RESOURCE DEPENDENCE DYNAMICS:

PARTNER REACTIONS TO MERGERS[*]

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Resource Dependence Dynamics: Partner Reactions to Mergers

Abstract

Research on resource dependence typically takes a static view in which actions and outcomes are determined structurally, but not as responses to the actions of the counterparty in an exchange relation. By contrast, this study addresses a question of power dynamics by examining whether mergers of organizations trigger responses from their common exchange partners. We predict that common exchange partners respond by withdrawing from the relationship and that their responses vary with the availability of alternatives, the value of the relationship, and the relationship history. Using data on advertising agencies, we show that mergers of agencies do trigger reactions from their common clients, and the reactions differ with agency and client characteristics. Extending existing theory and evidence, our results suggest that firms respond to the dynamics of exchange relationships and not only to their structure.

The constraints imposed by inter-organizational power relations have long been seen as potential explanations of a wide range of organizational behaviors (Baker 1990, Casciaro and Piskorski 2005, Mizruchi and Yoo 2002, Pfeffer and Salancik 1978). Specifically, resource exchanges that are important for a focal organization and controlled by concentrated counterparties present a problem of power imbalance (Pfeffer 1972a, 1972b). Resource dependence theory has usually been interpreted to predict that weaker actors in a power relation will seek to make the relation more balanced through actions such as seeking alternative partners or forming coalitions (Pfeffer and Salancik, 1978, see also Emerson, 1962). However, this conventional interpretation of the theory is incomplete because it omits the possibility that such balancing operations may elicit reactions from actors' counterparties. As weaker actors seek to alter unbalanced exchanges in their favor, they affect the power of their counterparty in the exchange unfavorably. This can trigger responses from the counterparty, which derives benefits from being the stronger side of an unbalanced relation. Thus, what elicits change in exchange relationships is not only the structural balance of power, as has been emphasized earlier, but also the actions taken by each party in the relation.

In contrast to past work, this study adopts a dynamic view of how exchange relations evolve through actions and responses. This dynamic view has not seen theoretical development and empirical testing and is a key opportunity for investigation because counterparties may not respond equally to balancing operations. Indeed, a balancing operation by one actor can lead to a range of responses and power shifts in its exchange relations. Furthermore, an actor may alter the exchange relation for reasons unrelated to power, and yet produce a more favorable power structure for itself as a side effect. This too can trigger a response from its counterparty. Thus, while some changes to exchange relations may in fact be balancing operations, predictions derived from of a dynamic theory of power dependence relations apply to a broader range of actions with various motives yet altering the pre-existing power balance. Hence, actions that restructure exchange relations, such as mergers, are inherently risky because counterparties may view them as producing a less favorable power balance.

In particular, investigation of the dynamics of exchange relations provides an opportunity to examine two features of relations that would be difficult to study through static analysis. First, not all actions in resource exchanges are taken by the weaker party to create a more even balance of power. Because greater power is advantageous regardless of the initial power balance, the stronger party may also take actions to increase its power, either without provocation or as a response to actions taken by a weaker party. Prior studies of inter-organizational networks have shown that weaker actors rebalance relationships through avoidance of very powerful actors (Katila *et al.* 2008, Rowley *et al.* 2005), addition of network ties around powerful actors (Bae and Gargiulo 2004, Gargiulo 1993), and coalition formation and mergers (Casciaro and Piskorski 2005, Finkelstein 1997, Pfeffer 1972a, 1972b, Simpson and Macy 2004). Yet these studies do not examine the countermoves in the power dynamic.

Second, not only the structure surrounding an exchange relation but also characteristics of the relation and the actors in the relation affect the likelihood that a counterparty will respond to a change in the power relationship (Emerson 1962, Pfeffer and Salancik 1978). For instance, a relation with a high-status actor has greater value and hence fewer comparable alternatives (Podolny 1993, 2001), increasing inertia; one offering more valuable resources to exchange partners is more sought-after and hence easier to change. Thus, counterparty responses are determined not only by the changes to the exchange network structure, but also by actor and relationship characteristics that affect the value of the relation to each party. Because responses are overlooked in research on exchange relations, work that takes the additional step of examining the effect of actor or relationship characteristics on responses is also missing.

As a result of these considerations, changing the power in exchange relations is a more dynamic process than what current theory depicts. It includes moves and countermoves and is sufficiently complex that boundedly rational managers are unlikely to fully anticipate the consequences of their actions. Hence, managers acting against powerful actors may trigger counter-reactions that reverse their gains, and managers seeking to alter an exchange relation for efficiency reasons may set off power dynamics that

they have not anticipated. A full investigation of these complexities is beyond the scope of the current investigation, but we will start unpacking them by examining mergers between advertising agencies with common clients, and the clients' responses to the mergers. While these mergers may be motivated for various reasons, the common clients may perceive the mergers as coalition building, a type of balancing operation, and in turn they may respond by withdrawing from the relationship.

