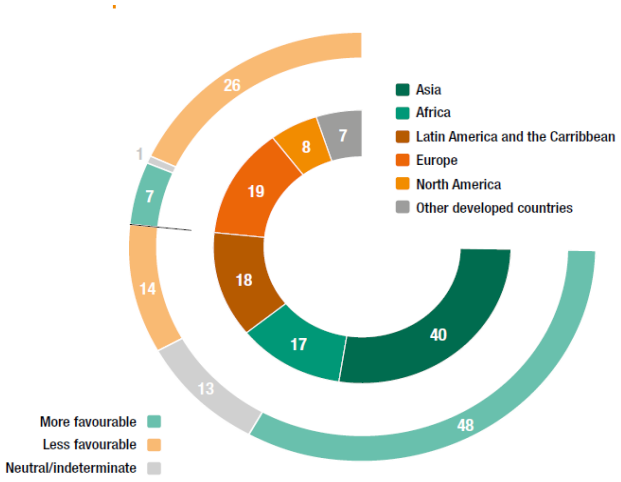
According to the UNCTAD World Investment Report 2022, FDI flows have shown both growth and fluctuations in recent years. In 2021, global FDI flows reached $1.58 trillion, marking a 64 per cent increase compared to the previous year. However, FDI flows were projected to decline in 2020 due to the COVID-19 pandemic and the associated economic uncertainties. To visualize this, we can refer to a graph illustrating the trend of global FDI flows over the past decade. (see Figure 1.1.1)



[Figure 1.1.1 FDI inflows, global and by economic grouping, 2008-2021]

[Source: UNCTAD, FDI/MNE database]

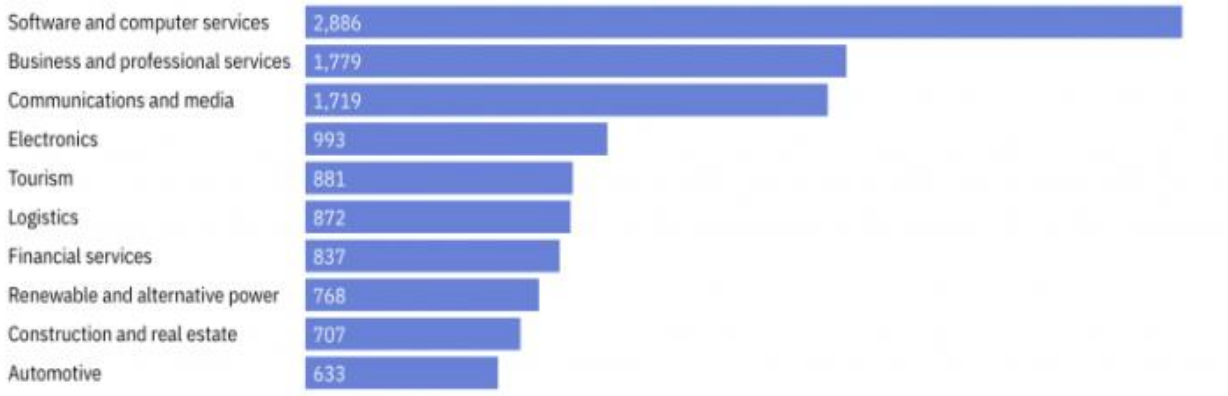
In addition to the overall FDI flows, the distribution of FDI across regions and countries is another crucial aspect. Historically, developed countries have been the largest recipients of FDI due to their established markets, infrastructure, and skilled labor force. However, emerging economies have been increasingly attracting FDI as well, offering market potential and favorable investment climates. A graph depicting the distribution of FDI flows across major regions can provide a clearer picture. (see Figure 1.1.2)



[Figure 1.1.2 Regional distribution of national investment policy measures in 2021]

[Source: UNCTAD, Investment Policy Monitor]

Greenfield investment, a type of FDI, plays a significant role in promoting economic development. (It will be introduced in detail in subsequent articles.) It involves establishing new businesses or facilities from scratch in foreign countries, contributing to job creation, technology transfer, and infrastructure development. Greenfield FDI projects can range from manufacturing plants to research and development centers. Analyzing the trends and patterns of greenfield investment can shed light on the sectors and countries attracting significant inflows. (see Figure 1.1.3)



[Figure 1.1.3 Top ten FDI sectors by number of greenfield FDI projects, 2021]

[Source: GlobalData's FDI Projects Database]

In conclusion, foreign direct investment is a critical driver of economic growth and globalization. Its definitions and measurements, including inward and outward flows, as well as FDI stock, provide insights into the extent and impact of cross-border investments. While FDI flows have experienced fluctuations in recent years, the distribution of FDI among regions and the prominence of greenfield investments contribute to shaping global investment trends. Governments and policymakers around the world recognize the importance of attracting FDI and creating favorable investment climates to stimulate economic development.

1.2 Definition of Multinational Enterprises

According to Organization for Economic Co-operation and Development (OECD): "A multinational enterprise (MNE) is an enterprise that engages in foreign direct investment and owns or controls value-adding activities in more than one country." (OECD. (2015). OECD Guidelines for Multinational Enterprises) MNEs engage in FDI to establish a presence in foreign markets, aiming to expand their operations, access resources, and tap into new consumer bases. By investing directly in foreign countries, MNEs can establish subsidiaries, joint ventures, or acquire existing companies to gain control over value-adding activities.

These enterprises are characterized by their ability to coordinate and integrate activities across borders, leveraging their global presence to optimize production, distribution, and marketing strategies. By capitalizing on diverse markets, resources, and knowledge, MNEs seek to achieve economies of scale, enhance competitiveness, and exploit comparative advantages in different countries.

MNEs contribute to economic growth and development in various ways. They create employment opportunities, transfer technology, introduce managerial practices, and facilitate knowledge spillovers in host countries. Additionally, they generate tax revenues and foster economic linkages with local suppliers and service providers. The operations of MNEs can contribute to enhancing productivity, promoting innovation, and improving the competitiveness of domestic industries.

Furthermore, the sectoral distribution of MNE activities can provide insights into the industries where MNEs are most prevalent, reflecting their areas of expertise and strategic focus. Also reflects the MNEs' ability to leverage their competitive advantages and technological expertise in specific industries.

MNEs are multinational entities that operate across borders through foreign direct investment. Their global reach, strategic decision-making, and ability to leverage resources and knowledge from multiple countries give them a unique competitive

advantage. MNEs contribute to economic growth, technology transfer, and trade integration while also facing scrutiny and expectations regarding responsible business conduct. Understanding the complexities and dynamics of MNEs is crucial for policymakers, researchers, and businesses operating in the global marketplace.

1.3 Hymer's Theory and Dunning's Theory

Hymer's theory of multinational enterprises (MNEs), developed by economist Stephen Hymer in the 1960s, provides valuable insights into the motivations and behavior of firms engaging in foreign direct investment (FDI) and the role of multinational corporations in the global economy. This theory offers a critical perspective on the factors driving the internationalization of firms and the advantages they seek through cross-border investments.

According to Hymer, the fundamental driver behind the emergence of MNEs is the presence of market imperfections. He argued that these imperfections, particularly in the form of monopolistic advantages and internalization advantages, create incentives for firms to engage in FDI and establish foreign operations rather than relying solely on exporting or licensing arrangements.

Monopolistic advantages refer to the unique assets and capabilities possessed by firms that allow them to establish a market position and earn above-average profits. These advantages can include technology, patents, brand recognition, managerial expertise, or access to key inputs. Hymer emphasized that these advantages are not easily transferable or replicable, giving firms a competitive edge over local competitors in foreign markets.

Internalization advantages, on the other hand, arise from the firm's ability to internalize certain activities or functions within its own organizational structure rather than relying on external transactions. By internalizing operations in foreign markets through FDI, firms can exercise greater control over key activities such as production, distribution, marketing, and research and development. This control allows them to capture and protect the value created within the firm, reducing transaction costs, and minimizing the risks associated with relying on external partners.

Hymer's theory challenges the traditional neoclassical trade theory, which suggests that firms engage in international trade based on differences in factor

endowments or comparative advantage. Instead, Hymer's theory highlights the importance of firm-specific advantages and market imperfections as key drivers of FDI and the internationalization of firms.

Hymer's theory has also influenced subsequent research on the determinants of FDI and the strategies of MNEs. Scholars have further explored the role of firm-specific advantages, the importance of intellectual property rights, the impact of globalization on the strategies of MNEs, and the relationship between FDI and economic development.

Dunning's theory of international production, often referred to as the eclectic paradigm or OLI framework, is a prominent framework that explains the motivations and strategies of multinational enterprises (MNEs) engaging in foreign direct investment (FDI). Developed by economist John Dunning, this theory provides a comprehensive analysis of the factors driving cross-border investments and the advantages that firms seek when entering foreign markets.

The eclectic paradigm consists of three interconnected components: ownership advantages, location advantages, and internalization advantages.

1. Ownership advantages (O):

Ownership advantages refer to the firm-specific assets, capabilities, or resources that give MNEs a competitive edge in international markets. These advantages can include technology, patents, brand recognition, managerial expertise, access to distribution channels, or economies of scale. Such ownership advantages allow MNEs to earn above average profits by exploiting their unique assets in foreign markets.

2. Location advantages (L):

Location advantages focus on the specific attributes and conditions of the host country that make it an attractive destination for FDI. These advantages can include access to natural resources, skilled labor, infrastructure, market size, political stability, favorable regulations, or proximity to key markets. MNEs aim to

leverage these location-specific factors to enhance their competitiveness and optimize their operations.

3. Internalization advantages (I):

Internalization advantages arise from the firm's ability to internalize certain activities or functions within its own organizational structure rather than relying on external markets or partners. By internalizing operations through FDI, MNEs can reduce transaction costs, protect proprietary knowledge, maintain control over critical activities, and coordinate global operations more efficiently. Internalization advantages enable MNEs to capture and retain a greater share of the value generated within the firm.

Dunning's theory has had a significant impact on the field of international business and has provided a basis for understanding the strategies and behaviors of MNEs. The OLI framework has been applied in various empirical studies and has been influential in shaping research on FDI and the operations of MNEs.

1.4 Types of FDI

Foreign direct investment (FDI) can take various forms depending on the nature and objectives of the investment. The types of FDI can be categorized as follows:

1. Horizontal FDI:

Horizontal FDI occurs when a company expands its operations in a foreign market within the same industry or engages in similar production activities as its home country. The primary objective is to extend the market reach, gain economies of scale, access new customers, or exploit market-specific advantages. Horizontal FDI often involves setting up production facilities or acquiring competitors or local firms to strengthen the company's market position and enhance its competitive advantage.

2. Vertical FDI:

Vertical FDI involves investments that occur along the value chain, encompassing both backward and forward linkages. Backward vertical FDI occurs when a company invests in activities that provide inputs or raw materials to its existing operations. This could include investing in suppliers or securing access to key resources. Forward vertical FDI, on the other hand, involves investments in distribution channels, marketing, or retail operations to reach customers more effectively. Vertical FDI allows companies to control the entire production process, reduce costs, ensure quality standards, and secure a stable supply of inputs.

3. Merger and Acquisition (M&A):

Mergers and acquisitions involve the purchase or acquisition of an existing company in a foreign country. MNEs acquire either a controlling or a substantial stake in the target company to gain access to its assets, resources, technologies, market share, or customer base. M&A can provide a faster entry into a foreign market compared to greenfield investments. It allows the investing company to leverage the established infrastructure, distribution networks, and market

presence of the target company. However, M&A involves integrating different organizational cultures and systems, and there may be challenges in aligning the operations of the acquiring and acquired companies.

4. Joint Ventures (JV):

Joint ventures involve a partnership between a foreign and domestic company to establish a new business entity. Both parties contribute capital, resources, technology, and expertise to the joint venture and share ownership, control, risks, and profits. Joint ventures allow companies to access local knowledge, distribution channels, and market insights provided by the domestic partner. They also help in navigating legal, political, and cultural complexities of the host country. However, joint ventures require effective collaboration, negotiation, and risk-sharing among the partners, as differences in objectives, management styles, and decision-making processes can arise.

5. Greenfield Investment:

Greenfield investment refers to the establishment of a new subsidiary or facility in a foreign country. It involves building operations from the ground up, including constructing new facilities, acquiring land, and hiring local staff. Therefore, this type of FDI typically requires significant capital investment. They offer opportunities to customize infrastructure, implement advanced technologies, and tailor the business to local market conditions in order to allow companies to have full control over their operations in the foreign market. This type of FDI provides the greatest level of control and flexibility but also requires significant upfront investment and entails higher risk.

6. Brownfield Investing:

Brownfield investing typically involves the purchase or takeover of underutilized or distressed assets, such as industrial plants, factories, or real estate properties. These assets may require renovation, modernization, or remediation to bring them up to operational standards. Brownfield investments often focus on revitalizing existing infrastructure or repurposing facilities for new activities.

Comparison with Greenfield Investing:

a. Control and Flexibility: Greenfield investments offer maximum control and flexibility, as companies have the freedom to design and construct operations according to their specific requirements. In brownfield investments, companies have to work with existing structures and may have limited flexibility.

b. Time and Speed: Greenfield investments generally take longer to set up, requiring time for land acquisition, construction, and obtaining necessary permits. Brownfield investments can be faster as they leverage existing infrastructure.

c. Risk and Uncertainty: Brownfield investments may involve lower risks compared to greenfield investments, as they utilize existing assets and benefit from established market presence. Greenfield investments carry higher risks and uncertainties associated with starting operations from scratch.

d. Costs: Brownfield investments can be more cost-effective initially, as they leverage existing facilities. Greenfield investments often require significant capital expenditure for land, construction, and infrastructure development.

e. Technology and Innovation: Greenfield investments provide opportunities for introducing advanced technologies and state-of-the-art facilities. Brownfield investments may require upgrading or modernizing existing technologies and equipment.

It is important to note that the choice of FDI types depends on various factors, including the nature of the industry, market conditions, legal and regulatory frameworks, and the objectives and resources of the investing company.

7. Platform FDI:

Platform FDI occurs when a company establishes its operations in a specific country or region to serve as a base for conducting business activities in nearby countries. The purpose of platform FDI is to leverage geographic proximity, access regional markets, and benefit from economies of scale and scope. Companies establish regional hubs or platforms to centralize functions such as manufacturing,

distribution, research and development, or services. By doing so, they can streamline operations, share resources, optimize logistics, and achieve cost efficiencies.

It's important to note that these types of FDI are not mutually exclusive, and companies often employ a combination of strategies based on their specific goals and market conditions.

1.5 Determinants of FDI

Foreign direct investment (FDI) is influenced by number of factors and determinants that shape the investment decisions of multinational enterprises (MNEs). These determinants can be classified into six categories:

1. Market-related Determinants:

Market Size and Potential: Countries with large and growing markets attract FDI due to the potential for increased sales and profits. MNEs seek to tap into consumer demand in these markets to expand their customer base and achieve economies of scale.

Market Growth Rate: Higher growth rates in a country's market indicate a greater potential for return on investment, which encourages FDI inflows. Rapidly growing markets offer opportunities for MNEs to capture a larger market share and generate higher revenues.

Consumer Preferences: FDI is influenced by consumer demand and preferences. Factors such as income levels, purchasing power, demographic trends, and cultural factors shape market attractiveness for MNEs. They analyze consumer behavior to identify target markets for their products or services.

2. Resource-related Determinants:

Natural Resources: Availability of natural resources can attract FDI, especially in industries related to resource extraction or processing. Countries with abundant reserves of minerals, oil, gas, or agricultural resources often attract investment from MNEs seeking access to these resources.

Human Capital: Skilled labor and a well-educated workforce are crucial determinants of FDI. MNEs seek countries with a pool of qualified and trainable workers who can contribute to their operations. The presence of skilled labor

allows companies to establish research and development centers, innovation hubs, and high-value-added production facilities.

Infrastructure: Adequate infrastructure, including transportation networks, energy supply, telecommunications, and logistical facilities, is essential for efficient business operations. Countries with well-developed infrastructure attract FDI as it reduces costs, improves connectivity, and facilitates the smooth flow of goods and services.

3. Policy-related Determinants:

Investment Incentives: Governments often provide investment incentives to attract FDI. These incentives may include tax breaks, grants, subsidies, or special economic zones that offer preferential treatment to foreign investors. Such incentives can reduce the cost of investment and enhance the overall attractiveness of a country as an investment destination.

Trade Policies: Favorable trade policies play a significant role in attracting FDI. Countries that adopt open trade policies, lower tariffs, and participate in free trade agreements create an environment that encourages investment by providing access to larger markets and facilitating international trade.

Regulatory Environment: A transparent and predictable regulatory framework is crucial for attracting FDI. Investors seek countries with clear and enforceable laws, protection of property rights, intellectual property rights, contract enforcement mechanisms, and efficient dispute resolution systems. A favorable business environment reduces uncertainty and the perceived risks associated with investment.

4. Cost-related Determinants:

Labor Costs: Wage differentials between countries influence investment decisions. MNEs often seek locations with lower labor costs for labor-intensive industries, allowing them to reduce production costs and improve cost competitiveness.

Production Costs: Factors such as land costs, energy prices, taxation, and logistical expenses impact the overall cost competitiveness of a location. MNEs consider these factors when selecting investment destinations to optimize their cost structure and improve profitability.

5. Political and Institutional Determinants:

Political Stability: Political stability is a crucial determinant of FDI. Countries with stable political environments and low levels of political risk attract more investment. Political stability reduces uncertainty and the potential for disruptive events that can adversely affect business operations.

Government Policies: Government policies and regulations play a vital role in attracting FDI. Countries that adopt investor-friendly policies, promote economic liberalization, and provide a stable and supportive business environment are more likely to attract investment. These policies may include tax incentives, streamlined bureaucracy, protection of intellectual property rights, and investment facilitation measures.

Institutional Quality: Institutional factors such as governance, rule of law, control of corruption, and regulatory efficiency influence FDI inflows. Strong institutions enhance the investment climate by ensuring transparency, legal protection, contract enforcement, and effective governance, which are essential for long-term investment commitments.

6. Market Access and Competitive Advantage:

Proximity to Markets: Geographical proximity to key markets can be an influential determinant of FDI. Companies prefer to invest in countries close to major markets to reduce transportation costs, enhance supply chain efficiency, respond quickly to customer demands, and capitalize on regional trade opportunities.

Competitive Advantage: FDI is often driven by the desire to leverage competitive advantages. Companies invest in locations where they have a competitive edge, such as advanced technology, specialized expertise, brand recognition, or

economies of scale. Accessing these advantages in a foreign market allows companies to strengthen their market position and gain a competitive edge over local competitors.

These determinants of FDI are interconnected and can vary in importance depending on industry-specific factors, economic conditions, and the specific objectives of the investing MNEs. Companies carefully analyze these determinants to make informed investment decisions and maximize their chances of success in foreign markets.

1.6 Impacts of FDI

Foreign direct investment (FDI) has significant impacts on both the host country and the investing company. Here are some of the impacts of FDI:

1. Economic Growth and Development:

FDI can contribute to economic growth and development in the host country by:

- Creating Jobs: FDI often leads to the creation of new job opportunities, reducing unemployment rates and improving living standards.

- Enhancing Productivity: FDI brings in advanced technologies, managerial expertise, and best practices, leading to increased productivity and efficiency in the host country's industries.

- Encouraging Innovation: MNEs often engage in research and development activities in the host country, stimulating innovation and knowledge transfer to domestic firms.

- Stimulating Infrastructure Development: FDI inflows can contribute to the development of infrastructure, such as transportation networks, power plants, and telecommunication systems, which benefits the overall economy.

- Boosting Exports: FDI can promote exports by integrating host country firms into global value chains, facilitating access to international markets, and improving competitiveness.

2. Transfer of Knowledge and Technology:

FDI brings in advanced technologies, management practices, and knowledge to the host country, which has several positive impacts:

- Technology Spillovers: MNEs transfer technology and know-how to domestic firms through various channels, including supplier linkages, employee training,

and joint ventures, thereby upgrading the technological capabilities of the host country.

- Enhancing Skills and Expertise: Local employees working in MNEs often acquire new skills and knowledge, which can contribute to the development of a skilled workforce in the host country.

- Research and Development (R&D): MNEs may establish R&D centers in the host country, leading to the development of new products, processes, and innovations that benefit the local economy.

3. Foreign Exchange Flows and Balance of Payments:

FDI has an impact on a country's balance of payments and foreign exchange reserves by:

- Increasing Capital Inflows: FDI brings in foreign capital, increasing the availability of investment funds in the host country.

- Generating Export Revenues: MNEs engaged in FDI often produce goods and services for export, leading to increased export earnings and improved trade balance.

- Providing Stable and Long-term Investments: FDI inflows provide stable and long-term investments, contributing to a more sustainable financing of the host country's development projects.

4. Competition and Market Dynamics:

FDI can affect the competitive landscape and market dynamics in the host country:

- Increased Competition: Entry of foreign firms through FDI can intensify competition in the host country's domestic market, leading to improved efficiency, better quality products, and lower prices for consumers.

- Technology Upgrading: Domestic firms may be pushed to upgrade their technologies and improve their competitiveness to survive in the face of increased competition from foreign firms.

- Market Expansion: FDI can lead to the expansion of markets, opening up new opportunities for domestic firms to enter global value chains and expand their customer base.

5. Social and Environmental Impacts:

FDI can have social and environmental impacts that need to be carefully managed:

- Social Development: FDI can contribute to social development by providing employment opportunities, improving labor standards, promoting skills development, and supporting local communities through corporate social responsibility initiatives.

- Environmental Sustainability: MNEs are increasingly expected to adhere to sustainable practices, leading to the transfer of environmentally friendly technologies and practices to the host country, which can contribute to improved environmental sustainability.

1.7 Model of FDI

1. Market-seeking Model

This model assumes that firms undertake FDI to enter new markets or expand their share in existing markets. This typically occurs in markets with high consumer purchasing power, rapid growth, or high relevance to the firm's products.

