Institut für Mittelstandsforschung

IfM BONN

IfM Materialien

The dependence of Mittelstand enterprises on supplies from China

Michael Holz, Peter Kranzusch, André Pahnke, Markus Rieger-Fels,
Olga Suprinovič, Hans-Jürgen Wolter

IfM Materialen No. 314

The English version has been machine-translated
and the content has been checked by the authors.

Imprint

Publisher

Institut für Mittelstandsforschung Bonn
Maximilianstr. 20, 53111 Bonn

Phone +49/(0)228 / 72997 - 0
Fax +49/(0)228 / 72997 - 34

www.ifm-bonn.org

Contact

Markus Rieger-Fels
Peter Kranzusch

IfM Materialien No. 314

ISSN 2193-1852 (Internet)
ISSN 2193-1844 (Print)

Bonn, March 2026

The IfM Bonn is a foundation under private law.

Gefördert durch:

Bundesministerium für Wirtschaft und Energie

aufgrund eines Beschlusses des Deutschen Bundestages

Ministerium für Wirtschaft, Industrie, Klimaschutz und Energie des Landes Nordrhein-Westfalen

The dependence of Mittelstand enterprises on supplies from China

Abhängigkeit des Mittelstands von Zulieferungen aus China

Michael Holz, Peter Kranzusch, André Pahnke, Markus Rieger-Fels, Olga Suprinovič, and Hans-Jürgen Wolter

IfM Materialen No. 314

Abstract

Abstract

Political efforts to encourage companies to engage in so-called de-risking with regard to Chinese suppliers have so far met with little success. Based on interviews with business associations and companies, this study examines possible reasons for the lack of de-risking, particularly among Mittelstand companies. It shows that these companies are well aware of the risks of dependency, but that measures to reduce their dependency are failing due to specific obstacles (e.g., regulatory hurdles, costs).

JEL: D22, F61, M21

***Keywords**: China, critical dependency, critical raw materials, de-risking, Mittelstand enterprises*

Contents

List of Figures

List of overviews

Executive Summary

The People's Republic of China is one of Germany's most important trading partners. This strong economic interdependence is now viewed critically, as China increasingly exploits trade relations as a means of political leverage. Consequently, policymakers in Germany and the European Union (EU) are attempting to reduce unilateral economic dependencies on China. Despite supportive policy measures such as the EU Critical Raw Materials Act (CRMA), companies have so far engaged in so-called "de-risking" only to a very limited extent to reduce their dependence on Chinese raw materials and intermediate goods.

Mittelstand enterprises are aware of existing dependencies

Mittelstand enterprises involved in trade with China are well aware of their dependence on China and the resulting risks. However, this awareness tends to be less pronounced among companies that are positioned toward the end of a value chain or are part of highly complex value chains.

Companies weigh political and economic risks against one another

Mittelstand enterprises generally assess the current geopolitical risks in trade with China as significant. However, they also recognize the economic risks associated with severing existing, long-standing business relationships and establishing new partnerships. From a Mittelstand perspective, de-risking is therefore often merely an exchange of one risk for another. The latter is not necessarily any smaller. Many Mittelstand enterprises consider this additional economic risk to be more serious than their dependence on China.

Multiple hurdles stand in the way of de-risking

Even if entrepreneurs conclude that de-risking activities make sense, a variety of hurdles stand in the way of translating them into practical measures. Sometimes this is simply the lack of available alternatives. However, such cases are rare. The main obstacle is the high cost associated with de-risking, which, due to price-sensitive demand on global markets, usually cannot be passed on to customers. Sometimes, de-risking measures also involve a significant bureaucratic burden or are complicated—or even made impossible—by regulatory hurdles.

Improve framework conditions instead of mapping dependencies

Many policy efforts, particularly at the European level, are focused on gathering information about existing dependencies. This approach should be viewed critically. On the one hand, the value of this information is questionable; on the other hand, collecting it entails (bureaucratic) compliance costs that companies incur due to new monitoring obligations regarding their direct and indirect supply relationships. Furthermore, they are sometimes counterproductive in terms of their intended purpose—reducing the dependence on China. For example, attempts at diversification can fail because new suppliers refuse to disclose information about their supply chain.

Instead, the focus should be on improving the framework conditions. In particular, trade barriers with third countries should be reduced, raw material partnerships promoted, and regulatory hurdles (such as those for the trade of waste within the EU) lowered. On the one hand, this improves the chances of tapping into potential alternative sources of supply, and on the other hand, it can unlock creative potential within companies to find innovative ways to reduce their dependence on China.

It is also important to recognize that regulations in seemingly entirely different policy areas—such as environmental protection or the health sector—can have (negative) repercussions on companies' de-risking efforts.

1 Introduction

The People's Republic of China (hereinafter referred to as China) is one of Germany's most important trading partners. In 2025 alone, Germany imported goods worth approximately 170.6 billion euros from China (cf. Destatis 2026). For many years, both sides have benefited from closer economic ties. These ties are now viewed more critically, however, because China is increasingly using trade relations as a means of exerting pressure, for example through export restrictions on rare earths. As a result, the German government and the European Union are making efforts to reduce unilateral economic dependencies on China.

As early as July 2023, the federal government of Germany presented a China strategy calling for a "de-risking" in supply relationships (cf. Die Bundesregierung 2023). The current government also intends to adhere to this goal (cf. Gillig et al. 2025). The Critical Raw Materials Act (CRMA), which entered into force at the EU level in May 2024, also contains a series of measures aimed at reducing dependencies on critical and strategic raw materials (cf. European Union 2024).

Key players in this de-risking process are companies that decide whether and to what extent they wish to continue sourcing raw materials or intermediate products from China. In principle, they have a range of options available to reduce their dependencies and the associated risks. These include geographic diversification of procurement, increased use of recycled materials, material substitution, and expanded inventories. Despite this number of options and despite numerous warnings about one-sided dependencies as well as political measures such as the CRMA, there has been no substantial reduction in trade with China to date. On the contrary, imports from China actually rose by 8.8% in 2025 compared to the previous year (cf. Destatis 2026). Even if a supply relationship does not per se imply dependence, it stands to reason that companies are engaging in de-risking only to a very limited extent. This raises the question of the causes behind this reluctance on the part of companies.

