



Article

Governance in the Italian Processed Tomato Value Chain: The Case for an Interbranch Organisation

Antonella Samoggia ¹, Francesca Monticone ^{1,*} and Gianandrea Esposito ²

- Department of Agricultural and Food Sciences and Technologies, University of Bologna, Viale Fanin 50, 40127 Bologna, Italy; antonella.samoggia@unibo.it
- ² ART-ER, c/o CNR—Area della Ricerca di Bologna, Via P. Gobetti 101, 40129 Bologna, Italy; gianandrea.esposito@art-er.it
- * Correspondence: francesca.monticone2@unibo.it

Abstract: Collective action among producers is a corrective measure for power imbalance, which affects primary producers in agro-food supply chains. As associations of producers and processors, Interbranch Organisations (IBOs) promote dialogue, best practice, and market transparency. However, interbranch cooperation is still a less explored subject in agro-food governance studies. Therefore, the present paper aims to analyse the role of IBO North Italy for Processing Tomato (IBO NIPT) in the governance of the processed tomato value chain. The IBO for Processing Tomatoes of Northern Italy was chosen as a case study as it is one of the eight recognized IBOs in the country and Italy is the third biggest producer of tomatoes for processing worldwide. Semi-structured interviews with stakeholders involved in the processed tomato value chain were carried out to reach this aim. Abridged transcripts were analysed through thematic analysis by two or three researchers. The present study has three research steps: first, to explore the history of the IBO NIPT; second, to explore its current role as collective institution acting towards power imbalances; third, the IBO's role in reference price streamlining. A multi-theoretical approach based on the following three theoretical frameworks was used to analyse the interviews: New Institutional Economics (NIE); Devaux's framework for collective action; and Transaction Cost Economics. The paper highlights the role of local institutions in bringing innovations in the food supply chain and suggests that the future of IBOs in Italy has to be expanded beyond reference price streamlining and could benefit from the cooperation of retailers.

Keywords: interbranch organisation; processed tomato; governance; agro-food value chain; IBO; North Italy

Academic Editors: Marco Bellandi and Gianluca Stefani

Citation: Samoggia, A.; Monticone,

F.; Esposito, G. Governance in the

Chain: The Case for an Interbranch

Organisation. Sustainability 2022, 14,

Italian Processed Tomato Value

2749. https://doi.org/10.3390/

su14052749

Received: 20 January 2022 Accepted: 24 February 2022 Published: 26 February 2022

check for updates

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/licenses/by/4.0/).

1. Introduction

It is often argued that agro-food supply chains are characterised by a power imbalance, which negatively affects primary producers as their bargaining power is the lowest among the chain stakeholders involved [1–4]. Collective action among producers is supported as a corrective measure for such imbalance and several examples of its benefits exist in the literature [4–7]. Producers Organisations (POs) are one of the possible aggregations of primary producers: POs make bulk purchases of means of agricultural production, give technical assistance and advice to their members, and sell collectively to processing industries under European Union (EU) Regulation 1308/2013. When POs network with processors or traders, they can form Interbranch Organisations (IBOs), associations promoting dialogue, best practices, and market transparency in their sector [5]. Previous governance studies either analysed the interactions between the Common Agricultural Policy and the IBOs in the EU [2,6] or the power dynamics between the IBOs and other stakeholders such as the POs [7]. However, interbranch cooperation is still a less explored topic in agro-food governance studies. Thus, this article aims to analyse the governance of

Sustainability **2022**, 14, 2749 2 of 18

one of the few Italian IBOs, the IBO North Italy for Processing Tomato (IBO NIPT), and its role in equilibrating power imbalance in the processed tomato value chain.

To fulfil this aim, the present study covers the following research steps:

- Analyse the historical development of the institutional relationships leading to the establishment of one of the major IBOs in the Italian agro-food sector, the IBO North Italy for Processing Tomato;
- 2. Analyse the long-term viability of the IBO NIPT, exploring its current governance role in supporting the standards setting and contractual negotiation of processed tomato chain between producers and processors;
- 3. Explore a key aspect of the governance of the IBO NIPT: its role in processed tomato reference price streamlining.

The processed tomato value chain has been selected as case study for a number of reasons. First, Italy is the third biggest producer of tomato for processing worldwide (5166 million tonnes in 2020), after California (10,258 million tonnes) and China (5800 million tonnes) [8]. Second, among Italian IBOs, the fruit and vegetables sector is dominant with four out of eight IBOs—the others being tobacco and meat production [9]. Moreover, of the four IBOs in the fruit and vegetable sector, two are the IBOs of processed tomato (North and South of Italy). Third, the IBO NIPT has a long history, as it was recognized by the Regional Government before the EU and Italian authorities.

In the present study, the wording "processed tomato" includes tomato paste, puree, and canned tomatoes, whose differences in composition are explained by the Codex Alimentarius. It is important to specify that the research focuses on tomato for processing because it has a specific supply chain, different from the tomato sold fresh.

The present article is structured as follows. Section 1.1 provides the literature review on the research topic. Section 1.2 presents the theoretical frameworks adopted for the analysis. Section 2 defines materials and methods. Section 3 provides the results in three sub-sections: IBO's historical development, IBO's internal governance, and IBO's role in reference price streamlining. Section 4 discusses the findings providing conclusive considerations.

1.1. Literature Review

POs are at the core of IBOs, as they often initiate the IBOs establishment. Therefore, before delving into IBOs, the research study analysed the literature to capture past research findings on the historical development and functioning of POs.

POs are regulated by the EU (Reg. EU 1234/2007, Reg. 1308/2013) as part of the European Common Agricultural Policy (CAP). Albeit being informally present in the agricultural sector since the 1970s, it is only with recent CAP reforms (in 1996 first, but particularly with the 2007 reform) that POs are officially recognised [10,11]. Their role is to bring together primary producers to enhance their bargaining power in the food chain [10,11]. In order to foster their formation, the 2007 reform of the Common Market Organisation (CMO) includes benefits for members of POs. Being part of producers' associations was essential to receive subsidies and co-financing of programmes aimed to ensure that production meets demand and that production costs remain stable [11,12].

POs have an operative function, dealing with negotiation, bargaining, programming with the processors; collection of payments; mutualism, that is if a producer does not receive a payment, solidarity mechanisms are activated; and controls of the disciplinary of production.

The presence of POs increases the vertical integration of the food supply chain and allows processors to decrease their transaction costs by dealing with one big player instead of many small ones [11]. For this reason, POs are more appealing for small producers than for larger ones [1].

POs have a role in influencing the price streamlining, but mainly indirectly. They can support producers in improving their product quality, facilitate marketing processes and inform over innovation and quality controls [11]. By strengthening the offer of their

Sustainability **2022**, 14, 2749 3 of 18

members, they increase their market power and, therefore, have an impact on the agreed reference price.

The influence that POs are able to exert is based on the geographical proximity of their members and the consequent relationships that were nurtured over decades of collaboration. This allows for a higher consensus when tackling complex issues such as environmental sustainability. The EU legislation requires that POs spend at least 10% of their operational programs on the implementation of "environmental actions" [13].

