

# 1. Chapter One

## General Introduction

Despite a global health crisis, conflict again on the steps of Europe, and the spectre of a changing climate; the internationalisation of multinational enterprises (MNEs) remains a hot topic. If anything, the Covid-19 pandemic and ensuing worldwide supply chain disruptions have brought sharply into focus discussions around activities such as the reshoring of manufacturing (Barbieri et al., 2020). Moreover, shocks to international grain markets following the conflict in the Ukraine has both nation states and companies considering their procurement plans (Hellegers, 2022). The internationalisation of MNEs has traditionally brought about narratives around the various benefits and challenges of their investments, with capital flows into developing countries sought to stimulate host country economic growth (Dabour, 2000). However, there has also been scrutiny of whether these investments actually delivered the sought-after spillover effects (Chudnovsky & López, 1999). For emerging economies<sup>1</sup>, an area of critical importance for investments from MNEs has been their agricultural sectors. With such countries often being less advanced along their investment development path (Dunning & Lundan, 2008) and more dependent on their primary sectors, foreign investments have been sought after to improve their employment and economic welfare (Hallam, 2011), and deliver on existential goals such as food security and improved nutritional outcomes (Reardon et al., 2003, 2010).

How the process of internationalisation in the context of developing countries is occurring is however shifting. Driven by the economic rise of the BRICS countries and the larger domestic capital pool that their home firms have access to, developing country companies have also begun engaging in international investments. Subsequently, focus has inverted from centring on the inward investments such countries receive, to the outward investments of emerging market multinational enterprises (EMNEs) (Andreff, 2016; Gammeltoft, 2008). In an agribusiness context, outward investments in agri-food emanating from developing economies are becoming increasingly prevalent as not only financial capabilities of domestic firms has risen, but domestic productivity and self-sufficiency in many agribusiness sectors has increased. Some enterprises are looking further afield to secure input supplies and procure higher quality

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<sup>1</sup> The terms “developing country” and “emerging economy” are used synonymously in this dissertation.

agri-food resources, to satiate both burgeoning domestic demand and changing food consumption patterns associated with higher domestic incomes (Hallam, 2011). Yet, while the underlying drivers for engaging in these investments may be apparent; scant research interest has been paid in determining where such agri-food investments occur, what could be influencing the selection criteria for host countries of such investments, and which factors could underpin the internationalisation strategies which they employ. These are aspects the following discourse looks to delve into deeper.

Out of the constellation of the BRICS countries, perhaps no country encapsulates these contemporary developments better than the Peoples Republic of China. Having not only experienced phenomenal economic growth, the country faces the dual challenge of feeding an enormous population while confronted with a scarcity of agricultural resources and competition from competing uses (Gale et al., 2015). Subsequently, Chinese enterprises have been increasingly engaging in an active strategy of internationalisation through outward foreign direct investments (FDI) (Jin et al., 2018). While not only illustrating a prime example which could be utilised to consider the internalisation strategies of emerging market multinationals in agribusiness, one could perhaps reasonably expect that in the voluminous research that has been conducted into the internationalisation of Chinese firms something exists that would look at considering these questions in the realm of agri-food.

However, even in the case of China, little research exists addressing the international investments made by either Chinese agribusiness firms directly, or by Chinese firms in the international agribusiness arena. Thus, the accompanying scrutiny of relevant strategies which they employ often flies under the radar. Much of the current narrative around outward Chinese investments continues to swirl around information technology, biotechnology and manufacturing sectors, which are often deemed sensitive to the national interests of host countries (Chan & Meunier, 2022). Subsequently, the contributions of this dissertation are considerable. Through the consideration of the Chinese case, it advances significantly the availability of literature focusing on the internationalisation of firms in an agribusiness setting originating from developing countries. Secondly, it expands the already vast pool of research available on the internationalisation of Chinese multinational enterprises into a rather unique direction, by providing sectoral considerations and contextualisation in agribusiness.