Based on interviews with industry associations and companies, this study examines possible reasons for the lack of de-risking on the part of companies. A better understanding of these reasons is essential if future policy efforts to reduce dependency are to be more successful. Beyond the reasons applicable to all companies, the study also focuses on reasons that are of particular relevance to Mittestand enterprises. According to Pahnke et al. (2023), Mittelstand industrial firms are somewhat less active in foreign trade than non-Mittelstand firms.

However, since Mittelstand enterprises makes up the majority of companies in Germany, their behavior will be decisive in determining the extent to which existing dependencies on China can be reduced.

In addition to their sheer numbers, it is worth taking a closer look at Mittelstand enterprises, as specific characteristics of these businesses may influence their decision to pursue or avoid de-risking. For example, an emphasis on independence or a strong preference for long-term supplier relationships could affect the extent to which Mittelstand enterprises are dependent in the first place. On the other hand, the generally smaller size of Mittelstand enterprises could limit their options for action regarding de-risking.

The identified reasons why companies maintain supply relationships with China can, in turn, help identify key obstacles to a more successful reduction of economic dependencies at the national level and improve the design of policy measures aimed at achieving such a reduction.

2 Dependencies on China and de-risking

The literature does not clearly indicate when “dependencies” exist at the macroeconomic level or when these should be classified as “critical.” For example, the European Commission (2021) and Mejean/Rousseaux (2024) identify “strategic dependencies” based on the concentration of imports in a few countries and on the extent to which the imported products can be replaced by products manufactured in the EU.[1] In this way, dependencies are identified both for products that policymakers consider “critical” (e.g., rare earths) and for products to which policymakers pay relatively little attention (e.g., artificial flowers or Christmas decorations).[2] Only then is a selection made as to which dependencies are deemed relevant. In Flach et al. (2022), Baur/Flach (2022, 2024), and Matthes (2025b), however, economic (or societal) significance is already part of the definition of “dependency.” Arriola (2024) speaks of a “critical dependency” when a product faces a high risk of supply disruptions, the product has high (economic or societal) significance, and there are only limited substitution options. In addition to these import dependencies, strong concentrations on the export side can also lead to dependencies that can be exploited politically (cf. Mejean/Rousseaux 2024). In the present study, we follow the current political focus and concentrate primarily on import dependencies.

The existence of (critical) dependencies not only presupposes a concentration of trade flows in individual countries; it also requires a limited availability of alternatives, both in terms of suppliers and potential alternative production options. The latter, however, are highly product- or even company-specific and therefore difficult to quantify. Matthes (2024, 2025b) points out that the available data can, at best, identify potential dependencies. He derives 225 product groups with potentially critical dependencies[3] on China (cf. Matthes 2025b). Baur/Flach (2022, 2024) take a different approach, identifying industries with high potential for dependencies.

Given these identification challenges, it is not surprising that there are significant discrepancies in the quantification of the affected firms. Kolev-Schaefer et al.

---

1 Mejean and Rousseaux (2024) also require a so-called “stickiness”—that is, long-term supplier relationships between firms—as these suggest that firms will be reluctant to abandon existing supplier relationships.

2 See Table C2 in Mejean/Rousseaux (2024).

3 Matthes (2025b) includes in this category industry-related product groups as well as pharmaceutical products with a share of imports from China of at least 50%.

(2025) estimate that approximately 15% of firms rely to a large degree on Chinese inputs. Baur/Flach (2022) report that, depending on company size, between 28% (micro and small enterprises) and 54% (large enterprises) of the manufacturing sector is affected. Regardless of what the actual percentage ultimately turns out to be, it is clear that many companies are subject to these risks. In light of this, the German federal government presented a China strategy in 2023 that aims to reduce existing dependencies through "de-risking" of supply relationships (cf. Die Bundesregierung 2023).[4] Companies, too, appear to increasingly view a dependence on Chinese supplies as a risk and are acting accordingly. According to Baur/Flach (2024), the share of companies in the manufacturing sector with "significant" inputs from China fell from 46% to 37% between 2022 and 2024. Aksoy et al. (2024) show that companies are taking various measures against potential supply disruptions. Significant differences can be observed here depending on company size: large enterprises are focusing more on diversifying their suppliers; SMEs are prioritizing expanding their inventory.[5] Overall, however, there is currently a downward trend in such de-risking measures (see, e.g., Aksoy et al. 2024; DZ-Bank 2024).

Accordingly, after a brief but significant decline between 2022 and 2023, the value of goods imported from China remained relatively constant in 2024[6] and rose significantly again in 2025 compared to the previous year (cf. Destatis 2026). Despite the risks of a dependence on China perceived by companies, the actual reduction of these dependencies thus appears to be reaching its limits.[7]

To understand the reasons behind this growing reluctance, it is worth consulting the business literature that addresses the existence of supplier dependencies and strategies for managing them (cf., e.g., Duan/Liu 2025). Although this

---

4 For a discussion of the "de-risking" concept, which focuses on reducing risk in trade with a country, as well as a distinction from "decoupling," which aims to completely sever trade relations with a country, see Klöppelt et al. (2024).

5 Klöppelt et al. (2024) also point out that the approach to and extent of de-risking can vary significantly across industries and companies.

6 The value of goods imported from China fell by 0.3% in 2024 compared to the previous year. However, the volume of goods imported from China rose by approximately 9% in 2024. The discrepancy with the value trend suggests price reductions or a devaluation of the Chinese currency (cf. Matthes 2025a).

7 While Klöppelt et al. (2024) argue that de-risking does not necessarily mean less trade with China, this is contradicted by the fact that the key measures of de-risking according to Klöppelt et al. (2024)—in particular, a greater localization of value creation ("in China for China") or greater diversification of suppliers without completely abandoning imports from China—cannot be implemented without a reduction in trade with China.

literature tends to focus on a company's dependence on specific suppliers, the underlying principles can be applied to the situation under discussion here. According to Duan/Liu (2025), a concentrated supplier base does indeed result in an increased risk of disruption and greater bargaining power for the supplier. On the other hand, a concentrated supplier base enables a more effective exchange of information and closer cooperation, which can mitigate other supply risks. There is thus a trade-off between different risks. If deliveries from China are associated with an increased risk of disruptions for political reasons, companies will factor this into their decision for or against suppliers from China. However, numerous other criteria, such as quality and price, are also of considerable importance (cf. Wilson 1994, Verma/Pullman 1998). An increased default risk may therefore be acceptable to companies as long as other advantages of Chinese suppliers outweigh it (cf. Matthes 2023).