2. Resource-seeking Model

In this model, firms undertake FDI to gain access to specific resources that are either not readily available or more costly in their home country. This might include minerals, cheap labor, or skilled labor.

3. Efficiency-seeking Model

Firms optimize their production and other operational activities across multiple countries to achieve economies of scale or scope. This often involves strategic planning around global supply chain management and production bases.

4. Escape Investment Model

In some situations, firms may undertake FDI to circumvent high tariffs, trade barriers, or other market access restrictions. This form of "escape" investment allows companies to be closer to their target markets.

5. Product Lifecycle Theory

This theory, proposed by Raymond Vernon, suggests that companies change their internationalization strategy as their product moves from introduction to maturity and then to decline in its lifecycle. At different stages of the product lifecycle, firms may shift from exporting to FDI or from one FDI model to another.

6. Network Model

This model views FDI as part of a global production and distribution network. From this perspective, multinational corporations are not just single economic entities

but are part of complex networks formed with suppliers, distributors, consumers, and other stakeholders.

These models offer insights from different angles, helping us understand why firms undertake FDI and how they choose investment destinations and modes. Typically, a firm's FDI decision might be influenced by multiple models and involve a practical combination of these models in practice.

Chapter 2. FDI over the world and Chinese FDI

2.1 FDI over the world

The trajectory of foreign direct investment (FDI) has changed considerably from post-World War II to today, guided in large part by forces from globalization. Traditionally, FDI flows from developed to developing countries are usually driven by manufacturing demand and access to resources. However, the onset of globalization expanded flows, leading to a more inclusive and democratized FDI landscape. Today, developing countries like China are not only important recipient of FDI, but also important sender to FDI. In addition, the development of the times and the advancement of technology is another key aspect of globalization, which has affected the sectoral distribution of FDI, among which the digital industry has become increasingly prominent. However, the interaction of FDI and globalization also poses complex challenges, including competition among countries for FDI inflows, income disparities and potential socio-economic issues such as environmental concerns. Thus, globalization has undoubtedly shaped the global FDI landscape, driven its evolution, and challenged the future.

2.1.1 The trajectory of global FDI

After World War II, foreign direct investment was mostly one-way, flowing from developed countries (usually North America and Western Europe) to Asia, Africa and some less developed countries. The goal is to establish a manufacturing base and take advantage of cheap labor and raw materials.

However, as globalization picked up pace in the late 20th century, the dynamics of FDI began to change. Thanks to advances in communication technology and barriers to trade, businesses have become truly global. Driven by the lure of new markets, cost optimization or access to specific resources, some multinational companies from developed countries have started to set up subsidiaries around the world. This phase also marks the rise of the services sector as a major recipient of FDI.

By the early 2000s, emerging economies, especially the BRICS countries (Brazil, Russia, India, China, and South Africa) began to attract a significant share of global FDI. These countries offer a unique combination of large consumer markets, increasingly liberalized economies, skilled labor and competitive cost structures, making them attractive as destinations for foreign direct investment. As more and more FDI began to flow to these emerging economies, the trajectory of global FDI began to reflect this change.

Moreover, in a surprising role reversal, some developing countries have gradually become important sources of FDI. The particular note is China's journey from an FDI recipient to one of the world's largest FDI sender. This new landscape reflects the rise of Chinese multinational enterprises and China's geopolitics.

Over the past decade, foreign direct investment flows have been heavily impacted by digital transformation and disruptive technologies. Tech industries, including e-commerce, artificial intelligence and renewable energy, have emerged as important recipients of foreign direct investment. Meanwhile, sectors such as retail and manufacturing, while still important, are losing their dominance in attracting FDI.

Looking ahead, geopolitics, environmental sustainability, and continued technological innovation are likely to shape the future trajectory of global FDI. Geopolitical changes such as the rise of economic nationalism and the

restructuring of trade agreements will undoubtedly affect FDI trends. In addition, environmental issues will be an important factor driving FDI flows to green technologies. As digitization transforms every industry, FDI in digital infrastructure and digital services is bound to increase.

2.1.2 The impact of globalization on FDI

Over the past few decades, globalization has fundamentally reshaped the foreign direct investment (FDI) landscape. As barriers between economies have decreased and interconnections have increased, the patterns、volume and impact of FDI have changed significantly.

In the early stages of globalization, foreign direct investment flowed mainly from developed to developing economies, driven by the developing economics' competitive advantage in labor-intensive manufacturing. This is achieved by removing trade barriers and creating an enabling business environment in developing countries. Globalization has enabled multinational corporations (MNCs) from developed economies to establish production bases in these countries, taking advantage of their cost efficiencies.

As another aspect of globalization, the cross-border penetration of technology has also shaped the pattern of foreign direct investment. It has facilitated more FDI flows into sectors such as information technology, electronic information and digital services, marking a major shift in the sector. FDI has played a crucial role in the global diffusion of cutting-edge technologies, reinforcing that FDI is not only a driver of economic growth but also a driver of technological progress.In addition, globalization has changed the nature of foreign direct investment, with an increasing emphasis on value-added investment. This shift is particularly pronounced in advanced economies, where FDI is increasingly targeting the acquisition of strategic assets, such as brands, patents and know-how, rather than

tangible assets. This “asset seeking” FDI has accelerated due to increased global competition and the goal of maintaining a competitive advantage.

Globalization has also led to increased competition among countries to attract FDI. This competition has led to policy reforms, the creation of special economic zones, tax incentives and other measures aimed at improving the investment climate. However, the race to attract foreign direct investment has sparked debate about potential negative consequences, such as tax evasion and a "race to the bottom" on labor and environmental standards. On the other hand, globalization and foreign direct investment have created socio-economic challenges. While FDI can create jobs and transfer technology, it can also lead to income disparities, environmental degradation and cultural erosion. The management of FDI inflows and their effects has thus become a key policy issue in many countries.

The role of globalization in the growth and direction of FDI is evident. From changing the direction and composition of FDI flows to promoting competition among countries and making policy reforms, the impact is transformative.

2.2 Role and significance of FDI in developing and emerging economies

For developing and emerging economies, one of the most obvious benefits of FDI is the provision of financial capital. Most developing and emerging economies are struggling with insufficient domestic savings, which inhibits their ability to invest in growth-generating sectors. In such cases, FDI can serve as an important complement to domestic capital, enabling these countries to make necessary investments in infrastructure, industry and services. FDI also has a positive impact on the host country's balance of payments. If the investment is directed at sectors producing exportable goods, it helps to increase the country's export capacity. At the same time, as foreign capital inflows, it has a positive impact on the current account and strengthens the country's international financial position (OECD, 2002).

A key advantage of FDI is its ability to stimulate job creation. As foreign companies establish production bases or launch new businesses, they need to recruit local personnel. Not only does this help reduce unemployment, but over time, as demand for labor increases, it can also lead to higher wages, thereby raising living standards in these countries. Furthermore, FDI often leads to technology transfer and creates an environment conducive to innovation. Companies from developed economies often have access to superior technical and management skills. When they expand their operations into developing countries, these technologies and methods have the potential to permeate the local economy, increasing productivity and overall competitiveness (Borensztein, De Gregorio, & Lee, 1998).

FDI also has a positive impact on the host country's balance of payments. If the investment is directed at sectors producing exportable goods, it helps to increase the country's export capacity. At the same time, as foreign capital inflows, it has a positive impact on the current account and strengthens the country's international financial position (OECD, 2002). However, the benefits of FDI are not without potential downsides. For example, FDI can increase income inequality if the

benefits of foreign investment are not equitably distributed. These benefits may be monopolized by wealthier segments of society, widening existing socioeconomic divides (Herzer, Hühne, & Nunnenkamp, 2014). Furthermore, environmental problems arise if foreign companies do not adhere to sustainable industrial practices, resulting in environmental degradation.

Given these potential pitfalls, the role of host governments in shaping the impact of FDI becomes critical. By establishing an appropriate regulatory framework, providing appropriate incentives, and maintaining effective oversight, governments can direct FDI to areas of greatest benefit while mitigating risks. The overall aim should be to align FDI with broader goals of sustainable development and inclusive growth (UNCTAD, 2022). In conclusion, FDI plays a crucial role in shaping the economic fortunes of developing and emerging economies. While the potential benefits are huge, capital inflows, job creation, technology transfer and improved balance of payments, the challenges, income inequality and environmental impact must be addressed to ensure that foreign direct investment becomes a strong pillar of sustainable economic development.

2.3 The shift of FDI from developed countries to developing nations

The shift in foreign direct investment (FDI) from developed to developing countries represents a major shift in the dynamics of the global economy. This shift, driven by multiple factors, has not only affected the economies receiving the investment, but has also changed the international business landscape.

At first, FDI flowed mainly from developed to developing economies, seeking the cost advantages associated with cheap labor and raw materials. Developing countries, facing financial shortfalls and looking for technology transfer and economic development, welcome these investments (Dunning & Lundan, 2008). Over time, a more diversified FDI landscape has emerged, driven by a number of factors. Market-seeking foreign direct investment has become common, with multinational enterprises (MNEs) investing in developing countries to gain access to their growing consumer markets. For developing countries, the economic rise of Asian countries in particular has led to a surge in consumer purchasing power, attracting foreign direct investment in sectors such as retail, automobiles and electronics. Resource-seeking FDI also played a role, driven by the availability of natural resources. For example, many African countries have attracted significant FDI in the mining and oil sectors due to their abundance of resources.

In addition, the liberalization of economic policies and improvements in the business environment in developing countries have also contributed to this shift. These include measures to reduce restrictions on foreign ownership, loosen capital controls, and provide tax incentives to attract foreign direct investment. However, the transfer of FDI to developing countries has not been consistent. It varies widely according to each country's economic, political and institutional factors. Governance and regulatory stability, infrastructure levels, and local market size and growth prospects play key roles in determining FDI inflows.

The transfer of FDI to developing countries has implications for both recipient countries and the global economy. While it offers recipient countries opportunities

for economic development and global integration, it also presents challenges in managing foreign capital and avoiding potential negative impacts such as market volatility or environmental degradation. Moreover, this shift points to a broader rebalancing of economic power, with emerging markets playing an increasingly important role in the global economy. As this trend continues, it will be critical for all stakeholders (governments, businesses and international organizations) to understand and navigate the changing landscape of FDI.

2.4 Development of Chinese FDI

On October 1, 1949, Mao Zedong, Chairman of the Communist Party of China, officially announced the founding of the People's Republic of China in Beijing. For more than 70 years, China has always pursued an independent foreign policy of peace and carry out friendly cooperation with other countries. China's economy is closely linked with the world's economy. It has witnessed the process of China's foreign direct investment from scratch, from a difficult start to an all-round development.

2.4.1 Emergence as a key FDI recipient

The trajectory of China's evolution as a premier recipient of Foreign Direct Investment (FDI) can be traced through several key stages, following the initiation of its open-door policy in 1978.

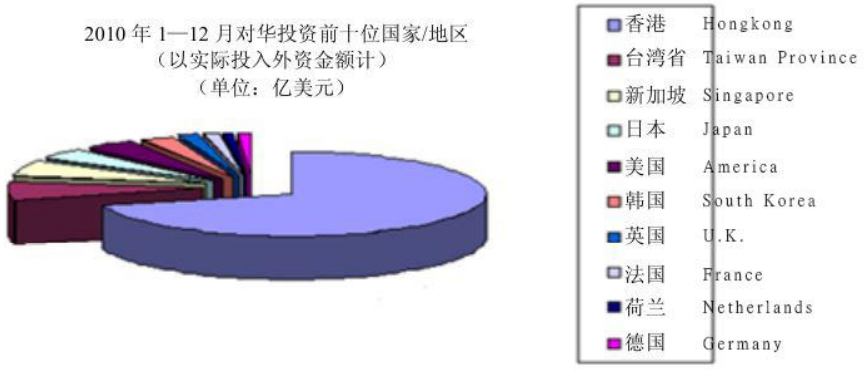
In the late 1970s and early 1980s, China was still in the early stages of economic reform. Under Deng Xiaoping's leadership, the Open Door Policy was introduced, an unprecedented move aimed at boosting foreign trade and attracting foreign investment to modernize the economy. The government established four special economic zones in Shenzhen, Zhuhai, Shantou, and Xiamen. Special Economic Zones (SEZs) are regarded as a testing ground for market-oriented economic policies and play a crucial role in China's process of attracting foreign direct investment (Cheung & Lin, 2004). At the same time, the establishment of the "Law of the People's Republic of China on Sino-foreign Joint Ventures" marks the legalization of foreign investment. Foreign business investment in China is basically a tentative attitude, and nationwide foreign investment has not yet been fully launched.

By the mid-1980s, the initial success of SEZs prompted the government to further liberalize FDI policies and expand these zones. With the launch of the "Coastal Development Strategy", 14 coastal cities have established new economic and technological development zones. This further facilitates the inflow of foreign direct investment into China, enabling it to leverage the technology, management expertise and capital of foreign companies. At the same time, relevant departments have accelerated the legislative work related to foreign investment, which has greatly improved the foreign investment environment. In addition, under the stimulation of multiple super-national treatment, the scale of foreign investment has grown rapidly. However, under the guidance of a series of preferential policies such as "marketing for technology", a large amount of foreign capital has poured into pollution-intensive industries such as manufacturing and chemical industries. The domestic investment structure has not yet been restricted, and the scale of foreign capital has continued to increase, resulting a large number of pollution-intensive industries have been transferred to China, causing varying degrees of impact on the environment.

Throughout the 1990s and early 2000s, China continued to attract increasing amounts of foreign direct investment as its economy grew rapidly. China's accession to the World Trade Organization (WTO) in 2001 was an important milestone. This not only marks China's further integration into the global economy, but also further enhances China's attractiveness as a destination for FDI, while China has firmly established its status as a major recipient of FDI. After joining the WTO, China has carried out a series of reforms aimed at opening up the market. Industry-guiding policies for foreign investment began to appear, "Interim Regulations on Guiding the Direction of Foreign Investment", and the "Catalogue for the Guidance of Foreign Investment Industries" was revised twice, and the "Catalogue of Advantageous Industries for Foreign Investment in Central and Western Regions" was revised at the same time, thus attracting more foreign direct

investment. The average size of foreign capital continued to expand, the industrial structure of foreign investment was further adjusted, and foreign capital engaged in high technology and infrastructure increased significantly. In addition, China's rise as the "World's factory" is closely related to its success in attracting FDI into manufacturing, which has had a major impact on its economic structure and growth.

By the end of the first decade of the 2000s, China had become one of the world's largest recipients of foreign direct investment, marking its remarkable journey since the start of its open door policy. During this period, the Chinese economy matured and foreign direct investment flowed into high value-added industries such as information technology and services (UNCTAD, 2012). In 2007, the "Enterprise Income Tax Law of the People's Republic of China" was officially promulgated, which became a symbol of equal competition between domestic and foreign-funded enterprises and pay more attention to the sustainability of foreign investment. As sustainability becomes the mainstream of development, China strictly restricts the entry of low-level, high-consumption, and high-pollution foreign-funded projects, and the impact of foreign investment on China's environment has gradually become positive.



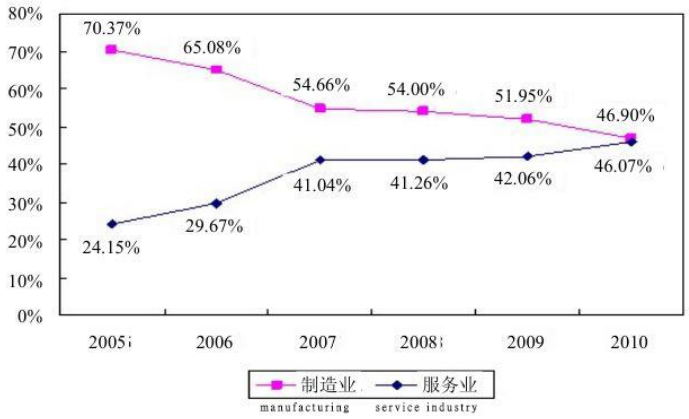
[Figure 2.4.1.1 Top 10 countries/regions investing in China in 2010]

[Source: Department of Commerce Statistics]

As of 2010, more than 170 countries (regions) in the world have invested enterprises in China. Judging from the accumulated actual investment amount （see Figure 2.4.1.1）, half of them come from Hong Kong, Macao and Taiwan regions, a quarter come from developed countries such as Europe, America and Japan, and investments from Southeast Asian countries and some free ports each account for about one-tenth. In 2010, Hong Kong, Macao and Taiwan actually invested USD 74.832 billion in foreign investment, accounting for 70.77% of the actual amount of foreign investment absorbed nationwide. The twenty-seven countries of the European Union invested in China and established 1,688 new enterprises, a year-on-year increase of 6.97%; the actual amount of foreign capital invested was 6.589 billion US dollars, a year-on-year increase of 10.71%. There were 1,576 newly established companies invested by the United States in China, a year-on-year decrease of 0.76%; the actual foreign investment amounted to US$4.052 billion, a year-on-year increase of 13.31%.

Between 2010 and 2018, China consolidated its position as a major recipient of foreign direct investment (FDI). At this point, China’s attractiveness to foreign investors has been established, based on its abundant labor market, huge market size, well-developed infrastructure, and policy incentives (These will be discussed in the next section). Since 2010, China's FDI inflows have grown steadily, and in 2014 China overtook the United States to become the world's largest recipient of FDI (UNCTAD, 2015). A major shift during this period was the diversification of FDI inflows to China. Although FDI in the early years was mainly aimed at the manufacturing industry, but since 2007, investment in the service industry has increased significantly（see Figure 2.4.1.2）. This shift is partly due to the Chinese government’s efforts to rebalance the economy towards a more sustainable growth model driven by consumption and services (Zhan, 2016). China's 12th Five-Year Plan (2011-2015) places great emphasis on technological innovation and green growth, attracting foreign direct investment in high-tech and environmental protection industries. By the time the 13th Five-Year Plan (2016-2020) was launched, China had made significant progress towards becoming a major recipient of FDI. The new plan emphasizes the goal of attracting foreign

investment into advanced manufacturing, high-tech, green energy and service industries. Further relax foreign direct investment regulation and expand free trade zones (Zhan, 2016).

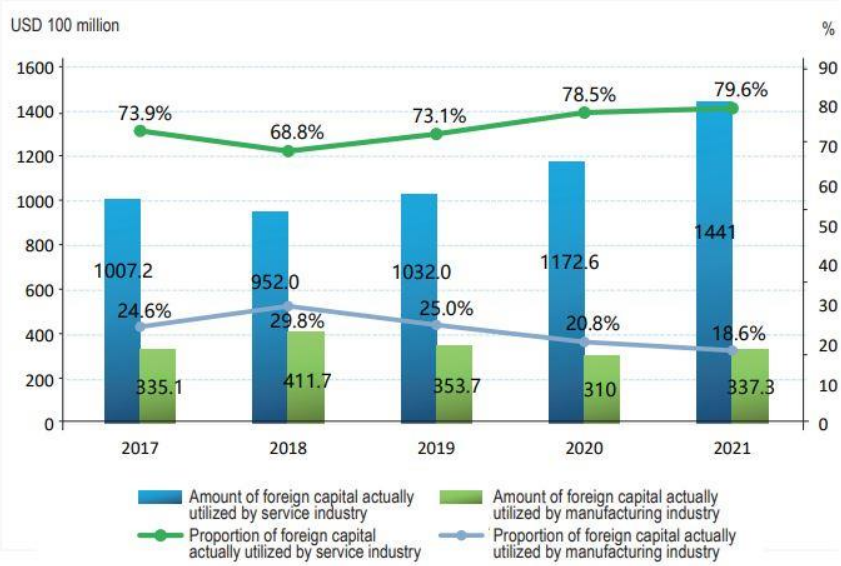


[Figure 2.4.1.2 Proportions of manufacturing and service industries in the actual use of foreign capital in the country from 2005 to 2010]

[Source: China Statistical Yearbook and Ministry of Commerce data]

From COVID-19 – present, Under the complicated and changing international situation such as the slow recovery of the world economy, the continuous spread of the COVID-19, and the blockage of the global industrial and supply chains, China has scientifically coordinated epidemic prevention and control and economic and social development. The national economy has continued to recover steadily, and high-quality development has achieved new results. It has formed a strong attraction for foreign investment and promoted the continuous growth of foreign investment. The situation in China is that the level of opening up to the outside world has been further improved, the economic development has maintained a recovery trend, the potential of the domestic market has been continuously released, the supporting role of scientific and technological innovation has been strengthened, the pace of industrial digital transformation has accelerated, and the green transformation of the economy and society has been fully completed. From 2017 to 2021, the actual use of foreign capital in the service industry grown at an average annual rate of 8.4%. The proportion of actual use of foreign capital in the country rised from 73.9% in 2017 to 79.6% in 2021.

The actual use of foreign capital in the manufacturing industry remained relatively stable（see Figure 2.4.1.3）.



[Figure 2.4.1.3 Details of Foreign Capital Actually Utilized by Service Industry and Manufacturing Industry during 2017-2021]

[Source: Foreign Investment Statistics of the Ministry of Commerce]

2.4.2 Factors attracting FDI to China

As China has gradually become a major recipient of foreign direct investment (FDI) since the introduction of the Open Door Policy in 1978, several unique factors have come into play to make China an attractive destination for multinational enterprises. These can be divided into several broad categories: labor market, market size, infrastructure, policy incentives and so on.

1. **Labor market:**

   China's huge population provides abundant and relatively low-cost labor, which has become a key factor in attracting FDI, especially in labor-intensive industries such as manufacturing. Many multinational corporations took this advantage to relocate their production facilities to China, thus earning China the reputation of “the factory of the world” (Dean, Lovely, and Wang, 2009).

2. **Market size:**

   China's large population and vast and untapped consumer market represent a compelling prospect for companies looking to expand their global reach. As China's middle class grows along with economic development, consumers' purchasing power continues to increase and the market becomes more attractive (Buckley et al., 2007).