As a theoretical framing for consideration of the motivations of EMNEs internationalising in the agri-food sector, international business and strategic management theories can be nested

within a broad food systems context. Internationalisation itself can be defined as an MNE commencing production in another country (Dunning & Lundan, 2008), while FDI is when an investor (or enterprise) from one country establishes an interest in a firm from another, with a controlling stake of at least 10% of the ownership of the firm (OECD, 2023). The food systems approach can take a value chain view spanning global dimensions and macro level landscapes, and considers integration of actors within these chains (Gaitán-Cremaschi et al., 2019). The system scope in this dissertation can be defined as agri-food chains where participating enterprises have a controlling stake from Chinese enterprises contextualised from an FDI perspective, which necessitates closer organisational integration. The major focus within these systems is on the macro level environment in which MNEs interact, and the subsequent influences on strategy and investment decisions.

International trade frameworks were initially employed to examine FDI, but theories proved inadequate as they made assumptions such as immobile factors of production, which provided significant barriers in explaining FDI flows within industries (Buckley, 2002). With the publication of his seminal dissertation, Hymer (1960) brought how FDI was perceived into a new paradigm. Rather than being viewed through the previous lenses of capital flows and interest rate differentials, industrial organisation theory became the method of understanding (Dunning & Rugman, 1985), and has provided the basis for contemporary research in the field. In classical international business literature, three research paradigms (see Table 1.1) of market imperfection, behavioural and market failure have evolved.

In contemporary studies, the market failure paradigm has been a cornerstone for research into broader Chinese FDI (Alon et al., 2018; Buckley et al., 2007; Buckley & Casson, 2021; Y. Yang et al., 2022), and concepts and theories have been extended, updated, or occasionally rewritten (Luo & Tung, 2007; Mathews, 2006). However, when considering research on Chinese agri-food outward foreign direct investment (AOFDI), the market failure paradigm has been seldom applied. A minor overlap occurs with one stream of research into natural resources acquisitions in developing countries by Chinese MNEs, specifically those acquisitions that focus on water (Smaller et al., 2012) and land resources abroad (Borras Jr & Franco, 2012). This is a major and recurring trend in Chinese AOFDI (Oliveira et al., 2021; B. Yang & He, 2021), but argumentation is presented from global agri-food industry restructuring perspectives, rather than considering international business dynamics.

**Table 1.1 Internationalisation theories**

Paradigm	Theory	Contributors
Market imperfection paradigm	Monopolistic advantage theory	Hymer (1960)
	International product life cycle	Vernon (1966)
Behavioural paradigm	Internationalisation theory	Johanson and Vahlne (1977)
	Networks theory	Hakansson (1987)
Market failure paradigm	Internalisation theory	Buckley and Casson (1976)
	Eclectic theory	Dunning (1977)
	Transaction cost theory	Anderson and Gatignon (1986)

Source: adapted from Andersen et al. (2014), and Sharma and Erramilli (2004)

A second avenue which has produced significant grey literature exists within governmental and NGO reports over the general state of Chinese AOFDI (Gale et al., 2015; Gooch & Gale, 2018; Smaller et al., 2012). While providing myriad information, they tend to offer one-sided perspectives and have few conceptual groundings. A third strand is research broadly attempts to replicate quantitative studies from the field of general Chinese FDI literature, such as Boys & Kandilov (2016) and Jin et al. (2018), but they often lack theoretical richness and contextualisation of how the agribusiness sector is related to international business strategy. For example, strategic asset seeking motivations in FDI is a concept which is both often associated with Chinese investments, and possesses rich and extensive theoretical avenues which can be explored (Meyer, 2015). This is one such aspect which many existing agri-food studies fail to fully integrate in their theoretical approaches. Such steps are just starting to be taken, with DuBois (2022) comparing the strategies of the international expansion of two Chinese dairies as case studies, but such research is the exception rather than the norm. Overall, conceptual contextualisation and application of the market failure paradigm on the internationalisation strategies employed by Chinese MNEs in the agri-food sector is scarce. This is the theoretical gap which the following discourse aims to contribute to.