3 Methodology

In the course of the study, we sought to engage in discussions with entrepreneurs as well as representatives of trade associations from sectors in the manufacturing industry for which supplies from China are significant.[8] In addition, we interviewed experts from the foreign trade agency German Trade and Invest (GTAI) and the German Mineral Resources Agency (Deutsche Rohstoffagentur, DERA). We discussed with these interviewees the reasons for the lack of or declining efforts to reduce dependence on China. Between June and October 2025, a total of nine interviews were conducted with representatives of business and industry associations (see Overview 1) and five interviews with companies (see Overview 2).

Overview 1 : Business associations interviewed

Business association
Association for Supply Chain Management, Procurement and Logistics (Bundesverband Materialwirtschaft, Einkauf und Logistik, BME e.V.) • Professional association representing the professions of purchasing, logistics, and supply chain management • Approximately 9,750 members—ranging from sole proprietorships to Mittelstand enterprises to large corporations—from all industries and sectors • Most strongly represented industries: automotive and its suppliers, plant and mechanical engineering, tool manufacturers, and the pharmaceutical and chemical processing industries
General Association of the German Knitwear Industry (Gesamtmasche e.V.) as the representative of the Confederation of the German Textile and Fashion Industry (Gesamtverband der deutschen Textil- und Modeindustrie) • Represents the interests of German manufacturers of knitwear, lingerie, and knitted fabrics • The association has 78 members, predominantly Mittelstand enterprises
General Association of the German Machinery and Equipment Manufacturing Industry (Verband Deutscher Maschinen- und Anlagenbau e.V., VDMA) • Represents companies in the mechanical and plant engineering sector • 3,500 members ranging from family-owned businesses to publicly traded corporations
Pharma Deutschland e.V. • Approximately 400 member companies—in addition to global pharmaceutical companies and SMEs, the membership also includes pharmacists, lawyers, publishers, agencies, and market research institutes; however, the core of the membership consists of Mittelstand enterprises • Members supply nearly 80% of the over-the-counter medications and nearly two-thirds of the prescription medications sold in pharmacies, as well as a large portion of the medical devices and dental products for patients.

8 The selection was based on relevant literature (see, e.g., Baur/Flach 2024), a review of comments on the CRMA draft (cf. European Commission 2023), as well as participation in relevant symposia and expert interviews.

Continued overview 1

Business association
German Association of the Automotive Industry (Verband der Automobilindustrie e.V., VDA) • More than 600 members, including approx. 18 final manufacturers, 70 body and trailer manufacturers, and approx. 500 suppliers • Many members also have their own production facilities in China
German Chemical Industry Association (Verband der Chemieindustrie e.V., VCI) • 2,400 member companies (including 600 from the pharmaceutical sector); the majority of members (2,300) are traditional Mittelstand enterprises • The VCI represents more than 90% of German chemical companies and German subsidiaries of foreign corporations.
German Electro and Digital Industry Association (Verband der Elektro- und Digitalindustrie, ZVEI e.V.) • Approximately 1,100 member companies • China is the largest supplier to the German electrical market. Approximately 30% of all imports of electrical products to Germany in 2024 came from China.
Association of the Potash and Salt Industry (Verband der Kali- und Salzindustrie e.V., VKS) • The industry extracts and processes potash and salt in fourteen mines and six saltworks. • The VKS had a total of ten members in 2025.
Association of German Metal Traders and Recyclers (Verband Deutscher Metallhändler und Recycler e.V., VDM) • Represents approximately 250 companies in the steel and metal recycling industry in Germany and Austria, covering around 90% of the metal market in both countries. • Members include smelting and refining companies as well as dealers, recyclers, brokers active on the London Metal Exchange, and other specialists in the metal industry. **© IfM Bonn**

Source Own representation.

Using a snowball sampling method (cf. Patton 1990), companies familiar with the topic were recruited for interviews through the industry associations. Three of the companies surveyed are located in a more upstream position of value chains. Among other things, they process metallic raw materials and convert them into electrical components, which they supply to manufacturers in the mechanical and automotive engineering sectors as well as in electrical, defense, and medical technology. They source both raw materials and intermediate products from China. Two companies are end manufacturers of pharmaceuticals and apparel, respectively, whose own global production networks rely on a small number of suppliers in one case and a large number in the other. Both are heavily dependent on inputs from China.

Overview2 : Characteristics of the interviewed companies

Industry	Number of employees in Germany	Ownership structure/management	Position in the value chain	Direct imports from China	Presence in China
Metal and plastics processing/electrical engineering	100 to 499	Family-owned	Intermediate products and materials	Yes	No
Metalworking/Electrical Engineering	Under 100	Family-owned	Intermediate products and materials	Yes	Sales offices, no production
Metalworking/Electrical Engineering	Over 1,000	Manager-led company	Intermediate products and materials	Yes	Production facilities
Pharmaceuticals	500 to 999	Family-owned	Final manufacturer (medicines)	Yes	No
Apparel manufacturing	100 to 499	Family-owned	Final manufacturer (clothing)	Yes	No

Source: Own representation.

The interviews were conducted using a structured guideline and were subsequently coded and analyzed to identify operational barriers to further reducing dependence on China and potential related factors (size, Mittelstand status, industry, etc.).

4 Perceptions and reactions of Mittelstand enterprises regarding dependencies on China

From a business perspective, the identification and assessment of dependencies form the basis for deciding whether and which de-risking measures should be implemented. In business perception theory, the process of information processing is typically divided into three core phases, drawing on classical models from cognitive science (cf. Daft/Weick 1984; Kiesler/Sproull 1982):

- **Perception**: The detection of internal or external signals regarding (potential) dependencies. This involves solely the collection and selection of data from the environment.
- **Evaluation** (interpretation): The analysis of the collected data in the context of corporate objectives. Here, the risks associated with the dependency are assessed.
- **Action** (Reaction/Action): The derivation and implementation of concrete (de-risking) measures or strategies based on the preceding evaluation and taking into account the benefits and costs associated with (potential) measures.

4.1 Perception of (import) dependence on China from a corporate perspective

A company's position within a value chain is of considerable importance when it comes to the perception of existing dependencies. Companies that have direct contact with Chinese suppliers—e.g., as direct importers or with a branch in China—generally perceive dependencies[9] more directly and are better informed than companies operating at downstream stages of the value chain—all the way to the end manufacturer—and are thus further removed from the procurement process.