3. **Infrastructure:**

   The Chinese government invests heavily in infrastructure construction, and its attraction to foreign direct investment is increasing day by day. It is known as the "infrastructure maniac". Well-developed transport, logistics and utility infrastructure especially in coastal and urban areas provide a favorable environment for businesses.

4. **Policy incentives:**

   The establishment of special economic zones and economic and technological development zones provides generous incentives, such as tax breaks, lower tariffs, and less regulation, to attract foreign investment. Policies encouraging foreign technology transfer further stimulated FDI inflows. At the same time, continue to expand the catalog of industries that encourage foreign investment, improve the foreign investment service guarantee mechanism, and provide convenience for foreign-funded enterprises and foreign investors to study and formulate investment strategies in China and carry out investment and business activities.

5. **Stability and growth prospects:**

   China's stable economy, stable GDP growth (see Figure 2.4.2.1), and continued economic liberalization policy measures paint a safe and promising investment environment that attracts long-term FDI.

[Figure 2.4.2.1 2011-2022 GDP per Capita: USD: China]

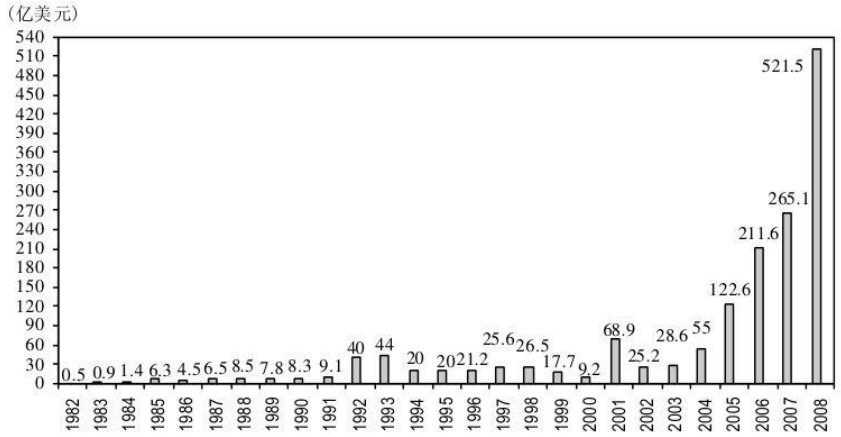
[Source:WWW.CEICDATA.COM | CEIC Data]

2.4.3 China's Outward FDI

From the late 1970s to the early 1990s, the exploration of foreign direct investment started. It is characterized by focusing on resource acquisition, market access and learning advanced technologies from developed countries. During this period, the amount of China's foreign direct investment was very small, and the annual foreign direct investment flow was less than US$900 million except in 1991. Enterprises are small in scale, lack funds, and have limited operating autonomy. They basically have no enthusiasm and initiative for foreign investment, and the vast majority of foreign direct investment decisions are government actions. The recipient countries are mainly developing economies with abundant natural resources, which are needed for China's industrial development.

From 1992 to 2001, foreign direct investment was in an unstable development stage. At this stage, the amount of foreign direct investment expanded rapidly, but the investment growth showed the characteristics of "big ups and downs". In 1992, the foreign direct investment amounted to 4 billion US dollars, a substantial increase of more than 3 times compared with 1991, and then dropped to 920

million US dollars in 2000, returning to the level of 1991. In 2001, the foreign direct investment surged more than 6 times, reaching 6.89 billion US dollars（see Figure 2.4.3.1）. This rapid and unstable development of "big ups and downs" reflects the reform of China's market-oriented economic system that began in 1992 and the acceleration of the process of opening up to the outside world. Enterprises (most of which are still state-owned enterprises) have gained greater operational autonomy and gained leading advantages in certain industries began to consciously carry out or expand foreign direct investment in order to expand market space. However, the foreign direct investment behavior at this time has not yet been included in the long-term production and operation development strategies of enterprises, lacks clear investment goals and strategic positioning, and foreign direct investment of enterprises is still driven by accidental factors and short-term profit goals.



[Figure 2.4.3.1 Changes in China's foreign direct investment flows: USD 100 million]

[Source: UNCTAD: Major FDI Indicators (WIR 2008); Ministry of Commerce of the People's Republic of China: Statistics on China's Outward Direct Investment]

From the early 2000s to the late 2010s, foreign direct investment was in a stage of steady, rapid and sustained growth. The main factors that promote the rapid and sustained growth of China's foreign direct investment are: after more than 20 years of opening up, reform and development, especially after a certain period of market economic competition, a large number of enterprises (including state-

owned, private, foreign-funded and joint-stock enterprises) gradually develop, grow and mature, and expand the space for production, operation and market competition, making foreign direct investment an active long-term strategic appeal for more and more Chinese enterprises. As China's connection with the global economy continues to deepen and at the end of 2001, China successfully joined the WTO, China has created a more open and transparent international environment than before, and has the opportunity to compete on an equal footing with companies from other countries in the world. More and more Chinese companies have begun to go overseas. The experience summarization, capital accumulation and understanding of the world market in the early stage of foreign investment practice have continuously increased the confidence of Chinese enterprises in foreign direct investment. If Chinese enterprises want to form their own regional or global production and supply chains, or participate and become part of them, it must be realized through foreign direct investment. According to the "Eleventh Five-Year Plan", China implements the "going out" strategy and policy measures in order to accelerate the adjustment of regional and industrial structures, promote the upgrading of technology and product structure and transfer backward technology and equipment and excess production capacity have played an important role in promoting the rapid and sustained growth of foreign direct investment. Africa, Latin America, and certain parts of Asia were the main recipients of Chinese FDI during this period, consistent with China's need to secure resources for its rapidly expanding economy.

From 2011 to 2015, with the establishment of the "Twelfth Five-Year Plan" (2011-2015), it marks the transformation of China's foreign direct investment pattern. Comprehensively improve the level of open economic development in coastal areas, and accelerate the transformation from a global processing and assembly base to a research and development, advanced manufacturing and service base. Maintain the existing competitive advantages in export and accelerate the cultivation of new advantages with technology, brand, quality and service as the core competitiveness. Deepen mutually beneficial cooperation in the development and processing of international energy resources. Support overseas technological

research and development investment cooperation, encourage enterprises with advantages in the manufacturing industry to invest effectively abroad, and create an international marketing network and well-known brands. The shift in focus to high-tech industries and services reflects its strategy to upgrade its domestic industrial structure. During this period, Chinese companies began to increase investment in developed economies, especially high-tech companies in the United States and Europe, to acquire advanced technology and management experience.

From 2016-present, at the Fifth Plenary Session of the Eighteenth Central Committee of the Communist Party of China, Xi Jinping, General Secretary of the Central Committee of the Communist Party of China, reviewed and approved the "Thirteenth Five-Year Plan" (2016-2020), clearly proposing the new goal of adhering to the new concept of open development and building a new pattern of all-round opening up so that China's foreign direct investment reached a new high level. It clearly stated that foreign investment and domestic industrial development will be promoted each other, and "going out" and "bringing in" will complement each other, so as to make full use of the advantages of the two markets for common development. At the same time, the Chinese government provides more policy support for overseas business expansion of enterprises, making foreign investment more rules-based and law-based. Promote the broadening and diversification of China's foreign investment fields. Meanwhile, the Belt and Road Initiative, launched in 2013, has played an important role in promoting connectivity and trade links between Asia, Europe and Africa. In 2021, the direct investment flow of Chinese enterprises to countries along the “Belt and Road” reach US$24.15 billion, a year-on-year increase of 7.1%, double that of 2012, and account for 13.5% of China’s total foreign direct investment flow during the same period（see Figure 2.4.3.2）. As of mid-February 2023, China has signed more than 200 cooperation documents on the joint construction of the "Belt and Road" with 151 countries and 32 international organizations. The joint construction of the "Belt and Road" projects are all over the world, and the coverage is constantly expanding. Many countries have aligned their own development plans with the joint construction of the "Belt and Road".

[Figure 2.4.3.2 China's investment in countries along the Belt and Road: Unit: USD 100 million]

[Source: Ministry of Commerce]

2.4.4 Impacts and implications of China’s growing role as a FDI sender

Globally, China's rise as a sender of FDI represents a major shift in the global economic order. The shift reflects a broader trend of emerging economies becoming important players in the global investment landscape, driving a redistribution of power in the global economy. China's strong outward FDI presents new opportunities for economic growth, especially in developing countries that have traditionally had limited access to capital. The report of the 20th National Congress of the Communist Party of China pointed out that "In the past ten years, China has become the main trading partner of more than 140 countries and regions, the total volume of trade in goods ranks first in the world, and the attraction of foreign capital and foreign investment ranks in the forefront of the world. A pattern of opening up to the outside world in a wider field and at a deeper level."

In terms of scale, from 2013 to 2021, China's foreign direct investment flows accumulated to more than 1.3 trillion US dollars, with an average annual growth rate of 6.5%, ranking among the top three in the world. Since the outbreak of the

COVID-19, China has made overall plans to promote the epidemic prevention and control the overseas enterprise projects' person and the development of foreign investment cooperation, and has achieved positive results. By the end of 2021, the stock of foreign direct investment will be 2.8 trillion US dollars, accounting for 6.7% of the current global stock, an increase of 4.4 percentage points from 2012, and the ranking has risen to the third place, creating more than 2 million jobs per year on average.

In terms of layout, foreign direct investment covers 190 countries (regions) around the world, and about 46,000 overseas enterprises have been established, of which more than 11,000 enterprises have been established in countries along the "Belt and Road". From 2013 to 2021, the cumulative direct investment in countries along the "Belt and Road" was 164 billion U.S. dollars, and the countries along the "Belt and Road" have become important destinations for Chinese enterprises to invest abroad. It has created tax revenues for the local area, stimulated employment, supported and helped the development of developing countries, and brought a real sense of gain to the local people.

As of the end of 2021, the overseas economic and trade cooperation zones included in the statistics of the Ministry of Commerce are distributed in 46 countries, with a cumulative investment of 50.7 billion US dollars, paid taxes and fees of 6.6 billion US dollars to the host country, and created 392,000 local jobs. It has effectively promoted mutual benefit, win-win results and common development. The fields involved in outsourcing projects extend from civil engineering construction to the whole industrial chain including design, consulting, financing, and operation. Tripartite and multi-party market cooperation continues to advance, which has effectively improved the infrastructure level of the country where the project is located, improved the investment and business environment of the host country, and promoted local economic and social development. Foreign labor service cooperation was stable and orderly, and 323,000 laborers of various types were dispatched for foreign labor service cooperation, which alleviated the labor shortage in some fields in the

host country, improved the technical level of local workers, and strengthened cultural exchanges, this has also led to the growing influence of China's foreign direct investment in the world.

2.5 China's role in the future of global FDI

At present, external shocks such as slowing global economic growth, escalating geopolitical conflicts, accelerated restructuring of industrial chains and supply chains, sharp fluctuations in commodity prices, and intensified financial market turmoil continue. In this context, the report of the 20th National Congress of the Communist Party of China pointed out that China will continue to promote high-level opening up to the outside world and promote the high-quality development of the joint construction of the "Belt and Road". Under the new development pattern, it is expected that foreign investment and cooperation will continue to maintain a stable and orderly high-quality development trend.

1. The structure of foreign investment and cooperation is transformed to a green and digital direction

China has put forward the goal of "strive to achieve carbon peaking by 2030 and carbon neutrality by 2060", and green development has become an important criterion for leading economic and social development in the coming period. China will actively promote international cooperation in green development, and jointly promote the development of green infrastructure, green energy, green transportation, and green finance through foreign investment and cooperation. In the field of digital economy, relying on a good development foundation, China's leading digital economy companies will actively deploy overseas markets and participate in the construction of global digital infrastructure. In the future, the scale of foreign investment and cooperation in China's digital economy will continue to expand. With the help of digital technologies such as 5G, big data, cloud computing, and AI, the globalization of R&D, asset management, and production service platforms are rapidly advancing.

2. Foreign investment and cooperation pay more attention to compliance management

Compliant operation is the premise for enterprises to achieve stable and long-term foreign investment and cooperation. As the joint construction of the “Belt and Road” goes deeper and more solidly, while participating in international economic competition and cooperation, companies going global are also facing more and more compliance higher requirements. In the future, China's foreign investment and cooperation will face more and more compliance requirements and compliance risks. While China's economy is moving towards a stage of high-quality development, it will actively benchmark international high-level economic and trade rules, and further promote institutional opening-up.

3. The policy environment for foreign investment and cooperation will continue to improve

It is necessary to promote high-level opening up to the outside world, steadily expand rules, regulations, management, standards and other institutional openings, promote the high-quality development of the joint construction of the "Belt and Road", deeply participate in the global industrial division of labor and cooperation, and maintain a diversified and stable international economic structure and economic and trade relations. In the future, in order to further realize a high level of opening up to the outside world and accelerate the establishment of a new development pattern in which the domestic cycle is the main body and the domestic and international dual cycles promote each other, the policy environment for China's foreign investment and cooperation will continue to improve, involving investment protection, dispute resolution, financial support, public information services and other relevant supporting policies and measures are expected to continue to improve, release policy dividends, and create a favorable policy environment for foreign investment and cooperation of enterprises.

Chapter 3. Chinese FDI in Italy

3.1 A blossoming relationship between China and Italy

China and Italy, two ancient civilizations that boast thousands of years of history, have long since been familiar with one another. From the legendary stories of Marco Polo traveling the Silk Road to Beijing, to the modern trade routes and diplomatic channels that have been established, the two nations have an intricate tapestry of mutual respect, admiration, and shared interests.

Historically, Italy, with its splendid art, fashion, and architecture, has always fascinated China. On the other hand, China, with its profound culture and immense market potential, has been an area of interest for Italy. The allure of the east and west, encapsulated by these two nations, has been the foundation of their diplomatic ties.

In the contemporary era, China and Italy have forged ahead with strengthened ties in a multitude of domains, especially in trade, technology, and culture. Italy is one of the founding members of the European Union and holds significant influence within the bloc. Its decision to be the first G7 country to endorse China's Belt and Road Initiative (BRI) in 2019 was seen as a milestone in Sino-Italian relationships. This move not only opened the doors for enhanced trade routes between the two nations but also showcased Italy's openness to embrace global initiatives and to collaborate on international platforms.

Economically, trade between China and Italy has grown exponentially over the years. Italy's prowess in luxury goods, automobile manufacturing, and machinery finds a massive market in China's burgeoning middle class, who have an increasing appetite for high-quality products. Conversely, Italy imports a

considerable amount of electronics, textiles, and machinery from China, indicating a balanced trade relationship.

Culturally, the exchange between China and Italy has been profound. Italian fashion, wine, and cuisine have made significant inroads into the Chinese market. Events like Milan Fashion Week or the Venice Film Festival have seen a notable presence of Chinese designers, artists, and cinephiles. Simultaneously, Chinese culture, with its rich tapestry of traditions, festivals, and arts, has found a receptive audience in Italy. This mutual cultural appreciation has been the key point in soft diplomacy between the two nations.

3.2 Chinese FDI in Italy from humble beginnings to strategic partnerships

The history of Chinese investment in Italy traces back to the latter half of the 20th century, but it has notably intensified in recent decades due to globalization and the rise of China as a major global economic powerhouse. The intertwining economic relationship between China and Italy tells a story of evolving mutual interests, strategic partnerships, and shared economic visions.

In the early days, Chinese investments in Italy were primarily focused on small and medium-sized businesses, particularly in the trade and textiles sectors. Italy, with its renowned fashion and luxury goods industries, proved to be an alluring destination for Chinese entrepreneurs wanting to harness Italian craftsmanship and brand prestige. Milan and its surrounding regions, known for their sartorial excellence, saw the establishment of numerous Chinese-owned textile factories and workshops.

By the turn of the millennium, with China's entry into the World Trade Organization (WTO) in 2001, the dynamics began to shift. As China's economy grew, so did its outward foreign direct investments. Italy, with its technologically advanced machinery, automotive, and luxury sectors, became a focal point for Chinese investments. Chinese companies, recognizing the technological gap in certain sectors, began acquiring stakes in Italian firms to transfer knowledge and expertise.

The post-2008 period, following the global financial crisis, marked a significant uptick in Chinese investments in Italy. Italian firms, grappling with financial hardships, became attractive targets for cash-rich Chinese companies. High-profile acquisitions during this time included ChemChina's acquisition of Pirelli, one of the world's leading tire manufacturers, and the acquisition of the iconic Milan football club by Chinese investors.

Infrastructure has also been a central area of interest for Chinese investors. Italy's strategic location, acting as a bridge between Europe and Africa, combined with its world-class ports like Genoa and Trieste, caught the attention of Chinese policymakers. The Belt and Road Initiative (BRI), launched by China as a massive global infrastructure development project, saw Italy as a pivotal partner. In 2019, Italy became the first G7 nation to formally endorse the BRI, which led to a surge in Chinese investments in Italian ports, railways, and logistics sectors.

However, the investments were not one-sided. Italian firms also saw an opportunity in the vast Chinese market. Italian luxury brands, automotive companies, and machinery manufacturers made significant inroads into China, setting up shops, forming joint ventures, and collaborating on technological advancements.

Cultural and tourism sectors have also witnessed increased Chinese interest. Italy, with its rich history, art, and culture, is a top destination for Chinese tourists. This influx led to several Chinese investments in the Italian hospitality sector, from hotels to travel agencies, ensuring that Chinese tourists get an unparalleled experience.

Despite the robust growth in investments, the Sino-Italian economic relationship has faced its share of challenges. Issues like intellectual property rights, market access, and transparency have occasionally led to tensions. However, both nations have showcased a commitment to resolving these challenges through dialogue and mutual understanding.

3.3 Analysis regional distribution of Chinese FDI in Italy

3.3.1 Distribution characteristics of major regions and cities

Italy, strategically positioned in Southern Europe and bathed by the Mediterranean Sea, has long been a crossroads of culture, trade, and innovation. Its rich tapestry of history, combined with a dynamic economy, has made it an attractive destination for global investors. Among these, Chinese investments have been particularly noteworthy in recent years, underscoring the deepening economic ties between the two nations. When we look at the geographical distribution of Chinese investments across Italy (see Figure 3.3.1.1) , a clear pattern emerges that offers insights into the investment priorities and strategies. We're using the dataset from AIDA, the date for the dataset was 28/07/2023.

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Indirizzo sede legale – Regione	Freq.	Percent	Cum.
Abruzzo	60	0.79	0.79
Basilicata	18	0.24	1.03
Calabria	44	0.58	1.61
Campania	359	4.74	6.36
Emilia-Romagna	420	5.55	11.91
Friuli-Venezia Giulia	63	0.83	12.74
Lazio	1,046	13.82	26.56
Liguria	101	1.33	27.89
Lombardia	2,385	31.51	59.41
Marche	102	1.35	60.76
Molise	6	0.08	60.84
Piemonte	278	3.67	64.51
Puglia	219	2.89	67.40
Sardegna	110	1.45	68.86
Sicilia	147	1.94	70.80
Toscana	1,462	19.32	90.12
Trentino-Alto Adige	65	0.86	90.98
Umbria	54	0.71	91.69
Valle d'Aosta/Vallée d'Aoste	2	0.03	91.72
Veneto	627	8.28	100.00
Total	7,568	100.00	

[Figure 3.3.1.1 Distribution of Chinese companies investing in Italy for Region]

[Source: AIDA]

1. Lombardia & Milano - A Symbiotic Relationship:

Lombardia, with a dominant presence of 2,385 companies, accounts for 31.51% of Chinese investments in Italy. Milano, the region's capital, further accentuates this dominance, boasting 1,654 companies, which is approximately 21.86% of the total Chinese investments (see table 1). Milano's global reputation in sectors like fashion, finance, and design, coupled with Lombardia's robust economic infrastructure, makes this duo an irresistible magnet for Chinese investors.

2. Toscana's Twin Pillars - Prato & Firenze:

Toscana emerges as another major region, hosting 1,462 companies, which is 19.32% of total Chinese investments. Prato, with its 930 companies (12.29%), is a testament to the city's strength in the textile industry. Firenze, on the other hand, with 365 companies (4.82%), showcases the allure of Italian culture, art, and history that Chinese businesses are keen to integrate with.

3. Lazio & Roma - The Administrative Powerhouse:

Lazio, with its 1,046 companies, marks 13.82% of Chinese investments. Its capital, Roma, further strengthens this position with 979 companies, accounting for 12.94% of the investments. Roma, as the historical and administrative epicenter of Italy, offers a plethora of opportunities across sectors, making it a strategic choice for Chinese investors.

4. Veneto - The Historical Trade Center:

Veneto, known for its historical trade routes and maritime strength, is home to 627 Chinese companies, which is 8.28% of the total. While the data does not highlight a specific city in Veneto, the region's overall trade-centric activities undoubtedly align with China's global trade ambitions.

5. Other Regions - A Pan-Italian Presence:

Beyond these dominant regions and cities, Chinese investments are spread across Italy, from the beaches of Sardegna to the hills of Piemonte and the rustic charms of regions like Calabria and Sicilia. While the numbers might be comparatively lower in these regions, their strategic and sector-specific importance cannot be sidelined. Each region offers unique opportunities that resonate with the diverse interests of Chinese companies, whether in machinery, electronics, agriculture, tourism or traditional crafts.

China's investment footprint in Italy is comprehensive. It not only captures the regional and urban powerhouses but also ensures a presence in niches that hold unique value. This multi-layered approach testifies to China's commitment to fostering a deep-rooted economic relationship with Italy.

3.3.2 Development trends of regional distribution

1. Preference for Economic Hubs: Lombardia emerges as the predominant region for Chinese investments. With Milan at its helm, Lombardia represents not just Italy's, but one of Europe's major economic powerhouses. The region's robust infrastructure, advanced industries, and global connectivity make it an attractive destination for foreign investments. Chinese businesses, always on the lookout for dynamic and growth-oriented markets, find Lombardia a natural fit for their expansion strategies. This trend mirrors global patterns where foreign investments often gravitate towards regions offering a combination of economic vitality and strategic advantage.