### **Internationalisation and Emerging Market Agribusiness Multinationals**

Over the next five chapters, this dissertation investigates internationalisation strategies of emerging market agribusiness multinationals in international food systems against the backdrop

of the market failure paradigm, using Chinese AOFDI as a prime example. The first essay (chapter two) sets the scene in an exploratory fashion, with an implementation of the PESTEL framework commonly used in strategic management (Johnson et al., 2014), to examine the business environment experienced by Chinese investments in the dairy sector. This section considers why Chinese investments have not occurred in the German dairy sector, giving depth and reasoning to established literature factors on Chinese AOFDI (Buckley et al., 2007; Jin et al., 2018; Kolstad & Wiig, 2012), which are also transferred to an agri-food setting. Additionally, it provides a unique developed country context, a perspective which is not often considered with respects to Chinese AOFDI. Here, the strategy per se is not the defining element, but the environment in which strategies are enacted in. It illustrates that complicated governance structures and legal forms matter when it comes to enacting international acquisitions, and that the decisions that policy makers take could influence business environment. These in turn could affect the investment decisions of Chinese enterprises in the dairy sector, no trivial dialogue in the current climate of scepticism to open markets and free trade.

The second essay (chapter three) delves further into Chinese dairy AOFDI, in the context of the melamine crisis which struck the industry in 2008, and the resulting FDI that was generated as a result of Chinese government interventions (Enderwick, 2017). Here, it takes a broader perspective with respect to Chinese dairy supply chain resilience (Stone & Rahimifard, 2018), in that not only inward FDI can provide this resilience, but that outward FDI could also constitute a valuable tool, particularly in the context of shocks to agri-food supply chains (AFSCs) (Béné, 2020). Specifically, it questions how supply chain resilience elements may explain where Chinese enterprises invest internationally in the dairy sector, and resilience elements (Stone & Rahimifard, 2018) are contextualised within foreign direct investment motivations (Alon et al., 2018; Buckley et al., 2007; Dunning & Lundan, 2008) for theoretical validity. It illustrates that resilience elements such as buffer capacity and diversity could be important for AFSCs following shocks such as the food safety scandal which engulfed the Chinese dairy sector (Xiu & Klein, 2010), and provides thoughts on how domestic and international firms may react if policy makers were enact similar policies in relation to a shock in another emerging market.

Agricultural production is also dependent on inputs, and the fourth chapter (third essay) considers this in greater detail through an examination of Chinese investments in the agrochemical sector. As pressure ratchets up to increase yields in the agricultural sector,

primary producers are increasingly reliant on inputs, and Chinese producers have become one of the largest worldwide users of agrochemicals (Chen et al., 2018; Zhang et al., 2015). This section weighs up self-sufficiency developments in the Chinese agrochemical sector, and considers where and why Chinese cross-border investments in the sector have occurred. Of significance here is ChemChina's acquisition of Syngenta for US\$ 42 bil. in 2016 (Baumann, 2020), which has provoked interest in Chinese investments in the sector, set in the context of both investments motivations but also taking into consideration mode of entry. Along with transferability of international business concepts to the agrochemical sector, this chapter conjectures that it appears that concerns over Chinese acquisition of intellectual property in the agrochemical sector are overstated. At least when taking into account mode of entry as a strategy, which both managers and firms should consider when attempting cross-border fusions between enterprises, but also policy makers when considering approval of such applications.

After several specific applications in agribusiness, chapter five captures Chinese AOFDI in the entire agri-food industry. Here, a deeper dive is taken into investments decisions through an examination of strategic asset seeking motivations (Dunning & Lundan, 2008; Meyer, 2015), and the question is considered of which strategic elements are important for Chinese agri-food FDI in facing contemporary challenges such as green innovations in agri-food and the effects of climate change on agricultural productivity. Knowledge seeking FDI is compared with asset augmenting FDI, to determine which internationalisation strategy Chinese enterprises are broadly following in the agri-food sector, along with comparisons between time periods and modes of entry. Results show that knowledge seeking appears to be lower priority until now, and could be considered a prime example of how other middle income countries may experience international expansions in agri-food sector. This should be of interest to policy makers when considering how institutional frameworks can influence investment decisions their home enterprises make, such as if capital controls should be implemented to encourage firms to make strategic investments which could provide long run benefits to the home country.