The development of IBOs followed a similar path to that of POs. Albeit IBOs being a reality in Europe since the 1970s, it was only in the last decade that the EU legislated for their recognition. Article 157 of EU Regulation No 1308/2013 acknowledged the role of interbranch organisations in fostering dialogue among the supply chain stakeholders, and safeguarding market transparency [14]. IBOs formation is usually initiated by producers, but the initiative can come from any of the stakeholders, and they have to include at least two branches of the supply chain. The most common stakeholder composition is of primary producers and first processors or distributors of agricultural products, while food distributors and retailers are rarely present [14]. In the first case, they are called "Short IBOs" while if they include more than two actors they are "Long IBOs" [14].

The CAP recognised the formation of IBOs, at first, for a limited number of agricultural sectors (tobacco, fruit and vegetables, wine, and olive oil) and subsequently in all sectors [14]. However, while the 2013 CAP reform supports collective actions inter and intra sectors, some ambiguity still stands as some of the IBOs activities (for example joint planning and joint selling) are not totally exempt from competition law [14,15].

IBOs may fulfil a variety of aims, such as conducting research to improve innovation, transparency, and marketing, as well as improving quality and environmental sustainability standards [14]. However, none of the EU regulations on IBOs set specific targets for them to reach, and the focus is left to its members to decide.

Albeit being recognised for providing an effective vertical integration, critiques of IBOs have been raised: the role of processors is argued to be prevailing and dominating in imposing standards for producers [7,16]. Such a problematic dynamic also stems from the diverse range of interests that exist in the food supply chain since decades: in a 1969 study, Babb explained how in the tomato processing industry producers were concerned about price, while processors focused on quality.

IBOs provide several benefits to their members. In the agro-food sector, specialisation and intensification have been strongly promoted over the years, favouring highly specialised farms, whose survival, however, is at risk if the price of their main crop or produce suddenly drops [17]. IBOs represent a good support against price volatility because of their vertically integrated nature, and they can also have a pivotal role in fostering innovation in the agri-food sector [6,17].

1.2. Theoretical Framework

The present research study adopts a multi-theoretical approach based on the following theoretical frameworks: New Institutional Economics (NIE); Devaux's framework for collective action; and Transaction Cost Economics (TCE). These frameworks support the analysis of the IBO itself, its formation process and reference price streamlining (Figure 1). Previous literature adopted these frameworks to analyse Interbranch Organisations and Producers Organisations [2,3,11].

Sustainability **2022**, 14, 2749 4 of 18

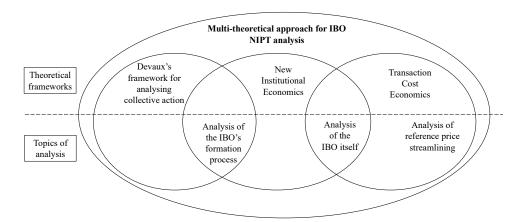


Figure 1. Multi-theoretical approach for IBO NIPT analysis.

New Institutional Economics, a term coined by Williamson [18], is a theory that integrates neoclassical economics with institutionalism. The institutional theory explains how institutions shape public policies and vice versa. The definition of institutions is quite broad, as it includes social structures with a high level of resilience, operating at different level from local to global [19]. In such an approach, institutions are considered as policybuilding forces that shape the scope and field of action of the actors involved [20]. Over the years, institutionalism has developed several complementary perspectives, including NIE [21]. With NIE, Williamson aimed to add to the principles of self-adjustment of the neoclassical economics the framing effects of the institutions underlying all economic activities [22]. Given the nuanced governance structure of the IBO, which is strongly connected to several institutions—and could be considered an institution itself from the NIE perspective—such framework is effective in supporting the analysis of the IBO.

As most exchanges create transaction costs, the Transaction Cost Economics theory (TCET) supports that alternative governance structures organise transactions in a way that minimise costs [18]. As each transaction produces coordination costs of monitoring, control, and management, transactions costs are defined as "the costs of running the economic system of firms" [18]. Such costs are considered the most significant factors in business operation and management, and include, for example, the cost of planning, deciding, redefining plans, and resolving disputes. Thus, they are in addition to production costs. A better understanding of transaction costs allows to make an informed decision on whether to use a firm structure or source from the market to run the "firm economic system". Similarly, stakeholders of the tomato value chain choose if exchanging goods with other stakeholders within the IBO or not. Such choice influences their transaction costs or better may transfer some transaction costs into the IBO. Among transaction costs, the price negotiation process plays a key role. Thus, the TCET provides a framework to analyse the processed tomato reference price streamlining process. This process requires a high level of cooperation among the stakeholders, as a good supply chain coordination allows for lower transaction costs.

Finally, when studying farmers collective actions, Devaux et al. [3] developed a framework of analysis identifying four clusters of variables that impact stakeholders' cooperation. Devaux's framework was built on the Institutional Analysis and Development (IAD) theory elaborated by Ostrom [23]. IAD aims at understanding institutions. Devaux further conceptualised IAD framework, adding the components of external environment, social learning, social capital formation, and joint activities. The final four variables identified by Devaux that influence the emergence and outcomes of collective action in market chain innovation are: external environment, material characteristics of the market chain, characteristics of participating actors, and institutional arrangements [3]. Such variables and their respective sub-groups were used in the analysis of the IBO's formation process.

The multidimensionality of the theoretical frameworks presented above allows us to analyse the specificities of the processed tomato value chain governance, and reveal the

Sustainability **2022**, 14, 2749 5 of 18

IBO's role and functioning (Figure 1). The three theoretical frameworks together allow for an integrated and comprehensive analysis, that captures the multidimensionality of the IBO NIPT as a governance structure. For example, NIE is used both for the analysis of the IBO itself, and to cover its formation process. Similarly, TCE is used both to frame the reference price streamlining, and to analyse the IBO itself. This is because in the case of the IBO, there is need to analyse the different IBO elements comprehensively to capture its multidimensionality. For this reason, the new IBO framework of analysis created and used in the present research encompasses the combination of the three theoretical frameworks together.

2. Materials and Methods

The research analyses a specific case study, that of IBO North Italy for Processing Tomato. Therefore, the research adopted the single-case embedded approach with multi units of analysis theorised by Yin [24] (Figure 2). Within the single case study, three embedded units of analysis were explored: the history of the IBO NIPT, its current governance role in the processed tomato chain as a whole, and the IBO's role in processed tomato reference price streamlining.

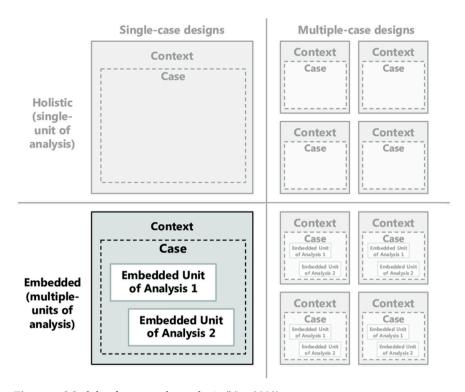


Figure 2. Models of case study analysis (Yin, 2003).

Data Collection and Analysis

The methodological research approach adopted include both primary and secondary data collection and analysis.

Primary data include semi-structured interviews with the stakeholders involved in the processed tomato supply chain in North Italy. Secondary data were of two types. First, past studies included in the literature review, retrieved from the Scopus database using words combinations such as "Interbranch organisation", "Interprofessional association" or "Interbranch association", referred to the food sector. Second, grey literature, such as regulations, statutes, reports, and memoranda retrieved from official institutions websites, news outlets, and past projects.

