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Postgraduate Dissertation

**The Role of Negotiations in the Supply Chain
of Packaging materials**

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Supervisor: Dr. Konstantinos G. Papadopoulos

Athens, Greece, June 2023

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of Packaging Materials**

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Abstract

This master thesis explores the intricate supply chain of three widely used packaging materials for food contact: PVC cling film, aluminum foil, and baking paper. The study comprehensively analyzes the entire process, starting from the sourcing of raw materials to the production of final packaging products. The research focuses on the global, European, and Greek markets, identifying the key players operating in each section of the supply chain.

Furthermore, the thesis delves into the complex negotiation dynamics among the various sections of the supply chain. It examines the negotiation strategies and tools employed by raw material suppliers, manufacturers, distributors, and retailers. The study employs a combination of primary and secondary research methods to gain valuable insights into the factors influencing negotiations, including market competition, supply and demand dynamics, and regulatory requirements.

The findings of this research contribute to a deeper understanding of the supply chain for food packaging materials and shed light on the negotiation practices of major industry players. This knowledge holds significant practical implications for companies operating in the food packaging market. By identifying opportunities for collaboration and enhancing negotiation outcomes, businesses can optimize their supply chain processes and strengthen their competitive position in the market.

In addition to exploring the typical challenges faced by the supply chain of packaging materials, this thesis also addresses the impact of unforeseen events such as natural disasters, pandemics, and market shortages. Such events can significantly disrupt the supply chain, causing delays, shortages, and volatility in pricing. The study investigates how these challenges affect the negotiation dynamics within each section of the supply chain and how companies navigate

these complexities with limited Best Alternative to a Negotiated Agreement (BATNA) option.

Overall, this master thesis provides a comprehensive analysis of the supply chain of PVC cling film, aluminum foil, and baking paper for food contact. It examines the negotiation strategies employed by various stakeholders and explores the challenges posed by natural disasters, pandemics, and market shortages. By examining the interplay of supply chain dynamics and negotiation processes, this research contributes valuable insights to the food packaging industry, enabling companies to optimize their operations and enhance their resilience in the face of uncertainties.

Keywords

Packaging materials: This refers to the materials used to protect, contain, and present products. It encompasses various materials such as plastics, paper, metals, and more, which are designed to ensure the safety, preservation, and convenience of packaged goods.

Supply chain: This term refers to the network of activities and processes involved in the production, distribution, and delivery of goods or services. It encompasses the flow of raw materials, manufacturing, transportation, warehousing, and retailing, among other stages.

PVC cling film: PVC (Polyvinylchloride) cling film is a widely used packaging material known for its ability to cling tightly to surfaces, providing excellent sealing properties. It is commonly used for food preservation, as it helps to keep food fresh, prevent contamination, and extend the shelf life of various food products.

Aluminum foil: Aluminum foil is a thin, pliable sheet made of aluminum metal. It is commonly used for food packaging due to its excellent heat conductivity, moisture resistance, and ability to create a barrier against light, oxygen, and contaminants. Aluminum foil helps to maintain the freshness, flavor, and quality of food during storage and cooking.

Baking paper: Baking paper, also known as parchment paper, is a non-stick paper used in baking and cooking. It is often used to line baking pans, prevent food from sticking, and facilitate easy removal. Baking paper is widely used for food contact, as it provides a safe and convenient solution for cooking and baking without the need for added oils or sprays.

Negotiation dynamics: This term refers to the processes, strategies, and interactions involved in negotiation. It encompasses the analysis of different negotiation tactics, power dynamics, communication styles, and decision-making processes within the context of the supply chain for packaging materials. Understanding negotiation dynamics is crucial for effectively managing relationships, resolving conflicts, and achieving mutually beneficial agreements among stakeholders in the supply chain.

These keywords capture the essential elements of your research, including the focus on packaging materials for food contact, the analysis of the supply chain, and the examination of specific materials like PVC cling film, aluminum foil, and baking paper. Additionally, the keyword "negotiation dynamics" highlights the study's exploration of negotiation dynamics and tools used within the supply chain.

Μεταπτυχιακή Διατριβή

Χρυσούλα Αλεξανδράτου

Περίληψη

Η παρούσα διατριβή εξετάζει την λυσίδα εφοδιασμού τριών δημοφιλών υλικών συσκευασίας για επαφή με τρόφιμα: μεμβράνη τροφίμων PVC, αλουμινοχαρτο και αντικολλητικό χαρτί ψησίματος. Η μελέτη αναλύει εκτενώς την ολόκληρη διαδικασία, από την προμήθεια των πρώτων υλών έως την παραγωγή των τελικών προϊόντων συσκευασίας. Η έρευνα επικεντρώνεται στις παγκόσμιες, ευρωπαϊκές και ελληνικές αγορές, αναγνωρίζοντας τους κύριους φορείς που δραστηριοποιούνται σε κάθε τμήμα της αλυσίδας εφοδιασμού.

Επιπλέον, η διατριβή εξετάζει την πολυπλοκότητα της διαπραγμάτευσης μεταξύ των διαφόρων τμημάτων της αλυσίδας εφοδιασμού. Εξετάζει τις στρατηγικές και τα εργαλεία διαπραγμάτευσης που χρησιμοποιούν οι προμηθευτές πρώτων υλών, οι κατασκευαστές, οι μεταποιητές οι διανομείς και οι λιανοπωλητές. Η μελέτη χρησιμοποιεί μια συνδυασμένη προσέγγιση πρωτογενούς και δευτερογενούς έρευνας για να αποκτήσει πολύτιμες πληροφορίες για τους παράγοντες που επηρεάζουν τις διαπραγματεύσεις, όπως ο ανταγωνισμός στην αγορά, οι δυναμικές προσφοράς και ζήτησης και οι νομοθετικές απαιτήσεις.

Τα αποτελέσματα αυτής της έρευνας συμβάλλουν στην καλύτερη κατανόηση της αλυσίδας εφοδιασμού για τα υλικά συσκευασίας τροφίμων και φωτίζουν τις πρακτικές διαπραγματεύσεων των βασικών παραγόντων στη βιομηχανία. Τα ευρήματα της έρευνας έχουν πρακτικές επιπτώσεις για τις επιχειρήσεις που λειτουργούν στην αγορά συσκευασίας τροφίμων, ιδίως όσον αφορά τον εντοπισμό ευκαιριών για συνεργασία και τη βελτίωση των αποτελεσμάτων των διαπραγματεύσεων.

Επιπλέον, πέρα από τις τυπικές προκλήσεις που αντιμετωπίζει η αλυσίδα εφοδιασμού των υλικών συσκευασίας, η διατριβή αναφέρεται και στην επίδραση απρόβλεπτων γεγονότων όπως φυσικές καταστροφές, πανδημίες και έλλειψη στην αγορά. Τέτοια γεγονότα μπορούν να διαταράξουν σημαντικά την αλυσίδα εφοδιασμού, προκαλώντας καθυστερήσεις, έλλειψη εμπορευμάτων και αστάθεια στις τιμές. Η μελέτη ερευνά πώς αυτές οι προκλήσεις επηρεάζουν τη δυναμική της διαπραγμάτευσης εντός κάθε τμήματος της αλυσίδας εφοδιασμού και πώς οι εταιρείες αντιμετωπίζουν αυτές τις πολυπλοκότητες με περιορισμένες εναλλακτικές επιλογές ή BATNA (Best Alternative To a Negotiated Agreement).

Συνολικά, η παρούσα διατριβή παρέχει μια ολοκληρωμένη ανάλυση της αλυσίδας εφοδιασμού μεμβράνης τροφίμων PVC, αλουμινοχαρτου και αντικολλητικού χαρτιού ψησίματος για επαφή με τρόφιμα. Εξετάζει τις στρατηγικές διαπραγμάτευσης που χρησιμοποιούνται από διάφορους φορείς και ερευνά τις προκλήσεις που προκύπτουν από φυσικές καταστροφές, πανδημίες και έλλειψη στην αγορά. Αυτή η έρευνα έχει σημαντική αξία για τη βιομηχανία τροφίμων και τους ενδιαφερόμενους φορείς, καθώς παρέχει πολύτιμες πληροφορίες για τη βελτίωση των πρακτικών εφοδιασμού, διαπραγμάτευσης και αντιμετώπισης προκλήσεων.

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PVC μεμβράνη τροφίμων: Η μεμβράνη τροφίμων PVC είναι ένα δημοφιλές υλικό συσκευασίας που χαρακτηρίζεται από την ικανότητά του να προσκολλάται στενά σε επιφάνειες. Χρησιμοποιείται για την προστασία και την διατήρηση τροφίμων.

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1. Introduction.

Effective supply chain management is a critical factor for the success and competitiveness of businesses in the modern world. It involves the coordination and integration of various activities and stakeholders involved in the production, distribution, and delivery of goods or services. Within the context of the packaging materials industry, the supply chain plays a crucial role in ensuring the availability of essential products such as PVC cling film, aluminium foil, and baking paper for food contact.

This master thesis aims to provide a comprehensive analysis of the supply chain for these packaging materials, from raw materials to final products, with a particular focus on the role of negotiation. In addition to examining the key players and processes involved in the supply chain, this research explores the negotiation topics between the nodes of the supply chain and the negotiation tools they employ.

The supply chain for packaging materials comprises various stages and entities, including raw material suppliers, manufacturers, converters, distributors, and retailers. Each node in the supply chain plays a vital role in ensuring the smooth flow of materials and products. However, negotiation is a critical aspect that shapes the relationships and interactions between these entities.

Negotiation within the supply chain involves discussions and agreements on various topics, such as pricing, lead times, quality standards, and contractual terms. It is essential for the nodes of the supply chain to engage in effective negotiation to optimize their operations, enhance efficiency, and maintain competitiveness. Understanding the negotiation dynamics and strategies employed by these entities can provide valuable insights into improving supply chain performance.

To investigate the role of negotiation in the supply chain of packaging materials, a research study was conducted. The study involved the distribution of questionnaires to key stakeholders in the industry, including raw material suppliers, manufacturers, converters, distributors, and retailers. The questionnaires sought to identify the negotiation topics that arise within the supply chain and the negotiation tools utilized by the entities involved.

By analyzing the data collected through the questionnaires, this study aims to shed light on the negotiation practices within the packaging materials supply chain. It seeks to identify the key challenges and opportunities associated with negotiation in this context and propose strategies for improving negotiation effectiveness and enhancing overall supply chain performance.

In conclusion, this master thesis provides a comprehensive analysis of the supply chain for PVC cling film, aluminium foil, and baking paper for food contact. It explores the negotiation topics between the nodes of the supply chain and the negotiation tools employed. Moreover, it presents the findings of a research study conducted to examine the role of negotiation in the supply chain of packaging materials. The insights gained from this research can contribute to the development of effective negotiation strategies and the enhancement of supply chain performance in the packaging materials industry.

2. The Supply Chain and Negotiation strategies of Aluminium foil

2.1. The supply Chain of Aluminium foil.

The supply chain of aluminum foil is a complex and global network of producers, converters, distributors, and end-users. The key players in the supply chain of aluminum foil include global giants such as Alcoa, Novelis, and Hindalco, as well as European companies such as Hydro, Amcor, and UACJ Foil and Greek companies such as Elmin Bauxites, AL (Aluminium of Greece) of the Mytilineos group and ElvalHalcor. These companies operate across multiple continents and supply aluminum foil to various industries such as packaging, automotive, construction, and aerospace.

The production of aluminum foil starts with the extraction of bauxite ore, which is refined into alumina and then smelted into aluminum. The aluminum is then cast into large ingots or billets, which are rolled into thinner sheets and then processed into various foil products. The production of aluminum foil is a highly energy-intensive process that requires significant investments in equipment, infrastructure, and technology.

Once the aluminum foil is produced, it is typically sold to converters who specialize in converting the foil into various products such as household foil in rolls and sheets, lids, pouches, and containers. The converters use specialized equipment such as slitters, rewinders, laminators, and printers to customize the aluminum foil to meet the specific needs of their customers. The converters also provide value-added services such as design, technical support, and quality control to ensure the aluminum foil meets the highest standards and if the product is for food contact, then it meets the quality standards according the European and Global legislation.

The distribution of aluminum foil is typically handled by distributors who purchase the foil from manufacturers or converters and sell it to end-users. The distributors operate in various regions and often have exclusive contracts with specific manufacturers or converters. The distribution process involves handling and storage of the aluminum foil, as well as logistics and transportation to ensure timely delivery to the end-users.

The end-users of aluminum foil are diverse and include various industries such as food packaging, pharmaceuticals, cosmetics, and electronics. The end-users often have specific requirements for the aluminum foil, such as thickness, strength, and printing capabilities. They negotiate with manufacturers, converters, or distributors to ensure they get the best value for their money and the aluminum foil meets their specific needs.

In conclusion, the supply chain of aluminum foil is a complex and dynamic system that involves various players across multiple continents. The global and European players in the supply chain are constantly innovating and investing in new technologies to improve the efficiency and sustainability of the production, conversion, and distribution processes. The key challenges facing the supply chain include increasing demand, rising energy costs, and environmental sustainability concerns, which require a collaborative effort from all players to address. ¹

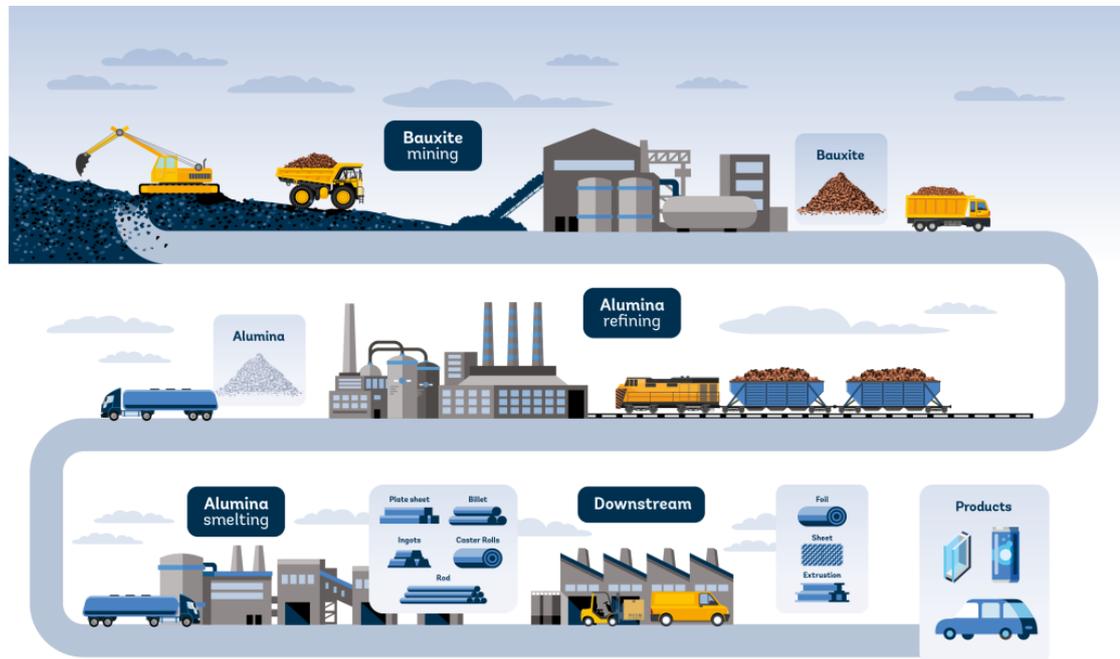


Figure 2.1.: The Supply Chain of the production of Aluminium foil ²

2.1.1. Production procedure of Bauxite Miners and Top Players.

The production procedure of bauxite miners is a critical step in the supply chain of aluminum foil. The mining of bauxite ore is the first stage in the production of aluminum, and it involves extracting the ore from the ground using various techniques such as surface mining, underground mining, and strip mining. Bauxite miners are responsible for locating, extracting, and processing bauxite ore to produce alumina, which is then used to produce aluminum.

The key players in the bauxite mining industry include global giants such as Rio Tinto, Alcoa, and Rusal, as well as European companies such as Norsk Hydro, Alteo, and Compagnie des Bauxites de Guinée. These companies operate across multiple continents and have significant investments in equipment, infrastructure, and technology.

¹ See: (1), (2), (35), (36), (37), (38)

² See: (121)

Bauxite miners negotiate with various stakeholders such as governments, local communities, and suppliers to ensure smooth operations and sustainable practices. Negotiations often involve issues such as land rights, environmental regulations, and labor rights. In some cases, bauxite miners also negotiate with aluminum producers to ensure a reliable supply of bauxite ore.