2. Diversification Strategy: While Lombardia leads the pack, the significant investments in Toscana, Lazio, and Veneto indicate a diversification strategy. These

regions, each with its unique economic and cultural offerings, provide varied opportunities. For instance, Toscana, with its strong agricultural and tourism sectors, offers a different investment profile compared to the industrial strength of Veneto. This spread suggests that Chinese investments are not just seeking short-term gains but are rooted in a long-term vision of growth and diversification.

3. Recognizing Potential Beyond Major Cities: While cities like Milan, Rome, and Florence capture a significant chunk of investments, the interest in provinces like Arezzo and Ancona indicates a comprehensive approach. Recognizing the potential of smaller cities, especially those with specialized industries or strategic locations, showcases the depth of the Chinese investment strategy. It's a reflection of the broader Belt and Road Initiative, where the emphasis is on creating a network of trade and investment opportunities.

4. Future Trajectories: The current investment distribution shows that in the future, Chinese investment will penetrate more deeply into southern Italy, especially in areas such as agriculture, tourism and traditional handicrafts. At the same time, the north will continue to attract Chinese investment with its strong industrial strength.

In conclusion, the regional distribution of Chinese investments in Italy paints a picture of a well-strategized and forward-thinking approach. By balancing between established economic hubs and emerging markets, and by diversifying across sectors, Chinese investors are poised to maximize their growth potential in Italy. As Italy continues to modernize its infrastructure and expand its industries, it can expect a continued and deepened partnership with Chinese businesses, bringing mutual growth and prosperity.

3.4 Analysis industry distribution of Chinese FDI in Italy

For the industry distribution we also use the dataset from AIDA, and use the ATECO2007 code which from "Classificazione delle attività economiche Ateco 2007" as an industry comparison code（see table 2）.

3.4.1 Distribution characteristics of major industries

China's strategic investments in Italy span across a plethora of sectors, reflecting its multifaceted economic interests. A deep dive into the top industries reveals the following key distribution characteristics:

Wholesale Trade (46): With 1,884 companies（see table 3）, the wholesale trade sector emerges as a significant area of Chinese investment. This underscores the importance of Italy as a hub for goods that are likely distributed across Europe and possibly beyond. Investing in wholesale operations enables Chinese businesses to tap into established distribution networks and market their products effectively.

Retail Trade (47): Close on the heels of wholesale is retail trade, with 1,665 companies. Italy, with its rich history of luxury goods, fashion, and craftsmanship, presents a lucrative retail market. Chinese investments here could be driven by the allure of high-end Italian brands and the potential to introduce them to the vast Chinese consumer base.

Restaurant Service Activities (56): The presence of 946 companies in this sector highlights the significance of the restaurant service industry in Italy. Known for its culinary excellence and world-famous wines, Chinese investments in this sector likely tap into Italy's gastronomic reputation, aiming to cater to both locals and the increasing number of Chinese tourists in the region.

Manufacture of Wearing Apparel (14): The fashion industry is synonymous with Italy. With 559 companies, this sector's attraction to Chinese investors is evident. Italy's reputation for high-quality apparel, combined with its design prowess, makes it an ideal destination for investments aimed at capturing the luxury and premium market segments.

While these are the standout sectors, it's worth noting that Chinese investments in industry are also widespread, touching various facets of the Italian economy. The chosen sectors highlight China's strategy of blending traditional industries with modern retail and service-oriented sectors, leveraging Italy's strengths across the board. As mentioned in chapter two, the global investment patterns of Chinese enterprises have witnessed a significant transformation over the past few decades. Historically known for investing heavily in the manufacturing sector, recent years have seen a shift towards the services industry.

1. Traditional Strength in Manufacturing:

Traditionally, Chinese investments in Italy gravitated towards the manufacturing sector, especially in industries such as "Manufacture of Wearing Apparel (14)". Italy's global reputation for high-quality craftsmanship, combined with its rich history in textiles, leather goods, and luxury items, made it a natural destination for Chinese investors. At the same time it offers Chinese businesses a unique opportunity to integrate high-quality design and craftsmanship into their products.

2. The Emerging Preference for Service Sector:

However, the data provided indicates a noticeable surge in investments in the services sector. Sectors like "Wholesale Trade (46)", "Retail Trade (47)", and "Restaurant Service Activities (56)" have witnessed an influx of Chinese enterprises. These sectors are primarily service-oriented and are reflective of China's broader global investment strategy that pivots towards the service industry. It not only allows Chinese businesses to efficiently bring Italian products to the vast Chinese market but also can attract Chinese Tourists.

3. Reasons Behind the Shift:

Several factors can explain this shift:

Consumer Evolution: The burgeoning middle class in China has a growing appetite for luxury goods, gourmet foods, and unique experiences. Investing in Italian service sectors allows Chinese businesses to cater to this demand back home.

Tourism Dynamics: The increase in Chinese tourists visiting Italy presents lucrative opportunities in the retail and food & beverage sectors. By investing in these sectors in Italy, Chinese businesses aim to offer a 'localized' experience to their compatriots.

Economic Diversification: With the Chinese economy itself evolving from being manufacturing-centric to services-driven, Chinese enterprises are aligning their global investments to reflect this domestic shift.

3.4.2 Development trends of industry distribution

Through the 2022 edition of the country (region Italy) guide for foreign investment cooperation and the Italian investment guide report and by examining the current distribution and aligning it with global economic and geopolitical developments, we can discern the following trends:

1. Continued Emphasis on the Service Sector:

With significant investments already in the "Wholesale Trade (46)", "Retail Trade (47)", and "Restaurant Service Activities (56)" sectors, we can expect the service sector to continue attracting Chinese capital. As the global economy becomes more service-oriented and the importance of the experience economy grows, Chinese investors are likely to delve deeper into sectors that offer unique

consumer experiences, especially those that can be replicated or adapted for the Chinese market.

2. High-End Manufacturing and Luxury Goods:

While there has been a shift towards the service industry, we should not overlook the continued interest in high-end manufacturing, particularly in the "Manufacture of Wearing Apparel (14)" sector. Italy's renowned luxury goods and fashion market is still of significant interest to Chinese investors. As the luxury market in China continues to grow, the demand for authentic and high-quality Italian products will likely spur more investments in this sector.

3. Technology and Innovation:

While the current data highlights traditional sectors, there is an underlying trend towards technology and innovation. Italy's burgeoning tech hubs, advancements in automation, and green technologies are potential areas for future Chinese investments. As China pushes its "14th Five-Year Plan (2021-2025)" initiative, sectors in Italy that align with this vision, especially those focused on technological innovation, will become increasingly attractive.

4. Sustainable and Eco-Friendly Sectors:

Globally, there's a shift towards sustainable and eco-friendly solutions. Italy, with its innovations in sustainable fashion, renewable energy, and eco-friendly manufacturing, presents opportunities for investments that align with global sustainability goals. As China commits to environmental sustainability, sectors in Italy that offer green solutions might see increased Chinese interests.

5. Health and Wellness:

The global health and wellness industry is booming, and Italy, with its spa towns, wellness retreats, and health-focused products, is well-positioned in this sector. Post-pandemic, as health and wellness gain prominence, Chinese investments in this sector in Italy might see an uptick.

6. Agri-food Sector:

Given the current investments in the agricultural sector, and with Italy being a significant exporter of gourmet foods and wines, the agri-food sector might see sustained interest. There's potential for collaboration in organic farming, wine production, and specialty foods, catering to China's rising demand for quality food products.

3.5 Relationship analysis between regions and industries

Analyzing the intersection of regions and industries in the context of Chinese investment in Italy indicates both a response to local economic strength and an intention to exploit regional capabilities.

Lombardia:

Hosting 2,385 Chinese companies, Lombardia stands out as a primary hub for Chinese investments.

Wholesale Trade (46), (787 companies): Milano, as the financial capital, offers a vast network for wholesalers, syncing with China's dominance in global trade（see table 4）. Retail Trade (47), (371 companies): With Milano's status as a fashion capital, Chinese retail businesses find an upscale market and a global platform.

Beyond these primary sectors, Lombardia's strengths in Financial Services and Fashion Design offer potential areas for future Chinese investments, given Milano's prominence in these fields.

Toscana:

Home to 1,462 Chinese enterprises, Toscana's rich cultural heritage attracts diverse investments.

Clothing Manufacturing (14), (353 companies): The region's acclaim for leather goods and fashion resonates with China's apparel and leather manufacturing sectors. Wholesale Trade (46), (336 companies) and Retail Trade (47), (151 companies) further tap into Toscana's craft legacy.

Additionally, Toscana's reputation for Wine Production, especially Chianti, presents opportunities for Chinese investors in the vineyard and agri-food sector.

Lazio:

With 1,046 Chinese ventures, Lazio's historical significance attracts a myriad of businesses.

Retail Trade (47), (343 companies) benefits from Roma's global tourist appeal. Wholesale Trade (46), (314 companies) and Restaurant Service Activities (56), (161 companies) exploit both local and international markets.

Beyond these, Roma's historical tourism allure suggests potential avenues for Chinese travel and entertainment firms.

Piemonte:

Boasting 278 Chinese companies, Piemonte exhibits a balanced economic interest across diverse sectors.

Retail Trade (47), (55 companies), Wholesale Trade (46), (48 companies), and Restaurant Service Activities (56), (48 companies) stand out.

Piemonte's Automotive industry, with Torino as a focal point, could resonate with China's automotive ambitions, given the city's significance to brands like FIAT. Manufacture of Machinery and Equipment N.E.C. (28), (6 companies) and Manufacture of Motor Vehicles, Trailers and Semi-Trailers (29), (5 companies)

Veneto:

Veneto's renowned Glass Craftsmanship in Murano and its significance in Footwear Production, especially in areas like Riviera del Brenta, match with China's luxury goods and footwear manufacturing sectors, offering potential collaboration avenues.

Emilia-Romagna:

Known for luxury automotive brands and agri-food products, Emilia-Romagna presents opportunities for Chinese automotive giants and food importers.

Sicilia and Sardegna:

Their unique seafood and agricultural products offer prospects for Chinese food processing and export sectors.

China's strategic investments across various Italian regions, guided by the intrinsic strengths of these regions, manifest a well-researched and geographically diversified approach. By capitalizing on Italy's regional industrial profiles, Chinese enterprises are fostering bilateral growth and deeper economic integration.

3.6 Relationship analysis between investments and local Chinese community

The relationship between the distribution of Chinese enterprises in Italy and the Chinese expatriate community can be an intricate interplay of historical, economic, and social factors. Based on the provided data and wider insights into Chinese diaspora patterns, we can postulate a few strategic considerations:

Historical Migration Patterns: The initial waves of Chinese immigrants to Italy, like many other countries, were driven by better economic opportunities and the prospect of a better life. The regions that first saw a concentration of Chinese immigrants often became hubs for Chinese businesses, primarily because the first entrants in any region tend to attract subsequent migrants through familial or community ties. For instance, Prato, near Firenze in Toscana, is known to have a significant Chinese population, many of whom are involved in the textile industry. It's no coincidence that Toscana ranks high in Chinese investments in clothing manufacturing.

Business Synergies: Chinese entrepreneurs are often influenced by existing Chinese communities. A strong community can offer support in terms of local knowledge, language assistance, and an initial customer base. This is evident in areas like Lombardia, particularly Milano, where a bustling Chinese business community supports newcomers, leading to a higher concentration of Chinese enterprises.

Cultural and Social Integration: Regions with a significant Chinese diaspora tend to be more receptive to Chinese businesses. This can be attributed to a mutual cultural understanding, shared community spaces, and events that foster integration. The influx of Chinese companies in such regions can also be seen as a by-product of the community's entrepreneurial spirit.

Resource Sharing and Networking: Chinese businesses often rely on community networks for resources, be it in terms of labor, materials, or even market insights. Regions with a dense Chinese population provide an ecosystem where businesses can thrive on shared resources and community wisdom.

Consumer Behavior: Areas with significant Chinese populations naturally have a higher demand for Chinese goods and services. This creates a favorable market for Chinese businesses, especially in sectors like retail trade, food & beverage services, and wholesale trade.

In sum, while Chinese investments in Italy are influenced by various economic, strategic, and geopolitical considerations, the presence and dynamics of the Chinese diaspora in different Italian regions undoubtedly play a pivotal role in shaping these investment patterns. The symbiotic relationship between Chinese communities and Chinese businesses in Italy enhances the socio-economic fabric of the regions and promotes mutual growth.

Chapter 4. A comparative analysis of investment between China and other countries in Italy

Here we're also using the dataset from AIDA, the date for the dataset was 24/08/2023. Country specific ranking by number of invested companies. (see table 5, No. , col%)

4.1 Analysis regional distribution of other countries FDI in Italy

France: (Total 4181 investments)

Lombardia: With 1,957 investments, Lombardy is clearly the primary target for France investments in Italy, constituting approximately 46.81% of all France investments in the country.

Lazio: With 558 investments, this region accounts for around 13.35% of France investments in Italy. The significant number of France investments in Lazio is likely attributable to its status as a political center, given that Rome is located here, and possibly its diverse economic activities.

Piemonte: Known for its industrial activities, including the automotive sector. This could be one of the reason that attracted 326 France investments, making up approximately 7.80% of the total.

Emilia-Romagna: With 261 investments, holds roughly 6.24% of the France investments in Italy.

Toscana: 228 investments have been made here by France entities, comprising about 5.45% of the total.

Germany: (Total 4053 investments)

Lombardia: As the region with the most investments, with 1,492 investments, this region accounts for approximately 36.81% of all German investments in Italy.

Trentino-Alto Adige: With 885 investments, its strategic location near the Alps and Germany itself could be a factor contributing to its 21.84% share.

Veneto: This region has received 348 investments, making up about 8.59% of the total.

Emilia-Romagna: With 246 investments, this region accounts for roughly 6.07%.

Lazio: With 241 investments, Lazio makes up about 5.95% of German investments in Italy.

The United States: (Total 3918 investments)

Lombardia: Lombardy remains a strong focus for U.S. investors, thanks to its well-established financial and industrial sectors. With 1,991 investments, this region accounts for approximately 50.82% of all U.S. investments in Italy.

Lazio: Home to the capital city, Rome, Lazio has received 519 investments, constituting about 13.25% of the total.

Emilia-Romagna: It has attracted 301 investments, making up roughly 7.68% of all U.S. investments in Italy.

Veneto: With 231 investments, Veneto accounts for about 5.90% of total U.S. investments.

Toscana: Close behind Veneto, Toscana has 230 investments, representing approximately 5.87% of the total.

The United Kingdom: (Total 3859 investments)

Lombardia: With 1,886 investments, constituting approximately 48.87% of all British investments in the country.

Lazio: With 591 investments, it accounts for around 15.31% of British investments in Italy.

Veneto: Attracted 296 British investments, making up approximately 7.67% of the total.

Toscana: Renowned for its tourism, agriculture, and wine production, it attracted 190 investments, holds roughly 4.92% of the British investments in Italy.

Piemonte: 157 investments have been made here by British entities, comprising about 4.07% of the total.

4.2 Analysis industry distribution of other countries FDI in Italy

This paragraph only introduces the top three industries in each country' s investment in Italy, and other special industries will be introduced in the follow-up comparison. (see table 6, No. , col%)

France:

Wholesale Trade (46)

The wholesale trade sector is again the leading sector, with 535 French companies. It accounts for about 13.10% of all France investments in Italy.

Real Estate Activities (68)

France investors also saw the great potential of the Italian real estate market, making the real estate industry the second most popular investment sector in France, with 420 companies, accounting for about 10.30%.

Business management and consulting activities (70)

This industry has 269 France companies, which is about 6.60% of all French companies operating in Italy. The industry's prominence reflects the growing interdependence and complex commercial relationship between the two countries.

Germany:

Wholesale Trade (46)

Topping the list, the Wholesale Trade sector hosts 841 German companies and represents approximately 21.10% of all German investments in Italy.

Electricity, Gas, Steam Supply and Waste Management (35)

The second most popular industry for investment in Germany is electricity, gas, steam supply and waste management activities, with a total of 488 companies,

accounting for about 12.2%. This shows Germany's strong interest in Italy's utilities and infrastructure sector.

Business management and consulting activities (70)

A total of 216 German companies accounted for approximately 5.40% of German investment in the sector, reflecting business-to-business (B2B) synergies between the two countries.

The United States:

Wholesale Trade (46)

Among the many industries in which the United States invests in Italy, this sector leads with 623 American companies, accounting for approximately 16.30% of all American companies in Italy.

Software Production and IT Consulting (62)

Home to 306 American companies, this sector captures nearly 8% of all American firms operating in Italy. Its prominence signals the importance of digital transformation, an area where American companies have a global competitive edge.

Real Estate Activities (68)

From commercial real estate in financial centers such as Milano to tourism-oriented real estate in regions such as Toscana, the sector attracted 284 U.S. companies to invest, accounting for about 7.40% of total U.S. investment in Italy.

The United Kingdom:

Wholesale Trade (46)

The leading British investment industry in Italy is still the wholesale trade industry, with a total of 352 British companies, accounting for about 9.50% of the total British investment in Italy.

Business management and consulting activities (70)

This is followed by the industry focused on business management and consultancy activity, with 347 companies representing around 9.30% of all investment in the UK. The sector's attractiveness may be partly due to the complexities posed by Brexit, requiring specialized consultancy services to tap the European market.

Real Estate Activities (68)

The real estate sector is another important area of UK investment, with a total of 346 companies accounting for approximately 9.30% of total UK investment in Italy.

4.3 Comparative analysis

In order to compare the investment situation of various countries in Italy in more detail, we used STATA to combine the data of all six countries and obtained the following conclusions after observation and analysis. In order to have a better compare, we also includes Italian local companies as benchmark, but due to the large number of Italian local companies, we randomly selected 10,000 companies in all Italian local company data samples for comparative analysis. The total number of investment companies in each country is approximately 20,000 (excluding Italian local companies), and through comparison with data provided by Agenzia ICE, this number has exceeded half of the total investment in Italy from all countries.

Common Points:

From a regional distribution perspective, all six countries are highly focused on Northern Italy, especially the Lombardia region. It's not hard to see that this area is a hub for various industries, from finance to manufacturing, and is highly attractive to global investors. In general, all six countries invested the most in the Lombardia region, if we assume that these six countries account for all investment in this region（see table 5, row%）, Chinese investment accounts for 20.59% of this region, France 16.9%, Germany 12.88%, The United States 17.19%, The United Kingdom 16.28%, Italy 16.16%. Followed by Lazio region, Chinese investment accounts for 22.95% of this region, France 12.24%, Germany 5.29%, The United States 11.39%, The United Kingdom 12.97%, Italy 35.17%.

From an industry distribution analysis, the investments are diversified, ranging from manufacturing to technology and services. The most significant industry is wholesale trade （46）, where these countries invested the most, also if we assume that these six countries account for all investment in this industry（see table 6, row%）, Chinese investment accounts for 36.2% of this industry, France 10.3%, Germany 16.2%, The United States 12%, The United Kingdom 6.8%, Italy

18.6%. Their exceptional performance in this sector highlights its general appeal as an important distribution center in Europe, while Italy also serves as an effective gateway to the European market.

Differences:

Regardless of the region in Italy, China's investments in Italy are more focused on industries like Textile Manufacturing（13）, Apparel Manufacturing; Packaging of Leather and Fur Products（14）, Manufacturing of Leather and Similar Items（15）, Wholesale Trade（46）, Retail Trade（47）, and Restaurant Services（56）. In each of these industry sectors across various regions, China's investments take the top position. This reflects China's global leading manufacturing capabilities and its enormous global trade volume in the wholesale market. Assume that investments from these six countries represent all investments in Italy and among the investments in Toscana, China accounts for 50.80% of the region’s investment where Italy 21.54%. Textile Manufacturing（13）, Apparel Manufacturing; Packaging of Leather and Fur Products（14）and Manufacturing of Leather and Similar Items（15）these three industries are particularly prominent, accounting for 48%, 81.6%, 73% of each industry’s investment respectively.

Compared to China, the other countries have different focuses:

France has a strong automotive manufacturing industry, especially with some globally recognized brands such as Citroen, Peugeot, Bugatti, Renault etc. France also has significant advantages in sustainable energy and public infrastructure. As a result, in terms of industrial sectors, France is more focused on Automobile, Trailer, and Semi-trailer Manufacturing（29） accounting for 24.6% of this industry where China 7.9%, Italy 11.9%, Electricity, Gas, Steam, and Air Conditioning Supply; Water Supply, Sewage Treatment, Waste Management, and Remediation Activities（35）accounting for 17.5% of this industry. It also focuses on Real Estate Activities（68）accounting for 16.9% of this industry, where in the Lazio region, there are 97 companies, taking the top position. This reflects France's long-term value investment perspective in the capital Rome and its surrounding areas.

Germany is the largest economy in Europe with advanced engineering and sustainable development capabilities. Germany also has a strong interest and ability in supply chain management and business consulting, which may be related to German companies' emphasis on efficiency and optimization. Therefore, Germany has as many as 300 companies in the Trentino-Alto Adige region in the Electricity, Gas, Steam, and Air Conditioning Supply; Water Supply, Sewage Treatment, Waste Management, and Remediation Activities (35) accounting for 37.3% of this industry where China 7.4%, Italy 6.6% and many companies in the Veneto region in the Other Professional, Scientific, and Technical Activities sector (74) accounting for 19.2% of this industry where Italy 23.1%. These investments are likely part of long-term strategic partnerships and infrastructure development. Following that are Wholesale Trade (46) and Business Management and Consulting Activities (70), with 166 and 55 companies respectively.

