

# Power and relationship quality in Russian agri-food supply chains: a structural equation approach

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## Motivation and research aim

### Motivation

Power can be considered to be one of the strongest and the most influential tools in vertical relationships along the supply chain. The research topic of power relationships has been receiving increasingly more attention lately. In general, literature views consequences of an unequal power distribution in supply chains both, negatively and positively. However, only a few scientific works have studied this issue in the context of supply chain networks in Russian agri-food business.

### Research aim

The aim of our research is to investigate the effect of power on relationship quality in processor-supplier relationships and work out recommendations for practitioners about how to use power as an effective managerial tool. Russian agri-food business serves as an empirical setting for our research.

## Main results and conclusions

### Main results

- Coercive power was the only type of power which had a negative effect on relationship quality. Therefore, its use in supply chains should be avoided.
- Reward and expert power had strong positive effects on relationship quality and, therefore, are more appropriate for managing supply chain relationships.
- Informational, legitimate and referent power types had weak positive effects on relationship quality, which could be attributed to the cultural or country specific matters.

Hypotheses	Constructs	Expected sign	Obtained sign and path coefficients	Supported/ not supported
H1	Coercive power → Relationship quality	-	- 0,210	supported
H2	Reward power → Relationship quality	+	+ 0,220	supported
H3	Expert power → Relationship quality	+	+ 0,302	supported
H4	Informational power → Relationship quality	+	+ 0,023	supported
H5	Legitimate power → Relationship quality	+	+ 0,065	supported
H6	Referent power → Relationship quality	+	+ 0,088	supported

TABLE 1: Information about hypotheses confirmation

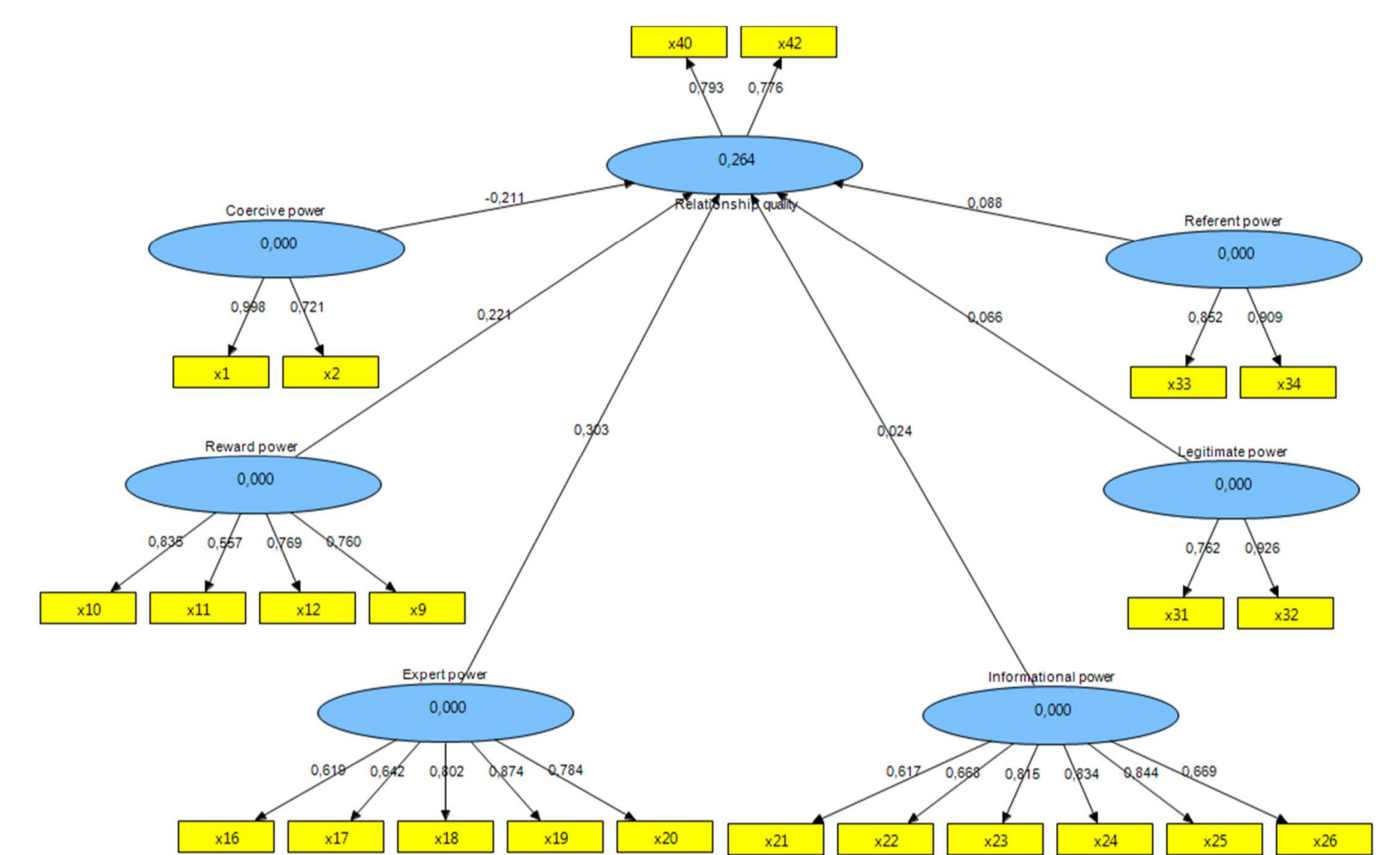


FIGURE 1: Graphical representation of the model in SmartPLS

### Main conclusions

- In order to successfully maintain relationship quality in supply chains the knowledge of different power types is essential. Depending on the type of power, its effect on relationship quality may be completely different.
- Our recommendations can help managers to understand different interactions of these factors, and to design their management practices to successfully manage relationships with suppliers in agri-food supply chains.

## Research hypotheses, data, method

### Research hypotheses

We developed the theoretical model on the role of power for managing conflict in supply chains and formulated the following research hypotheses:

*Within agri-food supply chains in Russia, the perceived use of coercive power will negatively affect relationship quality (H1).*

*Within agri-food supply chains in Russia, the perceived use of non-coercive power (reward, expert, informational, legitimate and referent) will positively affect relationship quality (H2, H3, H4, H5, H6).*

### Data and method

In order to test our research assumptions we conducted 89 telephone interviews with international food processing companies about their

relationships with suppliers in Russia from March till June 2010 (response rate of 8.9%). We contacted the companies of foreign origin with at least 10% of foreign direct investment capital operating in the area of food processing in Russia. In order to test our model, we chose the Partial Least Squares (PLS) technique of Structural Equation Modeling (SEM) using SmartPLS software 2.0.1 .

## Partner, project duration, funding

### Partner

Geisenheim University

### Project duration

Since April 2007

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