Global and European bauxite miners are constantly investing in new technologies to improve the efficiency and sustainability of their operations. For example, Rio Tinto has developed a technology called "Ore Sorting" that uses sensors to identify high-grade bauxite ore, reducing waste and increasing efficiency. Norsk Hydro has also invested in sustainable bauxite mining practices such as reforestation, biodiversity conservation, and water management.

However, the bauxite mining industry is not without its challenges. The mining of bauxite ore is often associated with environmental concerns such as deforestation, soil erosion, and water pollution. Additionally, bauxite miners often face social and political risks such as labor disputes, community protests, and government regulations.

In conclusion, the production procedure of bauxite miners is a critical step in the supply chain of aluminum foil, and global and European players in the industry are constantly innovating to improve the efficiency and sustainability of their operations. The bauxite mining industry faces challenges related to environmental and social risks, and it requires a collaborative effort from all stakeholders to address these challenges and ensure a sustainable supply of bauxite ore to produce aluminum foil.³

2.1.2. Production procedure of Refining and Top Players.

Refining is the next step in the production of aluminum foil after the extraction of bauxite and the production of alumina. Refiners are responsible for converting alumina into aluminum through a process called electrolysis. The process involves passing an electric current through a solution of alumina dissolved in molten cryolite, resulting in the production of aluminum metal.

The global and European players in the refining industry include companies such as Alcoa, Rio Tinto, Norsk Hydro, and Rusal. In Greece, the largest player in the refining industry is Mytilneos Holdings, which operates the Aluminium of Greece (AoG) plant in Agios Nikolaos. The AoG plant is the only vertically integrated aluminum production plant in Europe, and it includes both refining and smelting operations.

Refiners negotiate with various stakeholders such as governments, labor unions, and suppliers to ensure smooth operations and sustainable practices.

³ See: (3), (4), (5), (6), (7)

Negotiations often involve issues such as energy costs, environmental regulations, and labor rights. Refiners also negotiate with aluminum producers to ensure a reliable supply of aluminum metal.

Global and European refiners are constantly investing in new technologies to improve the efficiency and sustainability of their operations. For example, Alcoa has developed a technology called "EcoSource" that reduces energy consumption and emissions by using renewable energy sources such as hydropower. Mytilineos Holdings has also invested in sustainable refining practices such as the use of natural gas as a fuel source and the recycling of waste materials.

However, the refining industry also faces challenges related to environmental and social risks. The electrolysis process used in refining produces greenhouse gas emissions such as carbon dioxide and perfluorocarbons, which contribute to climate change. Additionally, refineries often face social and political risks such as labor disputes, community protests, and government regulations.

In conclusion, the production procedure of refiners is a critical step in the supply chain of aluminum foil, and global, European, and Greek players in the industry are constantly innovating to improve the efficiency and sustainability of their operations. The refining industry faces challenges related to environmental and social risks, and it requires a collaborative effort from all stakeholders to address these challenges and ensure a sustainable supply of aluminum metal to produce aluminum foil.

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2.1.3. Production procedure of Aluminum producers and Top Players.

Aluminium producers are responsible for smelting the refined aluminium metal into ingots or sheets which are then rolled into aluminium foil. The production procedure of aluminium producers involves several stages, including melting, alloying, casting, rolling, and finishing. The process is energy-intensive and requires significant investments in equipment and infrastructure.

Global and European players in the aluminium production industry include companies such as Alcoa, Rio Tinto, Norsk Hydro, and Rusal. In Greece, the largest player in the aluminium production industry is ElvalHalcor, a subsidiary of Viohalco, which operates a state-of-the-art aluminium rolling plant in Oinofyta.

Aluminium producers negotiate with various stakeholders to ensure the smooth operation of their facilities and to address issues such as energy costs, environmental regulations, and labor rights. Negotiations with governments and energy providers are critical as energy costs typically account for a significant portion of the production costs. In Europe, aluminium producers have also been

⁴See: (8), (9), (10), (11), (12), (13)

engaging in discussions with the European Union to promote sustainable practices and reduce greenhouse gas emissions.

The aluminium production industry is constantly innovating to improve the efficiency and sustainability of their operations. For example, Alcoa has developed a technology called "Micromill" which allows for the production of high-strength aluminium alloys with reduced energy consumption and carbon emissions. ElvalHalcor has also invested in sustainable production practices such as the use of recycled aluminium and the implementation of energy-efficient technologies.

However, the aluminium production industry also faces challenges related to environmental and social risks. The production process generates significant greenhouse gas emissions, and producers must navigate a complex web of regulations related to emissions and waste disposal. The industry also faces social and political risks such as labor disputes and community protests related to the environmental impacts of production facilities.

In conclusion, the production procedure of aluminium producers is a critical step in the supply chain of aluminium foil, and global, European, and Greek players in the industry are constantly innovating to improve the efficiency and sustainability of their operations. The aluminium production industry faces challenges related to environmental and social risks, and it requires a collaborative effort from all stakeholders to address these challenges and ensure a sustainable supply of aluminium to produce aluminium foil.⁵

2.1.4. Production procedure of Converters and Top Players.

Converters play a crucial role in the supply chain of aluminium foil production as they transform the aluminium ingots or sheets into the thin, flexible sheets of foil that are widely used in packaging and other applications. The production procedure of converters involves several stages, including slitting, annealing, and finishing. The process requires specialized equipment and expertise, as even small deviations in the production process can affect the quality and properties of the final product.

Global and European players in the converter industry include companies such as Novelis, Reynolds, and Amcor. In Greece, the largest player in the converter industry is Symetal, a subsidiary of ElvalHalcor. Symetal operates a state-of-the-art production facility in Mandra, Attica, and specializes in the production of high-quality aluminium foil products for a range of industries.

Converters negotiate with various stakeholders to ensure the smooth operation of their facilities and to address issues such as raw material costs, energy costs, and environmental regulations. They often work closely with their upstream

⁵ See: (14), (15), (16), (17), (18), (19)

suppliers, such as aluminium producers and refiners, to ensure a reliable supply of raw materials and to coordinate production schedules.

In recent years, converters have also been focusing on sustainability and the use of recycled materials. For example, Novelis has developed a technology called "evercan" which allows to produce beverage cans made from 90% recycled aluminium. Symetal has also implemented sustainable practices such as the use of recycled aluminium and the optimization of its production processes to reduce waste and energy consumption.

However, the converter industry faces challenges related to market fluctuations and changing consumer preferences. The industry must be flexible and able to adapt quickly to changes in demand and production requirements. Additionally, converters must navigate a complex web of regulations related to environmental and labor standards, which can vary significantly from country to country.

In conclusion, the production procedure of converters is a critical step in the supply chain of aluminium foil production, and global, European, and Greek players in the industry are constantly innovating to improve their processes and sustainability practices. Converters must negotiate with various stakeholders to ensure the smooth operation of their facilities and address issues related to raw material costs, energy costs, and environmental regulations. The converter industry faces challenges related to market fluctuations and changing consumer preferences, but with a focus on innovation and sustainability, it can continue to play a vital role in the production of high-quality aluminium foil products. ⁶

2.1.5. Procedures of distributors in the supply chain of aluminium foil and Top Players.

Distributors play a critical role in the supply chain of aluminium foil production, as they are responsible for ensuring the efficient and timely delivery of products to end-users. The distribution procedure involves several stages, including transportation, storage, and logistics. The process requires specialized knowledge and expertise to handle the delicate and lightweight nature of aluminium foil and ensure its safe delivery to customers.

Global and European players in the distributor industry include companies such as Amcor, Ball Corporation, and Crown Holdings. In Greece, there are several players in the industry, which specializes in the distribution of aluminium foil and packaging materials.

Distributors negotiate with suppliers and customers to ensure a smooth and reliable supply chain. They work closely with converters to coordinate the delivery of products and manage inventory levels. Distributors also negotiate

⁶ See: (20), (21), (22), (23), (24), (25)

transportation costs and contracts with carriers to ensure timely and cost-effective delivery.

The distributor industry faces challenges related to market fluctuations and changing customer preferences. The industry must be able to quickly adapt to changes in demand and production requirements. Additionally, distributors must navigate a complex web of regulations related to environmental and safety standards, which can vary significantly from country to country.

In recent years, distributors have also been focusing on sustainability and the use of environmentally friendly packaging materials. For example, Amcor has set a target to make all of its packaging recyclable or reusable by 2025.

In conclusion, the distribution procedure of aluminium foil is a critical step in the supply chain, and global, European, and Greek players in the industry are constantly innovating to improve their processes and sustainability practices. Distributors negotiate with suppliers and customers to ensure a reliable supply chain and address issues related to transportation costs, inventory management, and environmental regulations. The distributor industry faces challenges related to market fluctuations and changing customer preferences, but with a focus on innovation and sustainability, it can continue to play a vital role in the efficient and timely delivery of high-quality aluminium foil products.⁷

2.1.6. Procedures of End-Users in the supply chain of aluminium, foil and Top Players.

End-users play a critical role in the demand for aluminium foil, as they are the ultimate consumers of the product. End-users can include a wide range of industries, such as food and beverage, pharmaceuticals, and construction. The procedures of end-users in the aluminium foil industry involve several stages, including procurement, customization, and utilization.

Global and European players in the end-user industry include companies such as Nestle, Coca-Cola, and L'Oreal, while in Greece, end-users may include companies such as Delta, Athenian Brewery, and Vio.Me. End-users negotiate with suppliers to ensure that they receive high-quality products that meet their specific needs.

End-users may negotiate customization options with suppliers to ensure that the aluminium foil they receive is tailored to their specific requirements, such as size, thickness, and print design. Additionally, end-users may negotiate packaging options to ensure that the aluminium foil is delivered in a manner that is suitable for their production processes.

⁷ See: (26), (27), (28), (29), (30)

End-users may also negotiate prices with suppliers, seeking to obtain the best possible price for the products they need. This negotiation can be challenging as aluminium prices are subject to market fluctuations, making it difficult for suppliers to offer a fixed price for extended periods.

In recent years, end-users have also been focusing on sustainability and environmental considerations, such as the use of recycled or sustainable materials. For example, Nestle has set a goal to make 100% of its packaging recyclable or reusable by 2025, while L'Oreal has implemented a sustainable packaging program that seeks to reduce the environmental impact of its products.

In conclusion, end-users play a critical role in the demand for aluminium foil products, and global, European, and Greek players in the industry must negotiate with suppliers to obtain the products they need. End-users may seek customization and packaging options and negotiate prices with suppliers. The industry faces challenges related to market fluctuations and changing customer preferences, but with a focus on sustainability and environmental considerations, end-users can play a vital role in shaping the future of the aluminium foil industry. ⁸

2.2. The Role of Negotiation and Negotiation tools in the supply chain of Aluminium foil.

Negotiation plays a crucial role in the supply chain of aluminum foil, involving various players such as bauxite miners, refiners, aluminum producers, converters, distributors, and end-users. Each player utilizes different negotiation tools and strategies to optimize their position and achieve favorable outcomes. Here, we will analyze some common negotiation tools used across the supply chain:

Bauxite Miners:

- a. Long-term contracts: Bauxite miners negotiate long-term contracts with mining companies or intermediaries to ensure a stable and consistent supply of bauxite. These contracts typically outline the quantity, quality, and duration of the supply agreement, providing both parties with certainty and reducing supply chain risks.
- b. Price indexation: Negotiations may involve linking the price of bauxite to a market index or benchmark. This helps align the pricing with market fluctuations and provides transparency in pricing mechanisms.
- c. Quality specifications: Bauxite miners negotiate on the desired quality parameters of bauxite, such as alumina content, silica levels, and moisture content. Defining clear quality specifications helps ensure that the bauxite meets the requirements of refiners and downstream players in the supply chain.

⁸ See: (31), (32), (33), (34)

d. Logistics arrangements: Discussions on logistics arrangements are crucial for bauxite miners. This may include negotiating transportation contracts, determining shipping methods, and establishing storage facilities. Efficient logistics help minimize costs and ensure timely delivery of bauxite to refiners.

Refiners:

a. Supply contracts: Refiners negotiate supply contracts with bauxite miners to secure a consistent supply of bauxite. These contracts outline the quantity, pricing, delivery terms, and quality standards of the bauxite supply. Long-term contracts provide stability and allow refiners to plan their production processes effectively.

b. Pricing mechanisms: Refiners may employ various pricing mechanisms in their negotiations with bauxite miners. This can include fixed pricing, where a predetermined price is agreed upon, or formula-based pricing, where the price is calculated based on market factors such as the London Metal Exchange (LME) index or other market benchmarks.

Quality standards: Refiners establish clear quality standards for the alumina they purchase from bauxite miners. This ensures that the alumina meets the required chemical composition, impurity levels, and physical properties necessary to produce high-quality aluminum.

c. Supply chain coordination: Refiners collaborate with bauxite miners to optimize the supply chain. This may involve discussions on scheduling, inventory management, and coordination of delivery to ensure a seamless flow of raw materials for aluminum production.

Aluminum Producers:

a. Supply contracts: Aluminum producers negotiate supply contracts with refiners to procure the required amount of alumina for their production processes. These contracts establish the terms and conditions of the supply, including pricing, volume commitments, and delivery schedules.

b. Pricing mechanisms: Negotiations with refiners may involve pricing mechanisms such as LME-based pricing, where the price is tied to the prevailing market rates for aluminum and alumina. This allows aluminum producers to align their purchasing costs with market fluctuations.

c. Quality specifications: Aluminum producers negotiate on the quality specifications of alumina to ensure it meets their specific requirements for aluminum production. They may discuss parameters such as chemical composition, impurity levels, and particle size distribution to optimize the quality of the final aluminum product.

d. Delivery terms: Negotiating delivery terms is crucial for aluminum producers to manage their production schedules and maintain inventory levels. Discussions may revolve around lead times, shipment methods, and storage arrangements to ensure a smooth flow of alumina for aluminum production.

Converters:

a. Pricing agreements: Converters negotiate pricing agreements with aluminum producers to procure aluminum products, including aluminum foil. They may discuss pricing structures, such as cost-plus pricing or market-based pricing based on factors like production costs, market demand, and competitive dynamics.

b. Volume commitments: Converters may negotiate volume commitments with aluminum producers to secure a stable supply of aluminum foil products. These agreements can provide volume discounts, preferential treatment, and guaranteed availability of the desired products.

c. Technical specifications: Negotiating technical specifications is essential to ensure that the aluminum foil meets the specific requirements of converters. Discussions may involve aspects such as foil thickness, width, surface characteristics, and any additional customization required for specific applications.

d. Packaging requirements: Converters may negotiate packaging standards, labeling requirements, and logistics arrangements with suppliers. These discussions ensure that the aluminum foil products are packaged appropriately and transported efficiently to meet customer demands.

Distributors:

a. Pricing negotiations: Distributors negotiate pricing terms with converters or aluminum producers to procure aluminum foil products at competitive rates. These negotiations may involve discussing volume-based discounts, price adjustments based on market conditions, and terms that balance cost-effectiveness and profitability.

b. Payment terms: Negotiating favorable payment terms is crucial for distributors to manage their cash flow and financial stability. They may negotiate credit periods, installment plans, or other flexible payment arrangements with suppliers to maintain a healthy business relationship.

c. Exclusivity agreements: In some cases, distributors may negotiate exclusive distribution rights for specific geographic areas or end-user segments. These agreements can provide a competitive advantage and ensure a consistent supply of aluminum foil products to their target markets.

d. Logistics optimization: Distributors collaborate with suppliers to optimize transportation, warehousing, and delivery processes. Negotiations may focus on cost-effective shipping methods, inventory management strategies, and efficient distribution networks to meet customer demands and reduce lead times.

End-Users:

a. Pricing negotiations: End-users negotiate pricing terms with distributors or converters to procure aluminum foil products that fit their budgetary requirements. These negotiations may involve volume-based pricing, long-term agreements, or price adjustments based on market conditions and customer loyalty.

b. Order quantities: End-users discuss and agree upon order quantities based on their usage, demand forecasts, and inventory management strategies. Negotiations may revolve around volume discounts, just-in-time delivery, and supply flexibility to meet their production or packaging needs.

c. Technical specifications: End-users collaborate with suppliers to ensure that the aluminum foil meets their specific technical requirements. Discussions may include foil thickness, width, alloy composition, surface treatments, and any additional features necessary for their specific applications.

d. Customization: Negotiating product customization options is crucial for end-users with unique packaging or product requirements. They may discuss

customization possibilities such as size variations, embossing, printing, or special coatings to meet their branding or functional needs.