In this setting, power refers to actors' abilities "to determine the nature of exchange" (Cook 1977: 66) in terms of the ratio of resources given to resources received; for example when a "powerful client compels an advertising firm to provide additional services for the same fee" (Baker *et al.* 1998: 153). Historically, advertising agencies have been less powerful actors in their market relations than their clients (Baker *et al.* 1998) and have been forced to seek client relations through tournaments in which the prospective client invites a set of advertising agencies to 'pitch' for the account. The agencies invest significant resources preparing pitches, and post-selection they are often pressured to reduce fees, consistent with the power imbalance. The power balance between advertising agencies and their clients shifts in the favor of advertising agencies when their status is increased through creativity awards and when they merge with other advertising firms, the focus of this study. Although post-merger agencies usually operate independently within the firm (von Nordenflycht 2011), the client is less able to play the two different agencies against each other in the price domain after they have merged. Thus, observing the effect of mergers among advertising agencies on the retention of clients tied to both firms provides an opportunity to investigate countermoves by stronger actors (clients) in response to weaker actors (agencies). Furthermore, a theoretical and empirical approach that recognizes heterogeneity in the ability to respond to mergers becomes a valuable addition to the theory because it can help predict when mergers will be met by a reduction of exchange.

Power Dynamics and Exchange Reduction

Examination of counterparty responses to mergers leads to predictions that extend the static predictions of resource dependence theory. Resource dependence theory predicts that actors in exchange

relations make balancing operations to improve disadvantageous positions in their relations. It defines a relation as disadvantageous if the actor values the exchange with the other actor greatly and has difficulty establishing a similar exchange with an alternative actor (Pfeffer and Salancik 1978). The theory considers the following balancing actions by an actor A against its exchange partner B (Emerson 1962, Pfeffer and Salancik 1978): i) reduction of importance for A of the resource exchange in the A-B relation, ii) creation of alternative counterparties for A in the resource exchange, iii) increasing the importance of the resource exchange for B, i.e., status giving, and iv) creating a coalition of actors in resource exchange with B.

The pioneering studies testing the theory were cross-sectional studies of status-giving through board representation (Pfeffer 1972b) and internalization of the resource exchange by acquisitions to obtain the necessary resource (Pfeffer 1972a, Pfeffer and Nowak 1976). Later work confirmed that organizations develop ties to exchange partners on whom they are dependent (Baker 1990, Boeker and Goodstein 1991, Burt 1980, Casciaro and Piskorski 2005, but see Finkelstein 1997), except when there are legal barriers against such ties (Zajac 1988). Dependent actors also develop alternatives outside their current exchange relation (Baker 1990, Heide and John 1988), except when personal ties between the firms exist (Keister 1999).

In particular, and as observed empirically by Pfeffer (1972a), actors seeking to increase their relative power with a partner join together in coalitions or mergers. Thus if two agencies merge, by definition, their shared clients have a reduction in alternatives, and this holds true regardless of the motive for the merger. If this balancing operation is successful, the clients are not able to make a counterbalancing operation and will have to maintain the exchange with the focal actor, but at potentially worse terms of trade. Thus, static resource dependence theory implies that we should observe an increased dependence on the now-merged agencies, but overlooks the potential for a countermove to nullify this change.

By contrast, a dynamic view of resource dependence predicts that coalitions can be met by

counterbalancing operations because the actors making the coalition have not anticipated the motivation and capability of their counterparty to respond. Managers are boundedly rational and oversee many more relations and processes than they can focus on continuously. Relations may be continually monitored, intermittently monitored, or not monitored at all; depending on their importance and the difficulty they pose for the organization. However, a change to the power balance of the exchange relation by one actor directs attention to that relationship. For example, when a client does not pay continuous attention to its advertising agencies, such a change can be an attention-getting event. Regardless of the previous power balance, the client is likely to notice either the balancing operation itself or the deterioration in bargaining position that results from it. If the client perceives the change in power balance as significant, it has sufficient motivation to respond with a counterbalancing operation. Moreover, attention provides an important explanation for why a more powerful actor in a relationship would seek to return the relationship to its earlier power imbalance, despite still being the advantaged party in the relation after the merger. Even when the action taken by the weaker party does not reverse the power balance, it brings the attention of the stronger party to the relation. The stronger party will be interested in restoring the earlier (im)balance, and hence chooses a counterbalancing operation.[1]

This argument implies that mergers by advertising agencies make common clients likely to respond. This can happen even if the merger was actually motivated by some other objective than power, such as when advertising agencies merge to obtain efficiencies yet their common clients still perceive the action as seeking power. Thus, when a client sees its power erode due to a merger of its advertising agencies, instead of remaining in the relationship it may respond by withdrawing from the exchange relation or developing new alternatives as a counterweight to the attempt to increase its dependence. This prediction is a central contribution of a dynamic view of resource dependence because it develops the implications beyond the initial balancing operation. It is consequential because a sufficiently powerful

[1] This theoretical extension does not contradict the earlier theory that balancing operations are initiated by the weaker party in an exchange—it adds one more reason for change in exchange relations, but in the form of countermoves by powerful actors who seek to recover their advantage.

client may be able to respond so strongly that the agency that made the initial move ends up worse off. Although this is a general prediction, it is consistent with earlier observations on how clients strategically drop or switch advertising agencies (Baker *et al.* 1998). These tactics pressure advertising firms to provide better quality services, additional services, and to put the best "creatives" on the account. For example, one client executive described the firm's response to mergers:

> "If two of our advertising agencies merged, we would drop one of the accounts. We prefer to have our business spread across at least two agencies. This keeps them competitive. We can play them off one another, for example when allocating budget. It's not an optimal scenario to have one agency. With multiple agencies we can manage the [advertising agencies'] creatives better. Sometimes as a client our demands are not met. The creative thinks differently and doesn't agree. We want to be able to send a message to the ad firm that our demands need to be met."[2]

In contrast to static resource dependence theory in which coalitions are viewed as beneficial to the firms in them, a dynamic view of exchange relations predicts that mergers of advertising agencies with common clients are likely to be met by withdrawal from exchange by the agencies' common clients. Mergers are generally disruptive for firms and their exchange relations, as they can lead to an exodus of talent, lower customer satisfaction, and reassessment of the value provided by the firm (Haspeslagh and Jemison 1991, Paruchuri *et al.* 2006), which in turn may lead to a general reduction of exchange by clients. In addition, concerns over power loss imply that post-merger client exchange reduction is especially likely among firms with pre-existing relations with both parties of the merger, so clients with ties to both agencies pre-merger will be even more likely to reduce exchange with the agency than clients with ties to only one agency pre-merger. Accordingly, the hypothesis is:

> *Hypothesis 1: Clients with ties to both agencies pre-merger are more likely than clients with ties to one agency pre-merger to reduce exchange with the merged agencies.*

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[2] The quotes are from personal interviews conducted in 2011.

Moderating Effects

According to resource dependence theory, when an actor seeks to balance a power relation, it can do so through finding alternative sources of the resources or through a reduction in the importance of these resources (Pfeffer and Salancik 1978). These predictions refer to a static network with no counterbalancing operations. Nevertheless, the theoretical logic can be extended in order to make predictions on moderator effects that are consistent with resource dependence reasoning, yet consider the dynamic effects of resource dependence. That is, an exchange partner's propensity to make counterbalancing operations is likely to vary with characteristics of the actors involved.

Following this framework, factors that affect either the availability of alternatives or the importance of resources should modify the predictions for counterbalancing operations. However, while resource dependence theory originally considered only the current structure of relations, later work added the history of each relation as an additional influence particularly relevant to our outcome of relation dissolution (Larson 1992, Levinthal and Fichman 1988, Seabright *et al.* 1992). In a dynamic view, relations become more deeply invested and normatively controlled as they age, and this affects dissolutions. Thus, we consider availability of alternatives, importance of resource, and relationship history as the three moderators of counterbalancing operations and derive four novel predictions from this framework.

Availability of Alternatives for Clients

Exchange partners with a greater number of alternative partners pre-coalition will have more alternatives post-coalition and will find post-coalition movement easier (Baker 1990). Hence, counterbalancing by shifting exchange to alternative partners is more worth the benefit in power gain. What provides an exchange partner with alternatives, in turn, is determined by the availability of potential partners that find the resources it provides valuable. These resources can be tangibles such as goods or money, or they can be intangibles such as status. The effect of tangible resources is a well-established part of the theory and evidence (e.g., Burt 1980, Pfeffer 1972a), and the largest firms have been found to be

the most valuable exchange partners (Stuart 2000). The effect of intangible resources is best illustrated by research on the effects of status on affiliations among firms. Status makes an actor a more attractive exchange partner because transactions with a high-status actor leads to status transfer to the focal actor, which in turn serves as a reference that increases business opportunities (Podolny 1993, 2001). Higher-status actors obtain better terms of trade (Ahuja *et al.* 2009, Benjamin and Podolny 1999, Castellucci and Ertug 2010) and are better able to initiate new exchange relations than lower-status actors (Shipilov *et al.* 2011).

In the advertising industry, clients with higher tangible and intangible resource endowments are sought after by advertising agencies and tend to have ties to more advertising agencies. The revenue an advertising agency receives from each client account is usually a percentage of the client's advertising expenditure; so higher advertising expenditures translate directly into higher revenues for the agency. Furthermore, winning a client with large advertising expenditures represents a "coming of age" for an advertising agency (Khaire 2010). It signals the quality of the advertising agency's work and leads to invitations to pitch for other large clients' accounts (see Parpis 2004 for an example). Such clients tend to have more alternatives, and as noted by Baker and colleagues (1998: 155), "when clients face an abundance of alternative suppliers, they are more likely to switch [advertising agencies]." Thus, in addition to the main effect prediction that clients with ties to both advertising agencies pre-merger will be more likely to reduce the exchange with the merged agencies than clients with single ties to either agency, we expect that the likelihood of reducing exchange increases further when these common clients also have high resource endowments. Formally:

Hypothesis 2: The likelihood of exchange reduction with the merged agencies by clients with ties to both agencies pre-merger increases when the clients have high resource endowments.