When making their initial sourcing decisions, **direct importers** compare various sources of supply or importing countries in terms of the associated opportunities and risks. Regularly, cost advantages turn out as the deciding factor for China: According to the surveyed companies, the price-performance ratio of raw materials and intermediate goods sourced from China is very good. Strong price

---

9 In the first phase, the assessment of dependencies primarily focuses on whether the company sources certain intermediate inputs (almost) exclusively from China and whether there are no, few, or only very expensive alternatives in the short and medium term.

competition in China also ensures favorable purchase prices. Chinese suppliers are further characterized by high quality, precision, agility, and reliability. (Potential) dependencies were of comparatively little relevance in decision-making—especially when entry into the Chinese market had taken place some time ago—since geopolitical conflicts only developed and intensified over time. If market entry had occurred more recently, this aspect was more important.

Once they have entered the market, factors such as the often long-standing and close business relationships with their Chinese partners also play an important role for Mittelstand import companies. However, they do keep a close eye on global market trends and supply conditions for their imported products on a regular basis. Key sources of information include on-site visits to business partners, networking with other import companies and business associations, as well as trade fairs, trade exchanges, and the media. Currently, many production and finishing processes cannot be conducted in other countries at the same price, quality, and reliability as in China. Even though direct importers are well aware of the extent of their (input-specific) dependence on China and the resulting risks, they currently see no economically viable alternative to China.

The extent to which **companies at downstream stages of the value chain** perceive their dependence on Chinese intermediate goods is much more difficult to assess. This is not least because the intermediate goods imported from China are further processed by companies at various stages and across many different economic sectors. The broad spectrum ranges from companies that engage intensively with their dependencies on one end, to those that are not even aware that the intermediate products they procure are based on imports from China and are therefore unaware of these dependencies on the other. Overall, the following (partially interdependent) underlying trends can be identified:

a. The further removed a Chinese supplier is from a company's own position in the value chain, the more difficult it is to recognize that the purchased (intermediate) products contain any Chinese inputs at all. Consequently, dependencies are identified only inadequately.
b. The more complex the value chain and the respective supplied components are, the more difficult it is to recognize the dependence on Chinese imports.
c. The more significant the intermediate inputs imported from China are for the company's own product, the more likely companies are to strive to identify and reduce dependencies.

d. The more companies are generally aware of the significance of dependencies (for example, in the context of “just-in-time” production), the more likely they are to actively engage in identifying them.
e. The smaller the companies are, the fewer personnel and financial resources they generally have available to identify dependencies, which can result in dependencies remaining unrecognized.

In principle, while company size is positively correlated with the perception of dependencies, numerous other parameters are relevant in this context. It is therefore insufficient to attribute the (lack of) perception solely to company size. For example, in the textile industry and parts of the pharmaceutical industry, there are SMEs that, as end manufacturers in manageable value chains, are well-informed about their dependencies. Furthermore, companies at downstream stages of the value chain and within complex supply chains can also gain an overview of potential dependencies through risk monitoring measures. Of particular note here is the use of IT-supported tools, which ideally map the entire supply chain and can identify critical dependencies or bottleneck factors. Even though these tools are more commonly used in large companies due to the costs associated with their implementation, they have established themselves among medium-sized suppliers as well.

4.2 Evaluation of (import) dependency on China from a corporate perspective

Assuming companies are aware of their dependence, they assess (explicitly or implicitly) the associated risks in a second step. Here, two overarching risk categories can generally be distinguished: economic risks and (geo-)political risks. In the following, we first outline the considerations of direct importers regarding these two risk categories. We then address any special factors affecting companies at downstream stages of the value chain.

Traditional **economic risks** (default, price, and quality risks, as well as transport and logistics risks) are of little relevance to most Mittelstand direct importers. This is primarily due to the close business relationships—often long-standing—that these Mittelstand enterprises maintain with their Chinese partners.[10] This

---

[10] For interchangeable, less complex intermediate inputs, e.g., metal-containing or chemical precursors, importers sometimes also purchase on spot markets. However, even for standardized goods, long-standing business relationships are often maintained in order to

is even more true when the Chinese partners are also family-owned businesses, creating a shared set of values.[11] This also reduces the risk that economic dependencies on the Chinese partner companies will be exploited unilaterally.[12] Furthermore, cooperation based on personal contacts ensures quick and flexible responses when needed (e.g., during the COVID-19 pandemic). Mittelstand enterprises therefore invest a significant amount of time in selecting and developing their suppliers and local sales representatives in China. Both German importers and Chinese suppliers have—despite current geopolitical tensions—a strong interest in maintaining business relationships that are mutually beneficial and well-established. Chinese partner companies also serve as a key source of information for Mittelstand companies, such as in cases of difficulties with authorities, potential delays, or other transport challenges. Accordingly, such contacts and firsthand knowledge of economic realities in China and transit regions—gained through personal observation and experience—are crucial for economic risk assessment. Other factors, such as company size or industry, are of secondary importance by comparison.

The situation is somewhat different for companies at downstream stages of the value chain. With the exception of acute delivery difficulties, they generally do not maintain personal contacts with Chinese suppliers (or German direct importers). Often, they do not even know about their Chinese partners. Due to this information disadvantage, they tend to find it more difficult to assess the economic risks of sourcing intermediate inputs from China. End-product and component manufacturers, in particular, have a vested interest in reducing dependencies where the failure of Chinese intermediate inputs could potentially lead to costly, prolonged production stoppages.

According to affected Mittelstand enterprises, the economic dependencies on China that have developed over time derive their “dangerous” nature primarily from the changed, more confrontational geopolitical context and the resulting increase in **political risks**. Of particular note here is the potential for the Chinese government to exploit existing dependencies for power-political purposes. This could take the form, for example, of an interruption of existing supply

---

ensure, for example, security of supply for end manufacturers until the end of the product life cycle (e.g., automotive components, magnets, or semiconductor chips).

11 In contrast to the Anglo-American corporate culture, which is more short-term and profit-oriented, the (Mittelstand) cultures in Germany and China—based on long-term thinking, personal contacts, and trust—exhibit greater compatibility.

12 In the case of custom-made products, mutual dependencies may also exist.

relationships or tying them to disadvantageous conditions. In this context, the information advantages of direct importers described earlier are of only limited help. Chinese suppliers have recently become significantly more cautious when it comes to assessing and communicating political risks. They are reluctant to share information about the Chinese government's policies. If companies have their own production facilities or sales representatives in China, these can transmit "on-site" assessments and evaluations to corporate headquarters. However, these are not always reliable either, as employees working in China or independent sales representatives sometimes have an interest in maintaining economic relations and therefore tend to downplay risks. Other potential sources of information include (German) partner companies, business associations, media coverage, or government information agencies.[13] Specifically large companies that import (directly or indirectly) product groups from China or Taiwan have also been increasingly monitoring geopolitical risks for several years as part of their risk management, sustainability reporting, or in preparation for supply chain due diligence laws.

