

Alignment between chain quality management and chain governance in European pork chains – a transaction-costs-economics perspective

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Introduction

- In Europe a large amount of pork meat is produced in many different pork meat chains
- Large diversity between pork chains in different EU regions and even within regions
- Diversity offers opportunities, can be exploited, creates different markets, but
 - May need specific management and organisation
- Q-Porkchains project (www.q-porkchains.org), module IV has explored differences between porkchains in Europe

Iberian pig



'Regular' pig



Pork chains in Europe

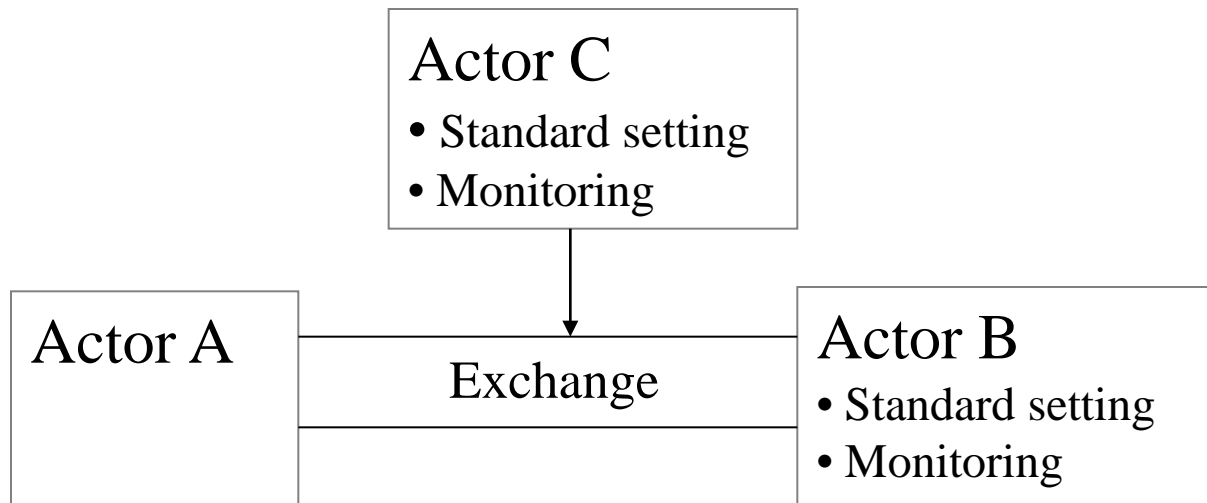
- Inventory of various pork chains in Europe:
 - Netherlands, Germany, Hungary, Spain, Greece, including China and South Africa
 - Fresh meat chains versus specialty chains
 - Large versus regional chains
- Variety of topics investigated, such as
 - Information systems and flow
 - Quality management systems
 - Governance
 - Innovation
 - Regulations
 - Sustainability

Quality Management Systems and Governance

- Identification of (patterns in) relationships between QMSs and GSs
- Justification:
 - Inter-firm coordination of quality management increasingly important in pork chains to meet quality demands.
 - Little research focuses on relation QMSs and GSs.
 - Failure to align QMSs and GSs leads to inefficiencies in chain.

Chain quality management systems?

