Can consummate concentric, conglomerate, constrained, and contractual creatures create value?
An intricate Shakespearean impromptu on romancing the deal

Nicholas C. Georgantzas • Fordham University at Lincoln Center • New York, NY 10023-7471, USA
Andreas Schulte • SM&P Unternehmensberatung GmbH • Bergisch Gladbach 51427, Germany

Abstract

This abstract extends the merger and acquisition (M&A) model of Georgantzas, Schmid, & Walton (1994), showing the dynamic evolution of markets into hierarchies or other transactional exchange governance (TEG) forms resulting from the creation of a climate of trust and its effect on the internalization cost of control. The extended M&A model offsets the shortcomings of transaction cost economics (TCE) and points to the potentially rich contribution of system dynamics to exploring governance structures beyond the ideal-type forms of markets and hierarchies that dominate the TCE literature.

Introduction

In the late 1980s, the merger and acquisition (M&A) activities encouraged by the renewal of corporate portfolios dominated the growth strategies of multibusiness firms in many industries. The same period witnessed the replacement of illiquid M&A commitments with the *entente cordiale* of contract-based governance forms. Yet, both the integrated hierarchy resulting from M&As and the contractual entente cordiale have been criticized for tremendous failure rates, ranging from 60 to 75 percent. A McKinsey study, for example, reports a success rate of 23 percent (Reinton, 1987). While being consummated, both governance forms can yield considerable losses in market share, sharp increases in cost, and a decrease in the value perceived by customers.

In terms of tactics, when a firm moves away from a simple commitment to one product or service line for one market, then several alternative directions become available. Market and product development—through price, distribution, or process technology—provide the necessary leverage for the firm to vertically integrate forward or backward, depending on whether its product technology is upstream or downstream in the industry value chain. The concurrent development of both new markets and new products amounts to a diversification strategy (Ansoff, 1965).

In terms of strategy, the coalignment of tactical moves leading to the concurrent development of new markets and products can characterize each firm's diversification strategy (Georgantzas, 1995). According to Ansoff, a *concentric* or *related* diversification strategy is confined by a common thread that relates past, present, and future markets and products so that management can coordinate the future development of the firm and outside constituents can sense its direction.

Fig. 1
Diversification categories

diversification

concentric

constrained   linked   conglomerate
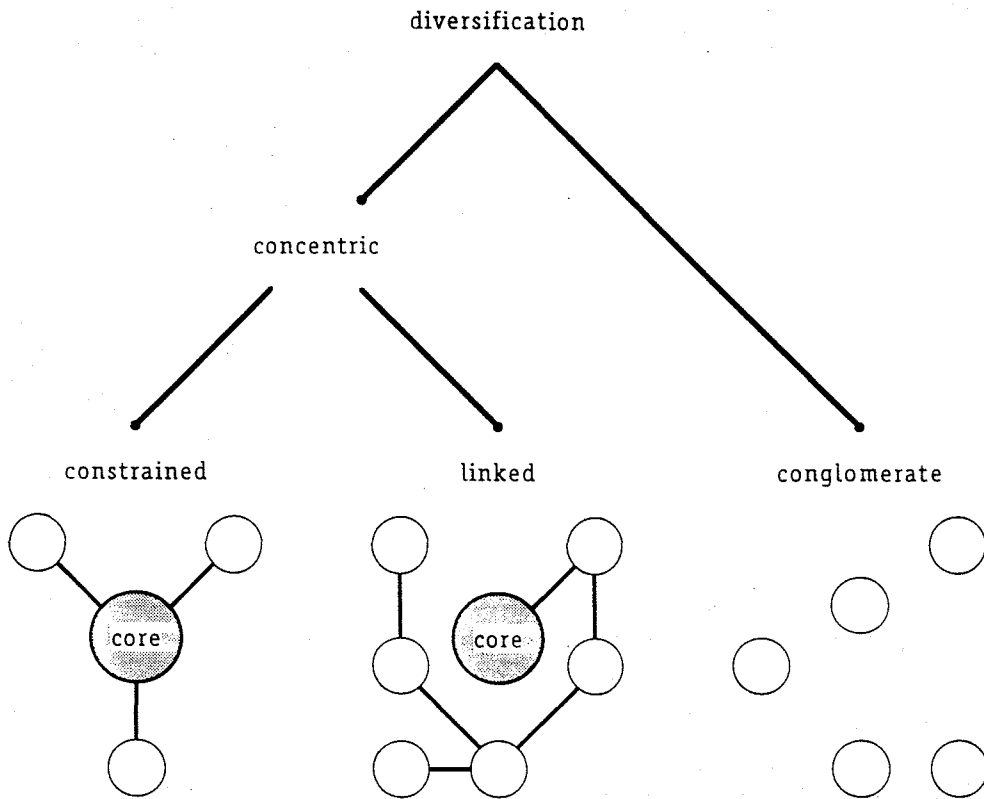
Conversely, a *conglomerate* diversification strategy is not confined by any market- or technology-based core. The *conglomerate firm* results from the coalignment of tactical moves that lead to the concurrent development of new *unrelated* markets and products (Fig. 1).