During the compilation of the previous essays, it became apparent that a contemporary perspective on sustainability was largely missing in explaining MNE motivations for engaging in FDI. The concept of sustainability present in FDI and international business literature often takes an institutional perspective to FDI (Sauvant & Mann, 2019), or captures individual pillar assessments (Cerdeira Bento & Moreira, 2019; L. Yang & Zhang, 2023). A more overarching view of the phenomenon is lacking, which the final essay (chapter six) looks to expand on by contemplating the question of what could be motivating MNEs to engage in sustainable foreign

direct investments. Subsequently, a sustainability seeking motivation is proposed which elaborates on why *firms* may engage in sustainability seeking investments. Sustainability motivations may become stronger as enterprise assets are affected by events such as climate change, through increased regulatory scrutiny on supply chain elements such as labour conditions, along with changing consumer preferences for more sustainable products and developments towards both a bioeconomy and circular economy. This essay proposes that enterprises engaging in such investments can better manage operational risks, mitigate future monetary and reputational loss, and align firm strategies with asset bases to potentially derive sustainable competitive advantages.

## 2. Chapter Two

### Are German pastures greener for Chinese dairy foreign direct investments?<sup>2</sup>

*Over the last two decades, China has implemented an extensive outward foreign direct investment strategy. In agribusiness, Chinese international dairy sector investments have been substantial, with the Chinese dairies Yili and Mengniu now entrenched in the global top 10. Germany is the largest European Union dairy producer and significant exporter of dairy products to China, but has yet to host these investments. This study explores this irregularity through an extensive literature review and descriptive analysis of secondary data, triangulated with semi-structured expert interviews. Results are presented in an adapted case-specific PESTEL framework, exploring influential macro environmental business conditions. It finds barriers such as prevailing governance structures and legislative tightening may outweigh positive factors such as product quality characteristics and consumer preferences. Focusing on Chinese investments into a developed economy agri-food sector, this study offers managerial and policy implications concerning Chinese dairy and agribusiness investments in both Germany and the wider dairy industry.*

**Keywords:** agri-food foreign direct investment; international dairy chains; PESTEL analysis; macro business environment; China

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<sup>2</sup> Revisions for this chapter have been submitted to the *International Food and Agribusiness Management Review* and is coauthored by Sebastian Lakner and Verena Otter.

**Douglas Robinson, Sebastian Lakner, Verena Otter:** Conceptualisation, Validation

**Douglas Robinson, Verena Otter:** Methodology, Investigation

**Douglas Robinson:** Formal Analysis, Data Curation, Original Draft, Visualisation

**Sebastian Lakner, Verena Otter:** Review & Editing, Supervision



## 2.1 Introduction

With a population of over 1.4 billion and per capita GDP of \$US 10,434 (World Bank, 2022a), the People's Republic of China is the preeminent emerging market of recent decades. Economic power has changed the Chinese investment outlook; instead of primarily hosting foreign direct investment (FDI), China is now a substantial provider of outward FDI (OFDI). Rapid economic development, shifting demographics, increasing urbanisation, and gradual economic liberalisation have changed Chinese food consumption patterns (Fuller et al., 2007; X. Yu, 2012; Zhang et al., 2018). The result has been a dietary shift from staples to dairy, meat, and processed foods (Fuller et al., 2007; He et al., 2016). To support burgeoning demand for non-traditional foods, China must supplement domestic production with offshore procurement (Fuller et al., 2006; Gooch and Gale, 2015, 2018), and agri-food OFDI (AOFDI) falls under the Chinese “going global” investment strategy (Gooch and Gale, 2018; Jin et al., 2018). While Chinese AOFDI is only ca. two percent of total Chinese OFDI, its share appears to be increasing (Gooch and Gale, 2018).