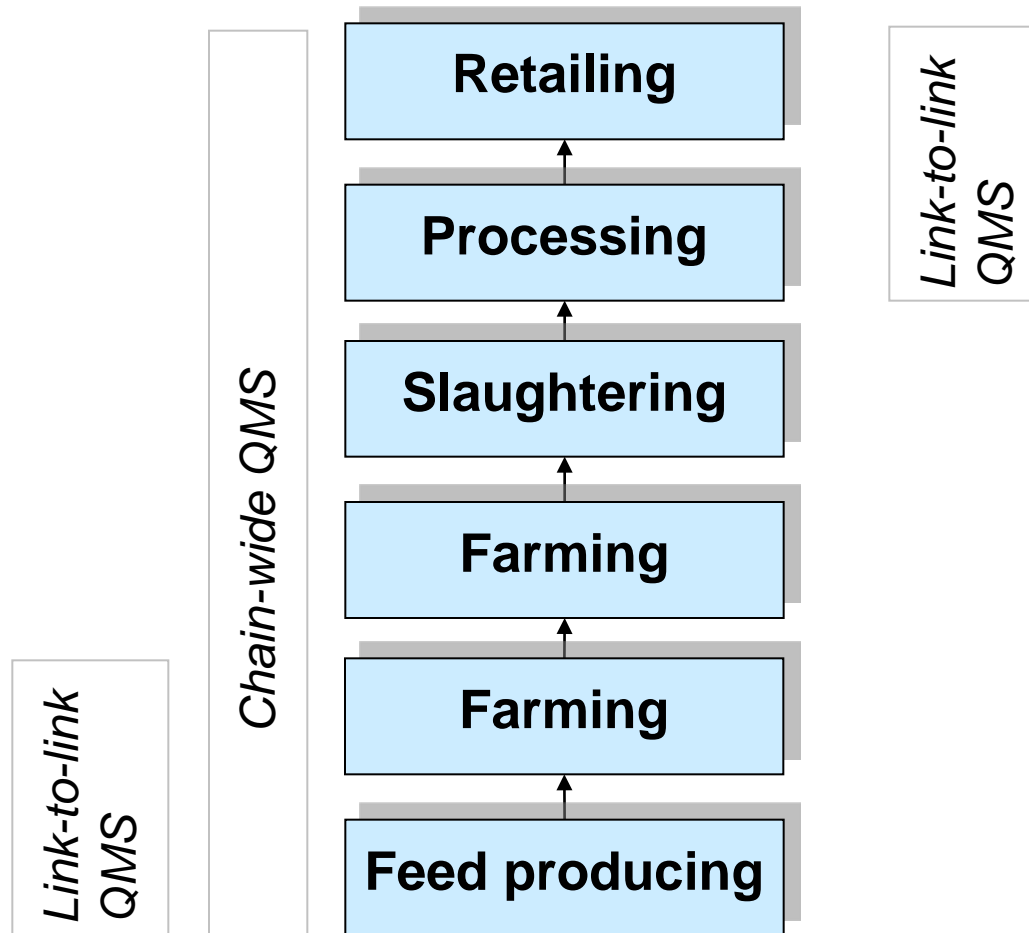
- Defined as a collection of activities in which standards are set, monitored and signaled between different actors within the chain or towards the customer.
- Standards can be set and monitored by either chain actors involved in a transaction, or by third parties.