As supported by the literature review, cooperation among stakeholders is crucial for the IBO functioning. Thus, exploring different actors' perspectives on processed tomato Sustainability **2022**, 14, 2749 6 of 18

agro-food chain and IBO role in the chain governance is a fundamental step in understanding the power balance and relationships within the whole supply chain. As Table A1 in Appendix A shows, researchers carried out 15 interviews and one stakeholder workshop including eight types of stakeholder representatives in the food supply chain: primary producers, agricultural cooperatives, processors, IBO, retailers, local government, producer association, agricultural extension services. Interviews were mainly carried out in 2018 and 2019, with follow-ups and multi-actor workshop meeting in 2020 and 2021. The start period of interviews coincides with that of the official recognition of IBOs by the Italian Agriculture Ministry. The prolonged timespan allowed for a better understanding of the phenomenon over the years. It showed the evolution of stakeholders' opinions on the interview topics, which were tailored to the interviewee's role within the processed tomato agro-food chain and remained consistent with the research topic.

Key participants were identified through purposive and snowball sampling. Semistructured interviews were chosen as they include a list of questions and leave some room for the interviewer and interviewee to include additional information if necessary [25]. The research interviews covered three main topics pertaining the research theoretical framework adopted: governance, collaboration, and pricing.

"Governance" examines which actors within the value chain hold the most power. It is focused on how power is exercised and what is the role of institutions and associations in overseeing power dynamics. "Collaboration" focuses on decision-making processes. It examines what the level is of trust and collaboration among stakeholders, and what access actors have to information that helps them make decisions on the value chain. "Pricing" explores how the price setting works in the processed tomato value chain. Factors investigated included pricing system dynamics and stakeholders involved, between the different processed tomato chain stages.

All interviews were carried out by two or three interviewers at the interviewee's premises and lasted about an hour. Upon permission of the interviewee, interviews were recorded but given the sensitivity of the topics it was important that the recording did not hinder the confidence of the interviewee. Before carrying out the interviews, the interviewers participated in training meetings and, therefore, they were both expert on the interviews processes and on the issues covered by the interviews. Abridged transcripts of the interviews were taken by the researchers [26]. On such transcripts, thematic content analysis was subsequently performed by four researchers, in order to reduce the bias, following the three interview topics presented above (governance, collaboration and pricing) [27].

3. Results and Discussion

3.1. IBOs Establishment Process

The Italian agricultural sector is characterised by farm fragmentations, with high numbers of small-medium farms and low percentages of bigger farms [28,29]. The tomato sector makes no exception.

Italy is a world leading producer of processed tomato, representing 13.6% of the global production and 49% of EU production, with a turnover of 3.15 billion euros [30,31]. Italy is the first exporting country of finished processed tomato products in the EU, showing increasing export sales in the first semester 2018 (+11.2% in volume, +7.69% in value) [30]. Italian production of processed tomato amounted to 4.65 million tons in 2018 (-11.5% compared with 2017), with a reduction of -12.7% in the Southern production region and of -10.2% in the Northern production area [30]. Production of tomatoes for processing in Italy, similarly to Spain and Portugal, is locally concentrated. In Italy, processing tomato production is divided between a Northern production area (mainly the Emilia-Romagna region) and a Southern production area (mainly the Campania and Puglia regions). In 2016, half of the Italian tomato was produced and processed in Northern Italy [29]. The COVID-19 pandemic and the consequent lockdown did not significantly affect processed tomato production in Italy as switching to retail compensated the loss in HORECA [32].

Sustainability **2022**, 14, 2749 7 of 18

In Italy, only eight IBOs are currently officially recognised by national authorities—compared to more than 60 in France and 133 in the EU in total [14]. Three out of eight IBOs are in Emilia-Romagna, reflecting the agro-food vocation of the region. In France and Spain, IBOs cover several agro-food sectors, with wine and milk products being prevalent in France, showing a certain degree of flexibility of IBOs in adapting to different value chain dynamics. According to the European Commission [33], the reasons behind the scarce success of IBOs in Italy may lie in the challenge in identifying common economic and political interests among different types of stakeholders. Moreover, in Italy there are a few POs [14], which is a prerequisite for the setting of IBOs [33]. The set-up of IBOs is a complex process, as they are what Martino et al. [6] call meso-institutions: such middle layer, between macro and micro institution, is considered very efficient for better stakeholder coordination [6].

In Northern Italy, 2007 was a crucial year for the formation of the IBO. In Emilia-Romagna, in order to prepare for the reduction in levels of CAP support as part of the CAP reform, the aggregation of stakeholders was fostered until the "District of Industrial Tomato" was formed to include both POs and processors but also research centres and local institutions [12,29]. Such aggregation allowed for a higher negotiation power in the international market. In the following years, more areas of tomato production were included, and the IBO NIPT was officially recognised by the local government of Emilia-Romagna in 2011, by the EU authority in 2012 and by the Italian Agriculture Ministry in 2017 [34]. In the following year, 2018, the IBO South Italy for Processing Tomato was also recognised by Italian authorities [35]. As mentioned by one of the interviewees,

"the IBO NIPT works well as it was not imposed top-down but it was a bottom-up process. When the coupled support was eliminated, we decided to keep the good part of what the EU did in bringing us stakeholders together. We saw the potential in it and we decided to keep working as a group for the benefit of all." [Producer]

Three quarters of the total IBO geographical area is on Emilia-Romagna regional territory, where tomato for processing is one of the major horticultural crops, mainly cultivated in the provinces of Piacenza, Ferrara and Parma [29]. In this area, the hectares cultivated for tomato for processing have been steadily growing over the past years, keeping an even distribution among the provinces (Figure 3) [36]. The climate and soil of the region are ideal for tomato production, and processors are located in close proximity, which allowed for the creation of strong and longstanding relationships between the two stakeholders [12,29].

The emergence of the IBO NIPT was influenced by a series of variables, which can be grouped in variable groups, as theorised by Devaux et al. [3]:

- External environment
- Biophysical and material characteristics of the market chain
- Characteristics of participating market chain actors
- Institutional arrangements and rules

Each of these variable groups has four or five sub-groups applied to analyse the IBO formation process (Table 1).

Sustainability **2022**, 14, 2749 8 of 18

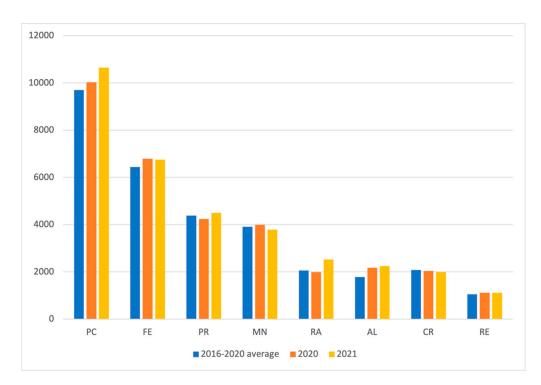


Figure 3. Processed tomato cultivated areas in North of Italy per province (hectares) [36]. The listed provinces are Piacenza (PC), Ferrara (FE), Parma (PR), Mantova (MN), Ravenna (RA), Alessandria (AL), Cremona (CR), Reggio Emilia (RE).