This extension incorporate the interaction among partners in an M&A or other forms of *entente cordiale* which, once consummated, may transform the partners into a conglomerate or concentric — constrained or linked — entity. Using the interpretation of Radzicki (1993), Petersen (1988), and Strogatz (1988) of the Romeo and Juliet drama as it applies to dyads of firms (Fig. 2 and Fig. 3), the research is restricted to multibusiness firms, where corporate level strategy is distinct from the business level. This distinction is clear when separate of separable businesses have to be managed simultaneously. Although pertinent to the theoretical synergy rationale for diversification and its relationship to risk, the results should also benefit business practice and the performance achieved by diversified firms.

## Conceptual Underpinnings of M&As and TCE

Although, mergers and acquisitions represent expeditious ways to keeping pace with change, particularly when firms seek new assets and competencies (Barney, 1988), pursuing cooperation because of reciprocal dependencies may cause firms to opt for contract-based governance form. The contract-based governance forms that firms use because of reciprocal dependencies include strategic alliances, partnerships, coalitions, franchises, research consortia and network organizations (Ring & Van de Ven, 1992). Inspired by the work of Barney and Ring & Van de Ven, Fig. 4 shows the characteristic dimensions of TEG forms that result under different levels of risk and firm trust.

Egressing from Williamson's (1975) extension of Coase's (Coase, 1952) transaction cost analysis of the firm, economists have formed a branch of organizational economics now known as transaction cost economics (TCE). Coase recognized that markets often deviate from the neoclassical ideal, creating impediments to market exchange. Monopoly, uncertainty or difficulties in price determination can cause market failure. M&A payoff stems from overcoming impediments to market exchange, including the transaction costs of (a) drafting, negotiating, monitoring and enforcing comprehensive claims contracts, and (b) firm-specific knowledge dissemination attributed to opportunism by external contractors.

TCE rests on the conjunction of bounded rationality (Simon, 1957), asset specificity, and opportunism. It explores governance options, such as discrete market contracts, recurrent contracts, relational contracts and hierarchies (Fig. 4). Although TCE operates on the assumption that economy is the best strategy, this does not mean that strategies that distribute risk and deter rivals with clever ploys and postures are unimportant. In the long run, however, the best option is to design efficient strategy and to implement it efficiently (Williamson, 1991). Williamson contends that if strategic management is to unlock the sources of long-term competitive advantage, and if it is going to rely on economic thinking to assist it, then

Fig. 2
The Radzichi-Strogatz interpretation of the Shakespearean dyad Romeo and Juliet