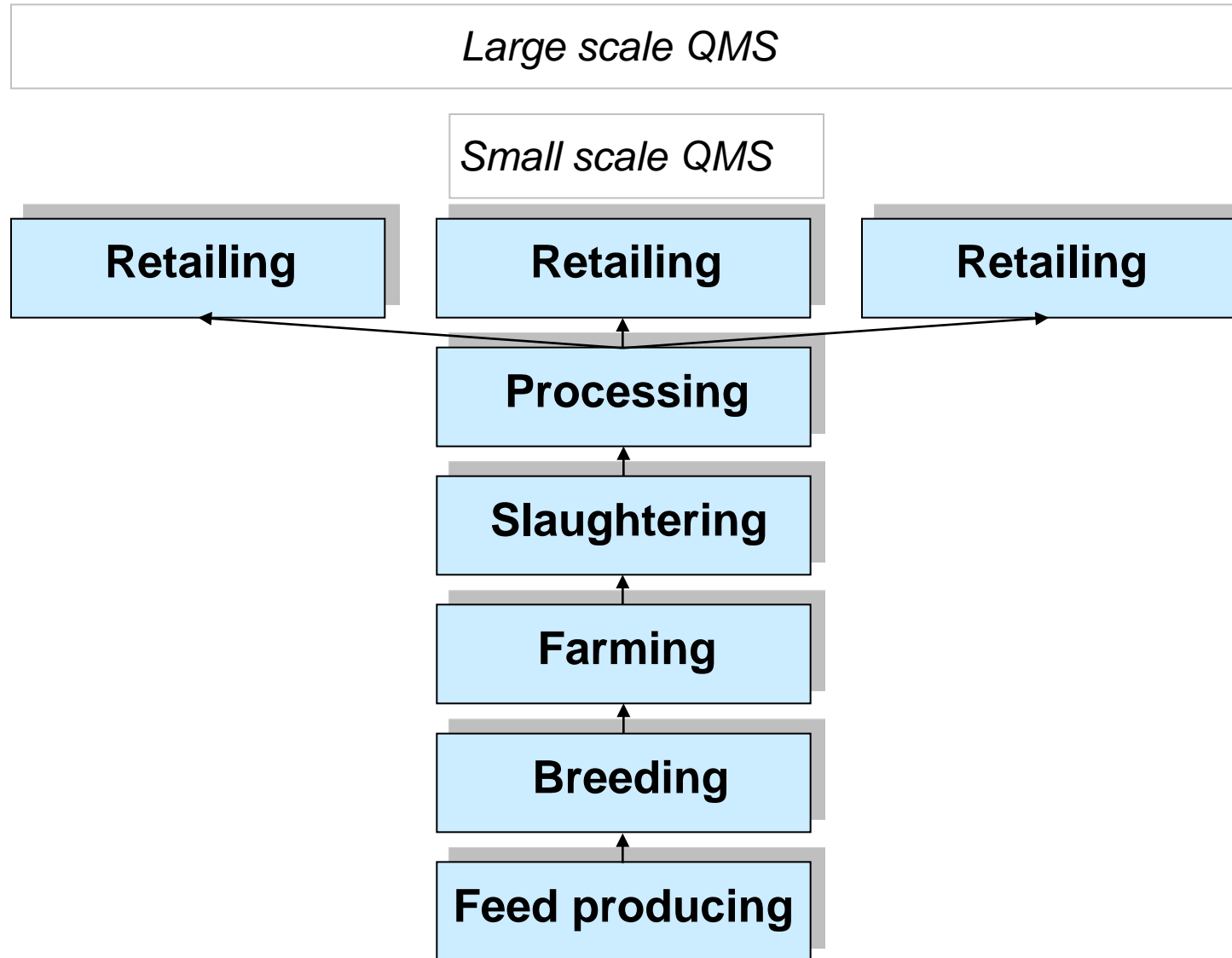
Characterization of QMSs

- Ownership
 - public or private systems
 - Responsibility for standard setting, monitoring, signaling
- Scope (vertical)
 - link-to-link or chain-wide systems.
- Scale of adoption (horizontal)
 - low or high adoption.