Table 1. Exogenous variables that influence the emergence and outcomes of collective action (source: authors, adapted from Devaux et al., 2009).

Variable Group	Variable Sub-Group	Application to Processed Tomato Chain Governance
External environment	"Trigger" for initiation of collective action	CAP reform that reduced support to the tomato supply chain
	Support from external agents (such as research organizations, NGOs, or governmental bodies) to stimulate innovation and facilitate group activities and provide technical and institutional backstopping	Local research centres involved to increase innovation and Rural Development Plans on quality controls
	Policy incentives for pro-poor market chain innovation	Emilia-Romagna Rural Development Plans aimed to foster agricultural innovation
	Presence of community groups or organizations	Long-term presence of POs and cooperatives in the region
	Collective action institutions at complementary levels (higher or lower)	Long-term presence of POs in the region
	Characteristics of the commodity (e.g., perishability and production zones)	The high perishability of tomato influenced the geographical proximity of the chain. The IBO production is highly based on the same tomato varieties and production methods, which makes the raw material more homogenous
Biophysical/material characteristics of the market chain	Current uses and consumer perceptions of intrinsic value	"Made in Italy" tomato has a higher perceived value for consumers
	Potential to reduce transactions costs through market chain innovation	IBO and POs allows for a high level of cooperation lowering transaction costs
	Potential for product differentiation and value addition	Tomato has potential for differentiation at processing level (canned, tomato paste, etc.)

Sustainability **2022**, 14, 2749 9 of 18

Table 1. Cont.

Variable Group	Variable Sub-Group	Application to Processed Tomato Chain Governance	
	Participation of diverse market chain actors and service providers	Both producers and processors are included in the IBO NIPT	
Characteristics of	High levels of dependence on the market chain	In the tomato chain, processors have a high level of dependence on producers for the quality of raw material	
participating market chain actors	Presence of social capital (norms, values, attitudes, and beliefs that predispose people towards collective action, as well as rules, procedures, precedents, and social networks)	Presence of POs in the area and longstanding established relationships among stakeholders	
	Capable leadership within the market chain and in the farming community	The presence of POs allowed for an easier process (the IBO could quickly connect with the PO and not with the single producers)	
	Effective social learning processes, leading to development of collective cognition, social capital, and leadership capacity	The geographical proximity of IBOs stakeholders allows for the creation of a local expertise and social capital	
Institutional arrangements	Locally devised rules that are simple, easy to understand, easy to enforce, and consistent with market signals	Italy regulatory framework fosters cooperatives and Emilia-Romagna has been a pioneer in recognising IBOs through Regional laws	
and rules	Fair allocation of costs and benefits of collective action	The IBO is a common collective action space where all stakeholders are listened to	
	Graduated sanctions for non-compliance with rules	A penalty is put in place if production exceeds the agreed quantity	
	Accountability/responsiveness of external agents to group members	Local institutions are supportive of the existence of IBO in several manners (policies, funding, etc.)	

As for the external environment, the elements influencing the IBO formation are, on one hand, the "trigger" factor of the CAP reform reducing support to the agro-food tomato supply chain. This external event led to the proliferation of collective actions. On the other hand, structural factors such as the long-term presence of POs in Emilia-Romagna facilitated the aggregation of stakeholders in an IBO. Furthermore, the Italian legislative setting favours the cooperation among stakeholders of the same kind (rather than among different stakeholders), starting from the Constitution itself. Article 45 declares the interest in the promotion of cooperation as a way of consolidating both economic activity and solidarity motivations [10]. Between the 1970s and the 1990s, several other laws favoured the consolidation of cooperatives. For example, at the national level, co-operative profits were exempted from corporate taxation when saved as reserves [10]. Nowadays, Italy has almost 60,000 recognised cooperatives [37].

The material characteristics of the tomato chain impacting the IBO formation are mainly the high perishability of the product that pushes for a local supply chain, and lower transaction costs due to a high level of cooperation. Consumers also support such characteristics of the supply chain as their perceived value of locally produced and "Made in Italy" products is higher.

As for the characteristics of the actors, there is a high level of interdependence among them, particularly the processors who strongly rely on the producers for quality continuity of raw materials over time. The aforementioned longstanding relationships and the presence of POs allowed for a smooth formation of the IBO.

Finally, the support of local institutions and laws is the last level of influence of the IBO. Cooperation with local actors is considered crucial by Emilia-Romagna firms even

Sustainability **2022**, 14, 2749 10 of 18

beyond the agro-food sector [38]. Emilia-Romagna has a long history of cooperativism, and cooperatives account for 30% of the region's Gross Domestic Product [39]. Over the years, Emilia-Romagna has emerged as the Italian region with the highest number of cooperative enterprises [40]. The region is also a forerunner in terms of IBOs, as it is the only Italian regional government to have approved local regulations on IBOs (Regional Law No 24/2000) [33]. In the case of Emilia-Romagna, it is the local institutions, more than other governance levels, that foster cooperation among the food chain stakeholders, bringing innovation in the region.

As one of the interviewees said:

"The Emilia-Romagna Region has helped a lot in the set-up of the IBO, as both regional government officials and technicians have accompanied the process. Over the years, IBO presidents were chosen among former Regional councillors, which guaranteed less internal conflict. The Regional government helped the IBO both financing the processed tomato sector through the regional Rural Development Plan but, above all, providing <moralsuasion> in key moments, such as the drafting of statutes. Even Producer Organisations from other Regional territories recognise the authority of the Emilia-Romagna Region. The interest of the Region in being involved in the IBO lies in the fact that it was feared that without EU support, tomato cultivation would have disappeared, losing an important supply chain for the territory." [Processor]

3.2. IBO's Governance

The IBO is an innovative form of governance that allows both vertical and horizontal integration [29]. It works as a neutral space, where trade-offs between the clashing interests of producers and processors may be found. In this context, the quality of the final product that is sold to consumers is of key concern for processors, while an adequate remuneration for their production is the main focus of producers [12]. The IBO, while not directly intervening in any transaction, streamlines the negotiation of a reference price between producers and processors, helps the coordination of production planning in order to solve conflicting interests, and stabilises the market [12,29]. Therefore, the IBO impacts the food chain both upstream influencing policies and financing, and downstream affecting crop planning.

The IBOs include several bodies that allow for its functioning: a General Assembly, a Board of Directors (where most of the economic decisions are made), working groups, and expert groups [14]. The power, in terms of vote numbers, within IBO is split exactly in half between producers and processors. However, the crucial pillar of IBO's governance is the trusting relationship that exists among its members [14].

"Decisions are always taken unanimously, not through a majority vote. If the farming community does not agree with something, then it doesn't go through, and vice versa. Conflicts are out of the IBO, which is not a mediator. If we all agree to do something, we do it, if not we don't. The point is helping each other achieving goals, not solving conflicts." [Processor]

Processed tomato is produced on a contractual basis agreed between producers and processors. Tomato production and commercial relationships within the IBO NIPT are regulated by both general rules of a Framework Contract and specific contractual conditions set in supply contracts between producers and processors, and between producers and self-processing cooperatives.