For Hypothesis 2 it is worthwhile to keep in mind that alternative predictions exist. As noted earlier, clients are motivated to make counterbalancing moves if they find that their power advantage has decreased significantly. Yet, even when a client has more available alternative exchange partners, two

other factors also correlated with size could limit its response to the merger. First, for a large client, its greater dependence on the agency could be offset by the agency's dependence on it because of the high revenue that it provides. Second, large clients may also have complex task requirements, and the agency may choose to grow through merger or organic growth in order to serve those task requirements. Firm growth as a result of client needs and internal career systems is important in the legal profession, suggesting the potential for the same process in advertising (Galanter and Palay 1991). In both cases the client will view the merger as unthreatening, and may not reduce exchange. These alternative accounts of post-merger client behavior can to some extent be measured through control variables such as the agency growth rate, but are still potential disturbances in the empirical work. At the same time, these influences can be seen as consistent with resource dependence concerns. Client size is a driver of value through exchange volume or complexity, and increasing the value of the exchange to the merged agencies (i.e., increasing the importance of the exchange for B) represents an alternative balancing operation to withdrawal. We give priority to withdrawal in the hypothesis because it matches the ease of exit argument, but the analysis tests the balance of these effects.

Importance of Agencies

Conversely, the status of the agencies also matters because clients use it as a proxy for the value of the creative resources agencies can provide. For the client, a high status agency is valuable because status is a proxy for quality when there is uncertainty regarding the value of the outputs it produces, so high status partners are perceived to be higher quality firms (Podolny 1993) and hence are less likely to lose their exchange relationships. Indeed, a study of the advertising industry showed that clients were less likely to dissolve relationships to high status agencies (Baker *et al.* 1998). Clients value advertising firm status because it reduces uncertainty about their actual creativity, quality, and effect of advertising on sales (Baker *et al.*1998: 158). Thus, we expect status to negatively moderate the positive effect of mergers on relationship dissolution. This argument is not about the change in status-giving due to the merger, because the change for the client is zero: unless it changes agencies, it is still associated with the same

status agencies that it had earlier. Instead, higher status of the merging agencies implies that the agencies have more valuable resources, which in turn complicates the client's attempts to counteract their balancing operation by replacing them with other agencies because there may be few agencies available that have similar-value resources.

In the advertising industry, status is reflected in the number of industry awards an agency has won (Von Nordenflycht 2007). A client manager mentioned the role of awards in making advertising agencies more valuable to the client: "This changes if they have won awards. Then we may still disagree, but we are more willing to go along with the advice. They have more credibility. We would be less likely to drop the account." In advertising, high-status agencies provide especially valuable resources that are difficult to replace with equally good alternatives, so the common client becomes less likely to respond. Again, although clients that have ties to both advertising agencies pre-merger will be more likely to reduce the exchange with the merged agencies than clients with single ties to either agency, the likelihood of reducing exchange will decrease when the merged agencies are high status. Formally:

Hypothesis 3: The likelihood of exchange reduction with the merged agencies by clients with ties to both agencies pre-merger decreases when the agencies have high status.

The previous arguments cover the case of both agencies having high status, but many mergers involve agencies that have unequal status. Unequal status is likely to cause problems in how a client views the importance of the merged agencies, and will represent a categorization problem. Whereas the client had earlier interacted with two agencies that were easy to place in the status order, one higher and one lower, and may have assigned accounts to those agencies that took into consideration the greater expectations for quality and creativity in the higher-status agency and the higher costs, the client now finds that the post-merger agency has both low and high status components. Such classification problems cause devaluation of status for horizontal distinctions such as industry because the identity of the organization becomes less clear (Zuckerman 1999). The potential for status devaluation is even greater for the vertical distinctions of status and quality expectations because it is no longer clear that the

high-status part of the agency will maintain the full attention of its best employees or that the low-status part of the agency will maintain its low price. Thus, we expect mergers of unequal-status agencies to be problematic and to result in possible exchange reduction. The status devaluation problem is especially salient for clients with ties to both agencies because these clients experience a reduction in choices, including lower ability to selectively place accounts to high and low status agencies. Formally:

Hypothesis 4: The likelihood of exchange reduction with the merged agencies by clients with ties to both agencies pre-merger increases when the agencies have unequal status.

Relationship History

In addition to actor characteristics, the history of the exchange relationship is important for predictions regarding counterbalancing operations. As the depth of interaction increases over time, exchange partners adopt a relational orientation leading them to be less instrumental or calculative (Larson 1992, Mizruchi 1989, Uzzi 1997). Longer lasting relations thus have greater embeddedness, which increases stability (Gulati 1995, Uzzi 1997) and task interdependence (Baker 1990) and thereby the likelihood of repeated relationship formation. A straightforward extension of these arguments to a dynamic theory of resource dependence suggests that long-standing partners are less likely to respond to a power shift with a counterbalancing operation. The relational orientation, greater embeddedness, and higher task interdependence that characterize long-standing relationships suggest that clients in relations with the merging agencies should be less likely to reduce exchange post-merger.