It's important to note that negotiation tools and strategies can vary based on individual circumstances, market dynamics, and specific players within the supply chain. These examples serve as a general framework, and actual negotiations may involve a combination of these tools to achieve mutually beneficial outcomes.⁹

⁹ See: (96), (97), (98), (99), (100)

2.2.1. Topics of Negotiation per sector of Aluminium foil Supply Chain

Topics of Negotiation per sector of Aluminium foil Supply Chain

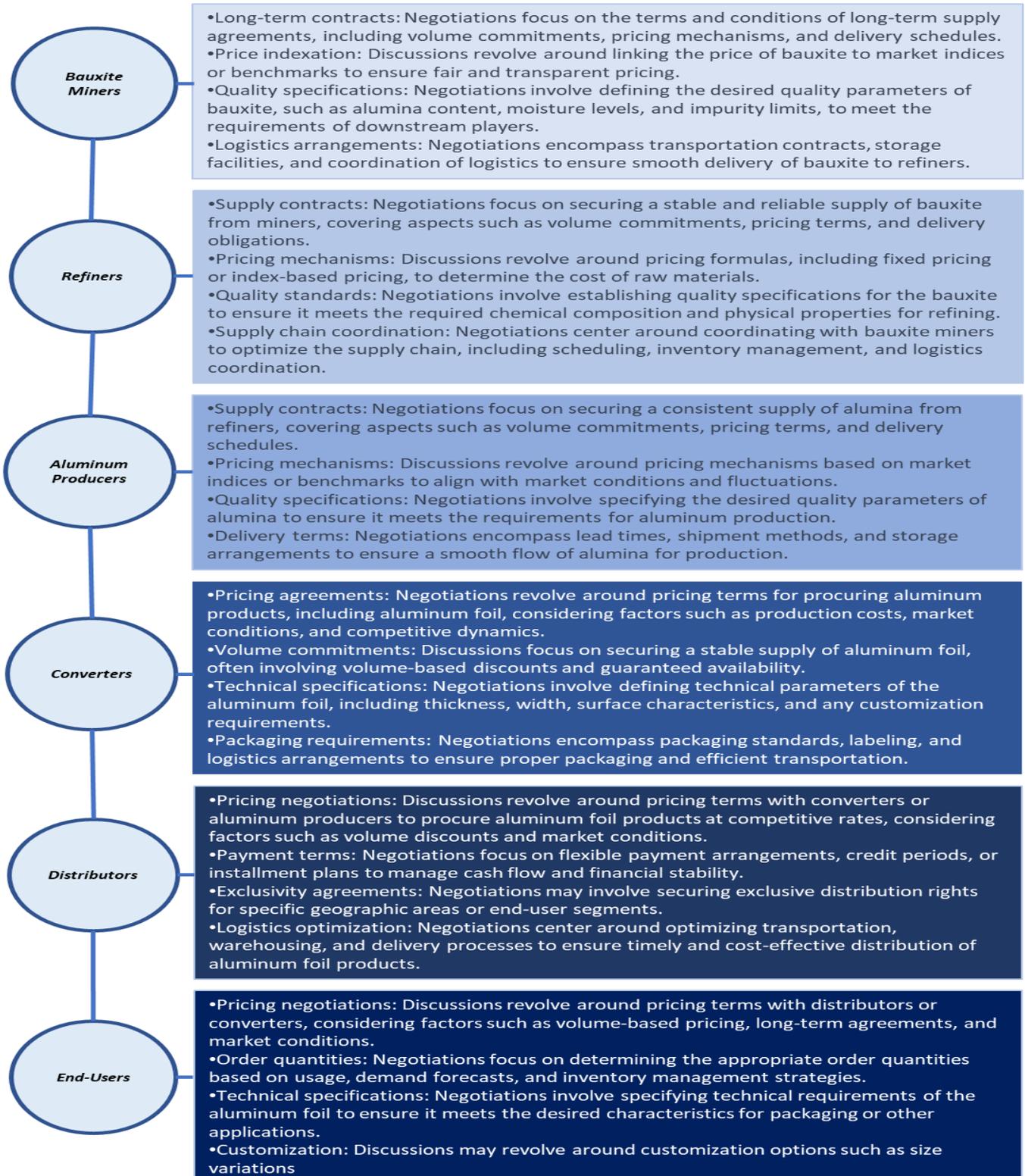


Figure 2.2.: Topics of Negotiation per sector of Aluminium foil Supply Chain

2.3. The difficulties in the supply chain of aluminium foil

2.3.1. The difficulties in the supply chain of aluminium foil due to Anti-dumping measures.

The European supply chain of aluminium foil has faced significant difficulties due to the imposition of anti-dumping duties on imported aluminium foil packaging material from several countries, including China. In 2018, the European Commission imposed and expanded anti-dumping duties on imports of aluminium foil from China, which was followed by similar measures against imports from Armenia, Brazil, and Russia. The duties ranged from 12% to 46.7% and were imposed to protect European producers from the adverse effects of unfairly priced imports.

As a result of these duties, the European supply chain of aluminium foil faced several challenges. Firstly, the higher import costs made it difficult for European manufacturers to source affordable raw materials, which increased their production costs and reduced their competitiveness. Secondly, the reduced supply of imported aluminium foil meant that European manufacturers faced supply shortages, which resulted in longer lead times and delayed deliveries. Additionally, the anti-dumping measures affected the profitability of European distributors and end-users, as they were forced to pay higher prices for the imported aluminium foil.

Furthermore, the anti-dumping duties on imported aluminium foil packaging material have had broader implications for the European packaging industry. The industry has seen a shift towards alternative packaging materials such as paper, cardboard, and plastic, which has impacted the demand for aluminium foil packaging material. As a result, European aluminium foil producers have had to adjust their production capacities to meet the changing demand patterns, which has been challenging.

In conclusion, the anti-dumping duties on imported aluminium foil packaging material have created significant difficulties for the European supply chain of aluminium foil. The higher import costs, supply shortages, and reduced competitiveness have had adverse effects on the profitability of manufacturers, distributors, and end-users. The broader implications of the anti-dumping measures have also impacted the packaging industry, resulting in a shift towards alternative packaging materials. It remains to be seen how the European supply chain of aluminium foil will adapt to these challenges and maintain its competitiveness in the global market. ¹⁰

¹⁰ See: (39), (40), (41), (42)

2.3.2. The impact of Anti-dumping measures on negotiations of the supply chain of Aluminium foil.

Anti-dumping measures can have significant impacts on the negotiations in the supply chain of aluminium foil. When anti-dumping duties are imposed on imports of aluminium foil packaging material, it can lead to a reduction in competition in the market. This can result in higher prices for aluminium foil, which can ultimately affect the profitability of downstream businesses that rely on aluminium foil as a key input.

In such situations, negotiations between the various players in the supply chain, including distributors, end-users, and producers, can become more complex and contentious. For example, if end-users are unable to source aluminium foil from cheaper foreign suppliers, they may have to negotiate with domestic producers for better pricing or risk cutting into their own profit margins.

In addition, anti-dumping measures may lead to disputes between countries and trade partners. The affected countries may challenge the imposition of anti-dumping duties at the World Trade Organization (WTO) or through other channels, which can further disrupt the supply chain and cause uncertainty for businesses.

Overall, anti-dumping measures can have far-reaching effects on the supply chain of aluminium foil, particularly in regions such as Europe where domestic production is limited. Negotiations between the different players in the supply chain may become more challenging, and the overall profitability of businesses may be affected. It is therefore important for policymakers to carefully consider the potential impacts of anti-dumping measures and to work towards finding solutions that balance the interests of different stakeholders.¹¹

2.3.3. The difficulties which face the supply chain of aluminium foil because of the announcement of stopping the production the biggest player.

In April 2018, United Company Rusal, one of the largest aluminium producers in the world, announced that it will be shutting down its production because of US sanctions. This announcement caused a shortage of aluminium products, including aluminium foil, in the global market. The shortage created a supply chain disruption as many downstream users were left scrambling to find alternative sources of supply.

The impact of Rusal's announcement was particularly felt in Europe, where Rusal was a major supplier of aluminium products. In response to the supply

¹¹ See: (43), (44), (45), (46), (47)

shortage, many European manufacturers were forced to reduce their production or halt it entirely, causing delays in delivery and increased costs. Additionally, the shortage of aluminium foil affected a range of industries, from packaging to construction, further exacerbating the supply chain disruption.

To mitigate the impact of the Rusal announcement, many European manufacturers had to source alternative suppliers. However, this was not always an easy task, as the global market was also impacted by the announcement. As a result, prices for aluminium products, including aluminum foil, surged, further adding to the cost burden for manufacturers.

The Rusal announcement demonstrates the fragility of the global supply chain and the impact that events in one part of the world can have on downstream users. The shortage of aluminium foil created by Rusal's announcement highlights the importance of having a diversified supply chain and having contingency plans in place to mitigate potential disruptions. It also emphasizes the need for strong supplier relationships and effective communication between suppliers and downstream users to navigate supply chain disruptions.

The shortage of aluminum foil caused by Rusal's announcement to close its production had a significant impact on the negotiation process of all the players in the supply chain. The shortage disrupted the usual supply and demand balance, resulting in increased prices and limited availability. Distributors and end-users were particularly affected as they struggled to secure the necessary quantities of aluminum foil for their products, leading to delays and increased costs.

Aluminum producers were also affected, as they had to adjust their production schedules to meet the increased demand for aluminum foil from converters. This resulted in higher production costs and reduced profit margins. Converters had to negotiate with their customers, including distributors and end-users, to allocate the limited supply of aluminum foil fairly, taking into account the priorities and needs of each customer.

The shortage also increased the bargaining power of aluminum producers, who were able to negotiate higher prices for their products due to the limited availability of aluminum foil in the market. Distributors and end-users, on the other hand, had to accept these higher prices or risk not being able to secure the necessary quantities of aluminum foil.

Overall, the shortage caused by Rusal's announcement had a significant impact on the negotiation process within the aluminum foil supply chain. The disruption of the usual supply and demand balance led to increased prices and limited availability, affecting all players in the supply chain and altering their negotiation positions and strategies.¹²

¹² See: (48), (49), (50), (51), (52)

2.3.4. How the supply chain of aluminium foil affected during the pandemic of Covid 19.

The COVID-19 pandemic has had a significant impact on the global economy and supply chains, including the aluminum foil industry. The pandemic led to widespread lockdowns and production shutdowns, which disrupted the global supply chain and caused a significant decline in demand for aluminum foil products. Many companies had to halt or reduce production, resulting in a shortage of supply in the market.

One of the main impacts of the pandemic on the aluminum foil industry was the disruption of trade flows. The closure of borders and restrictions on international trade caused disruptions in the supply chain. As a result, companies faced challenges in sourcing raw materials and exporting finished products, leading to a decline in production and revenue. The transportation of aluminum foil products was also affected due to the reduction of air and sea freight services.

The pandemic also affected consumer behavior, resulting in changes in demand for aluminum foil products. The increased demand for packaged food products and home cooking during lockdowns resulted in a surge in demand for aluminum foil. However, the closure of restaurants, hotels, and other foodservice businesses led to a decline in demand for aluminum foil products used in the foodservice industry.

Another impact of the pandemic was the increase in production costs. The disruption in the supply chain led to an increase in raw material prices and transportation costs, resulting in higher production costs for aluminum foil manufacturers. The increased costs, combined with the decline in demand, resulted in decreased profitability for companies in the industry.

The pandemic also highlighted the importance of digitalization in the aluminum foil industry. The industry was forced to adopt new digital technologies to maintain business operations and communication with suppliers and customers. Remote work and digital collaboration became critical tools in managing the supply chain during the pandemic.

In conclusion, the COVID-19 pandemic had a significant impact on the aluminum foil industry's supply chain, affecting production, trade, demand, and costs. The industry had to adapt quickly to the changing conditions and implement new strategies to maintain business operations. The pandemic demonstrated the importance of resilience, digitalization, and innovation in the aluminum foil industry and the global supply chain. ¹³

¹³ See: (53), (54), (55), (56), (57)

2.3.5. The impact of Pandemic Covid-19 on the negotiations in the supply chain of Aluminium foil.

The COVID-19 pandemic has had a significant impact on the negotiations in the supply chain of aluminum foil. The pandemic led to disruptions in the global supply chain, causing shortages of raw materials and logistics challenges. This has resulted in increased prices and delayed deliveries, which in turn have affected the negotiations between the players in the supply chain.

One of the major challenges faced by the players in the supply chain was the closure of production facilities due to government-imposed lockdowns. This affected the supply of aluminum foil, resulting in higher demand and a shortage of supply. This created a challenging situation for end-users who were faced with rising prices and difficulty in securing supplies.

The negotiations between suppliers and buyers were also affected by the uncertainty caused by the pandemic. Suppliers were forced to renegotiate contracts with buyers due to the disruptions in the supply chain and the increased costs of raw materials. This has led to some disagreements between the parties, with some buyers pushing back against the price increases.

Logistics was another area where negotiations were impacted by the pandemic. With the closure of borders and restrictions on movement, the transportation of raw materials and finished products was disrupted. This led to delays in deliveries and increased transportation costs, which affected the negotiations between suppliers and buyers.

In response to these challenges, players in the supply chain had to adapt their negotiating strategies. For example, some buyers opted for longer-term contracts to secure supplies, while suppliers sought to diversify their supply chains to mitigate the risks of disruption. The pandemic has also accelerated the shift towards digital negotiations, with many negotiations taking place remotely via video conferencing.

In conclusion, the COVID-19 pandemic has had a significant impact on the negotiations in the supply chain of aluminum foil. The disruption in the global supply chain, logistics challenges, and increased costs have affected the negotiations between the players in the supply chain. However, the pandemic has also led to new opportunities for players to adapt their negotiating strategies and embrace digital solutions. ¹⁴

¹⁴ References: (58), (59), (60), (61), (62)

3. The Supply Chain and Negotiation strategies of PVC Cling film for food wrapping.

3.1. The supply chain of PVC cling film for food wrapping.

The supply chain of PVC cling film for food wrapping is a complex and interconnected network that involves several players at different stages. At the beginning of the supply chain, raw material suppliers provide the materials required to produce PVC cling film. These suppliers can be local or global, depending on the location of the manufacturer. The global market for PVC cling film is dominated by large multinational companies that have extensive supply chain networks and advanced manufacturing facilities. These companies have significant purchasing power and can negotiate favorable deals with raw material suppliers, which allows them to produce cling film at a lower cost.

The film manufacturing stage is the next step in the supply chain. The manufacturers are responsible for converting raw materials into PVC cling film. The global manufacturers have large-scale operations and state-of-the-art machinery, which enables them to produce high volumes of cling film efficiently. European manufacturers are typically smaller and more specialized, offering customized products that cater to specific customer needs. Greek manufacturers operate in a similar fashion to the European manufacturers, with a focus on producing customized cling film products that meet local market demands.

The converter segment of the PVC cling film supply chain operates between the film manufacturers and distributors. Converters are companies that take raw film rolls from manufacturers and convert them into finished products, such as rolls of pre-cut cling film or customized sheets for specific applications. Converters may also add additional features to the cling film, such as perforations, printing, or specialized coatings. The global converters are often large companies with advanced machinery and technology that enable them to produce high volumes of customized cling film products efficiently. European converters are typically small and medium-sized companies that specialize in niche markets and offer customized cling film products to meet specific customer needs. Greek converters operate between the film manufacturers and distributors and offer a range of customized cling film products to meet specific customer needs.

Distributors/wholesalers are the next players in the supply chain. They are responsible for storing and transporting cling film from the manufacturers and converters to the retailers. Distributors/wholesalers typically have extensive logistics and distribution networks that enable them to deliver cling film to a wide range of end-users in different regions. Retailers, such as supermarkets and

online stores, are the final players in the supply chain. They sell PVC cling film to end-users, such as households and commercial kitchens.

Overall, the supply chain of PVC cling film for food wrapping involves a complex and interconnected network of global, regional, and local players. Raw material suppliers, film manufacturers, converters, distributors/wholesalers, retailers, and end-users all play critical roles in the supply chain. The global players dominate the market due to their scale and purchasing power, while the regional and local players offer customized products and services to cater to specific customer needs. The converter segment of the PVC cling film supply chain is subject to intense competition, and companies must be innovative and agile to remain competitive in the market. ¹⁵

3.1.1. Production Procedures of Raw material PVC cling film and Top players.

The production procedure of raw material suppliers for PVC cling film involves several steps. The raw materials used in PVC cling film production include plasticizers, stabilizers, and resins. These materials are often sourced from petrochemical companies such as ExxonMobil, BASF, and Dow Chemical, and undergo extensive processing before they are suitable for use in cling film production. The production process typically involves distillation, polymerization, and blending to produce the final product. Raw material suppliers must adhere to strict quality control measures to ensure the purity and consistency of their products.