(a) Stock and flow diagram, with parameter matrix **A**

$$\mathbf{A} = \begin{bmatrix} a_{11} & a_{12} \\ a_{21} & a_{22} \end{bmatrix}$$
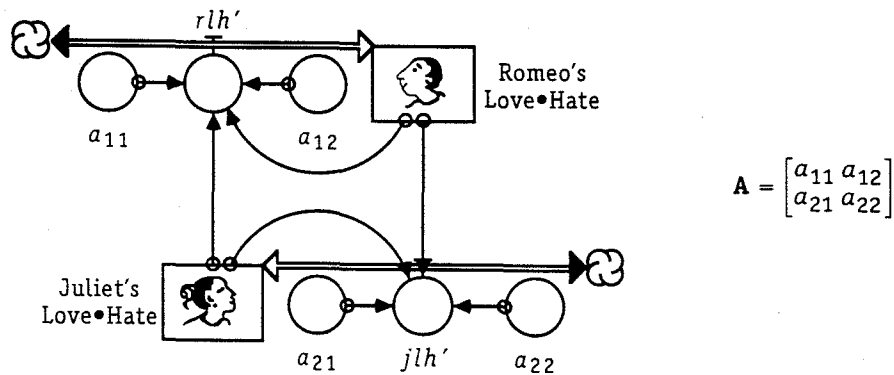
(b) Model equations

Stocks

Romeo's Love•Hate(t)	=	Romeo's Love•Hate(t - dt) + (rlh') · dt	(1)
Initial Romeo's Love•Hate	=	1 {Love•Hate units}	(1.1)
Juliet's Love•Hate(t)	=	Juliet's Love•Hate(t - dt) + (jlh') · dt	(2)
Initial Juliet's Love•Hate	=	1 {Love•Hate units}	(2.1)

Flows

rlh'	=	a_{11} · Romeo's Love•Hate + a_{12} · Juliet's Love•Hate	(1.2)
jlh'	=	a_{21} · Romeo's Love•Hate + a_{22} · Juliet's Love•Hate	(2.2)

Parameters

a_{11}	=	0 {dimensionless fraction}	(1.3)
a_{12}	=	-0.5 {dimensionless fraction}	(1.4)
a_{21}	=	0.5 {dimensionless fraction}	(2.3)
a_{22}	=	0 {dimensionless fraction}	(2.4)

where:

Romeo's Love•Hate(t)	=	Romeo's love•hate for Juliet at time t
Juliet's Love•Hate(t)	=	Juliet's love•hate for Romeo at time t
rlh'	=	change in Romeo's love•hate for Juliet
jlh'	=	change in Juliet's love•hate for Romeo

Fig. 3
Synopsis of the behavior patterns produced by the Radzicki-Strogatz dyadic process model

Character description, parameter matrix **A**, and eigenvalues	Causal-loop diagramming	Romantic behavior patterns

(a) Mr Fickle and his echo

$$\mathbf{A} = \begin{bmatrix} 0 & -0.5 \\ 0.5 & 0 \end{bmatrix}$$

$\lambda_1 = 0.00 + 0.5i$
$\lambda_2 = 0.00 - 0.5i$

Causal loop: rlh' — Romeo's Love•Hate $+$; $((-))$; Juliet's Love•Hate $+$; jlh' $+$; $-$

Romeo (dotted), Juliet (solid). 3.0 / 0.0 / -3.0 ; axis 0, 6, 12, 18, 24. Simultaneous love 1/4 of the time

(b) cautious lover, eager beaver

$$\mathbf{A} = \begin{bmatrix} -0.1 & 0.1 \\ 0.1 & 0.1 \end{bmatrix}$$

$\lambda_1 = 0.1414$
$\lambda_2 = -0.1414$

Causal loop: rlh' — Romeo's Love•Hate; $((-))$ $-$; $((+))$; Juliet's Love•Hate $+$; $((+))$ jlh' $+$; $+$