At the same time, there are reasons to be cautious about the prediction that longer-lasting relations would be less likely to dissolve. First, theory and evidence on duration effects considers only stable relations rather than relations that are exposed to unilateral and disruptive actions such as mergers. The merger brings attention to the relation, which may have terms of trade that are not fully adapted to the current power (im)balance. Recognizing this, the client may act to return the relation to its pre-merger balance. Second, task interdependence varies across relationships, and hence the ease of replacing an exchange partner varies as well. Indeed, although there is evidence that longer-term relations are more

stable than recent ones (Lunnan and Haugland 2008), this effect is short-lived even in the presence of task interdependence (Greve, Baum, Mitsuhashi, and Rowley 2010). If task interdependence is weak, the prediction hinges on the social argument that embedded relations are inertial because managers do not attend to opportunities for making changes in their favor as keenly as they would with a new relationship. Third, the social argument for inertia applies only to embedded relations in which no exchange party makes a unilateral change. If agencies in embedded relations with the same client do merge, even if the merger brings the dyad into a more equitable power balance, the client may view the move as coercive, violating an implicit understanding of acceptable behavior in embedded relations (Gundlach and Cadotte 1994). For these reasons, clients in long-standing relations with both of the merging agencies could be more, not less, likely to reduce exchange post-merger than clients with ties to only a single agency.

There is empirical evidence consistent with this counter prediction. Piskorski and Casciaro (2006) found that firms in embedded relationships gained more value from exchange except when they made attempts to increase their relative power. Although they did not observe exchange frequencies, this result is consistent with reductions in exchange frequency following a change in the power balance in an exchange relation brought about by the merger. There is also qualitative evidence on negative reactions when a firm generates alternatives to the current exchange partners, which is another action that changes a relation. Uzzi (1997: 45), describing an embedded exchange relationship, quoted a CEO as saying "If he switches to a new contractor then I won't work with that manufacturer again." This quote is from the better-dress apparel industry in New York, a context in which long-lasting relations build both collaboration skills and trust, and hence shows a reaction against changes in exchange relations that seems contrary to immediate exchange benefits. In the current study, a client may perceive the merger of the agencies as breaking the trust underpinning the embeddedness, giving the client reasons to improve its power position either by a move to return the balance to its pre-merger level or by leaving the relation outright. Consistent with these remarks, an advertising firm executive explained why some existing clients might object to mergers,

"When you talk about integration, there are a number of issues that come into play quite quickly. First of all there is the fact that clients are understandably very resistant to feeling that someone else is playing God with their business."

Thus, the theory and evidence suggest contrasting effects of relation duration. The existing task interdependence associated with long duration relationships makes client reduction of exchange after a merger less likely, just as client reduction of exchange is also less likely when there are no changes. The concerns about loss of trust, in contrast, suggest that actions that change the structure of the exchange relation produce exit of the counterparty who does not want a change in the power balance. A merger of two agencies to which a client has ties can trigger both of these effects, and their strength relative to each other is not known. Therefore, we propose two competing hypotheses:

Hypothesis 5: The likelihood of exchange reduction with the merged agencies by clients with ties to both agencies pre-merger a) decreases when relationship duration is high (due to task interdependence) or b) increases when relationship duration is high (due to a loss of trust).

Methodology

Advertising industry

We test our hypotheses on a sample of client relationships of advertising firms that were involved in mergers. Advertising firms work with their clients to analyze the client's marketing problem, find advertising solutions, devise an advertising campaign, and implement the campaign. Advertising includes print and television advertising, direct marketing, promotional sales, public relations, market research, and event marketing. For example, an advertising firm's services could include developing the creative work for a client's brand and/or optimizing the mix of print, television and internet advertising space to buy for the brand, as well as direct marketing campaigns or interactive advertising/website development. Advertising firms may be specialty agencies or full service agencies, and they can range from standalone independent agencies such as Wieden & Kennedy (creator of Nike's tag line 'just do it') to multi-agency firms such as WPP, parent company to several agencies including J. Walter Thompson,

Ogilvy & Mather, and Young & Rubicam.

In general, advertising firms are low power actors in their exchanges with clients. Typically, exchange is initiated when the client invites a set of advertising firms to 'pitch' for an account. Advertising firms regularly spend thousands of dollars (and occasionally hundreds of thousands) 'out-of-pocket' preparing the pitch. Such unpaid pre-contract expenses are typical of relations in which a powerful actor can make less powerful actors compete for access to its resources. A client firm can have multiple accounts, usually corresponding to its brands or regions, and these may be scattered across multiple advertising firms or consolidated into one or a few advertising firms. Thus, a relationship between a client and an advertising firm can be comprised of one or many accounts, and the client may add or drop accounts over the course of the relationship, thus increasing or decreasing the exchange relationship with the advertising firm. Most often, clients pay advertising firms for their services as a commission of billings/advertising expenditures on the account.

An advertising firm will sometimes merge with another advertising firm already serving one of its clients. Because advertising agencies already have established brands and client portfolios, such mergers are usually done by preserving the agencies and client relations of the merging firms, thus creating a family of advertising agencies under common ownership.[3] This lets clients of the merged firms continue their exchange relation with the same firms and creative personnel that they have transacted with before. However, from the perspective of the merging firm's common clients, the merger reduces choice and thus represents a structural change to the exchange relation that adversely alters the power balance. Because mergers in the advertising industry preserve the original exchanges and task interdependencies but reduce client power, they constitute a good test of our arguments about counterparty reactions to mergers.