The United States holds a global leadership position in high technology and information technology. Particularly in the Lazio region, there is a relatively large amount of investment in the Software Production, IT Consulting, and Related Activities sector (62) accounting for 31.1% of this industry where China 3.7%, Italy 19.1%. This is likely because Rome is Italy's political and economic center, with numerous business and government organizations, providing a broad market for IT and software services. Significant investments are also made in Financial Services Activities (64) accounting for 20.4% of this industry, consistent with its status as a global financial center. These investments may aim to further expand the influence of American financial institutions in Europe and globally. In the Emilia region, there is considerable investment in the Manufacture of Machinery and Equipment Not Elsewhere Classified sector (28) accounting for 26.6% of this industry where China 12%, Italy 17.1%. Such investments from the U.S. may reflect the country's expertise in high-end manufacturing and engineering. The Emilia region is an important industrial center in Italy, especially in mechanical manufacturing and high-end engineering.

The United Kingdom invests heavily in the Electricity, Gas, Steam, and Air Conditioning Supply; Water Supply; Sewage Treatment, Waste Management, and Remediation Activities (35) accounting for 22% of this industry, and Business Management and Consulting Activities sectors (70) accounting for 22.8% of this industry where China 8%, Italy 22.9%. The UK has rich experience and technological advantages in environmental management and sustainable development. These investments are likely aimed at expanding or consolidating their global influence in these key environmental and infrastructure sectors. As an important player in the global business services and consulting fields, UK companies are looking to leverage Italy as a mature and diversified market to propel their business consulting and management services. The UK's investments in these sectors fully reflect a preference for high-value-added and technologically complex industries, aligning with the importance of service and high-tech industries in the UK economy.

Chapter 5. Analysis the financial performance of Chinese owned firms in Italy

In today's era of globalization, cross-border investment has increasingly become an important factor in promoting economic growth and prosperity. Among them, China, as one of the largest economies in the world, its overseas investment strategy and its impact have become a hot topic in the international financial field. Italy, as a major economic power in Europe, has become one of the main investment destinations for Chinese companies in recent years. However, this investment relationship is not simply an economic behavior. It involves interactions and influences from many aspects such as finance, culture, and policies, making its analysis more complex. To better understand the far-reaching impact of this cross-border investment relationship, we first need to compare and analyze financial data from China, Italy, and other countries. This not only helps us reveal the economic health of companies in various countries, but also provides strong data support for future investment decisions. The data we use is also taken from AIDA, and we use data from 2016, 2017, and 2020 for analysis.

5.1 Debt comparative analysis

Through the data we obtained on AIDA and used STATA to integrate and analyze the financial data of 2016, 2017, and 2020, we use the total debt divided by the total liabilities to get the ratio, which is used to observe the company's loan situation of various countries.

Among them, the median ratio of the debt of Chinese investment companies in Italy to total liabilities in these three years was 0.8274, 0.8262, and 0.8692 respectively. For other countries, France are 0.6684, 0.6646, 0.6536, Germany are 0.6088, 0.6052, 0.5823, The United States are 0.5335, 0.5356, 0.5056, The United Kingdom are 0.6511, 0.6489, 0.6155, and the median ratio of local corporate debt to total liabilities in Italy are 0.7239, 0.7094, and 0.6881 respectively. (see table 7)

By comparing and analyzing these data, it is not difficult to find that compared with other countries, the ratio of total debt to total liabilities of Chinese investment companies in Italy is significantly higher, which may indicate that these companies have higher financial risks. At the same time, they are highly dependent on external financing. It is worth notice that 2020 is the year of the outbreak of the new coronavirus epidemic, which has had a huge impact on the global economy. Chinese companies may face supply chain disruptions, declining demand and other issues, causing them to rely more on external financing to maintain operations. Relatively speaking, European and American companies appear to have reduced their debt levels during this period. This may be due to their easier access to other sources of financing, or their adoption of more conservative financial strategies in response to the uncertainty of the pandemic. Similarly, the total debt to total liabilities ratio of Italian owned companies, although high, but is also on a downward trend.

Let's briefly analyze the reasons behind and the sources of debt funds based on the high ratio of China's investment in Italy. According to China's Global Investment Strategy Report, deleveraging has become a top priority for the

Chinese government since 2015 due to signs of overheating in China's domestic and overseas investments. However, credit expansion has not slowed since. Corporate debt continues to increase, which not only makes current debt levels unsustainable, but also complicates the balance between deleveraging and economic growth while implementing strategies to continue to support economic growth. Under normal circumstances, state-owned enterprises enjoy preferential treatment in the formal banking industry. The Chinese government has introduced a series of policies to support major banks in financing overseas investments. They can also provide mutual financing from other financial institutions or with other peers or partners. Instead, most private companies rely on non-bank financial institutions, "shadow banks", private equity funds and large loans from unregulated sources to finance overseas investment projects. This reflects the complexities of risky investment products and unregulated lending. High levels of unregulated lending and soaring debt pose a serious threat to China's financial system, increasing the risk of a break in the capital chain. To mitigate the threat posed by rapid credit growth and risky lending in the informal financial sector, the Chinese government has implemented a number of measures in recent years. These newly promulgated measures and regulations do not mean that the country will reduce its support for foreign direct investment. On the contrary, they provide clear regulations and guidelines for Chinese enterprises to "going out" and are intended to encourage enterprises to invest overseas. This is a complement to earlier “going out” policies that lacked detailed provisions. The strengthened guiding principles can be seen as the Chinese government's commitment to improve the transparency of overseas investments while preventing investment risks that may cause damage to the developing Chinese financial market. As China has made significant progress in regulating shadow banking financing and improving the management of overseas investment projects, it remains to be seen whether China's private enterprises, the most active part of the national economy, can achieve common development with investment destinations. Private enterprises have always responded quickly to government reforms and policy implementation. Therefore, as a new round of reforms such as the

internationalization of the RMB is approaching, China's foreign direct investment may usher in greater development.

Looking back at 2020, China was the first country to be affected by COVID-19, but it was also the first country to control the epidemic and resume economic activities. This means that Chinese companies can restart their global expansion and investment activities earlier than other countries that have been hit for longer. In order to combat the economic downturn caused by the epidemic, the Chinese government has implemented a series of monetary and fiscal stimulus policies. These policies help maintain liquidity and may encourage companies to make more overseas investments. At the same time, driven by the loose monetary policies of global central banks, global financing costs have decreased in 2020. Low interest rates may make borrowing an advantage in attracting Chinese companies to expand overseas. Facing global uncertainty and the uncertainty of the epidemic, many European companies are facing economic pressure, and this has provided more opportunities for low-price acquisitions, while companies in other countries may be more cautious or lack funds to conduct overseas investments, which provides more market share to Chinese companies with determination and capital. At the same time, compared with other countries, Chinese companies may be more willing to take higher financial risks in an uncertain environment in order to pursue higher returns, and Chinese companies may consider diversifying investments in external markets, especially the European market is a risk mitigation strategy, so the proportion of the median ratio of the debt of Chinese investment companies in Italy to total liabilities increased in 2020.

5.2 Productivity comparative analysis

As with the debts analyzed previously, we use data from 2016, 2017, and 2020 and use revenues from sales divided by the number of employees to get turnover per employees, （revenues from sales – production cost）divided by the number of employees to get value added per employees, same for turnover per labor cost and value added per labor cost to measure the productivity of companies investing in Italy of each country.（see table 8, 9, 10）

First, we use 2016 as reference data and observe various indicator data in 2017. We find that China's turnover per labor cost is on a downward trend（6.8394-6.3068）, while the other three indicators are on an upward trend（139.3532-139.4203， 0.4018-0.5427， 0.0223-0.0332）. This shows that the company's employee productivity increased slightly in 2017 and the value each employee brought to the company increased. The reason for the decrease in turnover per labor cost may be because, compared to 2016, employees' wages increased in 2017. The number of employees has led to increased cost pressure on the company, as rising labor costs may erode profit margins, especially if revenue growth is not significant.

For the United States, only value added per labor cost decreased in 2017（0.0718-0.0711）, while the other three indicators increased. This indicates that the value added created by the company is decreasing relative to labor costs, possibly due to high production costs. Chinese-invested companies can purchase raw materials and other production items directly from China, so production costs may be much lower and will not be affected. European countries were also affected by the increase in production costs. Except for the increase in turnover per employees, the other items all declined.

Let’s look at the special situation of 2020. Except for China’s turnover per labor cost, which increased, all other countries’ costs fell sharply without exception. Although the turnover per employee of Chinese investment companies in Italy is

decreasing, their turnover is increasing relative to labor costs. This may be due to the economic slowdown in the face of the epidemic, which has led to large-scale layoffs at domestic and foreign companies in China. And however, at the same time, despite low production efficiency, Chinese investors have seized the rare opportunity to make large-scale overseas investments.

Now we have integrated all the data and found that most of the industries China invests in are labor-intensive industries, with few involving high-tech or high value-added industries. However, most of these industries are industries with low profit margins, such as textiles and catering. Therefore, compared with other countries, China's median and average of turnover per employees and value added per employees are relatively low, but compared with labor costs, China's production efficiency highlights its competitiveness. This also reflects its dominant position in the global supply chain, which is to gain competitive advantage through large-scale production and low-cost labor. For other countries, most are concentrated in high-tech, high value-added and service-oriented industries. For example, France's automobile manufacturing and power supply; Germany's power supply and technical services; the United States' software production and financial services; and the United Kingdom's power supply and business management as we mentioned in chapter 3. Therefore, these countries have higher medians and averages in terms of turnover per employees and value added per employees, because these industries usually require a high degree of professional knowledge and technical support, which leads to higher production efficiency. This also shows that the investment strategies of these countries are consistent with their positioning in the global economy, that is, the pursuit of high-tech, high value-added and innovation-oriented industries.

Compared with other countries, China's investment strategy in Italy relies more on labor-intensive industries and cost advantages. Other countries focus more on investing in high value-added, technology- and service-oriented industries. These differences stem from each country's economic structure, historical background, global strategic positioning and core competitiveness. As a country with abundant

labor resources, China's investment strategy is to take advantage of its labor force; while other countries use its technology, innovation and management capabilities as their main competitive strategies.

5.3 Profitability comparative analysis

From the data we have, we selected six sets of data: operating income, pre-tax income, total assets, total net worth, revenue from sales and combined these six sets of data to get ROA, pre-tax ROA, ROE, pre-tax ROE, ROS, pre-tax ROS, we will use these six indicators to specifically analyze the profit efficiency of each country's investment in Italy（see table 11, 12, 13）. And we find that operating income, pre-tax income and total net worth have some negative data, we drop the both operating income and total net worth are negative, and both pre-tax income and total net worth are negative to calculate the ROE and pre-tax ROE.

Based on three years of data obtained using STATA, we found that, also using 2016 as a reference, China's ROE and pre-tax ROE showed an upward trend in 2017 （ROE：0.1930 – 0.2185， pre-tax ROE：0.1631 – 0.2016），while the other four items declined slightly（ROA：0.0192 – 0.0162, pre-tax ROA： 0.0148 – 0.0131, ROS： 0.0225 – 0.0191, pre-tax ROS：0.0176 – 0.0155），which shows that the value created by the company for its shareholders has increased and the company is efficient in using equity financing to fund its operations and generate profits from its primary business activities. At the same time, according to the production efficiency analysis in the previous section, we know that the net profits of Chinese investment companies increased in 2017, which also echoes the reasons for the increase in ROE. However, if the company makes a large amount of investment or expansion, it may lead to an increase in total assets, but it may not see corresponding benefits in the short term, and if sales decrease or the sales price decreases, it will lead to a decrease in ROA and ROS.

France and China had similar situations in 2017, with ROE and pre-tax ROE rising, while the rest fell. However, Germany and the United States showed an overall upward trend, and individual indicators tended to be stable. This further proves that companies in these countries have improved operational and financial efficiency and profitability, creating a favorable macroeconomic environment for

companies. At the same time, certain industries or fields may experience technological innovation, new market opportunities or industry restructuring, which may lead to improvements in corporate performance.

Let's now look at 2020. Consistent with the results of our analysis in the previous two sections, various indicators of investments from France, Germany, the United States, the United Kingdom, and including the Italian owned firms have all dropped significantly. On the contrary, in China, only ROA and pre-tax ROA decreased（ROA：0.0192 – 0.0130, pre-tax ROA： 0.0148 – 0.0107）, while the other items all increased significantly（ROE： 0.1930 – 0.2402, pre-tax ROE： 0.1631 – 0.2181, ROS： 0.0191 – 0.0205 compare with 2017, pre-tax ROS： 0.0176 – 0.0186）. This is also due to China's rapid, powerful and organized control of the epidemic in a short period of time, allowing production and supply chains to return to a relatively normal state. Therefore, the operations and profitability of both Chinese domestic and Chinese overseas-invested companies were relatively good during this period. At the same time, China's production base has maintained normal operations for most of the year of 2020. This also provides Chinese companies with opportunities to increase exports and international market share.

Despite the impact on the global economy, Chinese companies have still gained a larger share of the international market thanks to a series of monetary and fiscal stimulus measures introduced by the Chinese government. Moreover, China's overseas investment strategy is different from other countries. It is more long-term and stable and does not seek short-term returns. And based on the relevant industries of investment, it is not difficult to find that China has invested more in industries that are relatively stable or less affected by the epidemic, and have initially achieved scale effects. Although ROA has declined, it does not affect its relatively good return on investment. But industries such as automobiles, machinery manufacturing or energy invested by other countries are facing declining sales, intensified industry competitiveness, and disruptions to the global supply chain, resulting in a sharp decline in various indicators.

Conclusion

In this comprehensive analysis, as mentioned in the introduction earlier in the article, we first understand the basic concepts of FDI, its determinants, etc., and then we delve into the complexities of foreign investment in Italy, focusing specifically on China' s role and how it compares to other major global players. We used AIDA's data to segment regional and industry data and analyze the financial health and productivity of Chinese-owned companies in Italy. Here are the main points and implications:

Northern Italy' s dominance: Lombardy has emerged as a hub for foreign investment, reflecting its role as a hub for industries ranging from finance to manufacturing. The concentration of investment in northern Italy underlines the economic dynamism and strategic importance of the region.

Industry preferences: China' s investment strategy in Italy is heavily tilted towards labor-intensive industries, especially textiles and wholesale trade. This is consistent with China' s global dominance in manufacturing and large-scale trade. On the other hand, European and American countries favor high-tech, high value-added, and service-oriented industries, which reflects their core advantages and global economic status.

Financial performance and debt analysis: Chinese-funded companies in Italy have a high ratio of debt to total liabilities, which means they have potential financial risks and are highly dependent on external financing. This may be due to China's aggressive overseas expansion strategy and response to the economic challenges posed by the 2020 epidemic. However, overall debt trends among global investors indicate caution and conservatism, likely influenced by the uncertainty of the pandemic.

Productivity indicators: Chinese investments in Italy are concentrated in sectors with lower profit margins, suggesting a strategy based on volume and cost

efficiency. The efficiency of Chinese companies, measured by turnover per unit labor cost, underscores China's competitive advantage in labor-intensive industries. In contrast, European and American countries that invest in high-tech and high-value-added industries have higher per-employee income.

Profitability trends: Although profitability indicators in most countries declined in 2020 due to the epidemic, Chinese companies showed resilience and even growth in some indicators. This can be attributed to China's rapid control of the epidemic, allowing its companies to resume operations earlier than their global counterparts.

Strategic significance:

For China, the data suggests it will continue to push overseas investment, leveraging its manufacturing prowess and cost efficiencies. However, there is scope to diversify into higher value-added industries and reduce overreliance on debt financing.

Countries in Europe and the Americas, while already investing in high-tech industries, may benefit from a more diversified strategy that combines high-tech industries with volume-driven industries.

The impact of the epidemic on global investment highlights the need for more resilient and flexible investment strategies to cope with unforeseen global shocks.

Overall, China’ s investment strategy in Italy reflects its broader global economic strategy, leveraging its strengths in manufacturing and trade. Each country's investment patterns in Italy provide a window into its broader economic priorities, strengths and strategies. As global dynamics continue to evolve, especially in the post-pandemic world, these patterns are likely to change, providing new insights into the changing international investment landscape.

References

"China-Italy Relations and Economic and Trade Cooperation under the New Situation"

http://milano.china-consulate.gov.cn/zxhd/202212/t20221217_10991567.htm

2021 China’ s Outward Direct Investment Statistical Bulletin

Action Plan between China and Italy on Strengthening Economic, Trade, Cultural and Scientific and Technological Cooperation (2017-2020)

Amendolagine, Vito, Claudio Cozza, and Roberta Rabellotti. "Chinese and Indian multinationals: a firm-level analysis of their investments in Europe." Global Economic Review 44.4 (2015): 452-469.

Amighini, Alessia A., Roberta Rabellotti, and Marco Sanfilippo. "Do Chinese state-owned and private enterprises differ in their internationalization strategies?." China Economic Review 27 (2013): 312-325.

Amighini, Alessia, Roberta Rabellotti, and Marco Sanfilippo. "China’ s outward FDI: An industry-level analysis of host-country determinants." Frontiers of Economics in China 8.3 (2013): 309-336.

Belt and Road Initiative

https://www.worldbank.org/en/topic/regional-integration/brief/belt-and-road- initiative

Borensztein, Eduardo, Jose De Gregorio, and Jong-Wha Lee. "How does foreign direct investment affect economic growth?." Journal of international Economics 45.1 (1998): 115-135.

Buckley, Peter J., and Mark Casson. "The internalization theory of the multinational enterprise: Past, present and future." British Journal of Management 31.2 (2020): 239-252.

Buckley, Peter J., et al. "The determinants of Chinese outward foreign direct investment." International business strategy. Routledge, 2015. 574-600.

Business Environment Guidelines for Enterprises' Foreign Investment Countries (Regions): Italy

Can developing countries benefit from outward FDI? https://cts.nankai.edu.cn/info/1028/1297.htm

Ceccagno, Antonella. "New Chinese migrants in Italy." International migration 41.3 (2003): 187-213.

CEIC Italy data https://www.ceicdata.com/zh-hans/country/italy

Cheung, Kui-yin, and Lin Ping. "Spillover effects of FDI on innovation in China: Evidence from the provincial data." China economic review 15.1 (2004): 25-44.

China and Italy sign "Belt and Road" cooperation document https://www.yidaiyilu.gov.cn/p/83639.html

China Business Data Center: Non-financial foreign direct investment statistics http://data.mofcom.gov.cn/tzhz/fordirinvest.shtml

China Chamber of Commerce in Italy - News - China-EU Economic and Trade https://www.cccit.org/%E4%B8%AD%E6%AC%A7%E7%BB%8F%E8%B4%B8

China Foreign Investment Report, 2022.

China is an important partner of Italy" - Chinese and Italian experts discuss the stable development of bilateral relations
https://news.gmw.cn/2022-09/02/content_35996466.htm

China National Bureau of Statistics Data Center
http://www.stats.gov.cn/sj/

China' s Global Investment Strategy Report

China's Massive Belt and Road Initiative
https://www.cfr.org/backgrounder/chinas-massive-belt-and-road-initiative

China' s Overseas Investment and Cooperation Development Report (2020)

China' s Overseas Investment and Cooperation Development Report (2022)

China-Italy trade volume will grow by 5.4% in 2022, and bilateral economic and trade cooperation remains strong and resilient.
http://wap.qwitaly.com/ydlxw/32690.html

China's Overseas Investment Development Report 2018

China's Overseas Investment Development Report 2019

Chinese enterprises' "going out" strategy is still in its infancy.
https://www.gov.cn/govweb/zxft/ft32/content_673361.htm

Chinese investment in Italy: advantages for foreign investors
https://arnonesicomo.com/zh/news/85/%E4%B8%AD%E5%9B%BD-%E6%8A%95%E8%B5%84-%E6%84%8F%E5%A4%A7%E5%88%A9

Chintrakarn, Pandej, Dierk Herzer, and Peter Nunnenkamp. "FDI and income inequality: Evidence from a panel of US states." Economic inquiry 50.3 (2012): 788-801.

Country (Region) Guide to Foreign Investment and Cooperation: Italy (2022 Edition)

Country (Region) Guide to Foreign Investment and Cooperation: Italy

Cozza, Claudio, Roberta Rabellotti, and Marco Sanfilippo. "The impact of outward FDI on the performance of Chinese firms." China Economic Review 36 (2015): 42-57.

Crescenzi, Riccardo, Carlo Pietrobelli, and Roberta Rabellotti. "Regional strategic assets and the location strategies of emerging countries' multinationals in Europe." European Planning Studies 24.4 (2016): 645-667.

Dean, Judith M., Mary E. Lovely, and Hua Wang. "Are foreign investors attracted to weak environmental regulations? Evaluating the evidence from China." Journal of development economics 90.1 (2009): 1-13.

Development trends and prospects of foreign investment in China https://m.yicai.com/news/101703654.html

Direct Foreign Investment (FDI): What It Is, Types, and Examples https://www.investopedia.com/terms/f/fdi.asp

Dunning, John H. "Toward an eclectic theory of international production: Some empirical tests." Journal of international business studies 11 (1980): 9-31.

Dunning, John H. "Trade, location of economic activity and the multinational enterprise: A search for an eclectic approach." The theory of transnational corporations 1.1993 (1993): 183-218.

Dunning, John H., and Sarianna M. Lundan. Multinational enterprises and the global economy. Edward Elgar Publishing, 2008.

Explanation on the formulation of recommendations for the 12th Five-Year Plan for China National Economic and Social Development https://www.gov.cn/ldhd/2010-10/28/content_1732622_2.htm

Farrajota Ramos, Pedro. "CHINESE INVESTMENT IN PORTUGAL AND IN ITALY AND ITS IMPACT IN THE EUROPEAN UNION." Relações Internacionais (2021).

Freire-Serén, M. Jesús. "Human capital accumulation and economic growth." (1999).

Globerman, Steven, and Daniel Shapiro. "Global foreign direct investment flows: The role of governance infrastructure." World development 30.11 (2002): 1899-1919.

Grappi, G. The Chinese Labour Market in Prato. Made in China Journal, 2018.

Green transformation of China’ s economic development model, Chapter 4: Investment, trade and environment

Hill, C. W. L. International Business: Competing in the Global Marketplace (12th ed.). McGraw-Hill Education, 2020.