The Framework Contract aims to coordinate the programming of the tomato production and processing, to regulate the quality and safety characteristics of the produce and oversee the compliance with production regulations. An agreement on the Framework Contract, which includes the reference price, should be reached by January/February of every season to allow for a suitable planning of production, but this deadline is rarely respected. A novelty of the three-year Framework Contract 2018–2020 is that producers and processors commit to make data and information available to allow for a better understand-

Sustainability **2022**, 14, 2749 11 of 18

ing of market developments. The IBO NIPT conducts economic analysis, market research and statistical elaborations, thus trading and price setting can be based on analytical data and information from previous campaigns.

The IBO is based on voluntary shared rules based mainly on the transparency of information updated weekly, such as contracts signed, quantities delivered, and at which cost. The IBO collects contracts between producers and processors, verifies them, provides information, and works for the efficiency and sustainability of the supply chain. Specific working groups may solve conflict resolution among the members. The IBO is also an interlocutor with the institutions. Ultimately, the IBO can be seen as a tool to counteract the oligopsonic nature of the tomato value chain.

According to processors, the reasons why the processing industry should participate in IBOs, which would theoretically increase the bargaining power of producers, are numerous. First, the organizational facilitation mentioned above; second, the certainty of raw material quality; and lastly, reliability of supply.

"The IBO acts as a guarantor, ensures that payments are done correctly and on time and that everyone follows the rules. It is also helpful that we all convey data to the IBO so that we have a better picture of the sector evolution over the years. It is a successful model of data collection that we hope to export at European level" [Processor]

Processors also claim that IBO would enhance good relationship with the large-scale retailers. Processors support that the large-scale retailers also seek loyal relationships with food processors to ensure quality standards and continuation of product quantity and quality. Such relationships also decrease the need for intermediaries, who are instead necessary (and expensive) for export.

3.3. IBO's Role in Price Formation Streamlining

The aims of the IBO NIPT are to improve knowledge and transparency of the production of processed tomatoes, and to better coordinate their placing on the market [41]. In particular, the IBO streamlines the negotiation of the reference price of raw tomato to be processed paid to producers by processors. This negotiation activity can take up to some months. The reference price is not a set minimum price, but a reference price agreed, mainly based on the historical prices paid in the past, through the analysis of past contracts. The reference price varies according to qualitative parameters specified in the Framework Contract, as agreed by all the companies of the IBO. The two parameters affecting the final price are the level of "BRIX" of the tomato, and the percentage of major and minor defects.

As shown in Table 2, there is a relation between the volume of production and the reference price: the volumes of processed tomato tend to affect the reference price with a delay of one year. Price negotiation and production planning among producers and processors start in October of the previous crop year and ends in February of the crop year. The final signature of contracts occurs generally in February and the tomato harvesting is carried out from July to September of the crop year. One of the main aims of the coordination between producers and processors is to avoid overproduction of tomato, which would lead to overstocking and to minor purchasing of processors the following year. This would create a negative vicious circle that, according to some interviewees, could cause economic collapse of the tomato agricultural production and, thus, of the tomato processing.

Sustainability **2022**, 14, 2749 12 of 18

2017

2018

2019

2020

2021

Reference Price (€/t)	Volume (t)
88	2,570,262
84	2,412,304
85	1,948,125
92	2,385,775
92	2,681,285
85.2	2,844,754
	88 84 85 92 92

79.75

79.75

86

88

92

2,724,939

2,446,932

2,370,087

2,750,403

3,094,768

Table 2. Tomato for processing reference price for the IBO NIPT (OI Pomodoro da Industria Nord Italia).

Experience of past years shows that the IBO NIPT agreements can be vulnerable. During the 2016 campaign, the two crucial elements of the framework contract failed: the actors of the chain did not respect the time limit for setting up the supply contracts and the time limit for payments. Producers were in a weaker negotiating position due to the processors' unsold surplus of previous years. Processing firms required reducing tomato cultivation in order to avoid raw tomato overproduction, and to keep the raw tomato price level high. Producers and processors could not reach a timely agreement and in consequence they signed contracts only in June 2016, when the tomatoes were almost ready for harvesting. Since tomato production exceeded tomatoes under contract, a penalty of 2.25 € per ton was applied to every producer on the reference price agreed [29].

The reference price of the Southern Italy IBO is higher for historical and geographical reasons changing the economic structure of the farms. In the regions of Central and South Italy, production intensity and profitability are lower than the national average [42]. In 2020, the negotiated reference price was 105 or 115 €/t depending on the type of tomato. What is also different between the two areas is the governance structure: Northern Italy has a much more established experience of associationism, so while the number of POs in Southern Italy is higher than in the North, their market power is weaker and, therefore, negotiations are unbalanced [43]. The difference in price negotiations streamlining between the two areas were pointed out by one of the interviewees as well. One of the retailers interviewed also refers to different negotiation dynamics.

"In the North, once the price has been established, it tends to be maintained throughout the year until the end of the campaign regardless of the yield. In the South, this does not always happen. From June-July the yield of tomatoes in the field can be understood and agreements might not be kept. If yields are higher, prices drop from initial agreements, while if yields are lower, prices increase." [Retailer]

As shown in Table 2, the 2021 reference price was significantly higher than that of the previous five years. According to our exchanges with the IBO, this is due to the fact that processed tomato purchasing and at home consumption increased during the 2020 pandemic lockdown. Thus, retailers were able to sell everything and not having warehouse stocking from the previous year (i.e., less offer) caused a rise in the reference price.

Agreements between producers and processors to set a reference price may appear to be against the EU Competition Law, which prohibits every arrangement that controls the amount of produce and its price [5]. However, Interbranch Organisations are specifically exempted from such regulation: Article 210 of Regulation (EU) No 1308/2013 allows

Sustainability **2022**, 14, 2749 13 of 18

IBO some exceptions under specific conditions, provided that they notify the European Commission about their agreements to be granted permission [5].

Streamlining the reference price is not always a smooth process, as the case of one of the main processed tomato producers of the Emilia-Romagna region (Casalasco Consortium) shows. In 2019, the steady decrease of production volumes and the clause of selling no more than 10% of the produce to stakeholders outside the IBO allegedly caused the Casalasco Consortium exit from the Interbranch Organisation [44]. It is, therefore, not always possible to reach an agreement inside the organisation.

There may be challenging situations also with actors outside the IBO that may affect the processors management strategies. One of the processors interviewed reported that to compensate for difficult and complex relationships with some actors in the value chain, in particular retailers, tomato processing industries try to access to new markets and new types of clients. Market differentiation alleviates power pressure exerted by retailers.

"Currently, Italian tomato processing industries are trying to work more on export markets. Another strategy in the Italian processed tomato value chain is to invest more in the alternative sale channels, i.e., food industry and food service, which are important sales channels within the IBO NIPT. Generally, if the processed tomato is an ingredient product, e.g., in case of sales to the food industry the quality requirements are less rigid." [Processor]

3.4. Processed Tomato Pricing beyond the IBO

The negotiation of a reference price between producers and processors is not the only negotiation involving stakeholders in the tomato value chain. Processing industries and retailers are involved in their own price negotiation. One of the most impactful price negotiation practices is the online auctions. Even if not all the processors are involved in online auctions, the price set in these auctions influences the whole processed tomato industry. Interviewees from the processing industries and retailers support that the auction system influences the price setting strategy, also beyond the auction system itself. In particular, it may lead to low prices, possibly below producers' production costs. According to interviews with processors, some of the auction's organizers (i.e., retailers) require the participants (i.e., processors) to sign a document stating that they will not apply offers with below-production cost prices. However, apparently there is no further control once the price is set.