Data and Sample

The sample of advertising firm – client firm relationships was constructed by first identifying

[3] All the mergers in our data preserve the original agencies.

the population of mergers involving US-based target firms and North American or European acquiring firms in 2000 in SIC code 7311 from SDC Platinum™. The acquiring and target firms were matched by name and location to the corresponding advertising firms listed in the Standard Directory of Advertising Agencies (also known as The Advertising Redbooks™), the most comprehensive source of data on advertising agencies worldwide. Mergers were eliminated from the sample if the firms' reports omitted client names. Ten of 36 mergers had client data available. Inspection of the client relationships in these mergers indicated that in five of these, each of the merging firms was serving some of the same client(s) pre-merger. T-tests showed no significant differences in means and standard deviations between the population of mergers and these 5 mergers for date announced, date effective, percent shares acquired or estimated integration level. All observations in our data are agency-client ties for clients whose agencies have just merged. This is an important part of the test because it compares the dissolution rate within post-merger observations rather than with the dissolution rate when the agency has not made a merger. Thus the higher exit rate of clients of agencies post-merger is already incorporated through the sampling procedure and does not need to be controlled for in the regression.

Because the advertising firms involved in the mergers were multi-agency firms, constructing the relevant set of client relationships required gathering client data for the agencies comprising the advertising firm and aggregating it to the parent firm level. Client account names listed by the advertising agencies in The Redbooks were used to construct a set of all client relationships held by the agencies in each advertising firm in the sample. Additional data for these clients were collected from the databases AMADEUS, OSIRIS, and ORBIS. Client matches between The Redbooks and these databases were made by matching the name of the client, the geographic location of the client or the agency listing the client and, if given, the description of the account in The Redbooks. We collapsed the account level dyads to the advertising firm-client parent firm level in order to test our predictions about the withdrawal of these exchange relationships. Complete data for all independent variables were available for 91% of relationships in the mergers sample, yielding a final sample of 1450 relationships across the five mergers.

We tracked these relationships for three years post-acquisition (2000 to 2003) in The Redbooks, resulting in a final sample of 3888 dyad-years after dropping observations with no remaining accounts because the client had completely withdrawn from the relation.

We control for firm selection into merging through randomly selecting 220 firms from the population of advertising firms in the United States or Europe not involved in a merger or acquisition two years before and after 2000 (1998 to 2002) from The Redbooks, mirroring the selection criteria for the main sample (Heckman 1979). This control sample included 1941 relationships, or 4850 dyad-years. The control sample was pooled with the main sample to estimate a first-stage selectivity model for merging; this model was used to calculate an inverse Mills' ratio to include in the second-stage model for account dissolution conditional on a merger occurring (Heckman 1979). In order to effectively control for sample selectivity, the first-stage model contained additional variables: New York or Los Angeles location indicators, an indicator if the acquiring firm was publicly traded, and the counts of client accounts held by the agencies at the time of the merger. All except the Los Angeles indicator were strong predictors of inclusion.

Measures

Dependent variable. The dependent variable is the count of accounts dissolved in the advertising firm–client parent firm relationship when no offsetting additions of accounts occurred in the same year. When a client dissolves an account with an advertising firm, it puts the existing account under review and invites a set of advertising agencies, sometimes including the incumbent agency, to pitch for the account. Dissolution occurs when the account is awarded to an agency other than the incumbent. Specifically, an account is dissolved in the first year when an advertising firm no longer lists the client account in its Redbooks record. Sometimes additions occur simultaneously with dissolutions, however, which poses a potential interpretation problem. If these are accounts won under free bidding, then they are not problematic for our interpretation. If they are the result of consolidation of existing accounts by the client, then it is not correct to interpret the dissolution event as an exit motivated by power considerations.

Thus, we analyze the count of accounts dissolved in years with no accounts added. This variable is zero if an account is also added. For example, in one merger, both the acquirer and target had accounts with the client, Target. Of the two accounts held jointly by the merging firms, one was dissolved and no accounts were added. This was recorded as a reduction in exchange, and the value of the dependent variable was set to one. In contrast, for another client, Black & Decker, one new account was added to an agency at the same time that one account was dissolved. This was not recorded as a reduction in exchange, and the value of the dependent variable was set to zero.

Explanatory variables. To test Hypothesis 1, predicting that clients with ties to both agencies pre-merger are more likely to reduce exchange than clients with ties to only one agency pre-merger, we constructed an indicator variable set to one if both merging agencies had relationships with the client prior to the merger. This variable is interacted with the three next variables to examine the moderation effects as specified in Hypotheses 2 to 5.

To test Hypothesis 2, predicting that the likelihood of exchange reduction by clients with ties to both agencies pre-merger increases when the clients have greater resource endowments and therefore more alternatives, we ranked clients based on their total selling, general and administrative expenses (SGA). SGA includes advertising expenditures, and therefore it is a good indicator of the resource endowment of a client firm most relevant to advertising firms. Our main analysis uses the logarithm of the rank of the firm based on SGA (reverse coded), as this is the most direct measure of importance to an advertiser. Missing data on SGA were solved by inserting the predicted values from a regression of SGA on sales in the observations with non-missing SGA, and an indicator for missing SGA was entered as a control variable.