Romeo (dotted), Juliet (solid). 36 / 18 / 0 ; axis 0, 6, 12, 18, 24

(c) cautious lover, cognitive dissonant

$$\mathbf{A} = \begin{bmatrix} -0.1 & 0.5 \\ -0.5 & -0.1 \end{bmatrix}$$

$\lambda_1 = -0.1 + 0.5i$
$\lambda_2 = -0.1 - 0.5i$

Causal loop: $+$ rlh' $((-))$ Romeo's Love•Hate $+$; $-$; $((-))$ $-$; Juliet's Love•Hate $((-))$ jlh' $-$; $+$

Romeo (dotted), Juliet (solid). 3.0 / 0.0 / -3.0 ; axis 0, 6, 12, 18, 24

(d) eager beaver, Cyrano de Bergerac

$$\mathbf{A} = \begin{bmatrix} 0.1 & 0.5 \\ -0.5 & 0.1 \end{bmatrix}$$

$\lambda_1 = 0.1 + 0.5i$
$\lambda_2 = 0.1 - 0.5i$

Causal loop: $+$ rlh' $((+))$ Romeo's Love•Hate $+$; $+$; $((-))$; Juliet's Love•Hate $+$; $((+))$ jlh' $-$; $+$

Romeo (dotted), Juliet (solid). 15.0 / 0.0 / -15.0 ; axis 0, 6, 12, 18, 24

t (months, with $dt = 0.25$)

it ought not to rely so uncritically on economic perspectives that appeal to market power (strategies that restrict product competition) as the source of competitive advantage. Rather, the field should develop more of an efficiency perspective—that being good at what you do and avoiding waste is more important than exploiting switching costs or playing oligopoly games.

Porter (1991) finds the connection between resources and activities fundamental because resources represent an inherently intermediate position in the cross-sectional view of the chain of causality. Resources arise either from performing activities, acquiring them from outside, or some combination of the two. Both reflect prior managerial choices. Performing an activity or group of linked activities over time creates competencies and routines that accumulate. It also can create external assets. A firm's reputation, for example, could be a function of the history of its marketing and customer service activities. Assets and technology depreciate, however, unless reinvigorated though organizational, i.e., technological (or technical) and administrative, innovation (Georgantzas & Shapiro, 1993). Depreciation varies widely across different assets and technology, but can be rapid. Firms accumulate differing resources because of differing strategies and configuration of activities. Resources and activities are, in a sense, dual of each other.

Model Structure and Behavior

Figure 5 shows the TEG form and the firm trust sectors, respectively. In the TEG form sector—a modified version of the Georgantzas, Schmid, & Walton (1994) M&A model—technological innovation not only builds firm-specific knowledge but also determines the level of risk or uncertainty under which TEG forms other than the sovereign market might be considered by firm dyads. The difference between perceived payoff and internalization cost is the net payoff—right in the middle of the TEG sector—which determines the level of TEG form activity. The climate of trust that a firm dyad builds in the firm trust sector—a modified version of the Radzicki-Strogatz dyadic process model (Fig. 2)—determines the cost of control and thereby the internalization cost, i.e., the price of an *entente cordiale* or a managerial hierarchy that a firm dyad must pay to *internalize* (in a broad sense of the term) a sovereign external market. The formulation of Fig. 5 not only is consistent with the TCE framework but encompasses a view radically different from that of the firm as a bundle of contracts that serves to allocate efficiently property rights (Kogut & Zander, 1992).

Figure 6 shows the synthetic model's behavior. The four computed scenarios of mutual trust that cause the different payoff and TEG form behavior patterns of Fig. 6 resemble those produced by the Radzicki-Strogatz dyadic process model (Fig. 3). These results not only confirm the observations of Barney and Ring & Van de Ven but also indicate that, within a high climate of trust, organizations can become "communities in which individual and social expertise is transformed into economically useful products and services" (Kogut & Zander, 1992, p. 384)