For processed tomato products, online auctions are held once or twice a year. Auctions proceed in two phases:

- First round: retailers request via email a first price offer from tomato processors, who have around 20 days to make their offer [43].
- Second round: afterwards, the retailer starts the second auction-round, which is based
 on the lowest price offered during the first round. The second round is blind, and
 it concludes within just a few hours: it is won by the tomato processor offering the
 lowest price [43].

Tomato processors are not forced to take part in such auction, but it is often their only way of entering the market. This highlights the need for a more ethical collaboration with large-scale distributors [45]. An agreement between retailers and processors could prevent the management practice of auctions, as some representatives of both parties claim to dislike such practice.

"Online auctions are used especially by discount retailers, whose buying decision are influenced mainly by price. A distinction has to be made between different retailers, as they have different relationships with their suppliers. Mainly foreign retail chains and discount retailers are focused on price, while national Italian retail chains give more importance to production quality". [Processor]

Sustainability **2022**, 14, 2749 14 of 18

Another retailer interviewed claimed that online auction, through which about 15% of tomatoes are marketed, depersonalise the relationship between processed tomato industry stakeholder, as well as creating paradoxes.

"For example, 2018 was supposed to be a good year because of a reduction of produce, but the auctions led to a lowering of the price for the entire market despite the lack of product." [Retailer]

However, some retailers underlined that it is hard to escape from the mechanism of auctions, especially if adopted by competing retailers. Some low-cost and discount retailers' adoption of double auctions impacts on the price setting of the other retailers, who are pushed to lower prices to maintain competitiveness.

Double auctions can be considered an unfair practice as retailers use their purchasing power to reduce supplier prices to uneconomic levels. To tackle such pricing management practice, Italian NGOs have worked towards the approval of regulations against it. Currently, EU laws on Unfair Trading Practices (UTP) do not include the mechanism of double auctions [46], therefore, action at national level was needed. In June 2019, Law 1373 "Restrictions on below-cost sales of agricultural products and prohibition of double-race auctions" was approved by the Italian Chamber of Deputies, and it is waiting for discussion in the Senate, the upper house of the bicameral Italian Parliament [43].

To sum up, supply chain dynamics extend beyond the IBO NIPT. What happens downstream of the chain influences the IBO's governance dynamics.

3.5. Limitations and Further Areas of Research

The present study has a few limitations. First, the interviews carried out in 2020 and 2021 were conducted online due to SARS-CoV-2 pandemic. This results in some disparities among the two sets of interviews as, while still following the same procedure, online interactions are different from in person ones. Second, only a single case study (the IBO NIPT) was considered but a comparison with another IBO, such as the IBO South Italy for Processing Tomato, could be beneficial and could be addressed in further studies.

4. Conclusions

The present research aimed to analyse the role of the IBO NIPT in the governance of the processed tomato value chain. Results answered the three research questions through the lenses of the combination of theoretical frameworks adopted. First, Devaux's framework for analysing collective action confirmed that the historical development of the IBO NIPT was driven by a mix of internal and external factors. Local regulations, material characteristics of the processed tomato chain and the strong relationships among the local stakeholders all played a pivotal role in the formation of the IBO as an innovative governance model. Second, NIE and Transaction Cost Economics theories allowed us to analyse the IBO's internal governance and relationships with other tomato value chain stakeholders, confirming the crucial role of institutions at local, national and European level in influencing economic relationships. Third, analysing the IBO's role in the reference price streamlining process confirms TCE claim that institutions that lower transaction costs foster economic growth. The IBO NIPT, through lower transaction costs, increases the efficiency of the tomato value chain. In addition to these findings, using a new theoretical framework made of the combination of the three theories mentioned above is a theoretical contribution of the present study that can be used in future research to analyse complex governance phenomena such as the IBO NIPT.

Contrary to the findings of past literature [7,16], the present research supports how internal IBO balancing measures allow power to be adequately distributed within the IBO NIPT. Problems arise outside, where issues such as double auctions hinder the efficacy of the IBO in contrasting oligopsony in the supply chain.

Sustainability **2022**, 14, 2749 15 of 18

Future Perspectives

Future perspectives for the IBO NIPT suggested by the findings of the present paper are twofold.

First, the IBO NIPT, albeit being effective in its role as it is, may benefit from the involvement of retailers in order to improve the power balance within the supply chain. At the European level, including retailers in the IBO is relatively rare, but could be helpful in evening power dynamics. The literature showed that in the EU, only 13 IBOs include retailers [14]. The majority of such IBOs are in France and Spain and only one of them deals with fruits and vegetables, the French Interfel. Further research and political discussion may focus on the analysis of existent "Long IBOs" to evaluate the consequences of the inclusion of retailers.

The benefits of such inclusion would be fourfold. First, even if more stakeholders could make the reference price negotiation streamlining more difficult, the final result will be more robust as it will include the interests of the whole supply chain. Second, crop planning would be more effective, and it would limit quantity of production, possibly, thus, favouring raw material and food quality, and environmental sustainability. Retailers have a pivotal role in food sales, providing them with good understanding of consumers' expectations. The involvement of all the various chain stakeholders, including retailers, may support producers' and processors' understanding of consumers' food choice drivers. This would ensure that sustainability-oriented investments upstream in the agro-food chain are positively valued by consumers. The consistency of management choices may favour institutions' support toward chain sustainability choices. Third, the level of information asymmetry about volumes, quality, etc., will be further reduced, further increasing the value chain efficiency. Fourth, distributive fairness along the tomato supply chain will improve as more stakeholders are involved and willing to cooperate. Taking into account the interests of all the actors reduces the conflicts of interests that may decrease fairness along the chain.

The inclusion of retailers may have counter effects. First, the principle of geographic proximity could fall. Sixty percent of processed tomato produced in Italy is exported, which would mean that also foreign retailers could be included [47]. Second, to remain competitive, retailers tend to diversify their food offer and company positioning among each other. Thus, they impose private standards to the processors and, therefore, producers. The risk is that their power on other value chain actors may remain prevalent. Competition rules are also an issue as it is important to avoid making a cartel. Third, retail is not the only channel to the market as only 30% of processed tomato is sold to retail [36].

For these reasons, albeit the discussion on the inclusion of retailers was raised inside the IBO NIPT, it was never decided to implement it. Yet, recent trends at EU level support agro-food chain management practices favouring wider chain cooperation. For example, the recent EU Code of Conduct for Responsible Business and Marketing Practices foresees the retailers' involvement [48]. Therefore, the IBO may have to reconsider the internal stakeholder representativeness.

The second future perspective regards sustainability. Due to its geographical proximity, the IBO NIPT naturally allows for a small carbon footprint of the product. Moreover, regional policies support the sustainability of the processed tomato supply chain. In Emilia-Romagna, both regulatory and financial policies have been put in place to protect soil and water resources, which are heavily exploited in tomato production [29]. The Rural Development Plan of the Region gave financial support to sustainable practices by supporting the adoption of integrated production through compensation of consequent reduction in yields and increase in production costs [29].

However, regulations alone are not sufficient. In the future, the IBO NIPT could use its role of facilitator and guarantor towards the implementation of sustainable practices along the processed tomato value chain. The high level of IBO stakeholders' cooperation present may favour the achievement of sustainability goals.