Hypothesis 3, predicting that the likelihood of exchange reduction by clients with ties to both agencies pre-merger decreases when the agencies are high status, is tested using a joint status measure of the advertising firms in the merger. Following previous work using awards as status measures (Graffin *et al.* 2008, Pontikes *et al.* 2010, Rao *et al.* 2001), we selected the number of awards the firm won in

industry competitions. We gathered data on the number of *CLIO* awards each agency in the sample won in the five years prior to the acquisition (1995-1999). The *CLIO* awards is the world's most recognized global awards competition for advertising, design, and interactive; and winning a *CLIO* award is a signal of the quality of the advertising firms' creative work (Von Nordenflycht 2007). Because quality creative work is a valued resource, firms that consistently win awards are highly sought by clients. Our prediction concerns the effect of joint status on relationship dissolution, so we created an indicator set to one if each of the merging firms had won more than 10 awards in the five years prior to the merger. The indicator approach matches the highly skewed distribution of the awards, as most observations had zero awards, some had between one and eight, and a small number of elite agencies had more than a dozen awards.

Hypothesis 4 predicts that the likelihood of exchange reduction by clients with ties to both agencies pre-merger increases when the agencies have unequal status, and is tested using the same awards data. An indicator variable is set to one if there was a difference of 10 awards or more between the two agencies prior to the merger, and to zero otherwise.

To test Hypothesis 5 with competing predictions regarding the effect of the duration of the relationship on the likelihood of exchange reduction by clients with ties to both agencies pre-merger, we used a measure of the average duration of the accounts in the client relationships at the time of the merger. We consulted each advertising agency's listings for the 20 years pre-merger and coded the start year for each account as the first year in which it listed the client account in its Redbooks record. When the start year could not be determined due to data unavailability (17 percent of observations), it was set to the first year in which client data were available, and a left truncation indicator was included as a control in the models. The average account duration was calculated for each client relationship, and we entered its natural logarithm into the regression.

***Control variables*.** We include controls at the dyad, advertising firm and client firm levels to account for other factors that would affect the relationship between our explanatory variables and the dependent variable, the count of client accounts dissolved. We include an indicator set to one if the client

relationship was in its first year at the time of the merger to control for the fact that very new relationships are less likely to dissolve. Other dyad level controls include the count of accounts the advertising firm has with the client parent firm and the count of accounts the advertising firm has with clients in the same industry as the focal client (4-digit SIC code) for each year in the observation period. To control for competitive overlap among an advertising firm's clients which has been shown to affect dissolutions of client ties (Rogan 2013a), we also include the natural log of the count of overlaps a client firm had with other clients in the same 4-digit SIC code in the advertising firm's portfolio pre-merger and the change in the count of overlaps from the previous year.

Advertising firm controls include firm size measured as logarithm of the number of employees in the advertising firm as well as its growth rate (employee difference divided by number of employees). We also control for the proportion of executives departing the advertising firm each year, as departures of executives has been found to lead to loss of client relationships (Broschak 2004, Rogan 2013b). We constructed a Herfindahl index of each advertising firm's client industry concentration to control for differences in dissolutions for specialist versus generalist advertising firms. We also include the natural logarithm of the count of alternative advertising agencies in the same city as the focal advertising firm as listed in the Redbooks for each year in the observation period as a control for the general availability of alternatives to all clients of the advertising firm.

Client firm controls include the natural logarithm of the average advertising expenditures in the client's industry to control for the dependence of the client firm on advertising services generally using data on the average advertising expenditures in millions of USD for each client's industry from the *Advertising Ratios & Budgets* data, which provide annual advertising expenditures across 4-digit SIC codes. Data are not provided for those SIC codes in which average advertising expenditures are negligible, and therefore we replaced missing values as zero. Our findings are robust to the inclusion of client revenues as a size control, but due to correlation with client rank, we do not include it in the reported models. We included the count of client industry sectors and change in count to control for effects of

client diversification on account dissolutions. As a comparison, we also used the industry sector Herfindahl index and its change, and found that the same results were obtained. Table 1 shows the descriptive statistics and correlation coefficients.

=== Insert Table 1 about here ===

Analysis

The dependent variable is a count, so it can be modelled using a regular Poisson model, a negative binomial model if there is overdispersion, or a zero-inflated Poisson or negative binomial if there are excess zeroes. A Vuong test did not show significant zero inflation. Inspection of the overdispersion parameter showed negligible overdispersion; hence the Poisson is the best model. To control for all annual varying influences that are shared across observations, we enter indicator variables for each year in all models. We cluster the standard errors to account for dependence of observations within each agency-client dyad. In addition, we considered the following forms of modelling dependence. First, hierarchical Poisson models would be an alternative approach to capture dependence of observations; however, estimations using this approach failed the likelihood ratio test for improvement against the regular Poisson. Second, autocorrelation of responses within each dyad over years might occur. We assessed the autocorrelation by estimating generalized estimating equations with a Poisson specification and autoregressive error structure, and found the autocorrelation coefficient estimate to be a negligible 0.002. Third, observations with a shared agency or client may be dependent. We examined this possibility by estimating general estimating equations (GEE) models with clustering and exchangeable standard errors on the agency, client, or dyad dimension, and comparing the effects. We found that each approach produced results consistent with the other two and with our main analysis. Finally, we considered the possibility of two-way clustering on the agency and client dimension by using the approach developed by Cameron, Gelbach, and Miller (2011),[4] and found that it also produced findings consistent with our main

[4] We thank Doug Miller for sharing his Stata code with us.

analysis. Because these approaches should yield different estimates if there is indeed interdependence among observations not captured through our dyadic clustering, we conclude that our data is most parsimoniously modelled without such controls.