Global raw material suppliers dominate the PVC cling film market due to their large-scale operations and extensive supply chain networks. Some of the top global suppliers in this space include Eastman Chemical Company, Arkema, and Evonik Industries. These suppliers often have significant purchasing power that enables them to negotiate favorable deals with manufacturers and distributors. Global suppliers also have access to advanced technologies and R&D capabilities, which allow them to develop new and innovative products.

European raw material suppliers are typically smaller and more specialized, focusing on producing customized products that cater to specific customer needs. Some of the top European suppliers in this space include SABIC, Ineos, and Lanxess. These suppliers often have a strong reputation for quality and reliability, and they tend to have close relationships with their customers. European raw material suppliers may also be more environmentally conscious than their global counterparts, emphasizing sustainable production processes and reducing their carbon footprint.

¹⁵ See: (63), (64), (65), (66), (67)

Greek raw material suppliers operate on a smaller scale than their global and European counterparts, serving the local market. These suppliers may focus on producing raw materials that are unique to the Greek market or offer customized solutions to meet local customer needs. Some of the top Greek suppliers in this space include Viohalco and Hellenic Petroleum. Greek raw material suppliers may also have a competitive advantage in terms of cost, as they may have lower overhead costs than larger suppliers.

When negotiating with manufacturers and distributors, raw material suppliers must take several factors into account, including supply and demand, production costs, and market trends. Global suppliers often have an advantage in negotiations due to their purchasing power and economies of scale. However, European and Greek suppliers may offer more specialized products or services that provide added value to their customers.

Overall, the production procedure of raw material suppliers for PVC cling film involves extensive processing and quality control measures. Top global, European, and Greek suppliers each have their unique strengths and weaknesses, and they must negotiate with manufacturers and distributors to maintain a competitive edge in the market.¹⁶

3.1.2. Production Procedures of Manufacturers in PVC cling film and Top Players.

The production of PVC cling film for food contact involves a complex process that requires specialized equipment and skilled workers. PVC cling film manufacturers typically source their raw materials from dedicated suppliers who produce food-grade PVC resin and other necessary additives. The PVC resin is melted and mixed with the appropriate additives, and then extruded into thin films. The films are then stretched and wound onto large rolls for further processing and conversion.

In the global PVC cling film market, top players such as Berry Global Inc., Mitsubishi Chemical Holdings Corporation, Amcor plc, Sealed Air Corporation, and Dow Chemical Company have significant manufacturing capabilities and supply PVC cling film to customers in various regions of the world. In Europe, notable players include RKW Group, Bolloré Inc., and Novamont S.p.A, while in Greece, companies such as Sarantis SA operate in the market.

Negotiations between PVC cling film manufacturers and their customers can be complex and involve multiple parties such as distributors and retailers. Manufacturers must balance their production costs with the market demand for their products and ensure that their pricing remains competitive. In some cases, manufacturers may offer volume discounts or customized products to meet the specific needs of their customers.

¹⁶ See: (68), (69), (70), (71)

In the global market, some manufacturers may use a pricing strategy known as value-based pricing, where the price of the product is determined by the value that it provides to the customer. This approach is often used for high-end products that offer unique features or benefits. Other manufacturers may use a cost-plus pricing strategy, where the price of the product is determined by the production cost plus a markup for profit.

In the European market, sustainability is becoming an increasingly important factor in negotiations between manufacturers and customers. Many customers are seeking packaging solutions that are more environmentally friendly, and manufacturers are responding by investing in sustainable production methods and materials. This trend is also evident in the Greek market, where companies are adopting more sustainable practices to meet the growing demand for eco-friendly packaging solutions.

In conclusion, the production of PVC cling film for food contact involves a complex process that requires specialized equipment and skilled workers. Negotiations between manufacturers and customers can be complex and involve multiple parties, and manufacturers must balance their production costs with market demand to remain competitive. In the global market, top players such as Berry Global Inc., Mitsubishi Chemical Holdings Corporation, Amcor plc, Sealed Air Corporation, and Dow Chemical Company dominate the market, while in Europe and Greece, companies such as RKW Group, Bollore Inc., and SARANTIS SA operate. Pricing strategies such as value-based pricing and cost-plus pricing may be used, and sustainability is becoming an increasingly important factor in negotiations.¹⁷

3.1.3. Production Procedures of Converters in PVC cling film and Top Players.

The production procedures of converters of PVC cling film for food wrapping involves a multi-step process, starting with the selection of raw materials and continuing with the manufacturing of the final product. The converters negotiate with raw material suppliers to obtain the best possible prices and quality for their raw materials, while also maintaining long-term relationships to ensure a steady supply. Once the raw materials are acquired, the converters use their specialized machinery and expertise to manufacture the PVC cling film into the desired size and shape.

In the global market, the top players in PVC cling film production include Berry Global Inc., DowDuPont Inc., Intertape Polymer Group Inc., and Jindal Poly Films Ltd. These companies have a strong focus on innovation and investment in R&D to develop new products that meet changing market demands. In the

¹⁷ References: (72), (73), (74), (75), (76), (77), (78), (79), (80)

European market, the top players include RKW Group, Amcor Ltd., and Clondalkin Group Holdings BV, who have also been investing in sustainability efforts to reduce their environmental impact.

In the Greek market, the top players in PVC cling film production include Sarantis S.A., Arapos International S.A., and Thalassinos S.A. These companies have established a strong presence in the market through their commitment to quality, innovation, and customer service. They offer a range of products and services to meet the needs of their customers, while also maintaining competitive prices.

In terms of negotiation strategies, the converters typically negotiate with raw material suppliers to obtain the best possible prices and quality for their raw materials. This involves developing long-term relationships with suppliers, as well as leveraging their purchasing power to negotiate favorable terms. In addition, converters may negotiate with their customers to secure long-term contracts and stable prices, which can help to mitigate the risks associated with fluctuating raw material prices.

In conclusion, the production of PVC cling film for food wrapping involves a complex supply chain that includes raw material suppliers, manufacturers, and converters. While the global and European markets are dominated by a few large players, the Greek market is characterized by a more fragmented industry with a few key players. However, all players in the industry must focus on innovation, sustainability, and customer service to remain competitive and meet the evolving needs of the market. Effective negotiation strategies are also critical to ensure the best possible prices and quality for raw materials, as well as to secure long-term contracts and stable prices from customers.¹⁸

3.1.4. Procedures of Distributors of PVC cling film and Top Players.

Distributors play a crucial role in the supply chain of PVC cling film for food wrapping as they connect manufacturers with end-users. They are responsible for delivering the product to customers, managing inventory levels, and providing after-sales services. In the global market, the distribution of PVC cling film for food wrapping is primarily managed by large multinational companies such as Amcor, Berry Global, and Bemis. These companies have a vast distribution network that covers several countries and regions. They leverage their scale and size to negotiate better prices and terms with manufacturers.

In the European market, the distribution of PVC cling film for food wrapping is dominated by several large companies such as Mondi Group, Coveris, and Sealed Air. These companies have a strong presence in several countries in

¹⁸ See: (81), (82), (83), (84), (85), (86)

Europe and have built strong relationships with manufacturers and end-users. They offer a wide range of services such as logistics, inventory management, and technical support to their customers. They also negotiate with manufacturers to get the best possible prices and terms.

In the Greek market, the distribution of PVC cling film for food wrapping is primarily managed by several large distributors such as Vamvakas S.A. and Kefalas S.A. These companies have a strong presence in Greece and have built long-standing relationships with both manufacturers and end-users. They offer a range of services such as transportation, storage, and technical support to their customers. They also negotiate with manufacturers to get the best possible prices and terms.

Negotiation is an important aspect of the distributor's role in the supply chain of PVC cling film for food wrapping. They negotiate with manufacturers to get the best possible prices, terms, and delivery schedules. In the global market, large distributors such as Amcor and Berry Global have significant bargaining power due to their scale and size. They use their buying power to negotiate better prices and terms with manufacturers. In contrast, smaller distributors in the Greek market may have less bargaining power but can leverage their local knowledge and relationships to negotiate better deals.

In conclusion, distributors play a vital role in the supply chain of PVC cling film for food wrapping, connecting manufacturers with end-users. In the global market, large multinational companies dominate the distribution network, while in Europe and Greece, several large distributors manage the distribution. These companies negotiate with manufacturers to get the best possible prices, terms, and delivery schedules, ensuring a smooth supply chain from production to consumption.¹⁹

3.1.5. Procedures of End - Users of PVC cling film and Top Players.

End-users are the final customers in the PVC cling film for food wrapping supply chain. They are the ones who use the product to wrap food items before distribution and sale. Some of the top end-users in the global market include Walmart, Tesco, Carrefour, and Aldi. In the European market, top end-users include Metro AG, Lidl, and Auchan. In the Greek market, top end-users include AB Vassilopoulos, Sklavenitis, and Masoutis.

End-users negotiate with distributors or directly with converters to purchase the required amount of PVC cling film for their businesses. The negotiation process usually involves discussions around price, quality, delivery times, and other terms and conditions. End-users often have specific requirements for the cling

¹⁹ See: (87), (88), (89), (90), (91)

film, such as thickness, size, and clarity, and they look for suppliers who can meet these requirements at a competitive price.

In addition to price and quality, end-users are increasingly interested in sustainability and environmental considerations. As consumers become more conscious of the impact of plastics on the environment, end-users are seeking suppliers who offer PVC cling film made from recycled materials or biodegradable alternatives. Suppliers who can offer environmentally friendly options are more likely to win the business of end-users who are focused on sustainability.

End-users also play a critical role in shaping the demand for PVC cling film. They provide feedback to suppliers on the performance of the product and make requests for new or improved features. This feedback can influence the development of new products and technologies, as suppliers seek to meet the evolving needs of the market.

Overall, end-users are an essential part of the PVC cling film for food wrapping supply chain. Their demand for the product drives the industry, and their feedback helps to shape the future of the market. Top end-users are influential players in the industry and have significant negotiating power when it comes to purchasing PVC cling film from suppliers.²⁰

3.2. The Role of Negotiation and Negotiation Tools in the supply chain of PVC cling film.

Negotiation tools play a critical role in the supply chain of PVC cling film, facilitating effective communication and collaboration among stakeholders at various stages, including raw material suppliers, manufacturers, converters, distributors, and end-users. These tools enable parties to achieve mutually beneficial agreements and address potential challenges in the supply chain.

Price negotiation is a fundamental tool used throughout the PVC cling film supply chain. Parties engage in discussions to determine fair and competitive pricing that aligns with market conditions, production costs, and product quality. Negotiations may involve bulk purchasing discounts, long-term contracts, or pricing adjustments based on market fluctuations. Skillful price negotiation ensures cost efficiency while maintaining profitability for all stakeholders.

Contract negotiation is another crucial tool used to formalize agreements between parties in the supply chain. Contracts outline key terms and conditions related to product specifications, delivery schedules, payment terms, and quality standards. Through effective contract negotiation, parties establish clear expectations, minimize misunderstandings, and protect their interests. Careful

²⁰ See: (92), (93), (94), (95)

consideration is given to aspects such as liability, warranties, and dispute resolution mechanisms.

Collaborative negotiation is increasingly valued in the PVC cling film supply chain. Rather than engaging in adversarial tactics, parties seek win-win outcomes through open communication and problem-solving. Collaborative negotiation emphasizes long-term relationships and shared goals, encouraging parties to find mutually beneficial solutions. This approach fosters trust, transparency, and knowledge sharing among stakeholders, leading to improved collaboration and innovation.

Supplier development programs are utilized as negotiation tools to enhance relationships with raw material suppliers and promote their continuous improvement. Through these programs, manufacturers and converters engage in discussions to identify areas for supplier growth, such as quality management, process optimization, or sustainability initiatives. By working together, parties can build stronger supply chain partnerships, resulting in enhanced product quality, reliability, and responsiveness.

Risk assessment and management form an integral part of negotiation within the PVC cling film supply chain. Parties engage in proactive discussions to identify potential risks, such as natural disasters, raw material shortages, or geopolitical uncertainties. Negotiation focuses on developing contingency plans, alternative sourcing strategies, and collaborative risk mitigation approaches. Effective risk negotiation helps parties safeguard their operations, ensure continuity, and minimize disruptions.

In conclusion, negotiation tools are essential in the PVC cling film supply chain, enabling effective communication, collaboration, and problem-solving among stakeholders. Price negotiation, contract negotiation, collaborative negotiation, supplier development programs, and risk negotiation are all vital for building strong relationships, achieving fair agreements, and navigating the complexities of the supply chain. By employing these tools, stakeholders can enhance efficiency, foster innovation, and mitigate risks, ultimately contributing to the success and resilience of the PVC cling film supply chain.²¹

²¹ See: (96), (97), (98), (99), (100)

3.2.1. Topics of Negotiation per sector of PVC Cling Film Supply Chain

Topics of Negotiation per sector of PVC cling film Supply Chain

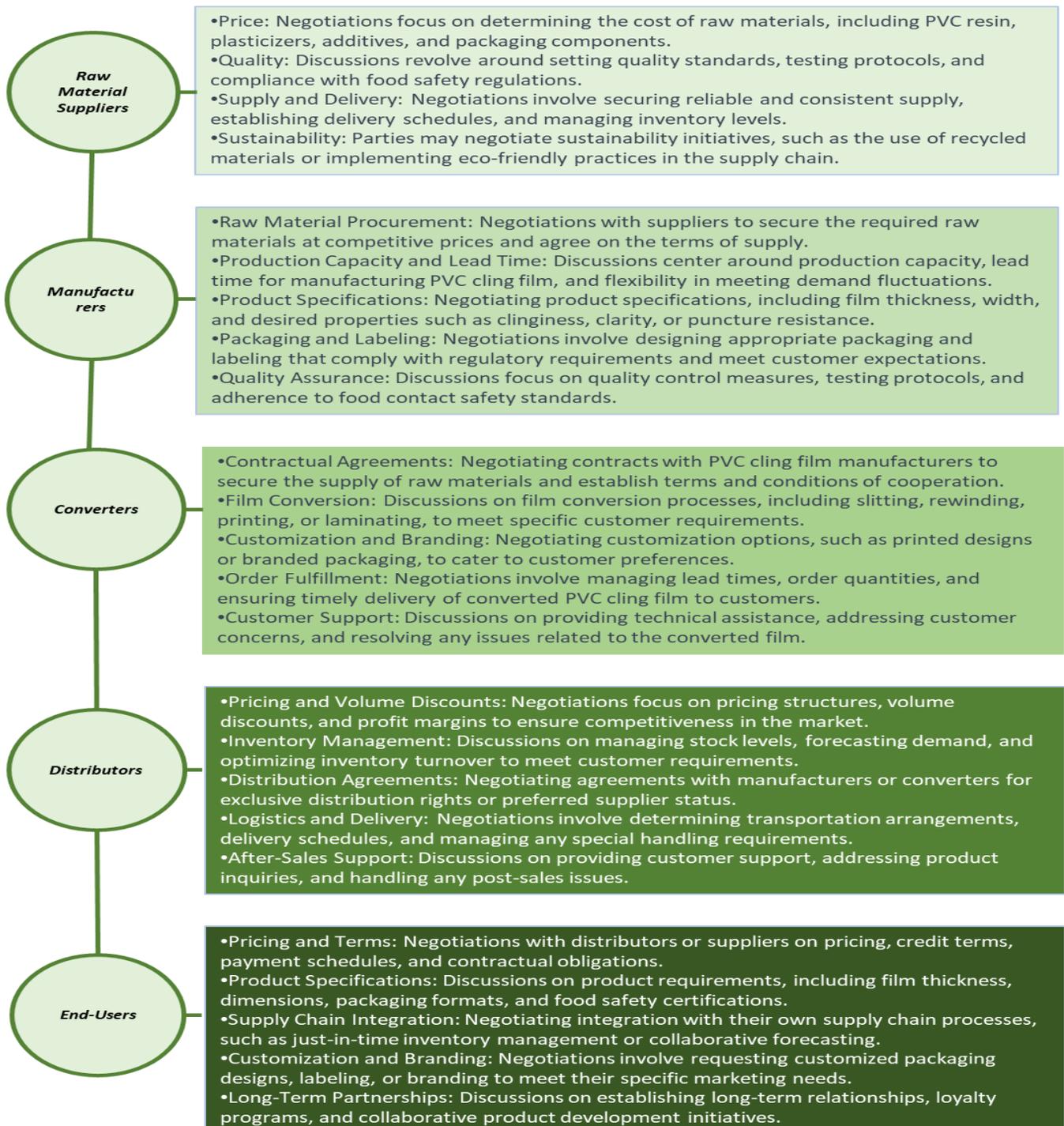


Figure 3.2.: Topics of Negotiation per sector of PVC Cling Film Supply Chain

3.3. The concerns in the Supply Chain of PVC Cling Film.

3.3.1. The impact of natural disasters, wars and pandemics in the Supply Chain of PVC cling Film.

The supply chain of PVC cling film can be significantly affected by natural disasters, wars, and pandemics. These events can disrupt various stages of the supply chain, leading to challenges in sourcing raw materials, manufacturing, transportation, and distribution. Here is an analysis of how each of these events can impact the PVC cling film supply chain:

Natural Disasters:

Natural disasters such as hurricanes, earthquakes, floods, or wildfires can disrupt the supply chain in several ways. Manufacturing facilities may be damaged or destroyed, leading to production delays or shutdowns. Transportation routes may be affected, hindering the movement of raw materials and finished products. Additionally, suppliers of raw materials or packaging components may face disruptions, impacting the availability of necessary inputs. These disruptions can lead to material shortages, increased costs, and delivery delays, causing significant challenges in maintaining a steady supply of PVC cling film.