Huo Jianguo，During the "14th Five-Year Plan" period, China should expand the development space and potential of foreign investment, Comprehensive Development Research Institute, "Open Report", Issue 2, 2020

Hymer, Stephen H. The international operations of national firms, a study of direct foreign investment. Diss. Massachusetts Institute of Technology, 1960.

In the past ten years, China's GDP has grown at an average annual rate of 6.6%, and its average contribution to world economic growth has exceeded 30%.
https://www.gov.cn/xinwen/2022-09/18/content_5710523.htm

Investment trends: Italy becomes the main destination for Chinese investment
https://m.iqiaowai.com/Hotspot/37225

Italy becomes the main destination for Chinese investment
https://news.cri.cn/chinanews/20170302/bbdbbfe7-6a3b-4083-f0e9-e9a523a411d1.html

Italy Investment Guide

Italy welcomes Chinese investment, but competition concerns remain
https://chinadialogue.net/zh/4/69404/

Italy’s advantages in attracting investment
https://www.ccpit.org/italia/a/20220222/20220222zidg.html

Lv, Ping, and Francesca Spigarelli. "The determinants of location choice: Chinese foreign direct investments in the European renewable energy sector." International Journal of Emerging Markets 11.3 (2016): 333-356.

MANGANO, MATTIA. "Foreign direct investment in Italy: a comparative analysis between China and the USA." (2020).

Ministry of Commerce of the People's Republic of China: “Going Out” Global Public Service Platform
http://fec.mofcom.gov.cn/article/tjsj/tjgb/

Ministry of Commerce of the People's Republic of China: Bilateral Economic and Trade Cooperation http://it.mofcom.gov.cn/article/zxhz/

Ministry of Commerce of the People's Republic of China: Regional and industrial distribution of German foreign direct investment http://de.mofcom.gov.cn/article/ztdy/200807/20080705645266.shtml

Ministry of Commerce of the People's Republic of China: Trade, Investment and Strategic Cooperation between China and Emerging Economies http://fec.mofcom.gov.cn/article/ywzn/xgzx/zlyj/201511/20151101187124.shtml

Moosa, Imad. Foreign direct investment: theory, evidence and practice. Springer, 2002.

Moran, Theodore. Foreign direct investment and development: Launching a second generation of policy research: Avoiding the mistakes of the first, reevaluating policies for developed and developing countries. Columbia University Press, 2011.

Multinational enterprises in the global economy https://www.oecd.org/industry/ind/MNEs-in-the-global-economy-policy-note.pdf

OECD. Publishing. Foreign direct investment for development: Maximising benefits, minimising costs. Organisation for Economic Co-operation and Development, 2002.

One Belt, One Road: Italy becomes first G7 country to join China's global investment project https://www.bbc.com/zhongwen/simp/world-47683550

Outline of the 12th Five-Year Plan for China National Economic and Social Development (full text) https://www.gov.cn/2011lh/content_1825838_13.htm

Paba, Sergio, and Cinzia Parolini. "Should we fear or hope for Chinese acquisitions? Evidence from Italy." DEMB WORKING PAPER SERIES (2020).

Paba, Sergio. "The Chinese automotive industry at a turning point. An Overview." DEMB WORKING PAPER SERIES (2022).

Pieke, Frank N. Transnational Chinese: Fujianese Migrants in Europe. Stanford University Press, 2004.

Pietrobelli, Carlo, Roberta Rabellotti, and Marco Sanfilippo. "Chinese FDI strategy in Italy: the 'Marco Polo' effect." International Journal of Technological Learning, Innovation and Development 4.4 (2011): 277-291.

Pietrobelli, Carlo, Roberta Rabellotti, and Marco Sanfilippo. What drives Chinese multinationals to Italy?. Springer Berlin Heidelberg, 2013.

Politi, Alice. "Italy: A case study of the Silk Road Project in Europe." Lau China Institute Policy Paper Series: 'China in the World (2020).

Sanfilippo, Marco. Chinese investments in Italy: facing risks and grasping opportunities. Istituto Affari Internazionali (IAI), 2014.

Spigarelli, Francesca, Ilan Alon, and Attilio Mucelli. "Chinese M & A in Europe: Emerging market multinational in the heavy construction industry." Competitiveness Review 25.4 (2015): 346-370.

Spigarelli, Francesca. "Chinese Investments in Italy: Is the Wave Arriving? 1." Advancing Technologies for Asian Business and Economics: Information Management Developments. IGI Global, 2012. 119-142.

The 14th Five-Year Plan for National Economic and Social Development of the People's Republic of China and the Outline of Long-Range Goals for 2035

UNCTAD. World Investment Report 2012: Towards a New Generation of Investment Policies. United Nations Publications, 2012.

UNCTAD. World Investment Report 2015: Reforming International Investment Governance. United Nations Publications, 2015.

UNCTAD. World Investment Report 2019. United Nations Conference on Trade and Development, 2019.

UNCTAD. World Investment Report 2022: International tax reforms and sustainable investment, 2022.

What Are Greenfield Investments? https://researchfdi.com/resources/articles/what-are-greenfield-investments/

Why do foreign investors continue to be optimistic about the Chinese market? http://www.news.cn/sikepro/20230228/eb22e4fe9bdd4f77bdb8f1f21ff52efb/c.html

Zhan, J. From Investor to Global Partner: China’ s New Role in Global Investment. In J. Gao (Ed.), China’ s Global Quest for Resources: Energy, Food and Water, 2016.

Zhou Shengqi，China’ s Foreign Direct Investment: Current Situation, Trends and Policies, East Asia Papers No. 75

Zhou Wenbo. The development trajectory of the relationship between international trade and FDI: substitution, complementation and integration, 2010.

Table 1

Province distribution of Chinese investment in Italy

Province	No.	%	Province	No.	%	Province	No.	%
Agrigento	9	0.12%	Grosseto	3	0.04%	Rieti	2	0.03%
Alessandria	24	0.32%	Imperia	19	0.25%	Rimini	19	0.25%
Ancona	21	0.28%	L'Aquila	10	0.13%	Roma	979	12.94%
Arezzo	31	0.41%	La Spezia	18	0.24%	Rovigo	28	0.37%
Ascoli Piceno	12	0.16%	Latina	30	0.40%	Salerno	22	0.29%
Asti	9	0.12%	Lecce	51	0.67%	Sardegna	12	0.16%
Avellino	11	0.15%	Lecco	18	0.24%	Sassari	43	0.57%
Bari	71	0.94%	Livorno	13	0.17%	Savona	10	0.13%
Barletta-Andria-Trani	16	0.21%	Lodi	11	0.15%	Siena	11	0.15%
Belluno	8	0.11%	Lucca	25	0.33%	Siracusa	8	0.11%
Benevento	5	0.07%	Macerata	32	0.42%	Sondrio	5	0.07%
Bergamo	88	1.16%	Mantova	58	0.77%	Taranto	33	0.44%
Biella	8	0.11%	Massa-Carrara	8	0.11%	Teramo	30	0.40%
Bologna	103	1.36%	Matera	9	0.12%	Terni	12	0.16%
Bolzano/Bozen	48	0.63%	Messina	24	0.32%	Torino	161	2.13%
Brescia	176	2.33%	Milano	1,654	21.86%	Trapani	11	0.15%
Brindisi	19	0.25%	Modena	109	1.44%	Trento	17	0.22%
Cagliari	50	0.66%	Monza e della Brianza	209	2.76%	Treviso	106	1.40%
Caltanissetta	6	0.08%	Napoli	284	3.75%	Trieste	11	0.15%
Campobasso	6	0.08%	Novara	29	0.38%	Udine	30	0.40%
Caserta	37	0.49%	Nuoro	3	0.04%	Valle d'Aosta/Vallee d'Aoste	2	0.03%
Catania	32	0.42%	Oristano	2	0.03%	Varese	85	1.12%
Catanzaro	4	0.05%	Padova	242	3.20%	Venezia	102	1.35%
Chieti	12	0.16%	Palermo	50	0.66%	Verbano-Cusio-Ossola	6	0.08%
Como	39	0.52%	Parma	38	0.50%	Vercelli	15	0.20%
Cosenza	30	0.40%	Pavia	30	0.40%	Verona	81	1.07%
Cremona	12	0.16%	Perugia	42	0.55%	Vibo Valentia	2	0.03%
Crotone	2	0.03%	Pesaro Urbino	14	0.18%	Vicenza	60	0.79%
Cuneo	26	0.34%	Pescara	8	0.11%	Viterbo	12	0.16%
Emilia-Romagna	1	0.01%	Piacenza	16	0.21%	Total	7,568	100.00%
Enna	5	0.07%	Pisa	25	0.33%			
Fermo	23	0.30%	Pistoia	51	0.67%			
Ferrara	19	0.25%	Pordenone	14	0.18%			
Firenze	365	4.82%	Potenza	9	0.12%			
Foggia	29	0.38%	Prato	930	12.29%			
Forlì-Cesena	46	0.61%	Ragusa	2	0.03%			
Frosinone	23	0.30%	Ravenna	19	0.25%			
Genova	54	0.71%	Reggio di Calabria	6	0.08%			
Gorizia	8	0.11%	Reggio nell'Emilia	50	0.66%			

Table 2

Industry ATECO2007 code

A	**AGRICOLTURA, SILVICOLTURA E PESCA**
01	COLTIVAZIONI AGRICOLE E PRODUZIONE DI PRODOTTI ANIMALI, CACCIA E SERVIZI CONNESSI
02	SILVICOLTURA ED UTILIZZO DI AREE FORESTALI
03	PESCA E ACQUACOLTURA
B	**ESTRAZIONE DI MINERALI DA CAVE E MINIERE**
05	ESTRAZIONE DI CARBONE (ESCLUSA TORBA)
06	ESTRAZIONE DI PETROLIO GREGGIO E DI GAS NATURALE
07	ESTRAZIONE DI MINERALI METALLIFERI
08	ALTRE ATTIVITÀ DI ESTRAZIONE DI MINERALI DA CAVE E MINIERE
09	ATTIVITÀ DEI SERVIZI DI SUPPORTO ALL'ESTRAZIONE
C	**ATTIVITÀ MANIFATTURIERE**
10	INDUSTRIE ALIMENTARI
11	INDUSTRIA DELLE BEVANDE
12	INDUSTRIA DEL TABACCO
13	INDUSTRIE TESSILI
14	CONFEZIONE DI ARTICOLI DI ABBIGLIAMENTO; CONFEZIONE DI ARTICOLI IN PELLE E PELLICCIA
15	FABBRICAZIONE DI ARTICOLI IN PELLE E SIMILI
16	INDUSTRIA DEL LEGNO E DEI PRODOTTI IN LEGNO E SUGHERO (ESCLUSI I MOBILI); FABBRICAZIONE DI ARTICOLI IN PAGLIA E MATERIALI DA INTRECCIO
17	FABBRICAZIONE DI CARTA E DI PRODOTTI DI CARTA
18	STAMPA E RIPRODUZIONE DI SUPPORTI REGISTRATI
19	FABBRICAZIONE DI COKE E PRODOTTI DERIVANTI DALLA RAFFINAZIONE DEL PETROLIO
20	FABBRICAZIONE DI PRODOTTI CHIMICI
21	FABBRICAZIONE DI PRODOTTI FARMACEUTICI DI BASE E DI PREPARATI FARMACEUTICI
22	FABBRICAZIONE DI ARTICOLI IN GOMMA E MATERIE PLASTICHE
23	FABBRICAZIONE DI ALTRI PRODOTTI DELLA LAVORAZIONE DI MINERALI NON METALLIFERI
24	METALLURGIA
25	FABBRICAZIONE DI PRODOTTI IN METALLO (ESCLUSI MACCHINARI E ATTREZZATURE)
26	FABBRICAZIONE DI COMPUTER E PRODOTTI DI ELETTRONICA E OTTICA; APPARECCHI ELETTROMEDICALI, APPARECCHI DI MISURAZIONE E DI OROLOGI
27	FABBRICAZIONE DI APPARECCHIATURE ELETTRICHE ED APPARECCHIATURE PER USO DOMESTICO NON ELETTRICHE

28	FABBRICAZIONE DI MACCHINARI ED APPARECCHIATURE N.C.A.
29	FABBRICAZIONE DI AUTOVEICOLI, RIMORCHI E SEMIRIMORCHI
30	FABBRICAZIONE DI ALTRI MEZZI DI TRASPORTO
31	FABBRICAZIONE DI MOBILI
32	ALTRE INDUSTRIE MANIFATTURIERE
33	RIPARAZIONE, MANUTENZIONE ED INSTALLAZIONE DI MACCHINE ED APPARECCHIATURE
D	**FORNITURA DI ENERGIA ELETTRICA, GAS, VAPORE E ARIA CONDIZIONATA**
35	FORNITURA DI ENERGIA ELETTRICA, GAS, VAPORE E ARIA CONDIZIONATA
E	**FORNITURA DI ACQUA; RETI FOGNARIE, ATTIVITÀ DI GESTIONE DEI RIFIUTI E RISANAMENTO**
36	RACCOLTA, TRATTAMENTO E FORNITURA DI ACQUA
37	GESTIONE DELLE RETI FOGNARIE
38	ATTIVITÀ DI RACCOLTA, TRATTAMENTO E SMALTIMENTO DEI RIFIUTI; RECUPERO DEI MATERIALI
39	ATTIVITÀ DI RISANAMENTO E ALTRI SERVIZI DI GESTIONE DEI RIFIUTI
F	**COSTRUZIONI**
41	COSTRUZIONE DI EDIFICI
42	INGEGNERIA CIVILE
43	LAVORI DI COSTRUZIONE SPECIALIZZATI
G	**COMMERCIO ALL'INGROSSO E AL DETTAGLIO; RIPARAZIONE DI AUTOVEICOLI E MOTOCICLI**
45	COMMERCIO ALL'INGROSSO E AL DETTAGLIO E RIPARAZIONE DI AUTOVEICOLI E MOTOCICLI
46	COMMERCIO ALL'INGROSSO (ESCLUSO QUELLO DI AUTOVEICOLI E DI MOTOCICLI)
47	COMMERCIO AL DETTAGLIO (ESCLUSO QUELLO DI AUTOVEICOLI E DI MOTOCICLI)
H	**TRASPORTO E MAGAZZINAGGIO**
49	TRASPORTO TERRESTRE E TRASPORTO MEDIANTE CONDOTTE
50	TRASPORTO MARITTIMO E PER VIE D'ACQUA
51	TRASPORTO AEREO
52	MAGAZZINAGGIO E ATTIVITÀ DI SUPPORTO AI TRASPORTI
53	SERVIZI POSTALI E ATTIVITÀ DI CORRIERE
I	**ATTIVITÀ DEI SERVIZI DI ALLOGGIO E DI RISTORAZIONE**

55	ALLOGGIO
56	ATTIVITÀ DEI SERVIZI DI RISTORAZIONE
J	**SERVIZI DI INFORMAZIONE E COMUNICAZIONE**
58	ATTIVITÀ EDITORIALI
59	ATTIVITÀ DI PRODUZIONE CINEMATOGRAFICA, DI VIDEO E DI PROGRAMMI TELEVISIVI, DI REGISTRAZIONI MUSICALI E SONORE
60	ATTIVITÀ DI PROGRAMMAZIONE E TRASMISSIONE
61	TELECOMUNICAZIONI
62	PRODUZIONE DI SOFTWARE, CONSULENZA INFORMATICA E ATTIVITÀ CONNESSE
63	ATTIVITÀ DEI SERVIZI D'INFORMAZIONE E ALTRI SERVIZI INFORMATICI
K	**ATTIVITÀ FINANZIARIE E ASSICURATIVE**
64	ATTIVITÀ DI SERVIZI FINANZIARI (ESCLUSE LE ASSICURAZIONI E I FONDI PENSIONE)
65	ASSICURAZIONI, RIASSICURAZIONI E FONDI PENSIONE (ESCLUSE LE ASSICURAZIONI SOCIALI OBBLIGATORIE)
66	ATTIVITÀ AUSILIARIE DEI SERVIZI FINANZIARI E DELLE ATTIVITÀ ASSICURATIVE
L	**ATTIVITÀ IMMOBILIARI**
68	ATTIVITÀ IMMOBILIARI
M	**ATTIVITÀ PROFESSIONALI, SCIENTIFICHE E TECNICHE**
69	ATTIVITÀ LEGALI E CONTABILITÀ
70	ATTIVITÀ DI DIREZIONE AZIENDALE E DI CONSULENZA GESTIONALE
71	ATTIVITÀ DEGLI STUDI DI ARCHITETTURA E D'INGEGNERIA; COLLAUDI ED ANALISI TECNICHE
72	RICERCA SCIENTIFICA E SVILUPPO
73	PUBBLICITÀ E RICERCHE DI MERCATO
74	ALTRE ATTIVITÀ PROFESSIONALI, SCIENTIFICHE E TECNICHE
75	SERVIZI VETERINARI
N	**NOLEGGIO, AGENZIE DI VIAGGIO, SERVIZI DI SUPPORTO ALLE IMPRESE**
77	ATTIVITÀ DI NOLEGGIO E LEASING OPERATIVO
78	ATTIVITÀ DI RICERCA, SELEZIONE, FORNITURA DI PERSONALE
79	ATTIVITÀ DEI SERVIZI DELLE AGENZIE DI VIAGGIO, DEI TOUR OPERATOR E SERVIZI DI PRENOTAZIONE E ATTIVITÀ CONNESSE
80	SERVIZI DI VIGILANZA E INVESTIGAZIONE
81	ATTIVITÀ DI SERVIZI PER EDIFICI E PAESAGGIO

82	ATTIVITÀ DI SUPPORTO PER LE FUNZIONI D'UFFICIO E ALTRI SERVIZI DI SUPPORTO ALLE IMPRESE
O	**AMMINISTRAZIONE PUBBLICA E DIFESA; ASSICURAZIONE SOCIALE OBBLIGATORIA**
84	AMMINISTRAZIONE PUBBLICA E DIFESA; ASSICURAZIONE SOCIALE OBBLIGATORIA
P	**ISTRUZIONE**
85	ISTRUZIONE
Q	**SANITÀ E ASSISTENZA SOCIALE**
86	ASSISTENZA SANITARIA
87	SERVIZI DI ASSISTENZA SOCIALE RESIDENZIALE
88	ASSISTENZA SOCIALE NON RESIDENZIALE
R	**ATTIVITÀ ARTISTICHE, SPORTIVE, DI INTRATTENIMENTO E DIVERTIMENTO**
90	ATTIVITÀ CREATIVE, ARTISTICHE E DI INTRATTENIMENTO
91	ATTIVITÀ DI BIBLIOTECHE, ARCHIVI, MUSEI ED ALTRE ATTIVITÀ CULTURALI
92	ATTIVITÀ RIGUARDANTI LE LOTTERIE, LE SCOMMESSE, LE CASE DA GIOCO
93	ATTIVITÀ SPORTIVE, DI INTRATTENIMENTO E DI DIVERTIMENTO
S	**ALTRE ATTIVITÀ DI SERVIZI**
94	ATTIVITÀ DI ORGANIZZAZIONI ASSOCIATIVE
95	RIPARAZIONE DI COMPUTER E DI BENI PER USO PERSONALE E PER LA CASA
96	ALTRE ATTIVITÀ DI SERVIZI PER LA PERSONA
T	**ATTIVITÀ DI FAMIGLIE E CONVIVENZE COME DATORI DI LAVORO PER PERSONALE DOMESTICO; PRODUZIONE DI BENI E SERVIZI INDIFFERENZIATI PER USO PROPRIO DA PARTE DI FAMIGLIE E CONVIVENZE**
97	ATTIVITÀ DI FAMIGLIE E CONVIVENZE COME DATORI DI LAVORO PER PERSONALE DOMESTICO
98	PRODUZIONE DI BENI E SERVIZI INDIFFERENZIATI PER USO PROPRIO DA PARTE DI FAMIGLIE E CONVIVENZE
U	**ORGANIZZAZIONI ED ORGANISMI EXTRATERRITORIALI**
99	ORGANIZZAZIONI ED ORGANISMI EXTRATERRITORIALI

Table 3

Industry distribution of Chinese investment in Italy

ATECO2007code	No.	%	ATECO2007code	No.	%
0	1	0.01%	**50**	1	0.01%
1	9	0.13%	**51**	2	0.03%
8	1	0.01%	**52**	49	0.68%
10	12	0.17%	**53**	5	0.07%
11	4	0.06%	**55**	53	0.74%
13	72	1.00%	**56**	946	13.18%
14	559	7.79%	**58**	3	0.04%
15	273	3.80%	**59**	4	0.06%
16	2	0.03%	**60**	1	0.01%
17	3	0.04%	**61**	9	0.13%
18	9	0.13%	**62**	36	0.50%
20	9	0.13%	**63**	44	0.61%
21	2	0.03%	**64**	51	0.71%
22	17	0.24%	**66**	5	0.07%
23	10	0.14%	**68**	296	4.12%
24	3	0.04%	**69**	6	0.08%
25	37	0.52%	**70**	121	1.69%
26	9	0.13%	**71**	16	0.22%
27	17	0.24%	**72**	12	0.17%
28	76	1.06%	**73**	28	0.39%
29	10	0.14%	**74**	58	0.81%
30	8	0.11%	**77**	29	0.40%
31	45	0.63%	**79**	18	0.25%
32	50	0.70%	**81**	8	0.11%
33	12	0.17%	**82**	54	0.75%
35	97	1.35%	**85**	11	0.15%
38	9	0.13%	**86**	10	0.14%
39	1	0.01%	**88**	1	0.01%
41	44	0.61%	**90**	1	0.01%
42	2	0.03%	**92**	105	1.46%
43	46	0.64%	**93**	41	0.57%
45	43	0.60%	**95**	16	0.22%
46	1,884	26.25%	**96**	87	1.21%
47	1,665	23.20%	**Total**	7,176	100.00%
49	8	0.11%			