Sustainability **2022**, 14, 2749 16 of 18

In conclusion, the present research supports that the future of IBOs in Italy may be expanded to a better coordination for the enhancement of the agro-food sustainability, and processed tomato valorisation marketing management approaches. As the regional President of Coldiretti Emilia-Romagna—one of the most important Italian farmers' associations—recently stated "it will no longer be enough to agree only on the quantities to be produced and delivered, but it will be essential that the entire sector aligns itself on a project to promote tomatoes grown in Italy" [49]. This goal could benefit from the cooperation of retailers, who are now rarely included in IBOs but could be more involved in the future.

Author Contributions: Conceptualization, A.S., F.M. and G.E.; methodology, A.S.; formal analysis and investigation, F.M.; data curation, A.S. and F.M.; writing—original draft preparation, F.M.; writing—review and editing, A.S. and F.M.; supervision, A.S.; project administration and funding acquisition, A.S. All authors have read and agreed to the published version of the manuscript.

Funding: This research was funded by the VALUMICS project "Understanding Food Value Chain and Network Dynamics", which received funding from the European Union's Horizon 2020 research and innovation programme, under grant agreement No. 727243. Available online: https://valumics.eu/(accessed on 4 February 2022).

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: Not applicable.

Conflicts of Interest: The authors declare no conflict of interest. The funders had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript, or in the decision to publish the results.

Appendix A

Table A1. Stakeholders' interviews list, carried out between 2017 and 2021.

	INTERVIEWEE	STAKEHOLDERS CATEGORY	INTERVIEW DATE
1	Emilia-Romagna Regional Government—Public officer	Local government	2 October 2017
2	Tomato Farming Manager	Primary producers	20 July 2018
3	IBO of North Italia Tomato—General Secretary	Primary producers—Processors	22 August 2018
4	Tomato Processor Manager	Processors	25 September 2018
5	Tomato Processor Manager	Processors	27 February 2019
6	Tomato Processor Manager	Processors	7 March 2019
7	Retailer Food Product Manager	Retailers	12 March 2019
8	Farmer Association Manager	Agricultural cooperatives	27 March 2019
9	Public event on tomato value chain—various stakeholders	Various	3 May 2019
10	Retailer Buyer for Grocery Processed Food Manager	Retailers	23 May 2019
11	Retailer Food Product Manager	Retailers	31 May 2019
12	Processor Association Manager	Processors	17 September 2019
13	IBO of South Italy Tomato	Interbranch Organisation	17 September 2019
14	Workshop—Raising Awareness about Food System Dynamics: Processed tomatoes food chain	Various	21 September 2020
15	Processor Association Manager	Processors	11 May 2021
16	Producer Organisation Director	Primary producers	19 May 2021

Sustainability **2022**, 14, 2749 17 of 18

References

1. Babb, E.M.; Belden, S.A.; Saathoff, C.R. An Analysis of Cooperative Bargaining in the Processing Tomato Industry. *Am. J. Agric. Econ.* **1969**, *51*, 13–25. [CrossRef]

- 2. Ciliberti, S.; Chiodini, G.; Frascarelli, A. The Role of the CAP in Fostering the Diffusion of Institutional Hybrid Arrangements: Three Case Studies from Italy. *Ital. Rev. Agric. Econ.* **2018**, 73, 17–35. [CrossRef]
- 3. Devaux, A.; Horton, D.; Velasco, C.; Thiele, G.; López, G.; Bernet, T.; Reinoso, I.; Ordinola, M. Collective Action for Market Chain Innovation in the Andes. *Food Policy* **2009**, *34*, 31–38. [CrossRef]
- 4. Bonanno, A.; Russo, C.; Menapace, L. Market Power and Bargaining in Agrifood Markets: A Review of Emerging Topics and Tools. *Agribusiness* **2018**, *34*, 6–23. [CrossRef]
- European Commission. Producer and Interbranch Organisations. Available online: https://ec.europa.eu/info/food-farming-fisheries/key-policies/common-agricultural-policy/market-measures/agri-food-supply-chain/producer-and-interbranch-organisations_en (accessed on 19 January 2022).
- 6. Martino, G.; Toccaceli, D.; Pacciani, A.; Ascani, M. The Interbranch Organizations in the Cap Reform: Institutional Nature, Opportunities and Limits. *Econ. Agro-Aliment.* **2019**, 315–334. [CrossRef]
- 7. Hooks, T.; Macken-Walsh, A.; McCarthy, O.; Power, C.; Henchion, M. Co-Operation among Irish Beef Farmers: Current Perspectives and Future Prospects in the Context of New Producer Organisation (PO) Legislation. *Sustainability* **2018**, *10*, 4085. [CrossRef]
- 8. Tomato News. The Global Tomato Processing Industry. 2021. Available online: http://www.tomatonews.com/en/background_47.html (accessed on 21 January 2022).
- 9. Ministero delle Politiche Agricole Alimentari e Forestali. A.O.P. e O.I. Riconosciute. 2020. Available online: https://www.politicheagricole.it/flex/cm/pages/ServeBLOB.php/L/IT/IDPagina/8322 (accessed on 21 January 2022).
- 10. Menzani, T.; Zamagni, V. Cooperative Networks in the Italian Economy. Enterp. Soc. 2010, 11, 98–127. [CrossRef]
- Camanzi, L.; Malorgio, G.; Azcárate, T.G. The Role of Producer Organizations in Supply Concentration and Marketing: A Comparison between European Countries in the Fruit and Vegetable Sector. J. Food Prod. Mark. 2011, 17, 327–354. [CrossRef]
- 12. Donati, M.; Guareschi, M.; Veneziani, M. Organic Tomatoes in Italy. In *Sustainability of European Food Quality Schemes: Multi- Performance, Structure, and Governance of PDO, PGI, and Organic Agri-Food Systems*; Arfini, F., Bellassen, V., Eds.; Springer International Publishing: Cham, Germany, 2019; pp. 171–189, ISBN 978-3-030-27508-2.
- 13. Coppola, A.; Ianuario, S. Sustainability Perceptions and Actions of Italian Agri-Food Firms. *Int. J. Glob. Small Bus.* **2015**, 7, 205–220. [CrossRef]
- 14. European Commission. *Study on Agricultural Interbranch Organisations in the EU*; Publications Office of the European Union: Luxembourg, 2016.
- 15. Agricultural Markets Task Force. Improving Markets Outcomes; European Commission: Brussels, Belgium, 2016.
- 16. Camanzi, L.; Bartoli, G.; Biondi, B.; Malorgio, G. A Structural-Functional Theory Approach to Vertical Coordination in Agri-Food Supply Chains: Insights from the "Gran Suino Italiano" Inter-Branch Organisation. *Econ. Agro-Aliment.* **2018**, 20, 169–180. [CrossRef]
- 17. de Roest, K.; Ferrari, P.; Knickel, K. Specialisation and Economies of Scale or Diversification and Economies of Scope? Assessing Different Agricultural Development Pathways. *J. Rural Stud.* **2018**, *59*, 222–231. [CrossRef]
- 18. Williamson, O. Transaction-Cost Economics: The Governance of Contractual Relations | The Journal of Law and Economics: Volume 22, No 2. Available online: https://www.journals.uchicago.edu/doi/10.1086/466942 (accessed on 22 April 2021).
- 19. Scott, W.R. *Institutions and Organizations: Ideas, Interests, and Identities*; SAGE Publications: Thousand Oaks, CA, USA, 1995; ISBN 978-1-4833-2191-2.
- 20. Parsons, K.; Lang, T.; Barling, D. London's Food Policy: Leveraging the Policy Sub-System, Programme and Plan. *Food Policy* **2021**, 102037. [CrossRef]
- 21. Nichols, P. Historical Institutionalism and Sociological Institutionalism and Analysis of the World Trade Organization. *Univ. Pa. J. Int. Econ. Law* **1998**, *19*, 461–511.
- 22. Cory, G.A. The New Institutional Economics: Williamson and Transaction Cost Economics. In *The Consilient Brain: The Bioneurological Basis of Economics, Society, and Politics*; Cory, G.A., Ed.; Springer US: Boston, MA, USA, 2004; pp. 109–115, ISBN 978-1-4615-0045-2.
- 23. Ostrom, E. Understanding Institutional Diversity; Princeton University Press: Princeton, NJ, USA, 2005; ISBN 978-0-691-12238-0.
- 24. Yin, R.K. Case Study Research: Design and Methods; SAGE: Thousand Oaks, CA, USA, 2003; ISBN 978-0-7619-2552-1.
- 25. Merriam, S.B. *Qualitative Research: A Guide to Design and Implementation*; Revised, Expanded edizione; Jossey-Bass Inc. Pub: San Francisco, CA, USA, 2009; ISBN 978-0-470-28354-7.
- 26. Jenks, C.J. Working with Transcripts: An Abridged Review of Issues in Transcription. *Lang. Linguist. Compass* **2013**, 7, 251–261. [CrossRef]
- 27. Anderson, R. Thematic Content Analysis (TCA): Descriptive Presentation of Qualitative Data. 2007. Available online: http://rosemarieanderson.com/wp-content/uploads/2014/08/ThematicContentAnalysis.pdf (accessed on 19 January 2022).
- 28. Gori, C.; Alampi Sottini, V. The Role of the Consortia in the Italian Wine Production System and the Impact of EU and National Legislation. *Wine Econ. Policy* **2014**, *3*, 62–67. [CrossRef]