Wars:

During times of armed conflict or geopolitical tensions, the PVC cling film supply chain can be severely impacted. Trade restrictions, embargoes, or political instability can disrupt the flow of raw materials and finished products. Cross-border transportation may be restricted, making it difficult to source necessary materials or distribute the film to international markets. Moreover, conflicts can lead to the displacement of manufacturers or distributors, further disrupting the supply chain. The uncertainty and risks associated with wars can make it challenging for supply chain participants to plan and execute their operations effectively.

Pandemics:

Pandemics, such as the COVID-19 outbreak, have demonstrated their profound impact on global supply chains, including PVC cling film. These events can disrupt production, distribution, and consumption patterns on a global scale. During a pandemic, manufacturers may experience labor shortages due to workforce restrictions or quarantines, leading to reduced production capacity. Lockdown measures and travel restrictions can disrupt transportation networks, making it difficult to move raw materials or finished products. Changes in consumer behavior and demand patterns can also affect the supply chain, as the need for PVC cling film may fluctuate depending on the restrictions and market conditions. Furthermore, the pandemic can lead to shifts in procurement

strategies, inventory management, and risk mitigation measures as supply chain participants strive to adapt to the changing circumstances.

In summary, natural disasters, wars, and pandemics can have significant impacts on the PVC cling film supply chain. These events can disrupt manufacturing operations, transportation networks, and sourcing of raw materials. The resulting challenges include material shortages, increased costs, delivery delays, and shifts in consumer demand. To mitigate the effects of these disruptions, supply chain participants must develop contingency plans, diversify sourcing strategies, and enhance flexibility in their operations. Effective communication, collaboration, and proactive risk management are essential in navigating the uncertainties and maintaining the resilience of the PVC cling film supply chain in the face of such events. ²²

3.3.2. How these disasters can affect the negotiations of the supply chain of PVC cling film.

Disasters such as natural disasters, wars, and pandemics can significantly impact the negotiations within the supply chain of PVC cling film. Here is an analysis of how these events can affect the negotiation processes:

Disruption of Supply and Demand:

During disasters, the supply of raw materials, packaging components, or finished PVC cling film may be disrupted. This can lead to scarcity and increased competition among suppliers, which can affect the negotiating power of both manufacturers and converters. Suppliers may have limited availability or face challenges in meeting the demand, leading to higher prices or reduced bargaining power. As a result, negotiations may become more intense as parties strive to secure the necessary resources and manage the impact of supply disruptions.

Price Volatility:

Disasters can cause price fluctuations in raw materials, transportation costs, or energy prices, which can influence negotiation dynamics. Increased demand or limited availability can drive up prices, affecting the cost structure of PVC cling film production. Negotiations may involve discussions on price adjustments, cost-sharing arrangements, or the allocation of increased expenses. Parties must navigate these price fluctuations and find mutually acceptable terms that reflect the changing market conditions.

Supply Chain Disruptions:

Disasters can disrupt the entire supply chain, impacting the timely delivery of PVC cling film. Manufacturing facilities may face production delays, transportation networks can be disrupted, and distribution channels may be affected. These disruptions can create uncertainty and affect the negotiation

²² See: (101), (102), (103), (104)

process. Parties may need to renegotiate delivery schedules, shipping methods, or alternative sourcing options. Negotiations may also focus on contingency plans, risk mitigation strategies, and collaboration to minimize the impact of disruptions on the supply chain.

Shifts in Priorities:

During disasters, the priorities and focus of supply chain participants may change. Safety, emergency response, and business continuity become primary concerns. Negotiations may need to address these priorities and adapt to the new circumstances. Parties may need to discuss flexibility in contracts, revising delivery timelines, or temporarily adjusting product specifications to meet urgent needs. The negotiation process becomes more dynamic and responsive to the evolving situation.

Collaboration and Support:

In the face of disasters, collaboration and support among supply chain partners become crucial. Negotiations may involve discussions on how parties can assist each other in overcoming challenges and minimizing the impact on their respective operations. Collaborative negotiation strategies, such as sharing resources, knowledge, and risk, can be employed to ensure the continuity of the PVC cling film supply chain.

In summary, disasters can disrupt the negotiations within the supply chain of PVC cling film by affecting supply and demand, introducing price volatility, causing supply chain disruptions, shifting priorities, and necessitating increased collaboration and support. Negotiations during these times require flexibility, adaptability, and a focus on finding mutually beneficial solutions to address the challenges and maintain the resilience of the supply chain.²³

²³ See: (105), (106), (107), (108)

4. The Supply Chain and Negotiation strategies of Baking Paper.

4.1. The Supply Chain of Baking Paper.

The supply chain of baking paper for food involves several stages, including manufacturing, conversion, distribution, and end-users. Let's take a closer look at each of these stages and examine the key players involved, starting from a global perspective and narrowing down to European and Greek players.

At the beginning the supply chain for baking paper involves raw material suppliers from various regions providing wood pulp, the primary ingredient in baking paper production. These suppliers can be located in countries such as Canada, the United States, Brazil, or Scandinavian nations, which are known for their abundant forests and robust pulp production. These global suppliers play a crucial role in ensuring a steady supply of raw materials to paper manufacturers worldwide.

The manufacturing of baking paper typically begins with the production of base paper. Global manufacturers like Mondi Group, Ahlstrom-Munksjö, and Metsä Board are significant players in this stage. These companies operate large-scale paper mills where they produce the base paper by processing wood pulp through various refining and drying processes. The base paper is then coated with a food-safe release agent, typically silicone, to give it its non-stick properties.

Once the base paper is manufactured, it is converted into baking paper rolls or sheets. This conversion process involves cutting, rewinding, and packaging the paper. Leading European players in this stage include companies like Delfort Group, Parchment House, and KLUG-CONSERVATION. These companies specialize in converting the base paper into different formats, such as rolls, sheets, or pre-cut shapes, and package them for distribution.

The distribution stage plays a crucial role in ensuring that baking paper reaches various retailers, wholesalers, and foodservice providers worldwide. Global players like Amcor, Reynolds Consumer Products, and Huhtamaki are involved in the distribution of baking paper. These companies have extensive distribution networks and supply chain infrastructure to transport baking paper products efficiently to different regions.

Baking paper is used by a wide range of end-users, including both commercial and domestic consumers. In the global market, major foodservice providers, restaurants, bakeries, and industrial kitchens form a significant portion of the commercial end-users. Domestic consumers, on the other hand, purchase baking paper from various retailers, supermarkets, and online platforms for home baking purposes.

In the European market, several players contribute to the supply chain of baking paper. Companies like SAGA, Papstar, Melitta, and Compostella Group have a strong presence in manufacturing, conversion, and distribution within Europe. These companies cater to the demands of both domestic and commercial customers throughout the continent.

Within Greece, there are local players who contribute to the supply chain of baking paper. Companies like Sarantis S.A., Arapos International S.A., and Thalassinos S.A. are notable Greek manufacturers and converters of baking paper. Sarantis S.A. specializes in the production of various consumer products, including baking paper, which is distributed through their extensive network. Arapos International S.A. is recognized for its expertise in manufacturing and converting baking paper into different formats tailored for specific baking needs. Thalassinos S.A. is a leading Greek company involved in the production, conversion, and distribution of baking paper products to local retailers, bakeries, and consumers. These companies play a crucial role in ensuring the availability of high-quality baking paper for the Greek market. They contribute to the local market by producing and supplying baking paper products to Greek retailers, bakeries, and consumers.

It is important to note that the supply chain of baking paper can also involve other stakeholders, such as raw material suppliers, packaging manufacturers, and logistics providers, depending on the specific operations of each company. The global, European, and Greek players mentioned above represent key participants in the baking paper supply chain, enabling the availability of this essential product for food preparation and baking purposes worldwide.²⁴

4.1.1. Production Procedures of Raw material production of Baking Paper and Top Players.

The procedures of raw material producers in the baking paper industry involve various stages, including raw material extraction, processing, and negotiation with global, European, and Greek players. Let's explore these procedures and analyze how raw material producers engage in negotiations within different contexts.

Raw material producers, often forestry companies, are responsible for the extraction of wood pulp, a crucial ingredient in baking paper production. They carefully manage and harvest trees from sustainable forests, ensuring responsible practices to maintain ecological balance. Global players in the forestry industry, such as International Paper, Stora Enso, Metsä Board Corporation and Sappi, operate across multiple countries and negotiate with governments, environmental agencies, and local communities to acquire logging permits and adhere to sustainable practices.

²⁴ See: (109), (110), (111), (112), (113), (114), (115), (116), (117)

Once the wood pulp is obtained, raw material producers engage in processing operations to refine it further. This involves converting the harvested timber into wood chips, which are then processed through chemical or mechanical pulping methods. Raw material producers use advanced technologies and equipment to extract high-quality pulp that meets the specifications required by baking paper manufacturers. Quality control measures are implemented to ensure consistency and adherence to industry standards.

Raw material producers engage in negotiations with various stakeholders, including baking paper manufacturers, to establish agreements for the supply of wood pulp. Global players negotiate with multinational baking paper manufacturers to secure long-term contracts, ensuring a stable market for their products. These negotiations encompass factors such as pricing, supply volume, delivery schedules, and quality standards. Agreements may also include provisions for sustainability practices and compliance with environmental regulations.

Raw material producers in the baking paper industry, such as International Paper, Stora Enso, Metsä Board Corporation and Sappi, negotiate with baking paper manufacturers on a global and European scale. These negotiations involve considerations of supply chain efficiency, market demand, and long-term partnerships. Players often have extensive operations across multiple continents, allowing them to negotiate with manufacturers and distributors in different regions and cater to their specific needs.

In summary, raw material producers in the baking paper industry follow procedures that encompass raw material extraction, processing, and negotiations with global, European, and Greek players. They employ sustainable practices in forestry management and utilize advanced technologies to produce high-quality wood pulp. Negotiations revolve around securing contracts with baking paper manufacturers, encompassing aspects such as pricing, supply volume, delivery schedules, and sustainability practices. Global players operate on a larger scale, negotiating with multinational manufacturers, while regional and local players engage in negotiations within specific markets, tailoring their agreements to meet regional demands. These negotiations ensure the availability of high-quality wood pulp, supporting the overall supply chain of baking paper production.²⁵

²⁵ See: (80), (109), (110), (111), (112), (113), (118), (119), (120)

4.1.2. Production Procedures of Manufacturing in Baking Paper and Top Players.

The production procedure of baking paper manufacturers for food contact involves stringent measures to ensure compliance with food safety regulations. In this analysis, we will describe and analyze the production process, negotiation strategies, and the involvement of global, European, and Greek players.

Baking paper manufacturers for food contact follow a meticulous production procedure. They start by sourcing high-quality raw materials, such as food-grade paper and safe coating materials. The base paper is produced using advanced paper-making techniques, while the coating application involves the use of food-safe substances like silicone. Manufacturing facilities adhere to strict hygiene standards and quality control measures to ensure the final product meets the required food safety regulations.

In the global market, several top players dominate the production of baking paper for food contact. Mondi Group, Ahlstrom-Munksjö Oyj and Metsä Greaseproof Papers GmbH, are among the leading manufacturers. These global players have extensive expertise in the industry, state-of-the-art manufacturing facilities, and a strong focus on food safety. When it comes to negotiations, they leverage their market presence and reputation to establish mutually beneficial partnerships with raw material suppliers, coating manufacturers, and equipment providers. Their negotiation strategies encompass long-term contracts, ensuring a reliable supply chain, cost optimization, quality assurance, and compliance with food safety regulations.

In Europe, renowned baking paper manufacturers for food contact include Mondi Group, Ahlstrom-Munksjö Oyj and Metsä Greaseproof Papers GmbH. These European players are at the forefront of technological advancements and adhere to strict European Union regulations governing food contact materials. When engaging in negotiations, they prioritize partnerships with local and global stakeholders to secure the highest quality raw materials and coatings. Their negotiation strategies involve discussions on pricing, supply chain efficiency, sustainability practices, and regulatory compliance. Additionally, European players actively participate in industry associations and engage in dialogue with regulatory authorities to influence and stay informed about evolving food contact regulations.

In summary, the production procedure of baking paper manufacturers for food contact involves strict adherence to food safety regulations. Global players as well as European and Greek players, prioritize compliance, quality assurance, and negotiation strategies that focus on partnerships, pricing, quality, volume and supply chain efficiency. ²⁶

²⁶ See: (108), (109), (110), (112), (113)

4.1.3. Production Procedures of Converters in Baking Paper and Top Players.

The production procedures of converters in the baking paper industry are critical for transforming base paper into the final baking paper product. These converters play a key role in the supply chain, and negotiations are essential for ensuring efficient operations and favorable business outcomes. Let's explore the production procedures and negotiation strategies of converters, including the involvement of global, European, and Greek players.

Converters in the baking paper industry receive the base paper from manufacturers and undertake the necessary processes to transform it into various formats suitable for baking applications. This includes cutting, sheeting, rewinding, and packaging. Converters use specialized machinery and equipment to ensure precise dimensions, consistent quality, and proper packaging for the end-users. Stringent quality control measures are implemented throughout the production process to meet food safety standards and customer requirements.

In the global market, top converters in the baking paper industry include Reynolds Consumer Products, Oji Holdings Corporation, and Huhtamäki Oyj. These global players have extensive expertise in converting processes and hold a significant market share. When it comes to negotiations, they leverage their market presence and economies of scale to establish strategic partnerships with base paper manufacturers, coating suppliers, and equipment providers. Their negotiation strategies focus on securing reliable and cost-effective sources of base paper, ensuring consistent coating material supply, and optimizing equipment performance. Additionally, global converters prioritize sustainability and engage in negotiations related to eco-friendly packaging solutions.

Within Europe, prominent converters in the baking paper industry include Papstar, Nordic Paper, SAGA and Delfort Group. These European players have a strong presence in the market and adhere to rigorous quality standards. In their negotiations, European converters prioritize collaborations with base paper manufacturers to ensure a consistent supply of high-quality paper. They also engage in negotiations with coating suppliers to guarantee the availability of suitable and compliant coating materials. European converters emphasize negotiation strategies that encompass long-term partnerships, volume agreements, and quality assurance to meet the diverse demands of European customers.

In the Greek market, Sarantis S.A., Arapos International S.A., and Thalassinos S.A. are prominent converters of baking paper. These Greek players contribute to the local industry and prioritize collaboration with base paper manufacturers and coating suppliers. In their negotiation strategies, Greek converters focus on sourcing base paper from reliable local and international suppliers, ensuring high-quality coating materials, and optimizing production efficiency. They

negotiate favorable pricing, quality control, and timely delivery to meet the demands of the Greek market.

Converters employ various negotiation strategies to optimize their production procedures and ensure favorable business outcomes. These strategies include long-term contracts with base paper manufacturers and coating suppliers to secure reliable sources of materials. Negotiations focus on pricing, quality standards, technical specifications, and delivery schedules. Converters also engage in continuous dialogue with customers, understanding their specific requirements and tailoring their production processes accordingly. Additionally, converters embrace sustainability and eco-friendly practices, engaging in negotiations related to environmentally friendly packaging solutions.

In summary, the production procedures of converters in the baking paper industry involve transforming base paper into the final product through cutting, sheeting, rewinding, and packaging processes. Global, European, and Greek players in the converter segment engage in negotiations with base paper manufacturers, coating suppliers, and equipment providers to secure reliable sources of materials, optimize production efficiency, and meet customer demands. These negotiations encompass aspects such as pricing, quality control, technical specifications, delivery schedules, and sustainability practices, ensuring a successful supply chain and the production of high-quality baking paper products.²⁷

4.1.4. Procedures of Distributors in Baking Paper and Top Players.

The procedures of distributors in the baking paper industry play a vital role in ensuring the efficient flow of products from manufacturers to end-users. Distributors act as intermediaries, connecting manufacturers with retailers, foodservice establishments, and other end-users. In this analysis, we will describe and analyze the procedures of distributors and their negotiation strategies, including the involvement of global, European, and Greek players.