Fig. 4
Characteristic dimensions of transactional exchange governance forms
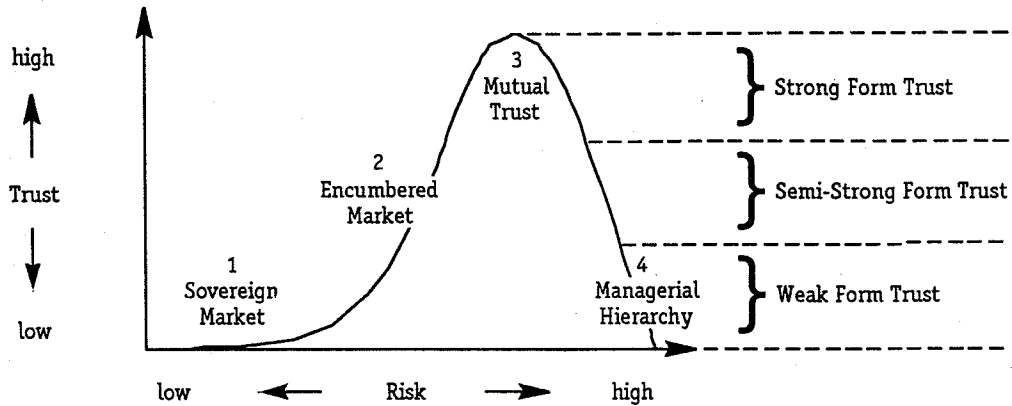
Transactional exchange governance form