Different scope

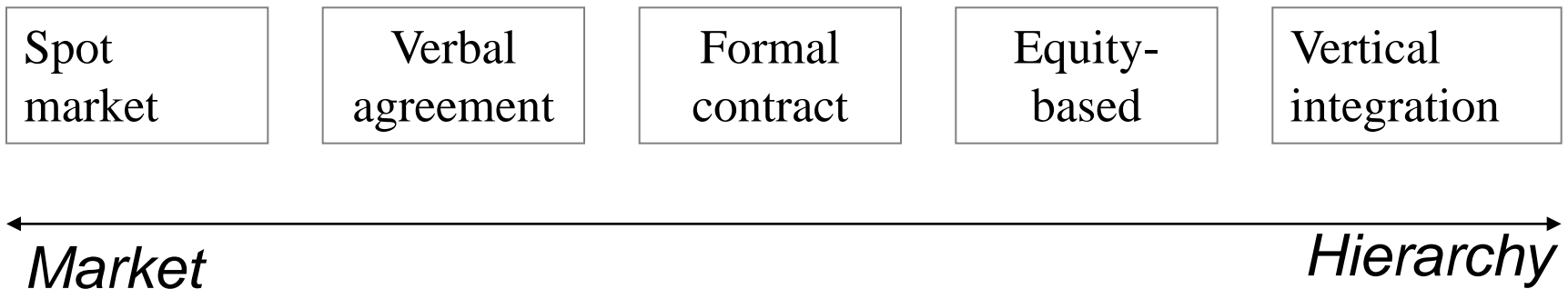


Different scale



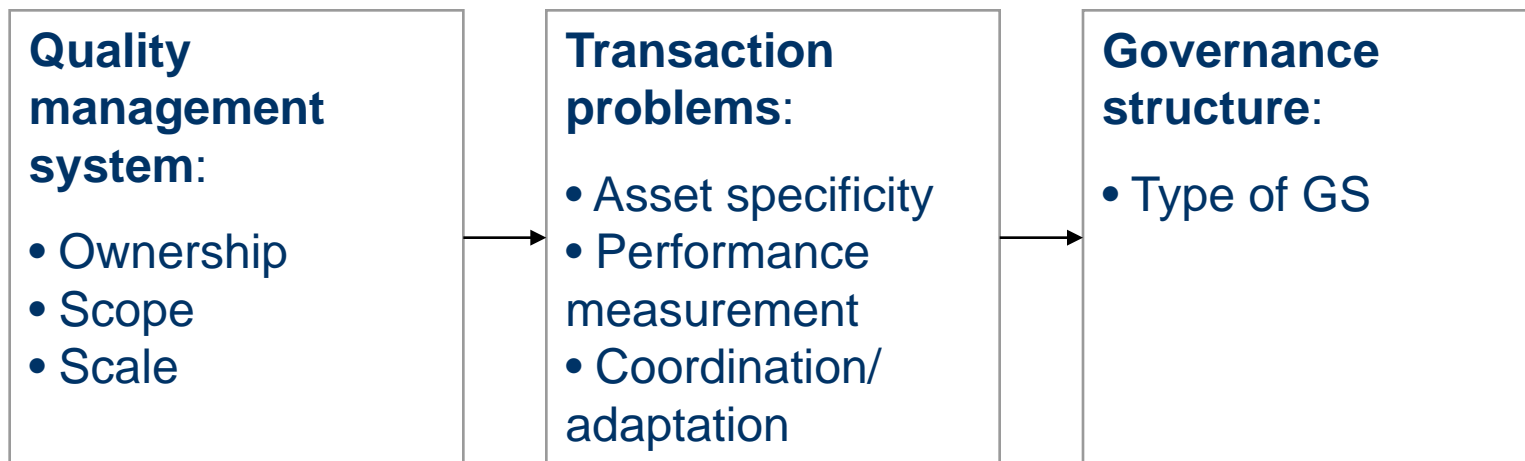
Chain governance structures?

- Defined as the set of relationships to support coordination of transactions within the chain.
- GSs can be placed on a continuum ranging from market to hierarchical relationships:



Relation QMSs and GSs

- Transaction Costs Economics (TCE) to model relationship between QMS and GS.
 - Different (characteristics of) QMSs lead to different types of problems in chain transactions.
 - TCE: Different types of QMSs need to be supported by different types of GSs.

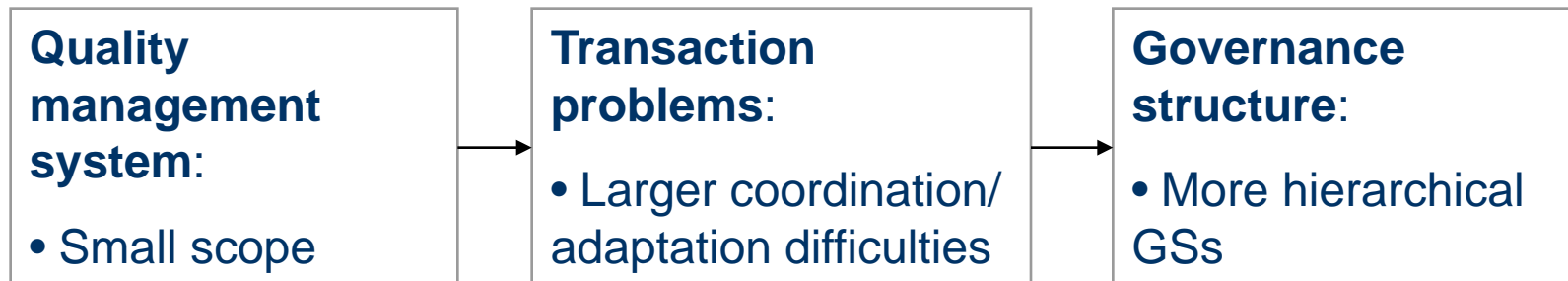


Relation QMSs and GSs

- Many different QMSs co-exist
- Focus of study:
 - QMS that determines quality level of chain