Overall, companies perceive the current situation as highly uncertain. Due to the complexity, cultural differences, and lack of transparency surrounding China's political, economic, and societal developments, many companies find it difficult to assess China's behavior and fundamental strategic direction. Many direct importers who have been cooperating with China for a long time and are interested in local conditions perceive increasing authoritarianism on the part of the Chinese leadership, growing economic problems (including a real estate crisis, weak growth, ruinous price competition, and overcapacity), as well as a less free societal climate in China. In general, the Chinese government is characterized by a long-term and strategic approach, as a result of which it systematically reduces its own dependencies while simultaneously building up foreign dependencies as a strategic instrument for (trade and power) policy. The detailed information on customers, manufacturing processes, and intended uses that must be provided when importing "dual-use" goods is causing concern among affected companies that this information could be used by Chinese competitors to poach customers and acquire sensitive production know-how. However, a

---

13 Government information providers such as Germany Trade & Invest (GTAI) or the German Mineral Resources Agency (DERA) are often not well known, particularly among smaller companies; however, they are appreciated once companies become aware of the information they provide (for example, through referrals from their trade associations).

potential escalation of the Taiwan conflict is viewed as the greatest threat to their own and global economic relations with China.[14]

With regard to the strategic positioning of the EU and German policy, there is broad consensus among German importers that independent political maneuvering room—primarily due to existing *de facto* dependencies—is relatively limited. Most Mittelstand enterprises would like to see a pragmatic, more interest-driven "raw materials diplomacy" that strives to achieve long-term cooperation with the Chinese leadership on an equal footing and with a (fair) market-oriented approach. A policy that, in misjudging global power dynamics, relies strongly on a morally grounded foreign trade policy will ultimately achieve few measurable improvements, especially given differing (political) cultures. Despite all current uncertainties, the prevailing hope among most Mittelstand enterprises is that emerging trade conflicts and export controls are only temporary in nature and that, ultimately, the (economic) self-interest of all involved actors in economic relations that are as free and market oriented as possible will prevail.[15]

4.3 Corporate calculation: de-risking

If a company views its existing dependencies on Chinese inputs as critical, it can employ various measures to reduce these dependencies ("de-risking"). Possible measures include:

a. Geographic diversification of procurement,
b. Increased use of recycled materials,
c. Substitution with other materials purchased from other countries,
d. Expanded inventories.

The extent of adaptation required within a company can vary significantly depending on the specific circumstances. For instance, when utilizing alternative sourcing channels, potential differences in cost or quality, as well as the costs

---

14 However, this was rarely explicitly addressed in the expert discussions. Under certain circumstances, this could be interpreted as an indication that overarching (geo)political risks tend to play a lesser role in the risk perception and assessment of German (import) companies.

15 Not least in light of the current economic difficulties in China and the great importance of economic success and increased prosperity for the Chinese government's domestic legitimacy, some import companies hope that China, too, has a vested interest in the (preferably amicable) continuation of economic relations with Western industrialized nations, especially since these countries absorb a large portion of China's economic output (exports) and thus contribute to the creation of jobs and prosperity there.

associated with switching suppliers, must be taken into account. However, the complete replacement of a raw material or intermediate product through material substitution requires further adjustments within the company and in downstream value-added stages (changes in purchasing, adjustments in product design, and, if necessary, new certifications). Measures a. through c. are of a fundamental nature and, due to the high adjustment costs, usually reduce existing dependencies only in the medium to long term. Only strategic inventory management can bridge the consequences of a supply disruption in the short term. However, it is mostly helpful in cases of temporary disruptions.[16]

When selecting the scope and type of de-risking measures, the company weighs the benefits of de-risking against its costs. This is described in Kolev-Schaefer et al. (2025, p. 14, own translation) as follows:

"…adapting the value chain [is] usually associated with high costs […]. A trade-off must therefore be made between the costs incurred now to make the value chain more resilient and thus insure against potential disruptions in the future, and the decision not to implement adjustment measures—and thereby risk future costs due to the potential occurrence of external shocks or crisis situations. This trade-off is a business decision and depends on numerous factors […]."

Our interviews also revealed that companies weigh a number of factors when deciding whether, to what extent, and how they want to pursue de-risking (see Figure 1)

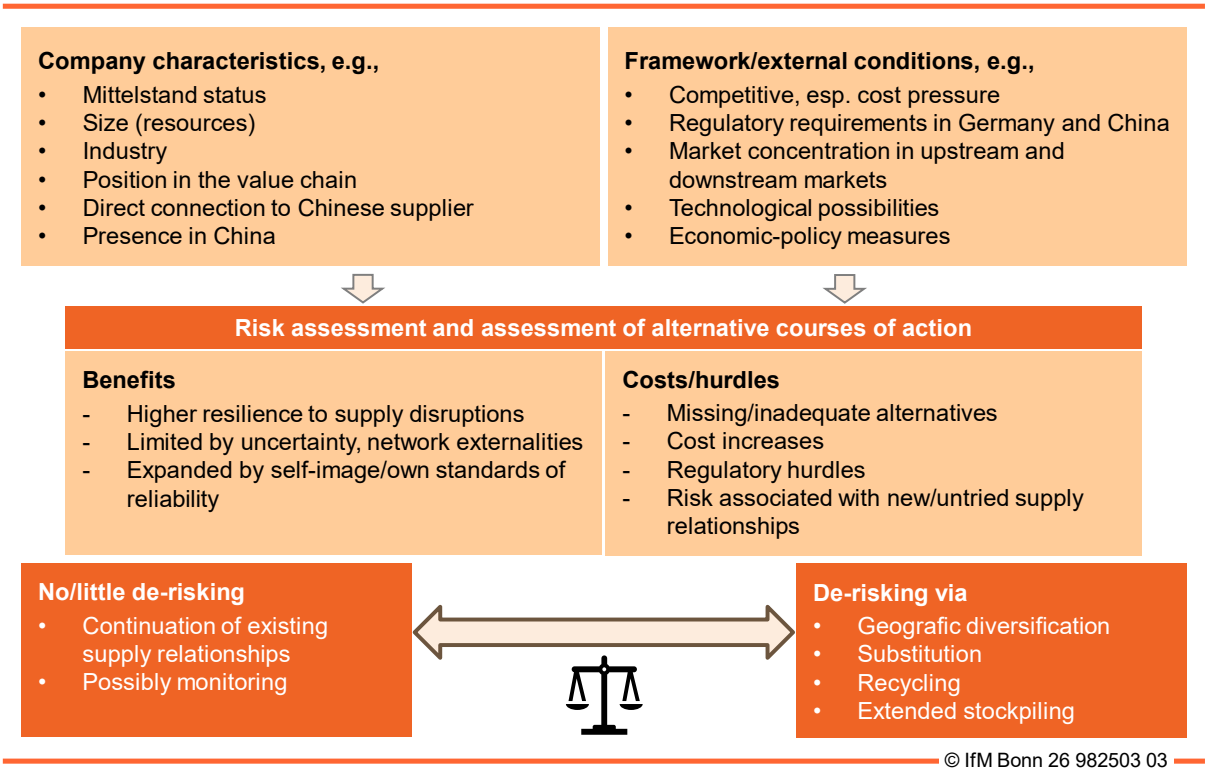
In the specific case, the benefit of de-risking lies in avoiding future losses due to supply disruptions from China. How high this benefit is estimated depends on the companies' risk perception and assessment (see Sections 4.1 and 4.2).