An agri-food subsector of particularly interesting trends and challenges within China is the dairy industry. Dairy products are promoted as fulfilling important dietary requirements (Fuller et al., 2006), but purchases are characterised by low consumer trust stemming from food safety concerns post the 2008 melamine tainting scandal. Chinese consumers subsequently developed preferences for international dairy products (Li et al., 2017; Yang et al., 2018; Zhang et al., 2018) and Chinese dairy imports have steadily increased post 2008 (Gale and Jewison, 2016). By volume, Chinese dairy imports have increased on average by 10.62% per year between 2016 and 2020, to 3.37 million metric tonnes (China Customs, 2022). This highlights the dairy industry as one that is still expected to be of continuing and increasing prominence for China (Collison et al., 2017). In this internationalisation surge, the rise of the Chinese dairies Mengniu and Yili in global rankings has been driven by an extensive strategy of mergers and acquisitions (Rabobank, 2022), with developed countries being key dairy suppliers due to stringent food safety standards (Yang et al., 2018). Germany is the seventh largest exporter of food and third largest of dairy products to China (World Bank, 2022a), and largest European Union (EU) dairy producer (BLE, 2021). The German dairy industry has annual revenues of €30 bil., totalling 15.9% of food industry turnover, with German dairy exports to China increasing 3,283% between 2008 and 2020 to €424 mil, the seventh largest export market between the United Kingdom and Spain (Janze et al., 2022). German dairy companies' annual reports from the German Business Registry still confirm Chinese investments in German dairy processors are

absent (Unternehmensregister, 2021). This hesitation may stem from uncertainties Chinese managers face when considering the entry to the German dairy sector via an AOFDI strategy.

Despite that background, there is little research examining Chinese OFDI in dairy or other agribusiness sectors in industrialised countries. Substantial research exists on general Chinese OFDI (Buckley et al., 2007; Deng, 2004; Hanemann et al., 2019; Kolstad and Wiig, 2012; Ramasamy et al., 2012; Sauvant and Nolan, 2015), while those in agri-food settings focus on aspects such as Chinese investments in developing countries (Amighini and Sanfilippo, 2014; Inekwe, 2013) or land acquisition (Chaudhuri and Banerjee, 2010). Focusing on the neglected area of Chinese AOFDI to industrialised countries, it is the objective of this study to examine the macro business environment of the German dairy industry for Chinese investments. This is achieved with an adapted case-specific PESTEL framework developed through a comprehensive literature review, and triangulated with descriptive secondary data and semi-structured expert dairy and investment sector interviews. By focusing on Chinese entrance into the agri-food sector of an industrialized economy in Germany, this study offers ex-ante insights for managers and policy makers, which may be applicable to dairy industries in other industrialised economies and agri-food sectors in Germany and abroad.

## **2.2. Background**

### ***2.2.1 Chinese Foreign Direct Investment***

As the Chinese economy has liberalised, it has increasingly integrated into global markets. Following their WTO accession in 2001 and reflecting the “going global” strategy (Buckley et al., 2007; Kolstad and Wiig, 2012), Chinese OFDI began to accelerate (Figure 2.1). These flows reached a peak in 2016, when outflows exceeded inflows for the first time. Recently, China has extended their investment strategies with the “Belt and Road” initiative (Gooch and Gale, 2018; H. Yu, 2017) and foundation of the Asian Infrastructure investment bank (H. Yu, 2017).

### ***2.2.2 The German Dairy Sector***

Germany is the largest EU milk producer at ca. 33 mil. tonnes, 22.4% of EU production. In 2020, Germany exported 25 mil. t of processed dairy products, while importing 13.2 million t. EU production accounts for 55% of Chinese fluid milk imports and 28% of skim milk powder imports. Germany alone supplies 68% of Chinese yoghurt imports (USDA, 2018). The German domestic dairy market exhibits high levels of competition. A large player exists in Deutsches Milchkontor (DMK), almost three times bigger than nearest competitors Mueller, Hochwald,