Table 4

Chinese investment in Italy by region and industry combination

Region/ATECO2007	0	1	8	10	11	13	14	15	16	17	18	20	21	22	23	24	25	26	27	28	29	30	31	32	33	35	38	39	41	42	43	45	46	47
Abruzzo		2				1	2	8				1					1							1		1							6	26
Basilicata																	1						8											3
Calabria		1																								1							2	26
Campania						1	12		1				1																				128	132
Emilia-Romagna	1	1				2	29	8		2				3	5		7	1	2	29	1	2	10	4					1	1	3	8	53	84
Friuli-Venezia Giulia					1									1						6		1	4						1				6	15
Lazio				2			5	1				1		1					1		1					37			2		2	5	314	343
Liguria							1											1	1						2					1	1	10	33
Lombardia				5	2	13	90	75			3	5	1	3	1	1	10	5	5	22	1	4	13	2	5	25	1		24		29	15	787	371
Marche				1			5	16									2					1	1	1									14	28
Molise																																		5
Piemonte				2			2							2	3	2	2		1	6	5				2				4			3	48	55
Puglia						1	5	2															2			5					1		25	114
Sardegna				1																											1		11	46
Sicilia								1																		2			1				15	71
Toscana		3	1	1	1	49	353	130		1	5	1		6			7			4			4	16	1	1	4		8		4	4	336	151
Trentino-Alto Adige		1													1						1					25	4	1	1	1	2	2	4	7
Umbria							3											1														1	4	26
Valle d'Aosta/Vallée d'Aoste																																		1
Veneto		1				5	52	32	1		1	1		1			7	1	7	9	1		3	26	2				2		3	4	121	128
Total	1	9	1	12	4	72	559	273	2	3	9	9	2	17	10	3	37	9	17	76	10	8	45	50	12	97	9	1	44	2	46	43	1884	1665

Region/ATECO2007	49	50	51	52	53	55	56	58	59	60	61	62	63	64	66	68	69	70	71	72	73	74	77	79	81	82	85	86	88	90	92	93	95	96	Total
Abruzzo							7									1				1												1			59
Basilicata							5																												17
Calabria							9																			1									40
Campania							36				1	1		1		4		1				1	2	1	1	1		2						2	329
Emilia-Romagna	1			1		2	75					4		6		17		7	2	2		2	1				1				7	1	5	14	405
Friuli-Venezia Giulia						1	13					1		1		1								1							3		3	2	61
Lazio	4			7	1	10	161	2	1		2	1	4	4		20		12		1	2	3	6	9	1	12	1	2				2	1	21	1005
Liguria		1		3			26					1				2		2				1	2								3	3		3	97
Lombardia	2		2	26	4	17	259		3	1		19	23	23		104	3	72	10	5	18	27	11	3	4	20	4	3			47	16	5	23	2272
Marche							16				1	1		1		4		2				3				1									98
Molise							1																												6
Piemonte				3		7	48	1				1	1	4		10	2	5	4	1	4	3	1			6					13	7		1	259
Puglia							30					1		1		3						3		1										1	195
Sardegna							39									2							1								2			1	104
Sicilia				1			23						1			1															3		1		120
Toscana	1			7		11	94				4	4	9	7	3	100	1	11		1	2	8	4	1	1	7	4	2	1		7	4	1	12	1398
Trentino-Alto Adige						1	7							1		2		2					1								1				65
Umbria				1			7							1		2										3				1		1			51
Valle d'Aosta/Vallée d'Aoste																								1											2
Veneto						4	90				1	2	6	1	2	23		7		1	2	7		1	1	3	1	1			21	4		7	593
Total	8	1	2	49	5	53	946	3	4	1	9	36	44	51	5	296	6	121	16	12	28	58	29	18	8	54	11	10	1	1	105	41	16	87	7176

Table 5

Regional distribution of each country

Region/Country	China No.	China col%	China row%	FR No.	FR col%	FR row%	GE No.	GE col%	GE row%	US No.	US col%	US row%
Abruzzo	60	0.79%	14.12%	35	0.84%	8.24%	24	0.59%	5.65%	26	0.66%	6.12%
Basilicata	18	0.24%	12.68%	8	0.19%	5.63%	7	0.17%	4.93%	4	0.10%	2.82%
Calabria	44	0.58%	14.19%	12	0.29%	3.87%	13	0.32%	4.19%	10	0.26%	3.23%
Campania	359	4.74%	20.64%	90	2.15%	5.18%	60	1.48%	3.45%	64	1.63%	3.68%
Emilia-Romagna	420	5.55%	20.04%	261	6.24%	12.45%	246	6.07%	11.74%	301	7.68%	14.36%
Friuli-Venezia Giulia	63	0.83%	16.62%	40	0.96%	10.55%	60	1.48%	15.83%	53	1.35%	13.98%
Lazio	1,046	13.82%	22.95%	558	13.35%	12.24%	241	5.95%	5.29%	519	13.25%	11.39%
Liguria	101	1.33%	18.43%	108	2.58%	19.71%	53	1.31%	9.67%	49	1.25%	8.94%
Lombardia	2,385	31.51%	20.59%	1,957	46.81%	16.90%	1,492	36.81%	12.88%	1,991	50.82%	17.19%
Marche	102	1.35%	23.39%	24	0.57%	5.50%	24	0.59%	5.50%	24	0.61%	5.50%
Molise	6	0.08%	7.32%	5	0.12%	6.10%	11	0.27%	13.41%	5	0.13%	6.10%
Piemonte	278	3.67%	17.43%	326	7.80%	20.44%	187	4.61%	11.72%	184	4.70%	11.54%
Puglia	219	2.89%	19.19%	100	2.39%	8.76%	113	2.79%	9.90%	34	0.87%	2.98%
Sardegna	110	1.45%	24.02%	45	1.08%	9.83%	41	1.01%	8.95%	31	0.79%	6.77%
Sicilia	147	1.94%	14.95%	63	1.51%	6.41%	82	2.02%	8.34%	56	1.43%	5.70%
Toscana	1,462	19.32%	50.80%	228	5.45%	7.92%	148	3.65%	5.14%	230	5.87%	7.99%
Trentino-Alto Adige	65	0.86%	4.97%	93	2.22%	7.11%	885	21.84%	67.66%	48	1.23%	3.67%
Umbria	54	0.71%	18.43%	19	0.45%	6.48%	16	0.39%	5.46%	55	1.40%	18.77%
Valle d'Aosta/Vallee d'Aoste	2	0.03%	4.76%	10	0.24%	23.81%	2	0.05%	4.76%	3	0.08%	7.14%
Veneto	627	8.28%	24.84%	199	4.76%	7.88%	348	8.59%	13.79%	231	5.90%	9.15%
Total	7,568	100.00%	22.58%	4,181	100.00%	12.47%	4,053	100.00%	12.09%	3,918	100.00%	11.69%

Region/Country	UK No.	UK col%	UK row%	ITA No.	ITA col%	ITA row%	Total No.	Total col%	Total row%
Abruzzo	33	0.86%	7.76%	247	2.48%	58.12%	425	1.27%	100.00%
Basilicata	18	0.47%	12.68%	87	0.88%	61.27%	142	0.42%	100.00%
Calabria	5	0.13%	1.61%	226	2.27%	72.90%	310	0.92%	100.00%
Campania	125	3.24%	7.19%	1,041	10.47%	59.86%	1,739	5.19%	100.00%
Emilia-Romagna	154	3.99%	7.35%	714	7.18%	34.06%	2,096	6.25%	100.00%
Friuli-Venezia Giulia	26	0.67%	6.86%	137	1.38%	36.15%	379	1.13%	100.00%
Lazio	591	15.31%	12.97%	1,603	16.13%	35.17%	4,558	13.60%	100.00%
Liguria	54	1.40%	9.85%	183	1.84%	33.39%	548	1.63%	100.00%
Lombardia	1,886	48.87%	16.28%	1,872	18.83%	16.16%	11,583	34.56%	100.00%
Marche	37	0.96%	8.49%	225	2.26%	51.61%	436	1.30%	100.00%
Molise	4	0.10%	4.88%	51	0.51%	62.20%	82	0.24%	100.00%
Piemonte	157	4.07%	9.84%	463	4.66%	29.03%	1,595	4.76%	100.00%
Puglia	73	1.89%	6.40%	602	6.06%	52.76%	1,141	3.40%	100.00%
Sardegna	42	1.09%	9.17%	189	1.90%	41.27%	458	1.37%	100.00%
Sicilia	57	1.48%	5.80%	578	5.81%	58.80%	983	2.93%	100.00%
Toscana	190	4.92%	6.60%	620	6.24%	21.54%	2,878	8.59%	100.00%
Trentino-Alto Adige	81	2.10%	6.19%	136	1.37%	10.40%	1,308	3.90%	100.00%
Umbria	19	0.49%	6.48%	130	1.31%	44.37%	293	0.87%	100.00%
Valle d'Aosta/Vallee d'Aoste	11	0.29%	26.19%	14	0.14%	33.33%	42	0.13%	100.00%
Veneto	296	7.67%	11.73%	823	8.28%	32.61%	2,524	7.53%	100.00%
Total	3,859	100.00%	11.51%	9,941	100.00%	29.66%	33,520	100.00%	100.00%

Table 6

Industry distribution of each country

Code	China No.	China col%	China row%	FR No.	FR col%	FR row%	GE No.	GE col%	GE row%	US No.	US col%	US row%
1	9	0.10%	2.00%	70	1.70%	15.20%	102	2.60%	22.20%	76	2.00%	16.50%
2	0	0.00%	0.00%	3	0.10%	21.40%	2	0.10%	14.30%	4	0.10%	28.60%
3	0	0.00%	0.00%	1	0.00%	12.50%	0	0.00%	0.00%	0	0.00%	0.00%
6	0	0.00%	0.00%	3	0.10%	21.40%	0	0.00%	0.00%	1	0.00%	7.10%
8	1	0.00%	3.00%	5	0.10%	15.20%	2	0.10%	6.10%	0	0.00%	0.00%
9	0	0.00%	0.00%	0	0.00%	0.00%	0	0.00%	0.00%	4	0.10%	50.00%
10	12	0.20%	4.90%	45	1.10%	18.20%	28	0.70%	11.30%	32	0.80%	13.00%
11	4	0.10%	10.00%	5	0.10%	12.50%	3	0.10%	7.50%	6	0.20%	15.00%
12	0	0.00%	0.00%	0	0.00%	0.00%	0	0.00%	0.00%	2	0.10%	66.70%
13	72	1.00%	48.00%	14	0.30%	9.30%	15	0.40%	10.00%	7	0.20%	4.70%
14	559	7.80%	81.60%	20	0.50%	2.90%	8	0.20%	1.20%	15	0.40%	2.20%
15	273	3.80%	73.00%	26	0.60%	7.00%	4	0.10%	1.10%	13	0.30%	3.50%
16	2	0.00%	3.30%	3	0.10%	5.00%	0	0.00%	0.00%	4	0.10%	6.70%
17	3	0.00%	3.90%	12	0.30%	15.60%	7	0.20%	9.10%	10	0.30%	13.00%
18	9	0.10%	12.30%	8	0.20%	11.00%	6	0.20%	8.20%	8	0.20%	11.00%
19	0	0.00%	0.00%	2	0.00%	14.30%	1	0.00%	7.10%	9	0.20%	64.30%
20	9	0.10%	4.10%	38	0.90%	17.10%	48	1.20%	21.60%	73	1.90%	32.90%
21	2	0.00%	2.20%	20	0.50%	22.00%	17	0.40%	18.70%	33	0.90%	36.30%
22	17	0.20%	7.80%	32	0.80%	14.70%	41	1.00%	18.90%	54	1.40%	24.90%
23	10	0.10%	7.60%	17	0.40%	13.00%	21	0.50%	16.00%	17	0.40%	13.00%
24	3	0.00%	5.20%	6	0.10%	10.30%	17	0.40%	29.30%	12	0.30%	20.70%
25	37	0.50%	7.70%	45	1.10%	9.40%	78	2.00%	16.30%	54	1.40%	11.30%
26	9	0.10%	5.10%	29	0.70%	16.40%	21	0.50%	11.90%	68	1.80%	38.40%
27	17	0.20%	8.90%	20	0.50%	10.50%	42	1.10%	22.10%	48	1.30%	25.30%
28	76	1.10%	12.00%	70	1.70%	11.10%	145	3.60%	22.90%	168	4.40%	26.60%
29	10	0.10%	7.90%	31	0.80%	24.60%	35	0.90%	27.80%	27	0.70%	21.40%
30	8	0.10%	11.00%	5	0.10%	6.80%	9	0.20%	12.30%	17	0.40%	23.30%
31	45	0.60%	36.00%	7	0.20%	5.60%	4	0.10%	3.20%	4	0.10%	3.20%
32	50	0.70%	29.20%	32	0.80%	18.70%	13	0.30%	7.60%	26	0.70%	15.20%
33	12	0.20%	5.40%	30	0.70%	13.40%	39	1.00%	17.40%	34	0.90%	15.20%
35	97	1.40%	7.40%	229	5.60%	17.50%	488	12.20%	37.30%	119	3.10%	9.10%
36	0	0.00%	0.00%	5	0.10%	62.50%	0	0.00%	0.00%	1	0.00%	12.50%
37	0	0.00%	0.00%	3	0.10%	30.00%	0	0.00%	0.00%	0	0.00%	0.00%
38	9	0.10%	11.40%	15	0.40%	19.00%	4	0.10%	5.10%	2	0.10%	2.50%
39	1	0.00%	8.30%	1	0.00%	8.30%	3	0.10%	25.00%	1	0.00%	8.30%
41	44	0.60%	2.90%	148	3.60%	9.80%	124	3.10%	8.30%	90	2.40%	6.00%
42	2	0.00%	1.60%	13	0.30%	10.50%	32	0.80%	25.80%	5	0.10%	4.00%
43	46	0.60%	4.80%	82	2.00%	8.50%	63	1.60%	6.50%	46	1.20%	4.80%
45	43	0.60%	8.30%	36	0.90%	6.90%	84	2.10%	16.20%	30	0.80%	5.80%
46	1,884	26.30%	36.20%	535	13.10%	10.30%	841	21.10%	16.20%	623	16.30%	12.00%
47	1,665	23.20%	53.60%	215	5.30%	6.90%	121	3.00%	3.90%	121	3.20%	3.90%
49	8	0.10%	2.90%	32	0.80%	11.80%	40	1.00%	14.70%	9	0.20%	3.30%
50	1	0.00%	4.00%	3	0.10%	12.00%	2	0.10%	8.00%	3	0.10%	12.00%
51	2	0.00%	33.30%	0	0.00%	0.00%	1	0.00%	16.70%	1	0.00%	16.70%
52	49	0.70%	12.90%	56	1.40%	14.70%	82	2.10%	21.60%	54	1.40%	14.20%
53	5	0.10%	17.20%	4	0.10%	13.80%	1	0.00%	3.40%	2	0.10%	6.90%
55	53	0.70%	10.20%	75	1.80%	14.50%	69	1.70%	13.30%	59	1.50%	11.40%
56	946	13.20%	52.50%	59	1.40%	3.30%	51	1.30%	2.80%	38	1.00%	2.10%
58	3	0.00%	2.70%	20	0.50%	17.90%	14	0.40%	12.50%	20	0.50%	17.90%
59	4	0.10%	2.10%	46	1.10%	24.60%	22	0.60%	11.80%	43	1.10%	23.00%

Code	China No.	China col%	China row%	FR No.	FR col%	FR row%	GE No.	GE col%	GE row%	US No.	US col%	US row%
60	1	0.00%	6.30%	1	0.00%	6.30%	0	0.00%	0.00%	5	0.10%	31.30%
61	9	0.10%	8.30%	13	0.30%	12.00%	4	0.10%	3.70%	41	1.10%	38.00%
62	36	0.50%	3.70%	156	3.80%	15.80%	116	2.90%	11.80%	306	8.00%	31.10%
63	44	0.60%	12.90%	38	0.90%	11.20%	30	0.80%	8.80%	44	1.10%	12.90%
64	51	0.70%	5.90%	223	5.50%	25.70%	80	2.00%	9.20%	177	4.60%	20.40%
65	0	0.00%	0.00%	11	0.30%	55.00%	6	0.20%	30.00%	1	0.00%	5.00%
66	5	0.10%	2.10%	34	0.80%	14.50%	36	0.90%	15.40%	45	1.20%	19.20%
68	296	4.10%	11.90%	420	10.30%	16.90%	211	5.30%	8.50%	284	7.40%	11.40%
69	6	0.10%	7.60%	7	0.20%	8.90%	6	0.20%	7.60%	5	0.10%	6.30%
70	121	1.70%	8.00%	269	6.60%	17.70%	216	5.40%	14.20%	220	5.70%	14.50%
71	16	0.20%	3.70%	72	1.80%	16.60%	99	2.50%	22.90%	56	1.50%	12.90%
72	12	0.20%	5.90%	28	0.70%	13.80%	29	0.70%	14.30%	69	1.80%	34.00%
73	28	0.40%	6.50%	76	1.90%	17.70%	45	1.10%	10.50%	107	2.80%	24.90%
74	58	0.80%	7.50%	143	3.50%	18.60%	148	3.70%	19.20%	80	2.10%	10.40%
75	0	0.00%	0.00%	0	0.00%	0.00%	0	0.00%	0.00%	0	0.00%	0.00%
77	29	0.40%	9.90%	56	1.40%	19.20%	51	1.30%	17.50%	31	0.80%	10.60%
78	0	0.00%	0.00%	4	0.10%	14.30%	2	0.10%	7.10%	7	0.20%	25.00%
79	18	0.30%	14.80%	18	0.40%	14.80%	14	0.40%	11.50%	19	0.50%	15.60%
80	0	0.00%	0.00%	3	0.10%	11.50%	1	0.00%	3.80%	1	0.00%	3.80%
81	8	0.10%	4.70%	18	0.40%	10.50%	8	0.20%	4.70%	4	0.10%	2.30%
82	54	0.80%	7.50%	98	2.40%	13.60%	67	1.70%	9.30%	116	3.00%	16.10%
84	0	0.00%	0.00%	1	0.00%	50.00%	0	0.00%	0.00%	0	0.00%	0.00%
85	11	0.20%	5.10%	33	0.80%	15.30%	14	0.40%	6.50%	21	0.50%	9.80%
86	10	0.10%	4.40%	53	1.30%	23.50%	21	0.50%	9.30%	22	0.60%	9.70%
87	0	0.00%	0.00%	39	1.00%	56.50%	3	0.10%	4.30%	2	0.10%	2.90%
88	1	0.00%	3.60%	11	0.30%	39.30%	0	0.00%	0.00%	3	0.10%	10.70%
90	1	0.00%	1.70%	6	0.10%	10.30%	7	0.20%	12.10%	9	0.20%	15.50%
91	0	0.00%	0.00%	2	0.00%	22.20%	1	0.00%	11.10%	1	0.00%	11.10%
92	105	1.50%	62.50%	0	0.00%	0.00%	1	0.00%	0.60%	18	0.50%	10.70%
93	41	0.60%	16.50%	17	0.40%	6.90%	13	0.30%	5.20%	29	0.80%	11.70%
94	0	0.00%	0.00%	0	0.00%	0.00%	0	0.00%	0.00%	0	0.00%	0.00%
95	16	0.20%	34.00%	6	0.10%	12.80%	3	0.10%	6.40%	2	0.10%	4.30%
96	87	1.20%	29.80%	48	1.20%	16.40%	13	0.30%	4.50%	11	0.30%	3.80%
99	0	0.00%	0.00%	0	0.00%	0.00%	0	0.00%	0.00%	0	0.00%	0.00%
Total	7,176	100.00%	22.00%	4,080	100.00%	12.50%	3,995	100.00%	12.30%	3,829	100.00%	11.70%