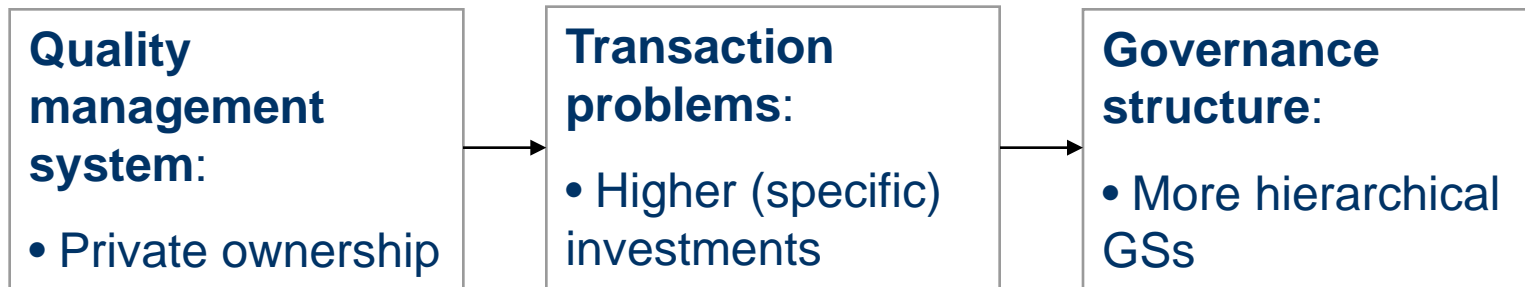
Proposition 1

- Private link-to-link QMS defined on top of baseline public QMS.
- Coordination problems are more severe in chains with link-to-link QMSs than in chains with chain-wide QMSs.
- **Proposition 1: Chains with link-to-link QMSs need, when compared to chains with chain-wide QMSs, more hierarchical GSs (i.e., formal contracts, vertical integration)**



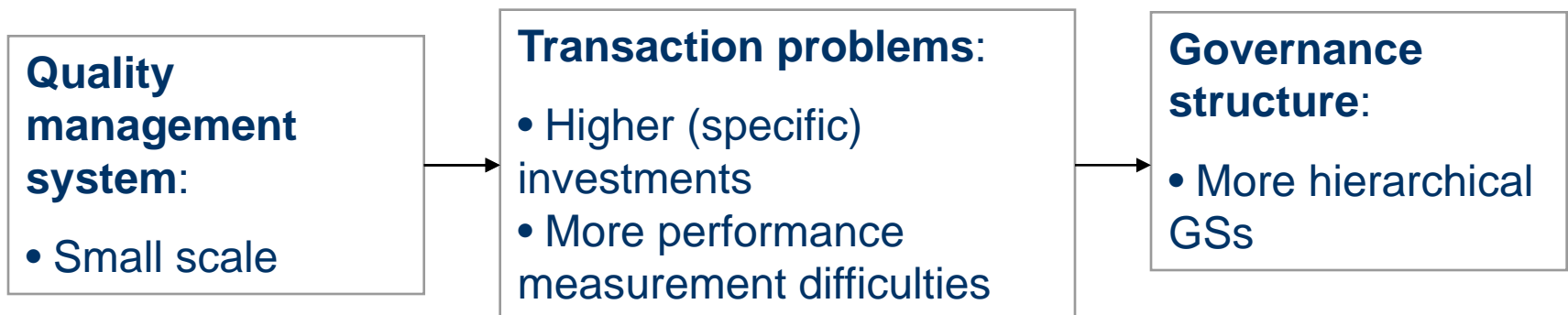
Proposition 2A

- In chains with private QMSs, chain actors make more specific investment in QMSs resources, when compared to public QMSs.
- In public QMSs, chain actors can economize on the cost of monitoring other chain actors, when compared to private QMSs.
- **Proposition 2A: Chains with private chain-wide QMSs need, when compared to chains with public chain-wide QMSs, more hierarchical types of GSs**