If imports from China account for only a small portion of total revenue or profit, the company's own dependence is low (or non-critical), and the incentive to invest in de-risking measures is correspondingly limited. If, on the other hand, Chinese inputs are essential for the company's own business, taking more extensive measures may be justified. The assessment—especially in Mittelstand enterprises—takes into account aspects that go beyond purely economic

16 Under this inventory strategy, safety stocks of goods are proactively built up to enable a response to both unexpectedly high demand and disrupted supply chains.

considerations, such as a sense of responsibility toward customers or the company's own commitment to reliability.

Figure1 : Determinants of a decision for or against de-risking



Source: Authors' own illustration.

But what factors stand in the way of implementing de-risking measures?

The most obvious hurdle is simply their unavailability. This is often illustrated by the example of geographic diversification in the procurement of so-called heavy rare earth elements. Here, China has effectively established a monopoly, meaning that opportunities for diversification - at least for now -do not exist. Smaller Mittelstand enterprises, in particular, also face the problem that they cannot take advantage of alternatives - even if they were generally available - because suppliers sometimes insist on minimum purchase quantities. This effectively rules out (geographic) diversification of procurement for smaller Mittelstand enterprises.[17] The use of recycled materials can also fail because they are not (yet)

[17] This aligns with findings in Aksoy et al. (2024), according to which smaller firms, compared to large firms, rely more heavily on expanded inventory holding than on diversification when selecting measures. The "Joint Procurement Mechanism" planned by the EU for Europe-wide bundled procurement of critical raw materials could provide a solution here. However,

available in sufficient quantities. Substitution may be impossible or only possible to a limited extent because the raw material or intermediate product used must possess certain material properties. Expanded stockpiling is sometimes hindered by the fact that the relevant raw materials or intermediate products have limited shelf life. Furthermore, China monitors exports of certain raw materials and actively takes steps to prevent expanded stockpiling.

However, experts and companies alike emphasized that the use of de-risking measures is generally less often hindered by a lack of alternatives than by the costs incurred—combined with customers' unwillingness to accept the resulting higher prices. If customers desire a low price even at the cost of accepting certain dependencies, a company cannot ignore this if it wishes to operate successfully in the market.

There are various possible reasons for this. First and foremost is the uncertain benefit of de-risking measures coupled with very concrete costs: Given the high level of uncertainty regarding future political developments, it is difficult to predict the likelihood of supply disruptions, as well as their extent and duration—and thus, ultimately, the benefit of any de-risking measure.

Furthermore, de-risking activities can give rise to so-called network externalities (see, e.g., Elliott et al. 2022, Acemoglu/Tahbaz-Salehi 2024): particularly in complex supply chains, multiple suppliers may be affected by supply disruptions at the same time. If just one of these suppliers fails to implement de-risking measures, the end manufacturer may have to scale back or even halt production, and the (costly) measures taken by the other suppliers will be in vain.

Furthermore, buyers may themselves be competing with Chinese companies, which can naturally take advantage of the cost benefits of Chinese suppliers without having to fear geopolitically driven supply disruptions.[18] To keep pace

---

strong reservations regarding the protection of intellectual property were expressed in the interviews. The information on the demand for specific raw materials and intermediate products that would need to be reported would allow conclusions to be drawn about production methods and thus intellectual property. There were doubts as to whether confidentiality would be maintained.

18 Companies in industries facing intense competitive pressure currently even see incentives to increase their purchases in China, as the current fierce competition among Chinese suppliers is driving down prices in China, thereby making purchasing there even more attractive.

with Chinese competitors at their own level of the value chain, they therefore have no choice but to also use Chinese suppliers.

Finally, in specific industries with highly regulated markets—public healthcare being a prime example—passing on cost increases may fail due to regulatory requirements, such as price caps on generic drugs.

Regulatory hurdles are another obstacle to increased de-risking. Specifically, existing or planned documentation requirements were cited in the interviews as a specific barrier to establishing new supply chains. To meet these information requirements, a company relies on suppliers' willingness to share the necessary information. However, suppliers are generally only willing to do so once a certain order volume is reached. Achieving such a volume is particularly difficult for smaller Mittelstand companies, especially if—as part of a diversification strategy—they have to split the required quantities of raw materials and intermediate products among multiple suppliers. The increased use of recycled materials is also limited by regulatory hurdles. Particularly in the metal and plastics sectors, cost-effective recycling often requires large quantities of waste, which are currently difficult to obtain within the EU. Regulatory hurdles to cross-border trade in waste within and outside the EU make it difficult for recycling companies to purchase the volumes necessary for scaling up. However, without scaling—i.e., reaching a minimum size—a competitive price cannot be achieved. Regulatory hurdles can also stand in the way of product substitution. Some products with legally mandated properties require, for example, specific metals in safety technologies or specific active ingredients in medications. Even when substitution is possible, it often requires a new approval process involving corresponding testing, reporting, and approval obligations. This is particularly true in the pharmaceutical industry, where costly, multi-year testing phases and the associated risk of failure deter smaller Mittelstand companies from pursuing substitutions.