Code	5_UK No.	5_UK col%	5_UK row%	6_ITA No.	6_ITA col%	6_ITA row%	Total No.	Total col%	Total row%
1	73	2.00%	15.90%	130	1.30%	28.30%	460	1.40%	100.00%
2	0	0.00%	0.00%	5	0.10%	35.70%	14	0.00%	100.00%
3	1	0.00%	12.50%	6	0.10%	75.00%	8	0.00%	100.00%
6	10	0.30%	71.40%	0	0.00%	0.00%	14	0.00%	100.00%
8	1	0.00%	3.00%	24	0.20%	72.70%	33	0.10%	100.00%
9	4	0.10%	50.00%	0	0.00%	0.00%	8	0.00%	100.00%
10	27	0.70%	10.90%	103	1.10%	41.70%	247	0.80%	100.00%
11	7	0.20%	17.50%	15	0.20%	37.50%	40	0.10%	100.00%
12	1	0.00%	33.30%	0	0.00%	0.00%	3	0.00%	100.00%
13	8	0.20%	5.30%	34	0.30%	22.70%	150	0.50%	100.00%
14	14	0.40%	2.00%	69	0.70%	10.10%	685	2.10%	100.00%
15	8	0.20%	2.10%	50	0.50%	13.40%	374	1.10%	100.00%
16	2	0.10%	3.30%	49	0.50%	81.70%	60	0.20%	100.00%
17	27	0.70%	35.10%	18	0.20%	23.40%	77	0.20%	100.00%
18	5	0.10%	6.80%	37	0.40%	50.70%	73	0.20%	100.00%
19	1	0.00%	7.10%	1	0.00%	7.10%	14	0.00%	100.00%
20	29	0.80%	13.10%	25	0.30%	11.30%	222	0.70%	100.00%
21	17	0.50%	18.70%	2	0.00%	2.20%	91	0.30%	100.00%
22	17	0.50%	7.80%	56	0.60%	25.80%	217	0.70%	100.00%
23	18	0.50%	13.70%	48	0.50%	36.60%	131	0.40%	100.00%
24	6	0.20%	10.30%	14	0.10%	24.10%	58	0.20%	100.00%
25	29	0.80%	6.10%	236	2.40%	49.30%	479	1.50%	100.00%
26	18	0.50%	10.20%	32	0.30%	18.10%	177	0.50%	100.00%
27	15	0.40%	7.90%	48	0.50%	25.30%	190	0.60%	100.00%
28	65	1.70%	10.30%	108	1.10%	17.10%	632	1.90%	100.00%
29	8	0.20%	6.30%	15	0.20%	11.90%	126	0.40%	100.00%
30	3	0.10%	4.10%	31	0.30%	42.50%	73	0.20%	100.00%
31	10	0.30%	8.00%	55	0.60%	44.00%	125	0.40%	100.00%
32	12	0.30%	7.00%	38	0.40%	22.20%	171	0.50%	100.00%
33	26	0.70%	11.60%	83	0.80%	37.10%	224	0.70%	100.00%
35	288	7.70%	22.00%	86	0.90%	6.60%	1,307	4.00%	100.00%
36	1	0.00%	12.50%	1	0.00%	12.50%	8	0.00%	100.00%
37	0	0.00%	0.00%	7	0.10%	70.00%	10	0.00%	100.00%
38	6	0.20%	7.60%	43	0.40%	54.40%	79	0.20%	100.00%
39	1	0.00%	8.30%	5	0.10%	41.70%	12	0.00%	100.00%
41	126	3.40%	8.40%	971	9.90%	64.60%	1,503	4.60%	100.00%
42	12	0.30%	9.70%	60	0.60%	48.40%	124	0.40%	100.00%
43	76	2.00%	7.90%	651	6.60%	67.50%	964	3.00%	100.00%
45	30	0.80%	5.80%	296	3.00%	57.00%	519	1.60%	100.00%
46	352	9.50%	6.80%	969	9.90%	18.60%	5,204	16.00%	100.00%
47	126	3.40%	4.10%	857	8.70%	27.60%	3,105	9.50%	100.00%
49	12	0.30%	4.40%	171	1.70%	62.90%	272	0.80%	100.00%
50	10	0.30%	40.00%	6	0.10%	24.00%	25	0.10%	100.00%
51	1	0.00%	16.70%	1	0.00%	16.70%	6	0.00%	100.00%
52	41	1.10%	10.80%	98	1.00%	25.80%	380	1.20%	100.00%
53	0	0.00%	0.00%	17	0.20%	58.60%	29	0.10%	100.00%
55	90	2.40%	17.40%	172	1.80%	33.20%	518	1.60%	100.00%
56	81	2.20%	4.50%	626	6.40%	34.80%	1,801	5.50%	100.00%
58	22	0.60%	19.60%	33	0.30%	29.50%	112	0.30%	100.00%
59	21	0.60%	11.20%	51	0.50%	27.30%	187	0.60%	100.00%

Code	5_UK No.	5_UK col%	5_UK row%	6_ITA No.	6_ITA col%	6_ITA row%	Total No.	Total col%	Total row%
60	3	0.10%	18.80%	6	0.10%	37.50%	16	0.00%	100.00%
61	21	0.60%	19.40%	20	0.20%	18.50%	108	0.30%	100.00%
62	183	4.90%	18.60%	188	1.90%	19.10%	985	3.00%	100.00%
63	37	1.00%	10.90%	147	1.50%	43.20%	340	1.00%	100.00%
64	187	5.00%	21.50%	151	1.50%	17.40%	869	2.70%	100.00%
65	1	0.00%	5.00%	1	0.00%	5.00%	20	0.10%	100.00%
66	51	1.40%	21.80%	63	0.60%	26.90%	234	0.70%	100.00%
68	346	9.30%	13.90%	931	9.50%	37.40%	2,488	7.60%	100.00%
69	6	0.20%	7.60%	49	0.50%	62.00%	79	0.20%	100.00%
70	347	9.30%	22.80%	349	3.60%	22.90%	1,522	4.70%	100.00%
71	72	1.90%	16.60%	118	1.20%	27.30%	433	1.30%	100.00%
72	41	1.10%	20.20%	24	0.20%	11.80%	203	0.60%	100.00%
73	78	2.10%	18.10%	96	1.00%	22.30%	430	1.30%	100.00%
74	162	4.40%	21.10%	178	1.80%	23.10%	769	2.40%	100.00%
75	37	1.00%	84.10%	7	0.10%	15.90%	44	0.10%	100.00%
77	37	1.00%	12.70%	88	0.90%	30.10%	292	0.90%	100.00%
78	11	0.30%	39.30%	4	0.00%	14.30%	28	0.10%	100.00%
79	20	0.50%	16.40%	33	0.30%	27.00%	122	0.40%	100.00%
80	6	0.20%	23.10%	15	0.20%	57.70%	26	0.10%	100.00%
81	17	0.50%	9.90%	116	1.20%	67.80%	171	0.50%	100.00%
82	172	4.60%	23.90%	213	2.20%	29.60%	720	2.20%	100.00%
84	0	0.00%	0.00%	1	0.00%	50.00%	2	0.00%	100.00%
85	39	1.00%	18.10%	97	1.00%	45.10%	215	0.70%	100.00%
86	9	0.20%	4.00%	111	1.10%	49.10%	226	0.70%	100.00%
87	11	0.30%	15.90%	14	0.10%	20.30%	69	0.20%	100.00%
88	3	0.10%	10.70%	10	0.10%	35.70%	28	0.10%	100.00%
90	8	0.20%	13.80%	27	0.30%	46.60%	58	0.20%	100.00%
91	1	0.00%	11.10%	4	0.00%	44.40%	9	0.00%	100.00%
92	13	0.30%	7.70%	31	0.30%	18.50%	168	0.50%	100.00%
93	29	0.80%	11.70%	119	1.20%	48.00%	248	0.80%	100.00%
94	1	0.00%	100.00%	0	0.00%	0.00%	1	0.00%	100.00%
95	5	0.10%	10.60%	15	0.20%	31.90%	47	0.10%	100.00%
96	8	0.20%	2.70%	125	1.30%	42.80%	292	0.90%	100.00%
99	0	0.00%	0.00%	2	0.00%	100.00%	2	0.00%	100.00%
Total	3,720	100.00%	11.40%	9,806	100.00%	30.10%	32,606	100.00%	100.00%

Table 7

Total debt/total liabilities by country in 2016/17/20

Country	Variable	Median	Mean	S.d	Min	Max
China	debt_pas_2016	0.8274	0.758	0.413	0	4.291
	debt_pas_2017	0.8262	0.775	0.577	0	13.70
	debt_pas_2020	0.8692	16.22	727.8	0	38664
FR	debt_pas_2016	0.6684	0.874	7.303	0	332.2
	debt_pas_2017	0.6646	0.885	10.13	0	479.8
	debt_pas_2020	0.6536	0.820	4.727	0	207.7
GE	debt_pas_2016	0.6088	0.656	1.229	0	48.02
	debt_pas_2017	0.6052	1.333	31.16	0	1508
	debt_pas_2020	0.5823	0.668	2.089	0	101.7
US	debt_pas_2016	0.5333	148.1	7045	0	336405
	debt_pas_2017	0.5356	142.6	6898	0	336965
	debt_pas_2020	0.5056	0.724	3.805	0	168.9
UK	debt_pas_2016	0.6511	0.931	6.839	0	263.8
	debt_pas_2017	0.6489	0.991	9.622	0	398.9
	debt_pas_2020	0.6155	1.151	17.52	0	835.9
ITA	debt_pas_2016	0.7239	0.962	6.173	0	232.0
	debt_pas_2017	0.7094	1.589	34.59	0	2372
	debt_pas_2020	0.6881	5.194	233.6	0	17161

Table 8

Productivity of companies by country in 2016

Country	Variable	Median	Mean	S.d	Min	Max
China	turn per emp 2016	139.4	330.1	792.2	0	10483
	val add per emp 2016	0.402	-10.56	117.9	-1188	1762
	turn per lab cost 2016	6.839	25.07	135.7	0	3179
	val add per lab cost 2016	0.0223	-15.15	273.1	-7195	186.3
FR	turn per emp 2016	239.8	671.1	2780	0	65113
	val add per emp 2016	2.592	-21.75	948.3	-32780	13588
	turn per lab cost 2016	5.063	51.18	582.0	0	18653
	val add per lab cost 2016	0.0693	-1.719	141.0	-3721	2952
GE	turn per emp 2016	297.6	598.6	1782	-21.18	47607
	val add per emp 2016	4.374	-12.20	288.1	-7894	2294
	turn per lab cost 2016	5.579	164.6	4814	0	189921
	val add per lab cost 2016	0.0840	-357.3	14445	-592526	2017
US	turn per emp 2016	248.4	575.7	1961	0	50934
	val add per emp 2016	4.517	-7.585	290.1	-8711	3757
	turn per lab cost 2016	4.181	23.51	341.9	0	10625
	val add per lab cost 2016	0.0718	-0.235	129.8	-3871	3931
UK	turn per emp 2016	196.7	653.4	2894	0	63976
	val add per emp 2016	0.961	-26.68	377.1	-4838	6514
	turn per lab cost 2016	4.366	43.99	448.7	0	9641
	val add per lab cost 2016	0.0240	5.736	215.9	-643.8	6579
ITA	turn per emp 2016	111.4	253.3	844.7	0	21692
	val add per emp 2016	2.032	3.893	152.3	-2178	7043
	turn per lab cost 2016	5.083	593.8	29645	0	1.661e+06
	val add per lab cost 2016	0.0981	-2.942	437.8	-19093	11776

Table 9

Productivity of companies by country in 2017

Country	Variable	Median	Mean	S.d	Min	Max
China	turn per emp 2017	139.4	352.3	965.0	0	12722
	val add per emp 2017	0.543	-7.462	149.2	-828.2	3242
	turn per lab cost 2017	6.307	23.14	106.6	0	1691
	val add per lab cost 2017	0.0332	-16.94	368.9	-10624	298.6
FR	turn per emp 2017	240.1	678.0	2873	0	70228
	val add per emp 2017	2.323	-25.92	646.7	-22917	2194
	turn per lab cost 2017	4.991	42.84	533.8	0	17796
	val add per lab cost 2017	0.0542	2.317	132.2	-2206	2782
GE	turn per emp 2017	298.8	601.0	1384	0	24791
	val add per emp 2017	4.322	-6.606	271.3	-8501	2949
	turn per lab cost 2017	5.492	33.98	560.0	0	22510
	val add per lab cost 2017	0.0802	-6.205	230.5	-8346	2037
US	turn per emp 2017	253.2	596.6	2369	0	70392
	val add per emp 2017	4.841	-3.392	275.5	-7022	3739
	turn per lab cost 2017	4.233	55.60	1503	0	64993
	val add per lab cost 2017	0.0711	-0.319	322.4	-7940	10962
UK	turn per emp 2017	185.7	689.8	3801	0	81170
	val add per emp 2017	0.727	-30.84	365.5	-8126	2450
	turn per lab cost 2017	4.181	58.19	672.7	0	17417
	val add per lab cost 2017	0.0164	-9.070	229.3	-6692	1353
ITA	turn per emp 2017	111.6	258.3	997.0	0	28232
	val add per emp 2017	1.819	-0.839	119.8	-4743	1884
	turn per lab cost 2017	5.069	85.80	1593	0	85003
	val add per lab cost 2017	0.0901	-4.080	233.0	-6842	5124

Table 10

Productivity of companies by country in 2020

Country	Variable	Median	Mean	S.d	Min	Max
China	turn per emp 2020	97.94	239.0	654.5	0	12471
	val add per emp 2020	-0.802	-7.601	77.31	-1721	1099
	turn per lab cost 2020	7.446	81.53	1201	0	36675
	val add per lab cost 2020	-0.0810	-5.429	155.6	-4082	4129
FR	turn per emp 2020	215.6	616.1	2872	0	91288
	val add per emp 2020	-0.327	-20.07	343.0	-8567	4623
	turn per lab cost 2020	4.461	35.78	369.3	0	11760
	val add per lab cost 2020	-0.0118	-12.34	561.8	-19973	8197
GE	turn per emp 2020	251.3	695.6	7377	-457.6	317270
	val add per emp 2020	1.664	-26.45	482.7	-18645	2707
	turn per lab cost 2020	4.807	45.67	768.4	0	24761
	val add per lab cost 2020	0.0273	-13.09	405.5	-12319	5118
US	turn per emp 2020	233.8	570.7	2613	0	97331
	val add per emp 2020	3.140	-27.90	992.6	-42930	3944
	turn per lab cost 2020	3.669	66.35	2040	0	92356
	val add per lab cost 2020	0.0434	-162.3	7392	-333546	41844
UK	turn per emp 2020	177.7	561.3	2268	0	42178
	val add per emp 2020	-1.413	-37.68	446.3	-9709	5582
	turn per lab cost 2020	3.913	85.77	1204	0	28567
	val add per lab cost 2020	-0.0436	-20.38	346.0	-10344	1802
ITA	turn per emp 2020	96.11	240.8	1060	0	33906
	val add per emp 2020	-0.243	-2.353	189.9	-5478	4880
	turn per lab cost 2020	4.903	203.6	3752	0	160047
	val add per lab cost 2020	-0.0127	3.486	640.2	-23290	19550

Table 11

Profitability of companies by country in 2016

Country	Variable	Median	Mean	S.d	Min	Max
China	ROA 2016	0.0192	-0.329	9.907	-320.6	2.063
	pre-tax ROA 2016	0.0148	-0.334	9.953	-322.1	2.058
	ROE 2016	0.193	-0.542	14.91	-325	45.32
	pre-tax ROE 2016	0.163	-0.748	14.89	-325	6.490
	ROS 2016	0.0226	-0.0937	4.182	-112	29.26
	pre-tax ROS 2016	0.0177	0.0283	6.227	-112	140.0
FR	ROA 2016	0.0287	0.0115	0.402	-10.15	1.620
	pre-tax ROA 2016	0.0217	-0.154	6.786	-315.0	1.620
	ROE 2016	0.160	-0.202	7.944	-303.4	36.92
	pre-tax ROE 2016	0.131	-0.308	8.195	-303.4	34.91
	ROS 2016	0.0486	-40.96	1572	-67881	8.256
	pre-tax ROS 2016	0.0384	-46.04	1774	-76726	41.95
GE	ROA 2016	0.0438	0.00922	0.539	-13.88	1.503
	pre-tax ROA 2016	0.0342	0.00484	0.557	-15.29	1.503
	ROE 2016	0.176	-0.139	5.212	-124.6	64.60
	pre-tax ROE 2016	0.151	-0.237	4.234	-128.5	12.62
	ROS 2016	0.0471	-63.98	2926	-133496	540.0
	pre-tax ROS 2016	0.0402	-63.98	2926	-133497	540.5
US	ROA 2016	0.0369	-0.0842	5.792	-274	41.15
	pre-tax ROA 2016	0.0362	-0.0904	5.793	-274	41.15
	ROE 2016	0.138	-0.214	4.823	-131.6	19.05
	pre-tax ROE 2016	0.129	-0.360	6.315	-187.7	8.605
	ROS 2016	0.0463	-3.667	157.9	-7119	193.5
	pre-tax ROS 2016	0.0432	-4.666	165.0	-7120	228.8
UK	ROA 2016	0.0143	0.0362	2.996	-46.34	114.1
	pre-tax ROA 2016	0.00968	0.0667	2.857	-46.41	73.89
	ROE 2016	0.0968	-0.158	5.842	-197.8	12.44
	pre-tax ROE 2016	0.0800	-0.311	6.070	-204.2	9.739
	ROS 2016	0.0450	-1.479	224.2	-6763	4968
	pre-tax ROS 2016	0.0334	9.547	524.6	-6785	17092
ITA	ROA 2016	0.0289	0.0187	0.650	-25.17	16.05
	pre-tax ROA 2016	0.0198	0.00969	0.652	-25.18	15.85
	ROE 2016	0.175	-0.0248	8.382	-467	105.0
	pre-tax ROE 2016	0.128	-0.211	8.885	-467	90
	ROS 2016	0.0470	-0.0922	10.30	-236.1	457.0
	pre-tax ROS 2016	0.0333	-0.0777	10.20	-236.1	424.1

Table 12

Profitability of companies by country in 2017

Country	Variable	Median	Mean	S.d	Min	Max
China	ROA 2017	0.0163	-0.0318	0.456	-8.453	1.947
	pre-tax ROA 2017	0.0131	-0.0354	0.456	-8.453	1.948
	ROE 2017	0.219	0.474	9.311	-73.67	306.0
	pre-tax ROE 2017	0.202	0.456	9.510	-76.57	306.0
	ROS 2017	0.0192	-8.638	333.3	-10624	1606
	pre-tax ROS 2017	0.0155	-12.21	335.7	-10624	211
FR	ROA 2017	0.0249	0.0167	0.289	-4.096	1.555
	pre-tax ROA 2017	0.0209	0.0145	0.295	-4.116	1.555
	ROE 2017	0.171	1.344	57.85	-208.6	2738
	pre-tax ROE 2017	0.147	1.255	57.84	-214.8	2738
	ROS 2017	0.0421	2.754	142.1	-641.7	6279
	pre-tax ROS 2017	0.0374	-6.167	401.3	-17373	3847
GE	ROA 2017	0.0454	-0.346	17.81	-870.6	1.675
	pre-tax ROA 2017	0.0374	-0.351	17.85	-872.2	1.675
	ROE 2017	0.190	-0.0874	8.941	-244	157.6
	pre-tax ROE 2017	0.162	0.00293	6.481	-146.6	157.6
	ROS 2017	0.0496	-47.11	2185	-101329	31.15
	pre-tax ROS 2017	0.0440	28.92	1340	-80.35	62142
US	ROA 2017	0.0365	-0.213	11.42	-560	1.111
	pre-tax ROA 2017	0.0369	-1.325	55.74	-2678	1.111
	ROE 2017	0.153	0.0267	5.976	-234.0	82.41
	pre-tax ROE 2017	0.151	-0.0561	6.839	-239.5	81.34
	ROS 2017	0.0472	129.6	7819	-38371	358560
	pre-tax ROS 2017	0.0452	118.3	7845	-45255	357576
UK	ROA 2017	0.0148	-0.0322	0.637	-16.26	3.027
	pre-tax ROA 2017	0.0108	-0.0533	0.935	-29.76	2.476
	ROE 2017	0.137	0.0656	3.696	-62.01	47.01
	pre-tax ROE 2017	0.119	-0.0105	3.667	-62.69	47.01
	ROS 2017	0.0437	-7.393	278.0	-10843	18.05
	pre-tax ROS 2017	0.0358	-7.069	278.1	-10843	412.2
ITA	ROA 2017	0.0283	-0.0971	5.354	-300.9	4.703
	pre-tax ROA 2017	0.0205	-0.0573	7.342	-359.4	302.6
	ROE 2017	0.188	0.382	15.03	-146.4	1039
	pre-tax ROE 2017	0.149	1.279	85.60	-177.2	6136
	ROS 2017	0.0469	-4.295	192.9	-9624	28.56
	pre-tax ROS 2017	0.0347	31.17	2241	-8641	150101

Table 13

Profitability of companies by country in 2020

Country	Variable	Median	Mean	S.d	Min	Max
China	ROA 2020	0.0131	-15.33	797.1	-42760	1.057
	pre-tax ROA 2020	0.0108	-15.33	797.1	-42760	1.057
	ROE 2020	0.240	-0.424	14.04	-655.2	11.21
	pre-tax ROE 2020	0.218	-0.459	14.04	-655.2	10.88
	ROS 2020	0.0205	-15.33	524.6	-25406	22.93
	pre-tax ROS 2020	0.0187	-40.16	1362	-62459	22.51
FR	ROA 2020	0.00974	-0.0848	2.391	-122.3	1.460
	pre-tax ROA 2020	0.00737	-0.100	2.481	-122.3	1.049
	ROE 2020	0.0714	-0.381	7.068	-242.4	73.56
	pre-tax ROE 2020	0.0636	-0.494	7.347	-242.4	118.5
	ROS 2020	0.0343	-5.370	139.9	-5959	221.4
	pre-tax ROS 2020	0.0278	-7.784	182.5	-5960	195.8
GE	ROA 2020	0.0267	-0.0188	0.563	-22.79	0.994
	pre-tax ROA 2020	0.0206	-0.0482	1.092	-40.34	0.994
	ROE 2020	0.112	-0.271	5.575	-147.7	65.47
	pre-tax ROE 2020	0.0917	-0.423	5.373	-150.6	8.474
	ROS 2020	0.0415	-4.032	152.8	-7489	182.5
	pre-tax ROS 2020	0.0349	-4.165	153.5	-7514	191.3
US	ROA 2020	0.0214	-0.196	7.560	-389.6	1.041
	pre-tax ROA 2020	0.0217	-0.213	7.575	-389.6	1.041
	ROE 2020	0.0813	-0.335	4.227	-141.4	5.870
	pre-tax ROE 2020	0.0823	-0.448	5.017	-139.3	5.367
	ROS 2020	0.0404	-0.137	32.10	-405.5	1468
	pre-tax ROS 2020	0.0393	-0.670	40.05	-1166	1468
UK	ROA 2020	0.000421	-0.119	2.255	-100.1	1.624
	pre-tax ROA 2020	0.000253	-0.174	3.233	-109.2	1.624
	ROE 2020	0.0342	-1.437	29.44	-953.4	75.50
	pre-tax ROE 2020	0.0349	-1.290	22.42	-751.8	75.48
	ROS 2020	0.0308	-4.610	93.20	-3025	56.45
	pre-tax ROS 2020	0.0256	-1.800	157.1	-3025	5276
ITA	ROA 2020	0.0204	-0.0691	4.776	-356	62.05
	pre-tax ROA 2020	0.0151	-0.0783	4.795	-356	61.93
	ROE 2020	0.119	0.0359	2.117	-49.03	47.31
	pre-tax ROE 2020	0.0920	-0.0965	4.174	-254.0	44.99
	ROS 2020	0.0439	-1.085	185.4	-8362	8927
	pre-tax ROS 2020	0.0351	-2.221	197.9	-8362	8609