Proposition 2B

- In small-scale QMSs, chain actors make more specific investment in QMSs resources, when compared to large-scale QMSs.
- In large-scale QMSs, chain actors can economize on the cost of monitoring other actors, when compared to small-scale QMSs.
- **Proposition 2B: Chains with small-scale private chain-wide QMSs need, when compared to chains with larger-scale private chain-wide QMSs, more hierarchical types of GSs**

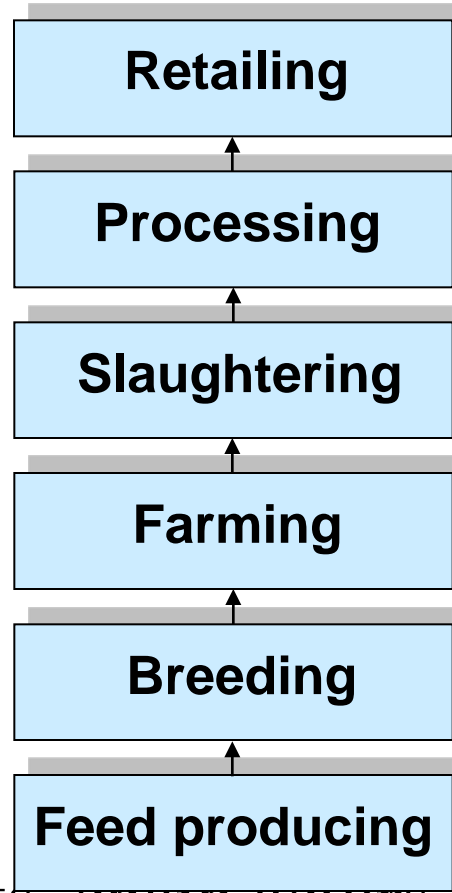


Research design

- Multiple case-study approach to obtain in-depth insights on the types of QMSs and GSs used in EU pork chains.
- Cross-country approach to obtain an valid representation of the EU meat industry.
- Case selection: 8 cases from 5 countries were examined:
 - DE (3)
 - ES (2)
 - GR (1)
 - HU (1)
 - NL (1)

Unit of analyses

- Each case formed a feed-producer to retailer supply chain:



- Data sources: experts, chain actors, documents.

Cases

- Proposition 1:** Chains with link-to-link QMSs need, when compared to chains with chain-wide QMSs, more hierarchical GSs (i.e., formal contracts, vertical integration)
- Proposition 2A:** Chains with private chain-wide QMSs need, when compared to chains with public chain-wide QMSs, more hierarchical types of GSs
- Proposition 2B:** Chains with small-scale private chain-wide QMSs need, when compared to chains with larger-scale private chain-wide QMSs, more hierarchical types of GSs

Fresh pork meat chain – Spain

Proposition 1

IKB and QS chain – NL and DE

Propositions 1, 2A, 2B

Eichenhof chain – DE

Proposition 2B

PDO Iberian cured ham – Spain

Proposition 1, 2A

Results (3): overview

		Ownership of system			
		<i>Public</i>		<i>Private</i>	
		Scope of system		Scope of system	
		<i>Link-to-link</i>	<i>Chain-wide</i>	<i>Link-to-link</i>	<i>Chain-wide</i>
Scale of system	<i>High</i>			Hierarchical types of transactions: - Fresh meat chain (ES) Market types of transactions: - Imported chain (GR)	Market types of transactions: - Fresh meat chain (NL) - Fresh meat chain (DE) Hierarchical types of transactions: - Fresh meat chain (DK)
	<i>Low</i>		Market types of transactions: - Iberian PDO Chain (ES)		Hierarchical types of transactions: - Eichenhof chain (DE) - Gutfleisch chain (DE) - Mangalica chain (HU)

Areas for further research

- Examining additional cases;
 - Focus on cases which can confirm/dispel patterns found
 - Refine patterns
 - Identifying dynamics of system choices.
 - Identifying context-sensitivity of system choices

Thank you!

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