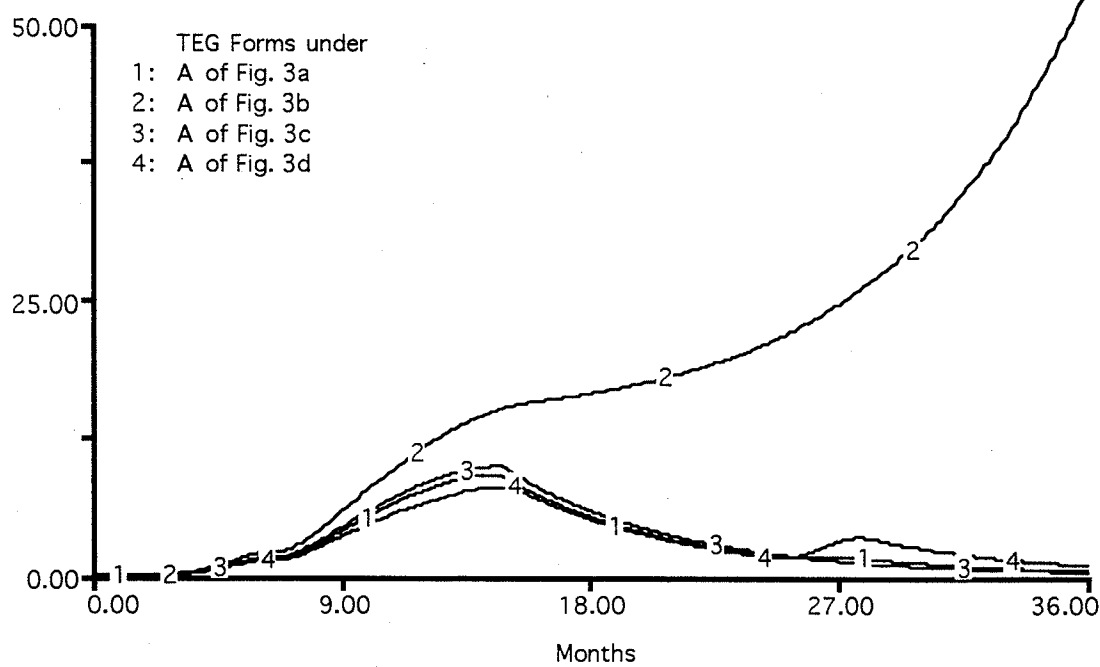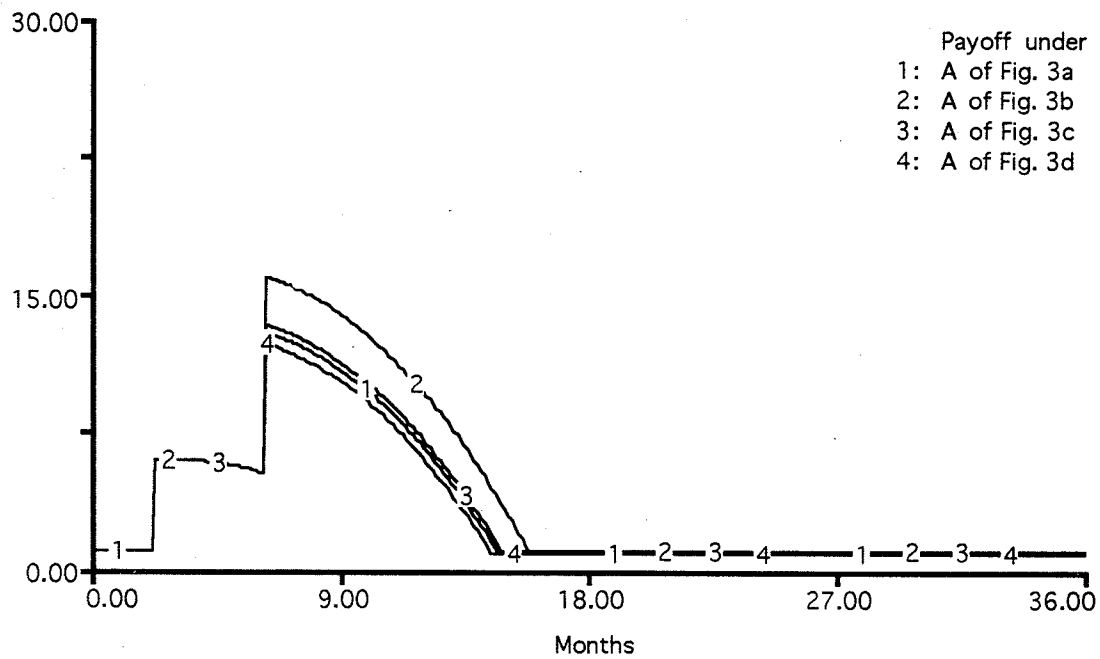| Dimension	1 Sovereign Market	2 Encumbered Market	3 Mutual Trust	4 Managerial Hierarchy
1 Asset specificity	Nonspecific	Mixed	Mixed & idiosyncratic	Idiosyncratic
2 Contract	Classical contract	Recurrent contract	Relational contract	Employment contract
3 Dispute resolution	External market norms & societal legal system	Equity/reciprocity norms & societal legal system	Endogenously designed based on trust	Internally by fiat & formal authority
4 Duration of exchange	Coincident in time	Short term	Medium term	Long term
5 Nature of exchange	One-time production & property rights transfer	Episodic production & property rights transfer	Sustained production & property rights transfer	On-going production & rationing of wealth
6 Relationship	Limited & nonunique of free & equal parties	Unlimited & unique of free & equal parties	Extensive, unique & socially embedded	Command & obedience of legally unequal parties
7 Terms & conditions	Clear & complete, sharp in by agreement & sharp out by pay & performance	Certain & complete, contingent on prior performance, with planned safeguards	Uncertain, open & incomplete, with mutual learning, safeguards & conflict resolution	Authority structure, where superior hires & subordinate obeys or leaves the position