Ultimately, especially for Mittelstand enterprises, the importance of long-term, close supplier relationships based on trust can also become an obstacle to de-risking, as established and functioning supplier relationships are not easily abandoned, given their unique culture of trust. During our discussions, it became clear that many Mittelstand enterprises maintain precisely such long-standing and well-functioning relationships with their Chinese suppliers. Abandoning these long-term partnerships due to increasing political risks in favor of new suppliers with whom they have no prior experience would entail their own business risks. Ultimately, this would simply amount to an exchange of risks.

In summary, it should be noted that from a business perspective, de-risking is associated with uncertain benefits, while entailing very concrete costs and hurdles. Consequently, it is hardly surprising that such measures are used only to a limited extent in Mittelstand enterprises.

5 Conclusion

Given that China increasingly views close trade relations as a political lever and is building and utilizing them accordingly, policymakers in Germany and the EU are striving to reduce economic dependencies on China. However, the options available to policymakers for implementing such measures are limited. In a market economy, it is ultimately up to economic actors—that is, customers and, above all, companies—to take appropriate measures to reduce dependencies. Recent import trends suggest that many (Mittelstand) companies are engaging in de-risking only to a very limited extent, if at all.

Yet most Mittelstand enterprises are well aware of the risks that can result from these dependencies. While this awareness tends to be more pronounced among direct importers, for example, than among companies positioned at the end of the value chain, the latter are by no means “unaware.” Mittelstand enterprises involved in trade with China thus generally recognize the (political) risks posed by dependencies and also view them as problematic.

But why, then, do companies prefer to accept these risks rather than actively counteract them?

First, it should be noted that, in addition to the risks mentioned, other economic considerations also influence companies’ decision-making. Here, factors such as maintaining long-standing and close business relationships play a major role—especially for Mittelstand enterprises, which often place a strong cultural emphasis on reliability, continuity, and long-term commitment. This is all the more true when their Chinese partners are also family-owned businesses that share similar values. Breaking away from these established processes may indeed reduce the risks posed by politically motivated supply restrictions. However, the restructuring of supply chains required to do so exposes them to significantly increased economic risk, as long-standing, dependable partners would have to be replaced by unknown suppliers who have yet to prove their reliability.

And even if de-risking measures are considered desirable by Mittelstand enterprises, numerous hurdles stand in the way of their practical implementation. While the benefits of reduced dependencies remain uncertain, the costs of reducing dependencies are very real. Typically, these costs cannot be passed on to customers through higher prices. Furthermore, de-risking measures are sometimes associated with considerable bureaucratic burden or are simply impossible to implement.

It is therefore by no means a lack of knowledge or risk awareness on the part of Mittelstand enterprises, but rather economically rational considerations that stand in the way of de-risking in most cases. Policymakers should accept this and not attempt to force diversification through new regulations, as is currently being discussed in the EU, at least for large companies (cf. European Commission 2025, p. 13). This would impair companies' competitiveness in international markets and would also entail new, additional bureaucracy. The latter would be a considerable burden, particularly for SMEs due to their limited (human) resources, and must be avoided at all costs.

Efforts at the EU level to systematically compile information on existing dependencies should also be viewed critically. Regardless of the questionable benefits of such a centralized information-gathering effort, it primarily leads to additional bureaucracy, which—as experience with existing reporting requirements shows—indirectly burdens even smaller, formally exempt companies due to their supply chain connections. Ultimately, such approaches can even be counterproductive and hinder the reduction of dependencies through geographic diversification if, for example, new suppliers outside China refuse to provide the relevant information.

But what could policymakers do to reduce dependencies on China at the macroeconomic level? One approach, which is already being pursued to some extent, is the (financial) promotion of selected de-risking measures, such as, in particular, the improvement of recycling options. While funding programs must generally be critically scrutinized due to well-known drawbacks such as demarcation problems or windfall effects, they would be more justifiable in this case because companies are being encouraged, to promote a societal goal, to do something that is not economically viable for them. The network externalities sometimes associated with de-risking measures can also justify such support.

Above all, however, the focus should be on improving the framework conditions. This could facilitate diversification efforts and reduce dependence on China by, for example, lowering trade barriers with third countries, promoting partnerships for raw materials, or reducing regulatory hurdles (such as those for the trade of waste within the EU). Such an approach does not require new reporting obligations and would also be beneficial for other reasons (e.g., creating new growth potential through an improved international division of labor). Furthermore, policymakers need to recognize that there are often interactions between seemingly disparate policy areas, which must always be taken into account. Thus,

political efforts to reduce dependencies are frequently thwarted by regulatory requirements and policy measures in other sectors: Higher environmental standards, higher electricity prices in the wake of the green transition, and stricter safety requirements sometimes pose significant hurdles to companies' de-risking efforts. Here, the German government's planned "National Economic Protection Strategy," which is intended to place greater emphasis on improving framework conditions and integration (cf. Deutscher Bundestag 2026), could be a step in the right direction.

6 References

Acemoglu, D.; Tahbaz-Salehi, A. (2025): The Macroeconomics of Supply Chain Disruptions, The Review of Economic Studies 92 (2), 656–695.

Aksoy, C.G.; Baur, A.; Flach, L.; Javorcik, B. (2024): Lieferketten nach Corona: Welche Prioritäten setzen deutsche Unternehmen?, ifo Institut: ifo Schnelldienst digital, 5 (1), München.

Arriola, C.; Cai, M.; Kowalski, P.; Miroudot, S.; van Tongeren, F. (2024): Towards demystifying trade dependencies: At what point do trade linkages become a concern?, OECD: OECD Trade Policy Papers, No. 280, Paris, https://doi.org/10.1787/2a1a2bb9-en, accessed on 25.03.2026.

Baur, A.; Flach, L. (2022): Deutsch-chinesische Handelsbeziehungen: Wie abhängig ist Deutschland vom Reich der Mitte?, ifo Institut: ifo Schnelldienst, 75 (4), München.

Baur, A.; Flach, L. (2024): Zeitenwende in den deutsch-chinesischen Handelsbeziehungen?, Ergebnisse einer aktuellen Unternehmensbefragung, ifo Institut: ifo Schnelldienst digital, 5 (4), München.

Daft, R.L.; Weick, K.E. (1984): Toward a Model of Organizations as Interpretation Systems, The Academy of Management Review 9 (2), 284-295.