Sustainability **2022**, 14, 2749 18 of 18

29. Mantino, F.; Forcina, B. Market, Policies and Local Governance as Drivers of Environmental Public Benefits: The Case of the Localised Processed Tomato in Northern Italy. *Agriculture* **2018**, *8*, 34. [CrossRef]

- 30. ANICAV Pomodoro: ANICAV. Campagna 2018: Annata Negativa per l'Industria di Trasformazione con calo Delle Produzioni e Incremento dei Costi Industriali. 2018. Available online: https://anicav.it/2018/10/22/pomodoro-anicav-campagna-2018-annata-negativa-per-lindustria-di-trasformazione-con-calo-delle-produzioni-e-incremento-dei-costi-industriali/ (accessed on 19 January 2022).
- 31. Global Agricultural Information Network. Italian Processed Tomato Overview 2018; 2018. Available online: https://www.fas.usda.gov/data/italy-italian-processed-tomato-overview-2018 (accessed on 29 January 2022).
- 32. European Commission. F&V Market Observatory Sub-Group Tomatoes. Meeting Summary. 2020. Available online: https://ec.europa.eu/info/sites/info/files/food-farming-fisheries/farming/documents/summary-fv-mo-tomatoes-2020-10-09_en.docx.pdf (accessed on 19 January 2022).
- 33. European Commission. National Legislation and Actions Concerning IBOs ITALY. 2016. Available online: https://op.europa.eu/en/publication-detail/-/publication/39e1cd86-1f55-11e7-84e2-01aa75ed71a1 (accessed on 15 January 2022).
- 34. OI Pomodoro da Industria Nord Italia Chi Siamo. Available online: https://oipomodoronorditalia.it/chi-siamo/#cosa-facciamo (accessed on 15 January 2022).
- 35. OI Pomodoro da Industria Sud Italia. Statuto Organizzazione Interprofessionale "OI Pomodoro Da Industria Nord Italia". 2020. Available online: https://oipomodorocentrosud.it/protocollo-oi-pomodoro-da-industria-nord-italia/ (accessed on 21 January 2022).
- 36. OI Pomodoro da Industria Nord Italia Dati. Available online: https://oipomodoronorditalia.it/dati/#produzioni (accessed on 22 January 2022).
- 37. EURICSE. L'economia Sociale in Italia. 2021. Available online: https://www.euricse.eu/structure-and-performance-of-italian-cooperatives/ (accessed on 29 January 2022).
- 38. Cainelli, G.; Mazzanti, M.; Montresor, S. Environmental Innovations, Local Networks and Internationalization. *Ind. Innov.* **2012**, 19, 697–734. [CrossRef]
- 39. Nicol, P.; Taherzadeh, A. Working Co-Operatively for Sustainable and Just Food System Transformation. *Sustainability* **2020**, 12, 2816. [CrossRef]
- 40. Mosconi, F.; D'Ingiullo, D. Institutional Quality and Innovation: Evidence from Emilia-Romagna. *Econ. Innov. New Technol.* **2021**, 1–33. [CrossRef]
- 41. OI Pomodoro da Industria Nord Italia. Statuto Organizzazione Interprofessionale "OI Pomodoro Da Industria Nord Italia"; OI Pomodoro da Industria Nord Italia: Parma, Italy, 2016.
- 42. CREA. Annuario Dell'agricoltura Italiana; CREA: Rome, Italy, 2018.
- 43. Ciconte, F.; Liberti, S. E(U)Xploitation. Gangmastering: The Southern Question Italy, Spain and Greece; Terra: Rome, Italy, 2021.
- 44. Corriere Ortofrutticolo II Consorzio Casalasco Esce Dall'OI Pomodoro Da Industria Nord Italia. Available online: http://www.corriereortofrutticolo.it/2019/03/13/consorzio-casalasco-esce-dalloi-pomodoro-industria-nord-italia/ (accessed on 24 January 2022).
- 45. Ciconte, F.; Liberti, S. Secondo Rapporto Filiera Sporca; Terra: Rome, Italy, 2016.
- 46. Wills, T. The Unfair Trading Practices Directive: A Transposition and Implementation Guide. 2019. Available online: https://fairtrade-advocacy.org/our-work/eu-policies/unfair-trading-practices/ (accessed on 18 January 2022).
- 47. Tomato News. Italy: Annual Trade Report (ISMEA) Part 1. 2021. Available online: http://www.tomatonews.com/en/italy-annual-trade-report-ismea-part-1_2_1255.html (accessed on 29 January 2022).
- 48. European Commission. Code of Conduct for Responsible Business and Marketing Practices. 2021. Available online: https://ec.europa.eu/food/farm2fork/sustainable-food-processing-wholesale-retail-hospitality-and-food-services/code-conduct_en (accessed on 22 January 2022).
- 49. Tomato News. Italy: Price Negotiations for the 2021 Season Have Started. 2021. Available online: http://www.tomatonews.com/en/italy-price-negotiations-for-the-2021-season-have-started_2_1258.html (accessed on 22 January 2022).