Fig. 5
Transactional exchange
governance (TEG) forms
and firm trust model sectors
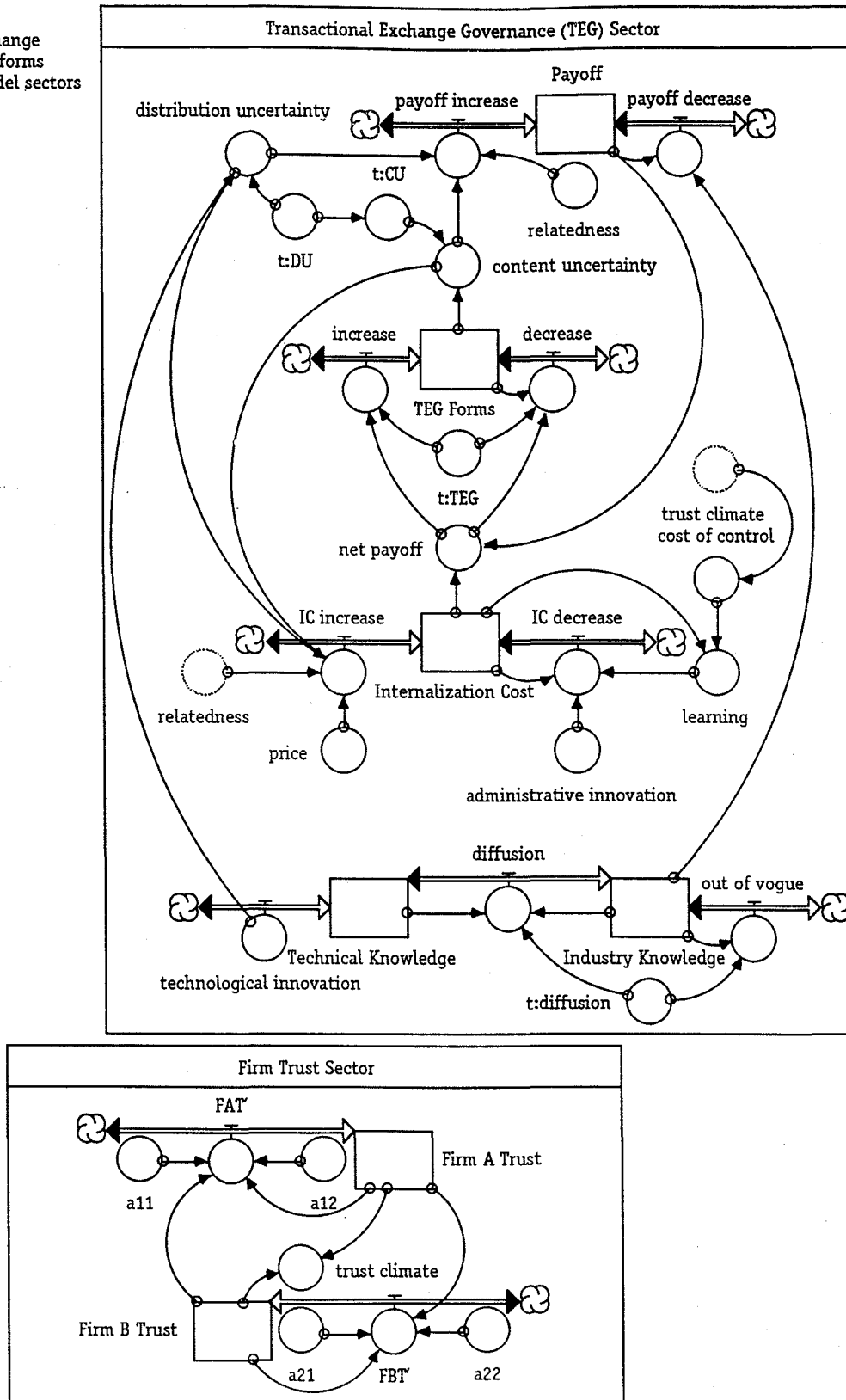
Fig. 6
Simulation results of perceived payoff and resulting
transactional exchange governance (TEG) forms
under four scenarios of mutual trust

Payoff under
1: A of Fig. 3a
2: A of Fig. 3b
3: A of Fig. 3c
4: A of Fig. 3d

TEG Forms under
1: A of Fig. 3a
2: A of Fig. 3b
3: A of Fig. 3c
4: A of Fig. 3d

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