Destatis (2026): China im Jahr 2025 wieder wichtigster Handelspartner Deutschlands, Pressemitteilung Nr. 056 vom 20. Februar 2026, https://www.destatis.de/DE/Presse/Pressemitteilungen/2026/02/PD26_056_51.html, accessed on 25.03.2026.

Deutscher Bundestag (2026): Nationale Wirtschaftsschutzstrategie, Drucksache 21/4920, Berlin.

Die Bundesregierung (2023): China-Strategie der Bundesregierung, Berlin, https://www.auswaertiges-amt.de/resource/blob/2608578/810fdade376b1467f20bdb697b2acd58/china-strategie-data.pdf, accessed on 25.03.2026.

Duan, R.; Liu, C. (2025): Concentrate or Diversify? Economic Policy Uncertainty and Supplier-Base Concentration, Asia-Pacific Journal of Financial Studies 54, 116-151.

DZ Bank (2024): Mittelstand – Regionale Neuausrichtung nach Krisen: Indien überholt China und USA. Konjunktur: Eine Research-Publikation der DZ Bank AG, Frankfurt, https://firmenkunden.dzbank.de/content/dam/firmenkunden/volkswirtschaft/mittelstandsstudie/sonderumfrage/f-2024_neuausrichtung-lieferketten/Konjunktur_Regionale-Ausrichtung-im-Mittelstand.pdf, accessed on 10.02.2026.

Elliott, M.; Golub, B.; Leduc, M.V. (2022): Supply Network Formation and Fragility, American Economic Review 112 (8), 2701–47.

Europäische Kommission (2021): Strategic dependencies and capacities, Commission Staff Working Document, SWD (2021) 352 final, Brüssel, https://commission.europa.eu/system/files/2021-05/swd-strategic-dependencies-capacities_en.pdf, accessed on 11.02.2026.

Europäische Kommission (2023): Public consultation regarding the European Critical Raw Materials Act, Brüssel, https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/13597-European-Critical-Raw-Materials-Act/public-consultation_en, accessed on 07.01.2026.

Europäische Kommission (2025): RESourceEU Action Plan, Accelerating our critical raw materials strategy to adapt to a new reality, Brüssel, https://single-market-economy.ec.europa.eu/document/download/01c448d6-dc93-40d7-9afe-4c2af448d00c_en, accessed on 27.03.2026.

Europäische Union (2024): Verordnung (EU) 2024/1252 des Europäischen Parlaments und des Rates vom 11. April 2024 zur Schaffung eines Rahmens zur Gewährleistung einer sicheren und nachhaltigen Versorgung mit kritischen Rohstoffen und zur Änderung der Verordnungen (EU) 168/2013, (EU) 2018/858, (EU) 2018/1724 und (EU) 2019/1020. Amtsblatt der Europäischen Union, L, 2024/1252, Luxemburg, https://eur-lex.europa.eu/eli/reg/2024/1252/oj?locale=de, accessed on 27.03.2026.

Flach, L.; Gröschl, J.; Steininger, M.; Teti, F.; Baur, A. (2022): Internationale Wertschöpfungsketten – Reformbedarf und Möglichkeiten, ifo Institut: ifo Forschungsberichte 133, München.

Gillig, A.-K.; Wulle, A.; Zimmehl, M.J. (2025): Wie geht es mit der Außenwirtschaft weiter? Die Pläne im Koalitionsvertrag 2025, KPMG Law Insights of 11.04.2025, https://kpmg-law.de/wie-geht-mit-der-aussenwirtschaft-weiter-die-plaene-im-koalitionsvertrag-2025/, accessed on 14.10.2025.

Kiesler, S.; Sproull, L. (1982): Managerial Response to Changing Environments: Perspectives on Problem Sensing from Social Cognition, Administrative Science Quarterly 27 (4), 548-570.

Klöppelt, C.; Lang, M.; Pothen, F.; Wagner, P. (2024): Literaturübersicht und Bewertung: De-Risking der Handelsbeziehungen mit China, Fraunhofer IMW im Auftrag der Hans-Böckler.-Stiftung, Leipzig, https://publica.fraunhofer.de/entities/publication/333bb3b5-635f-402f-8bbe-8eb73e94cd1d, accessed on 19.03.2026.

Kolev-Schaefer, G.; Matthes, J.; Schaefer, T.; Schmitz, E.; Weber, B.; Schmitz-Brieber, J. (2025): Resilienz der deutschen Lieferketten nach der Zeitenwende, Studie des EPICO KlimaInnovation e.V. in Zusammenarbeit mit dem Institut der deutschen Wirtschaft, Berlin, Köln.

Matthes, J. (2023): De-Risking von China im Licht aktueller Unternehmensumfragen. Nur begrenzte Lichtblicke, IW Köln: IW-Kurzbericht, Nr. 92/2023, Köln.

Matthes, J. (2024), Importseitiges De-Risking von China im Jahr 2023. Eine Anatomie hoher deutscher Importabhängigkeiten von China, IW Köln: IW-Report, Nr. 18, Köln.

Matthes, J. (2025a): Außenhandel 2024 mit China: Problematische Befunde im Detail, IW Köln: IW-Kurzbericht, Nr. 20/2025, Köln.

Matthes, J. (2025b): Importseitiges De-Risking von China im Jahr 2024 - Aktualisierung des IW-Monitoring importseitiger Abhängigkeiten, IW Köln: IW-Report, Nr. 24, Köln.

Méjean, I.; Rousseaux, P. (2024): Identifying European Trade Dependencies. in: Pisani-Ferry, J.; Weder di Mauro, B.; Zettelmeyer, J. (Hrsg.): Paris Report 2: Europe's Economic Security‘, S. 49-99, CEPR Press, Paris, London. https://cepr.org/publications/books-and-reports/paris-report-2-europes-economic-security, accessed on 19.03.2026.

Pahnke, A.; Reiff, A.; Wolter, H.-J. (2023): Entwicklungstendenzen globaler Wertschöpfungsketten aus Sicht mittelständischer Unternehmen, IfM Bonn: IfM-Materialien Nr. 302, Bonn.

Patton, M. Q. (1990): Qualitative evaluation and research methods, 2. Auflage, Newbury Park.

Verma, R.; Pullman, M.E. (1998): An analysis of the supplier selection process, Omega 26 (6), 739-750.

Wilson, E.J. (1994): The Relative Importance of Supplier Selection Criteria: A Review and Update, International Journal of Purchasing and Materials Management 30, 34-41.