Distributors in the baking paper industry are responsible for warehousing, inventory management, order fulfillment, and timely delivery of products to customers. They maintain a network of warehouses strategically located to ensure widespread distribution coverage. Distributors receive products in bulk from manufacturers and break down the quantities for distribution to various retail outlets or directly to end-users. They also provide value-added services like product customization, bundling, and private labeling to meet specific customer requirements.

In the global market, top distributors in the baking paper industry include Bunzl plc, Sysco Corporation, and WestRock Company. These global players have established extensive distribution networks and strong partnerships with manufacturers and retailers worldwide. When it comes to negotiations, global

²⁷ See: (80), (108), (109), (110), (112), (113), (114), (116)

distributors leverage their scale and reach to negotiate favorable terms with manufacturers and converters, including volume discounts, flexible payment terms, and logistics support. They focus on ensuring a reliable supply chain, competitive pricing, and efficient distribution to meet the demands of their global customer base.

Within Europe, renowned distributors in the baking paper industry include Metro AG, Alliance Group, and Bunzl plc (European operations). These European players have a deep understanding of local markets and customer preferences. In their negotiations, European distributors collaborate closely with manufacturers and converters to align product offerings with regional requirements. They negotiate pricing, packaging, and delivery terms to optimize the distribution process and meet the diverse needs of European customers. European distributors also emphasize sustainable practices and engage in negotiations related to eco-friendly packaging solutions and responsible sourcing.

In the Greek market, notable distributors in the baking paper industry include Vassilopoulos Group, Metro AG (Greek operations), and HORECA S.A. These Greek players have an in-depth understanding of the local market dynamics and customer preferences. When it comes to negotiations, Greek distributors focus on building strong relationships with manufacturers, converters and retailers. They negotiate competitive pricing, product availability, and reliable logistics support to meet the specific demands of the Greek market. Greek distributors also emphasize timely delivery and responsive customer service to maintain strong partnerships with manufacturers and retailers.

Distributors employ various negotiation strategies to ensure smooth operations and favorable business outcomes. These strategies include negotiating volume discounts based on the quantity of products purchased, securing exclusivity agreements to gain a competitive advantage, and optimizing logistics and distribution costs. Distributors also negotiate credit terms, payment schedules, and marketing support from manufacturers and converters to enhance their profitability. Additionally, they collaborate closely with manufacturers, converters and end-users to understand market trends, align product offerings, and provide valuable market insights.

In summary, the procedures of distributors in the baking paper industry encompass warehousing, inventory management, and efficient product distribution. Global, European, and Greek players in the distributor segment engage in negotiations with manufacturers to secure favorable terms, including volume discounts, flexible payment terms, and logistics support. They focus on ensuring a reliable supply chain, competitive pricing, and efficient distribution to meet the demands of their customers. Distributors play a critical role in bridging the gap between manufacturers and end-users, optimizing the

availability and accessibility of baking paper products in the global, European, and Greek markets.²⁸

4.1.5. Procedures of End-Users in Baking Paper and Top Players.

The procedures of end-users in the baking paper industry are essential as they are the final consumers of baking paper products. End-users include a wide range of entities such as households, bakeries, restaurants, and foodservice establishments. In this analysis, we will describe and analyze the procedures of end-users and their negotiation strategies, considering the involvement of global, European, and Greek players.

End-users in the baking paper industry employ baking paper for various applications, including lining baking trays, wrapping food items, and preventing food sticking during the cooking process. They procure baking paper from distributors, retailers, or directly from manufacturers. End-users typically consider factors such as product quality, pricing, availability, and specific requirements for their baking needs. They follow proper handling and usage procedures to ensure food safety and maintain the desired baking outcomes.

In the global market, end-users of baking paper products include large-scale bakeries, multinational foodservice chains, and household consumers. These global players have diverse requirements and volume demands. When it comes to negotiations, global end-users often engage in direct contracts or long-term agreements with manufacturers or distributors. Their negotiation strategies focus on factors such as pricing, product customization, reliable supply, and consistent quality. Global end-users may also negotiate favorable terms related to logistics, packaging, and sustainability practices to align with their corporate objectives.

Within Europe, end-users of baking paper products encompass a wide range of entities, including artisanal bakeries, patisseries, catering services, and households. European end-users prioritize high-quality products that comply with stringent food safety regulations. When engaging in negotiations, they often prefer to work with local or regional distributors or retailers. Negotiation strategies revolve around price discussions, product availability, delivery schedules, and customized solutions tailored to their specific baking needs. European end-users also value partnerships that prioritize sustainable practices and eco-friendly packaging options.

In the Greek market, end-users of baking paper products consist of traditional bakeries, confectioneries, restaurants, cafes, and individual consumers. Greek end-users emphasize the use of high-quality baking paper products that meet local food safety standards. Negotiations with Greek end-users typically involve

²⁸ See: (108), (109), (110), (113), (114)

local distributors, retailers, or direct procurement from manufacturers and converters. They focus on negotiating competitive pricing, product availability, and reliable delivery to meet their specific requirements. Greek end-users may also engage in discussions regarding product specifications, customization options, and responsive customer service.

End-users in the baking paper industry employ negotiation strategies to ensure the best possible outcomes for their baking paper procurement. These strategies include exploring multiple suppliers to compare prices, product quality, and value-added services. End-users negotiate terms such as pricing, delivery schedules, minimum order quantities, and potential discounts based on volume or long-term commitments. They may also negotiate packaging options, branding, and product labeling to align with their specific needs. Additionally, end-users value suppliers that provide excellent customer service, technical support, and timely responses to inquiries.

In summary, end-users in the baking paper industry employ procedures that involve sourcing and utilizing baking paper products for their specific baking needs. Global, European, and Greek end-users negotiate with manufacturers, distributors, or retailers to secure competitive pricing, product availability, and tailored solutions. Their negotiation strategies revolve around factors such as pricing, product customization, delivery schedules, and sustainability considerations. By engaging in effective negotiations, end-users optimize their procurement processes, ensure food safety, and meet their baking requirements in the global, European, and Greek markets.²⁹

4.2. The Role of Negotiation and Negotiation tools in the supply chain of baking paper.

Negotiation plays a crucial role in the supply chain of baking paper, involving various stakeholders such as raw material producers, manufacturers, converters, distributors, and end-users. Each player within the supply chain utilizes different negotiation tools to achieve their objectives and ensure a mutually beneficial outcome. Let's analyze the negotiation tools used across the different stages of the baking paper supply chain.

Raw Material Producers:

Raw material producers, such as pulp and paper manufacturers, negotiate with suppliers of raw materials, such as wood or recycled paper. They leverage the following negotiation tools:

- a. Long-Term Contracts: Raw material producers often establish long-term contracts with suppliers to ensure a stable and consistent supply of quality raw materials. These contracts may include volume commitments, pricing agreements, and quality specifications.

²⁹ See: (108), (109), (110), (113), (114)

b. **Supplier Development Programs:** Negotiations focus on developing strong relationships with suppliers, including providing training, technical support, and incentives for quality improvement. This tool helps ensure a reliable and sustainable supply of raw materials.

c. **Price Flexibility:** Negotiating pricing terms is essential to manage cost fluctuations of raw materials. Raw material producers use negotiation tools such as price index adjustments, forward contracts, or hedging strategies to mitigate price volatility.

Manufacturers and Converters:

Manufacturers and converters of baking paper negotiate with raw material producers for the base paper supply and with coating suppliers for the application of specialized coatings. Their negotiation tools include:

a. **Quality Specifications:** Negotiations focus on establishing clear quality specifications to ensure that the base paper and coatings meet the required standards for food contact. Specifications may include parameters such as weight, smoothness, moisture resistance, and food safety certifications.

b. **Cost Optimization:** Manufacturers and converters negotiate pricing with raw material suppliers and coating suppliers to optimize costs while maintaining quality. Volume discounts, long-term contracts, and competitive bidding processes are common negotiation tools used.

c. **Supply Chain Collaboration:** Negotiations aim to establish collaborative relationships with suppliers, ensuring timely delivery, technical support, and responsiveness to changing demand. Manufacturers and converters engage in continuous dialogue to address production challenges and explore opportunities for process improvement.

Distributors:

Distributors negotiate with manufacturers and converters to secure the supply of baking paper products and with retailers and end-users for product distribution. They utilize negotiation tools such as:

a. **Pricing and Margins:** Negotiations focus on securing competitive pricing from manufacturers and converters, allowing distributors to set appropriate margins while remaining cost-effective for retailers and end-users.

b. **Service Level Agreements:** Distributors negotiate service level agreements with manufacturers and converters, defining delivery schedules, order fulfillment, and customer support to ensure smooth operations and customer satisfaction.

c. **Logistics Optimization:** Negotiations with manufacturers, converters, and shipping companies revolve around optimizing logistics processes, including freight costs, transportation modes, and lead times. Distributors seek favorable terms to maintain efficiency in product distribution.

End-Users:

End-users negotiate with distributors, retailers, or manufacturers to procure baking paper products. Their negotiation tools include:

a. **Volume Purchasing:** End-users negotiate volume discounts based on the quantities of baking paper products they require. By committing to larger orders, they can secure more favorable pricing and terms.

b. **Customization and Branding:** Negotiations may involve discussions on customizing baking paper products to meet specific requirements or private labeling to promote their own brands. End-users seek flexibility and customization options that align with their baking needs.

c. **Contractual Agreements:** Negotiations with distributors or manufacturers may involve establishing long-term contracts to ensure a stable and reliable supply of baking paper products. These agreements often include pricing, delivery terms, and quality specifications.

In summary, negotiation tools are essential across all stages of the baking paper supply chain. These tools include long-term contracts, quality specifications, price optimization, supply chain collaboration, service level agreements, logistics optimization and volume.³⁰

³⁰ See: (96), (97), (98), (99), (100)

4.2.1. Topics of Negotiation per sector of PVC Cling Film Supply Chain

Topics of Negotiation per sector of Baking Paper Supply Chain

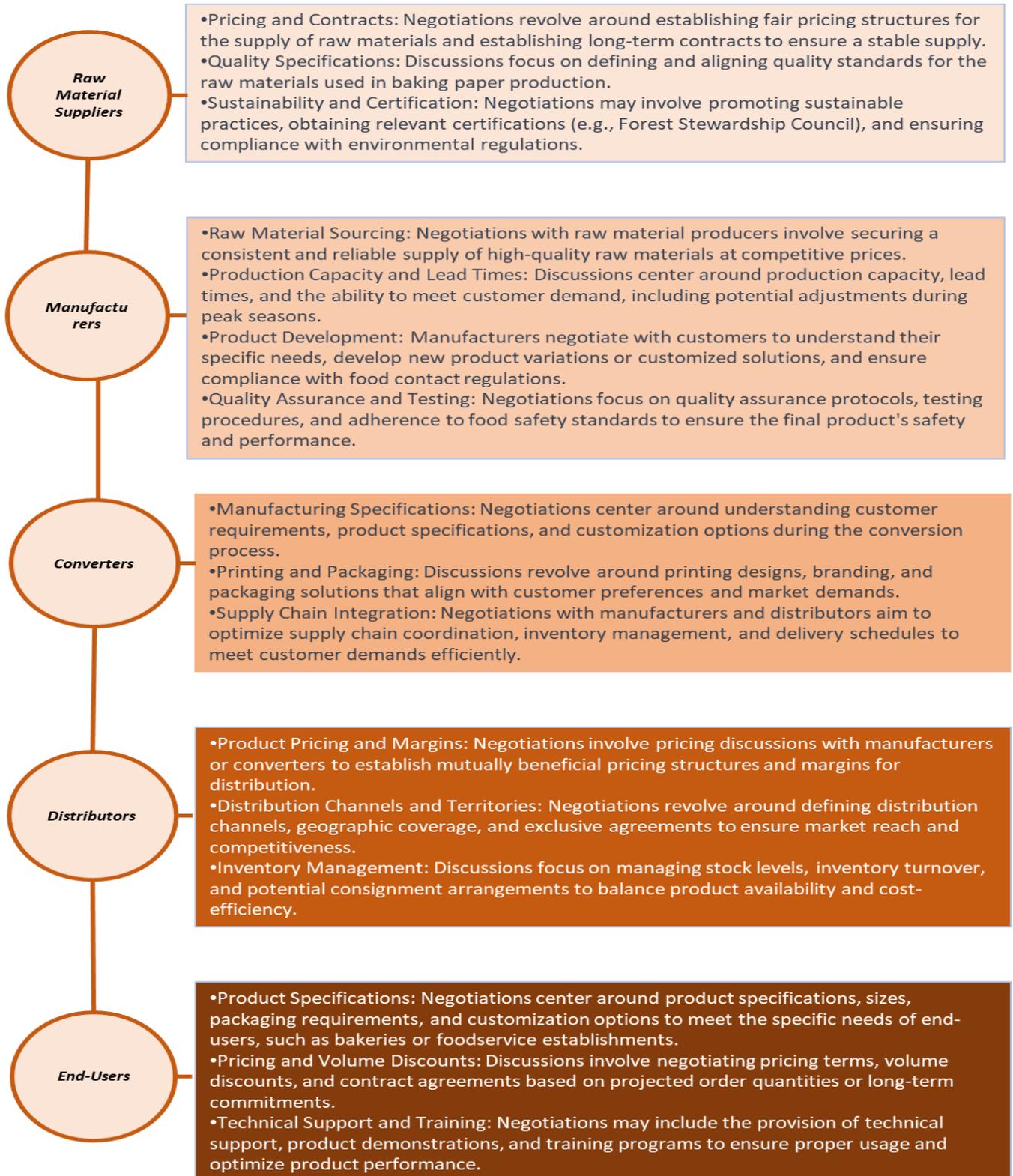


Figure 4.2.: Topics of Negotiation per sector of PVC Cling Film Supply Chain

4.3. The Difficulties in the Supply chain of Baking Paper

4.3.1. The impact of extreme events such as natural disasters, wars and pandemics on the Supply Chain of Baking Paper.

The supply chain of baking paper, like any other industry, can experience substantial disruptions due to natural disasters, wars, and pandemics. These events have the potential to significantly impact the various stages of the baking paper supply chain and have far-reaching consequences for the different players involved. Let us delve into how these occurrences can affect the baking paper supply chain and the implications for industry stakeholders.

Natural Disasters:

Natural disasters, including hurricanes, floods, earthquakes, or wildfires, can disrupt the baking paper supply chain in several notable ways:

- a. **Raw Material Availability:** Natural disasters have the potential to damage forests, thereby impacting the availability of key raw materials, such as wood, used in the production of baking paper. Consequently, shortages may occur, leading to increased prices for raw materials and subsequent challenges in the manufacturing process.
- b. **Manufacturing Operations:** Disruptions caused by natural disasters can inflict damage or destruction upon manufacturing facilities, resulting in production delays or even complete shutdowns. These circumstances may cause reduced supply and difficulties in meeting customer demand for baking paper products.
- c. **Logistics and Transportation:** Natural disasters can inflict damage on infrastructure, leading to road closures and disrupted transportation networks. Such disruptions can impede the movement of raw materials, finish products, and supplies necessary for baking paper production. Consequently, delays in product delivery and escalated transportation costs may ensue.

Wars and Political Conflicts:

Wars and political conflicts can have profound implications for the baking paper supply chain:

- a. **Supply Disruptions:** In times of war or political conflicts, trade routes may be disrupted or severed entirely, making it challenging to import or export baking paper products and essential raw materials. Consequently, shortages and disruptions in the supply chain can occur, adversely affecting the availability of baking paper products.
- b. **Trade Restrictions and Tariffs:** The imposition of trade restrictions, embargoes, or increased tariffs can hinder international trade, thereby impeding the import and export of baking paper products. This can result in higher costs,

limited product availability, and difficulties in accessing global markets for industry players.

c. **Safety Concerns:** Wars and conflicts pose significant safety concerns for manufacturers, distributors, and end-users. These concerns can lead to reduced production capacity, suspension of operations, or a general reluctance to engage in business activities. As a consequence, the baking paper supply chain may suffer from diminished production levels and disrupted business relationships.

Pandemics:

Pandemics, exemplified by the recent COVID-19 outbreak, can profoundly impact the baking paper supply chain:

a. **Disruptions in Manufacturing:** Pandemics can give rise to workforce shortages, restrictions on operations, and factory closures due to health and safety concerns. These disruptions can cause substantial delays in the manufacturing process, resulting in reduced production capacity and subsequent supply chain challenges.

b. **Supply and Demand Imbalances:** Heightened demand for baking paper products during pandemics, combined with manufacturing disruptions, can lead to supply shortages. Panic buying and consumer stockpiling further exacerbate the situation, creating imbalances between supply and demand within the baking paper market.

c. **Logistics and Distribution Challenges:** Pandemics necessitate stringent measures such as lockdowns, travel restrictions, and reduced transportation capacity. These factors can impede the distribution of baking paper products, resulting in delayed deliveries, increased transportation costs, and difficulties in reaching end-users.

d. **Shifts in Consumer Behavior:** Pandemics can instigate substantial changes in consumer behavior, such as increased home baking or a shift toward online shopping. These alterations in consumer preferences can have a pronounced impact on demand patterns, necessitating adjustments within the supply chain to meet evolving customer needs effectively.

In summary, natural disasters, wars, and pandemics can significantly disrupt the baking paper supply chain, affecting raw material availability, manufacturing operations, logistics, and customer demand. Industry stakeholders must adopt robust contingency plans, establish alternative sourcing options, maintain open communication channels, and adapt their operations to mitigate the effects of such events. By doing so, the baking paper supply chain can ensure its resilience and uninterrupted functionality.³¹

³¹ See: (101), (102), (103), (104)

4.3.2. How extreme events can affect the negotiations of the supply chain of Baking Paper.

Disasters such as natural disasters, wars, and pandemics can have a significant impact on the negotiations within the supply chain of baking paper. Let's explore how these disasters can affect the negotiation dynamics:

During a disaster, the priorities of the various stakeholders in the supply chain may shift. Ensuring the safety and well-being of employees, managing disruptions, and meeting urgent needs become the primary concerns. Negotiations may take a backseat as the focus shifts to immediate response and recovery efforts.

Disasters can disrupt the flow of raw materials, manufacturing operations, transportation, and distribution networks. This can lead to shortages or delays in the supply of baking paper products. Negotiations may involve discussions on alternative sourcing, expedited delivery, or reevaluating contractual obligations to adapt to the changing circumstances.

Disasters can cause price volatility in the market. Shortages, increased transportation costs, or changes in demand can impact pricing negotiations. Parties may need to reevaluate pricing structures, consider force majeure clauses, or explore temporary price adjustments to accommodate the changing market conditions.

Disasters may trigger the need for contractual adjustments to accommodate unforeseen circumstances. Parties may engage in negotiations to amend contract terms, revise delivery schedules, or modify performance obligations to reflect the impact of the disaster on the supply chain.

Disasters highlight the importance of risk management and contingency planning. Negotiations may focus on incorporating clauses related to force majeure, business continuity, and disaster recovery into contracts. Parties may assess risk-sharing mechanisms and negotiate insurance coverage to mitigate potential losses.

Disasters often necessitate collaboration and support among supply chain partners. Negotiations may involve discussions on how parties can assist each other during the crisis, such as sharing resources, adjusting production schedules, or providing financial support. Building strong collaborative relationships becomes essential during challenging times.

Disasters can result in regulatory changes or government interventions that affect the baking paper industry. Negotiations may involve engaging with regulatory authorities to understand new requirements, ensure compliance, and advocate for industry-specific considerations.

Disasters can lead to shifts in consumer demand patterns. Negotiations may revolve around understanding the evolving needs of end-users, exploring new market opportunities, or adapting product offerings to align with changing consumer preferences.

In summary, disasters can significantly impact the negotiations within the baking paper supply chain by shifting priorities, causing supply disruptions, influencing pricing dynamics, necessitating contractual adjustments, emphasizing risk mitigation, fostering collaboration, triggering regulatory changes, and shaping market demand. Adapting negotiation strategies to address these challenges becomes crucial for all stakeholders in the supply chain to ensure the continuity of operations and meet the needs of customers during times of crisis.³²

³² See: (105), (106), (107), (108)

5. Research about the Role of Negotiations in the Supply Chain of Packaging Materials.

5.1 Analysis of the results of questionnaire's

This analysis aims to provide a professional overview of the research results gathered through questionnaires³³ on the role of negotiation in the supply chain of packaging materials. The study involved 35 participants who answered a series of questions related to their duties, position in the organization, negotiation issues, negotiation power, negotiation style, and the impact of the COVID crisis on negotiation power and options. The analysis of these results will contribute to understanding the dynamics and strategies involved in negotiation within the packaging materials supply chain.

Products:

Question 1 asked participants to choose the product that relates mostly to their duties. The responses showed that 31.4% of the participants worked with aluminum foil, while another 28.6% worked with PVC cling film. Additionally, 17.1% worked with baking paper, 22.9% worked with all the mentioned products, and 17.4% worked with other sectors of packaging materials. This distribution indicates a diverse range of product responsibilities among the participants.

Supply Chain Nodes:

Question 2 aimed to identify the participants' positions in the supply chain. The majority (42.9%) identified themselves as manufacturers, while 20% were distributors, 17.1% were converters, and 8.6% belonged to the raw material node. A smaller proportion of participants (5.7%) were end-users, and 5.7% belonged to other positions. This distribution suggests a significant representation of manufacturers in the study.

Organizational Positions:

Question 3 reflects the participants' positions within their organizations. The majority (60%) identified themselves as sellers, while 28.6% identified as buyers. The remaining 11.4% had other positions. This distribution indicates that sellers were the most represented group in the study.

Negotiation Issues as a Seller:

Question 4 examined the issues negotiated by sellers with downstream companies. The responses revealed that the most frequently negotiated issues were prices (84.4%), payment terms (53.1%), quality (59.4%), and quantities (37.5%). This highlights the significance of financial aspects (prices and

³³ See: Appendix A

payment terms) as well as quality in negotiations between sellers and downstream companies.³⁴

Negotiation Issues as a Buyer:

Question 5 investigated the issues negotiated by buyers with upstream companies. The results showed that prices (88.5%) were the most frequently negotiated issue, followed by quality (69.2%), payment terms (42.3%), quantities (26.9%), and delivery terms (23.1%). This suggests that prices and quality are crucial factors in negotiations from the buyer's perspective.

Perception of Negotiation Power:

Question 6 aimed to understand participants' perception of negotiation power. The majority (71.4%) believed they had an equal level of negotiation power compared to the other party, while 11.4% believed the other party had more power, 8.6% believed the other party had less power, and 8.6% were unsure. This indicates that most participants perceive a balanced negotiation power dynamic.

Important Factors in Negotiation Style:

Question 7 explored the factors considered important in participants' negotiation style. The most frequently selected factors were building relationships (71.4%), effective communication (57.1%), flexibility and creativity (54.3%), and setting clear objectives (42.9%). This highlights the significance of interpersonal skills and effective communication in negotiation processes.

Factors Increasing Negotiation Power:

Question 8 examined the factors that could increase participants' negotiation power. The results showed that information and knowledge (88.6%) were considered the most influential factor, followed by strong relationships (65.7%) and expertise and credibility (60%). This indicates that access to information and building strong relationships are crucial for enhancing negotiation power.

Factors Decreasing Other Party's Negotiation Power:

Question 9 investigated the factors that could decrease the negotiation power of the other party. The responses indicated that the lack of information (80%) was the most significant factor, followed by poor relationship or trust (57.1%) and lack of credibility (40%). This suggests that having superior information can reduce the other party's negotiation power.

Long-Term Strategies to Improve Negotiation Power:

Question 10 aimed to identify long-term strategies to build and improve negotiation power. The most frequently selected strategies were continuous learning and skill development (65.7%), building a strong network (60%), and fostering long-term relationships (37.1%). This highlights the importance of

³⁴ See: Appendix B

personal growth, networking, and relationship building for enhancing negotiation power.³⁵

Impact of COVID Crisis on Negotiation Power:

Question 11 assessed the impact of the COVID crisis on participants' negotiation power. The majority (54.3%) reported no impact on their negotiation power, while 22.9% stated that their negotiation power had decreased. A smaller proportion (14.3%) reported a slight improvement in negotiation power. This indicates a varied impact of the COVID crisis on negotiation dynamics.

Impact of COVID Crisis on Negotiation Breakdown Options:

Question 12 aimed to determine the impact of the COVID crisis on participants' options in case of a negotiation breakdown. The responses indicated that 50% were moderately affected, 29.4% were significantly affected, and 14.7% were slightly affected. This suggests that the COVID crisis has had a notable impact on negotiation breakdown options.

Alternatives If Proposal Is Not Accepted:

Question 13 explored the alternatives participants had if their proposal was not accepted. The majority (88.6%) indicated having a few alternatives, while a smaller proportion (11.4%) reported having many alternatives. This indicates that most participants faced limited alternative options in case of proposal rejection.

Alternatives of Other Party If Not Agreed With:

Question 14 examined the alternatives available to the other party if participants did not agree with them. The results showed that 91.4% believed the other party had few alternatives, 5.7% believed they had many alternatives, and 2.9% believed they had no alternatives. This suggests that participants perceived the other party to have limited alternative options.

Suggestions for Organizing Negotiations to Improve Supply Chain Efficiency:

Question 15 provided an open-ended opportunity for participants to share their thoughts on improving negotiation efficiency in the supply chain. The responses indicated several key suggestions, including establishing clear objectives and goals, open and effective communication, honesty and clarity, building relationships, developing alternatives, market awareness, conducting thorough research, seeking win-win opportunities, prioritizing value over price, embracing technology, and establishing clear contractual agreements.

The analysis of the research results provides insights into the role of negotiation in the supply chain of packaging materials. The findings highlight the importance of negotiation issues such as prices, payment terms, quality, and quantities from both the seller's and buyer's perspectives. Participants perceive negotiation power as relatively balanced, emphasizing the significance of

³⁵ See: Appendix B

information, strong relationships, and expertise in increasing negotiation power. The impact of the COVID crisis varied, with some reporting decreased negotiation power and affected negotiation breakdown options. Strategies for long-term improvement include continuous learning, network building, and fostering relationships. Finally, participants provided suggestions for organizing negotiations to enhance supply chain efficiency, emphasizing clear objectives, communication, relationships, value-based approaches, and technological integration.³⁶

³⁶ See: Appendix B

6. Conclusion

In conclusion, this master thesis has explored the supply chain of packaging materials, specifically focusing on PVC cling film, aluminium foil, and baking paper for food contact. The study has provided a comprehensive understanding of the various stages and entities involved in the supply chain, from raw materials to final products. Moreover, it has examined the role of negotiation within the supply chain and the negotiation topics and tools utilized by the entities involved.

Throughout the research, it became evident that negotiation plays a crucial role in the effective functioning of the supply chain for packaging materials. The nodes of the supply chain, including raw material suppliers, manufacturers, converters, distributors, and retailers, engage in negotiations to address various topics such as pricing, lead times, quality standards, and contractual terms. These negotiations are essential for establishing mutually beneficial agreements, optimizing operations, and maintaining competitive advantage.

The findings of the study highlight several challenges and opportunities related to negotiation in the packaging materials supply chain. External factors such as natural disasters, pandemics, and market shortages can significantly impact the negotiation dynamics, often leading to a lack of Best Alternative to a Negotiated Agreement (BATNA) for the entities involved. These circumstances highlight the importance of resilience and adaptability within the supply chain, as well as the need for effective negotiation strategies to mitigate risks and ensure continuity.

The research study conducted through questionnaires provided valuable insights into the negotiation practices within the packaging materials supply chain. It identified the key negotiation topics, including pricing, quality standards, and supplier relationships, among others. Additionally, it revealed the negotiation tools commonly employed by the entities, such as information sharing, collaboration, and compromise.

Based on the findings, several recommendations can be made to enhance negotiation effectiveness within the packaging materials supply chain. Firstly, fostering transparency and trust among the entities involved is essential for building strong and collaborative relationships. Open communication and information sharing can lead to better negotiation outcomes and improved supply chain performance. Secondly, developing contingency plans and alternative sourcing strategies can help mitigate the impact of external disruptions, ensuring a more robust and resilient supply chain.

Furthermore, investing in technology and data analytics can provide valuable insights into market trends, demand patterns, and supplier performance, enabling more informed and data-driven negotiations. Embracing digital platforms and tools can streamline processes, enhance efficiency, and facilitate

effective communication and collaboration among the nodes of the supply chain.

In conclusion, this master thesis has contributed to the understanding of the supply chain of PVC cling film, aluminium foil, and baking paper for food contact. It has shed light on the role of negotiation within the supply chain and highlighted the challenges and opportunities associated with it. The findings and recommendations presented in this thesis can serve as a valuable resource for industry practitioners and stakeholders, providing insights and strategies to improve negotiation practices and enhance overall supply chain performance in the packaging materials sector.

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Appendix A: Questionnaire about the role of negotiations in the Supply Chain of Packaging Materials

The role of negotiation in the supply chain of packaging materials

I kindly request your participation in a brief questionnaire that will take approximately 3-4 minutes of your time. Your valuable insights will contribute to advancing our knowledge in supply chain management, specifically in negotiations within the packaging materials industry.

Rest assured that your responses will remain anonymous and confidential. Your participation will greatly impact the outcome of this study and shape future strategies in this field.

Thank you for considering this request. Your assistance is highly appreciated. If you have any questions, please feel free to contact me.

1. Please choose one of the following products that relates mostly to your duties with the film:

- Aluminium foil
- PVC cling film
- Baking Paper
- All the above
- Άλλο: _____

2. In which node of the supply chain, you belong to:

- Raw Material Supplier
- Manufacturer
- Converter
- Distributor
- End User
- Άλλο: _____

3. What is your position in your organization?

- Buyer
- Seller
- Άλλο: _____

4. When you are a seller, what issues do you negotiate with the downstream company in the supply chain?

(Please choose maximum 3 options)

- Prices
- Delivery terms
- Payment terms
- Quantities
- Quality
- Lead time
- Exclusivity
- Άλλο: _____

5. When you are a buyer, what issues do you negotiate with the upstream company in the supply chain?

(Please choose maximum 3 options)

- Prices
- Delivery terms
- Payment terms
- Quantities
- Quality
- Lead time
- Exclusivity
- Άλλο: _____

6. If we define negotiation power as the power of one party of the negotiation to choose or set the conditions of an agreement, then do you believe the other party you negotiate with has more, less, or equal power than you?

- More
- Less
- Equal
- I don't know

7. Which of the following are the most important factor in your negotiation style?
(Please choose maximum 3 options)

- Develop alternatives.
- Effective communication
- Set clear objectives.
- Active listening
- Control emotions
- Building relationships
- Negotiate from a position of strength.
- Flexibility and creativity
- Patience and persistence
- Άλλο: _____

8. What are the factors that could increase your negotiation power towards the other party?

(Please choose maximum 3 options)

- Information and knowledge
- Strong alternatives
- Expertise and credibility
- Strong relationships
- Unique resources or value proposition
- Άλλο: _____

9. What are the factors that could decrease the negotiation power of the other party?

(Please choose maximum 3 options)

- Lack of information
- Weak alternatives
- Lack of credibility
- Poor relationship or trust
- Power imbalance
- Lack of alternatives
- Άλλο: _____

10. In the long term, what are the strategies you may use to build and improve your negotiation power?

(Please choose maximum 3 options)

- Continuous learning and skill development
- Build a strong network
- Seek diverse experiences
- Develop subject matter expertise
- Enhance communication skills
- Embrace a problem-solving mindset
- Build a reputation for integrity
- Foster long-term relationships
- Seek feedback and reflect
- Embrace a growth mindset
- Άλλο: _____

11. On a scale of 1 to 5, with 1 being "Deteriorated" and 5 being "Improved," How has the COVID crisis affected your Negotiation Power?

	1	2	3	4	5	
Deteriorated	<input type="radio"/>	Improved				

12. On a scale of 1 to 5, with 1 being "not at all" and 5 being "significantly," How has the COVID crisis affected your options in case of a negotiation breakdown?

	1	2	3	4	5	
Not at all	<input type="radio"/>	Significantly				

13. What alternatives do you have if your supplier/seller or client/buyer won't accept your proposal?

- No alternatives
- Few alternatives
- Many alternatives

14. What alternatives does your supplier/seller or client/buyer have if you don't agree with them?

- No alternatives
- Few alternatives
- Many alternatives

Open Question

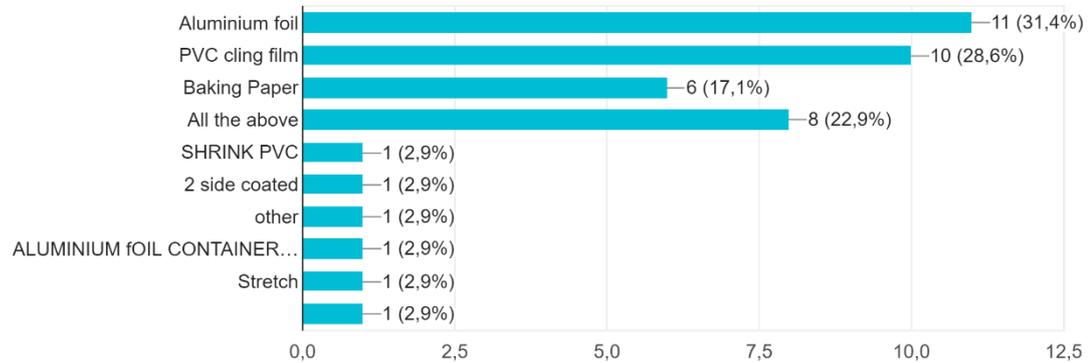
15. In the sector of your business activity, how do you think that negotiations should be organized to improve the efficiency of the supply chain?

Η απάντησή σας _____

Appendix B: Results and Statistics of questionnaire

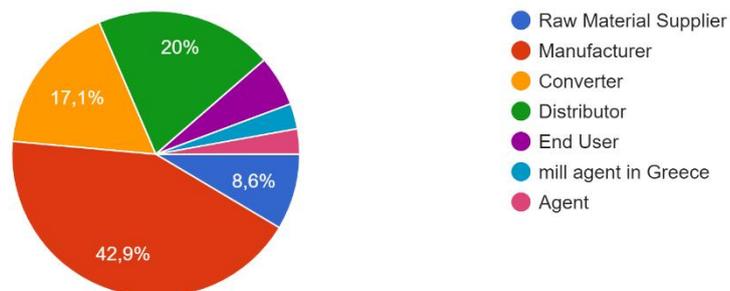
1. Please choose one of the following products that relates mostly to your duties with the firm:

35 απαντήσεις



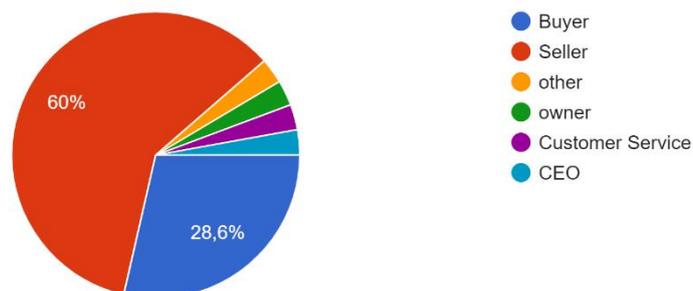
2. In which node of the supply chain, you belong to:

35 απαντήσεις



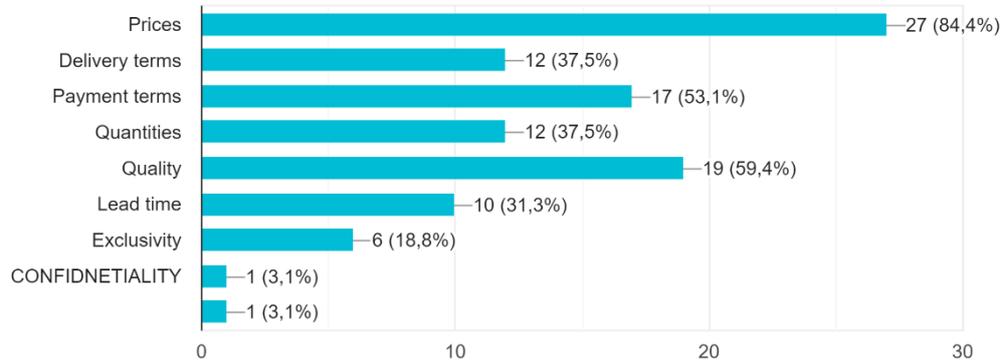
3. What is your position in your organization?

35 απαντήσεις



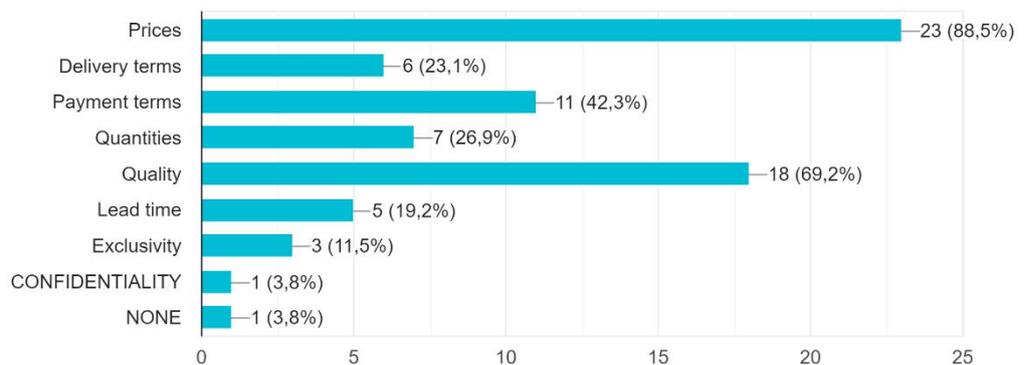
4. When you are a seller, what issues do you negotiate with the downstream company in the supply chain? (Please choose maximum 3 options)

32 απαντήσεις



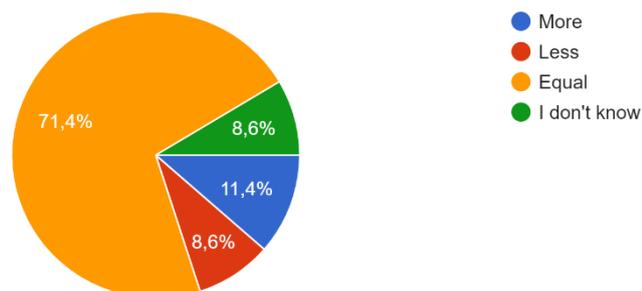
5. When you are a buyer, what issues do you negotiate with the upstream company in the supply chain? (Please choose maximum 3 options)

26 απαντήσεις



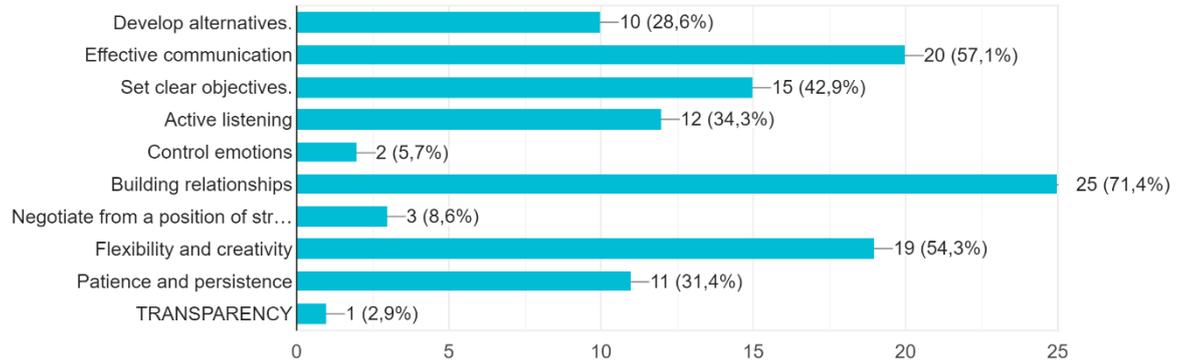
6. If we define negotiation power as the power of one party of the negotiation to choose or set the conditions of an agreement, then do you believe the...iate with has more, less, or equal power than you?

35 απαντήσεις



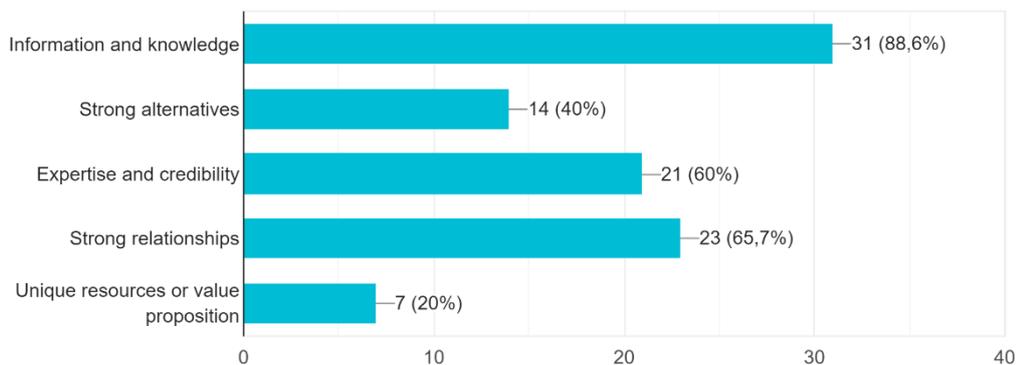
7. Which of the following are the most important factor in your negotiation style? (Please choose maximum 3 options)

35 απαντήσεις



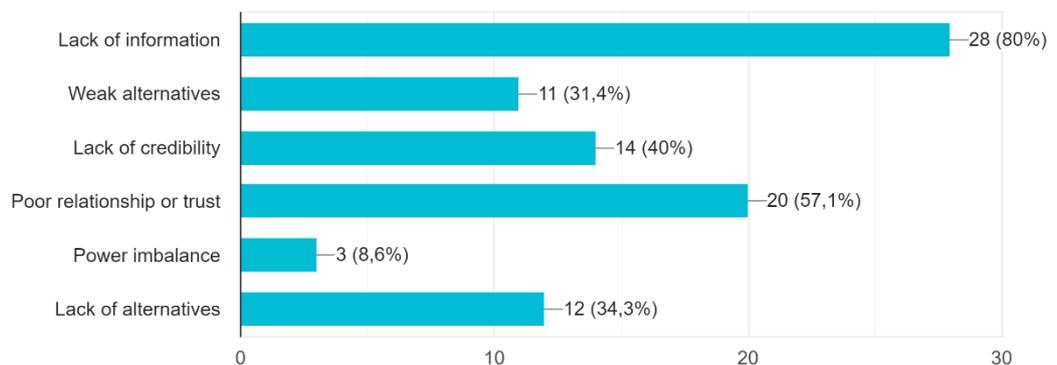
8. What are the factors that could increase your negotiation power towards the other party? (Please choose maximum 3 options)

35 απαντήσεις



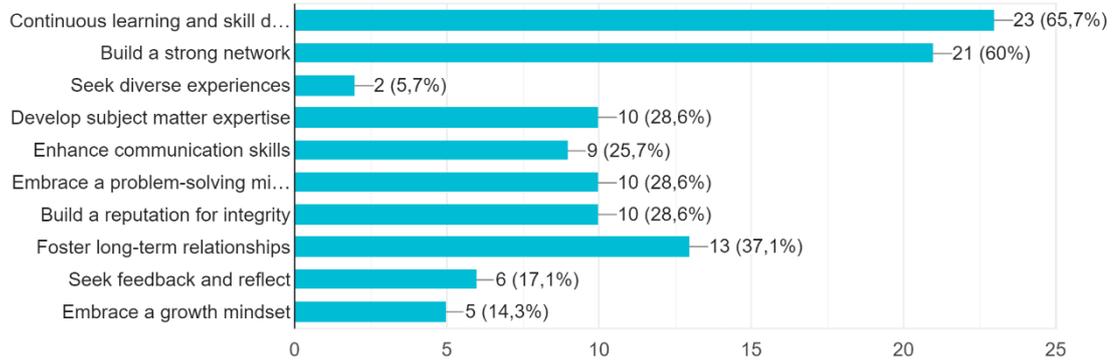
9. What are the factors that could decrease the negotiation power of the other party? (Please choose maximum 3 options)

35 απαντήσεις



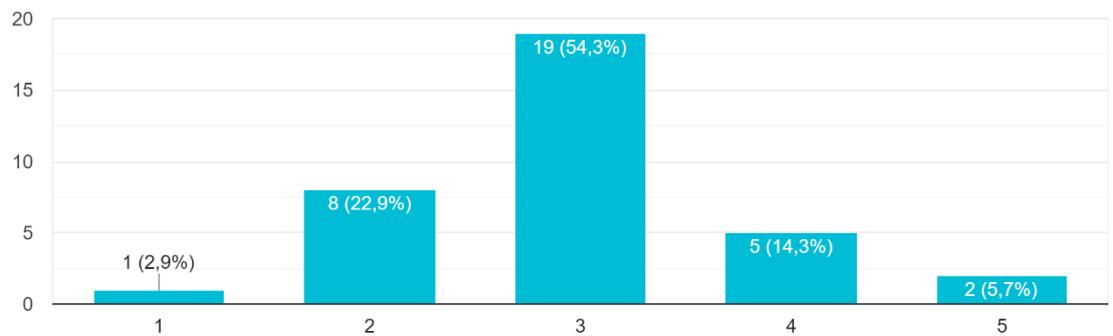
10. In the long term, what are the strategies you may use to build and improve your negotiation power? (Please choose maximum 3 options)

35 απαντήσεις



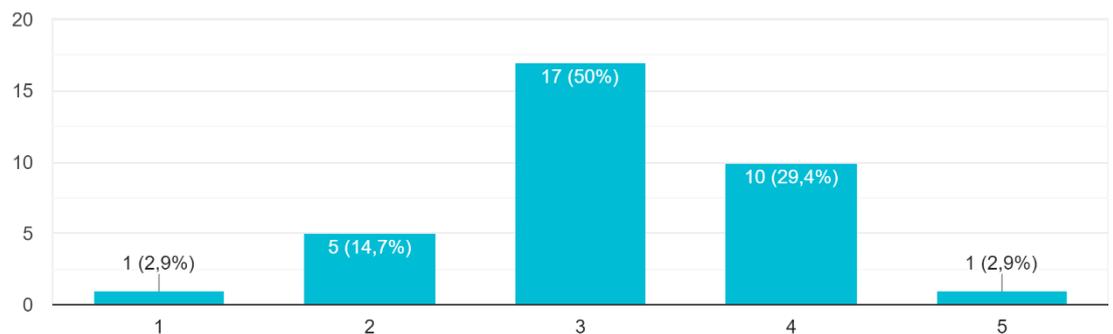
11. On a scale of 1 to 5, with 1 being "Deteriorated" and 5 being "Improved," How has the COVID crisis affected your Negotiation Power?

35 απαντήσεις



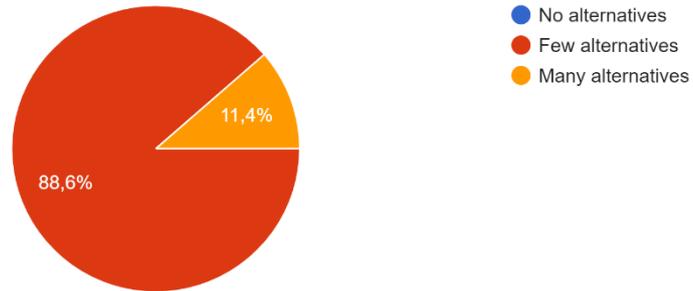
12. On a scale of 1 to 5, with 1 being "not at all" and 5 being "significantly," How has the COVID crisis affected your options in case of a negotiation breakdown?

34 απαντήσεις



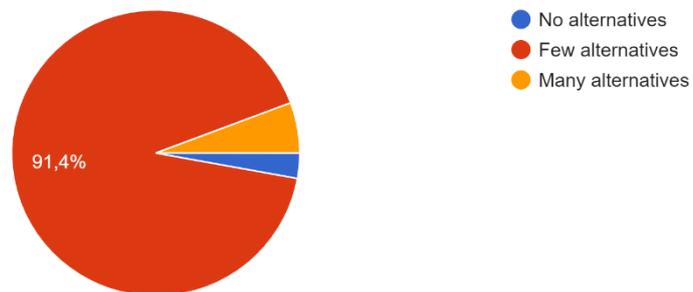
13. What alternatives do you have if your supplier/seller or client/buyer won't accept your proposal?

35 απαντήσεις



14. What alternatives does your supplier/seller or client/buyer have if you don't agree with them?

35 απαντήσεις



Author's Statement:

I hereby expressly declare that, according to the article 8 of Law 1559/1986, this dissertation is solely the product of my personal work, does not infringe any intellectual property, personality and personal data rights of third parties, does not contain works/contributions from third parties for which the permission of the authors/beneficiaries is required, is not the product of partial or total plagiarism, and that the sources used are limited to the literature references alone and meet the rules of scientific citations.