Results

Our data show significant change in client accounts in this time period, as one might expect following a merger of agencies. As Figure 1 shows, of the clients with ties to the two agencies that merged, 36 percent kept their accounts, 55 percent dropped accounts without adding any new ones (i.e., 86 percent of those that dropped accounts), and the remaining 9 percent added and dropped accounts at the same time, possibly to consolidate their accounts. Thus more than one-half of the clients made countermoves to agencies that merged, and about one-third of the clients did not and hence ended up in a worse power position than before the merger. Within groups there was variation in whether they added accounts to the merged agency (leading to stronger dependence) or moved accounts to competitor agencies (producing a strong countermove). As Figure 1 shows, 92 percent of the cases in which a client dropped an account without adding any was a "move" event involving adding one or more accounts with a competitor agency. For the remaining 8 percent we could not find a new account with a competitor agency, but the client may have moved business to an existing account with a competitor. In comparison, only 18 percent of clients with a single tie to either the target or acquirer pre-merger dropped accounts without adding any new ones and 5 percent added and dropped accounts at the same time.

=== Insert Figure 1 about here ===

Table 2 shows the results from the Poisson model of account dissolution counts when no accounts are added in the same year (the "countermove" boxes in Figure 1). The models start with control variables only (Model 1), then add the indicator if the client had ties to both agencies pre-merger (Model 2), then enter each interaction variable singly (Models 3-6), and end with the full Model 7. As Model 2 shows, clients with ties to both agencies pre-merger are more likely to dissolve ties, as predicted by Hypothesis 1.

This fact is important to establish before the interaction analysis because it shows the average effect before moderating effects are taken into account. This main effect estimate will differ in later models as other variables are entered to show how the effect varies depending on the dyad characteristics, but it is also positive and significant in the final model with all interactions entered.

The subsequent models give consistent answers on the interaction effects regardless of whether the partial or the full model is considered with the exception of Hypothesis 4, so for brevity only the full model is discussed here. The interaction of client SGA rank (reverse coded) and having ties to both agencies is negative and significant, opposite to the prediction (Hypothesis 2). The interaction of both merging agencies being highly awarded and client ties to both agencies is negative and significant, in support of Hypothesis 3. The interaction of a merger between highly and lowly awarded agencies and client ties to both agencies is not significant in Model 7, showing a lack support for Hypothesis 4. It is marginally significant in Model 6, suggesting that a status effect may be worthwhile investigating again in other datasets. Finally, for tie duration the coefficient estimate of the interaction is positive but not significant, and thus neither prediction in Hypothesis 5 is supported.

=== Insert Table 2 about here ===

The findings offer a mixture of support and surprises. The main effect of establishing a coalition merger is to increase dissolutions for those clients with ties to both agencies pre-merger. This is a key finding for the dynamic view of resource dependence, as it shows that clients with relations to both merging agencies react more strongly to mergers than clients with relations with only one agency, even though it is by no means certain that the merger is oriented toward them. This distinction is important for two reasons. First, one might expect that combining advertising agencies into a single firm through merger could shift the power relation in its favor and thus cause a general client side reaction. This shift in power occurs even though the merger preserves each agency, but includes it in a holding-firm structure with sister agencies from the merger partner, because there are now fewer independent groups of agencies to engage in bidding wars. In our analysis, all the observations are post merger dyads, and hence we show

that the reaction by clients with ties to both agencies is *greater* than the reaction of other clients in a merger though the size of the merged advertising firm is constant for all of the clients of that firm. Second, one might expect that a merger is intended to shift the power relation against a few key shared clients rather than against all. Indeed, it may not even be intended to shift any power relations, as it may instead be an attempt to broaden the product offering or obtain efficiencies. This should make each client less likely to see the merger as directed against itself, yet the clients with ties to both agencies still reacted sufficiently often to produce a significant effect. The dynamic view is thus fully supported even when subject to a stringent test.

For the moderating effects of client and agency characteristics, the effects are mixed. Surprisingly, highly resource-endowed client firms (i.e., clients ranked higher in terms of advertising expenditures) with ties to both agencies were less likely to break off ties even though they should have an especially easy time getting new exchange partners. To better understand this finding, we discussed post-merger client exits with an advertising executive (without revealing our finding). The executive noted that advertising firm merger strategies could be designed to prevent exit of large client firms:

> "Essentially what you seek to do is ensure that you have such a breadth of coverage of different geographies and different market sectors in your client that the disruption of change creates a degree of inertia, which I think helps to institutionalize the relationship."

The executive also noted that large clients had difficulty moving their accounts because the large agencies that they preferred would often have accounts with a competitor already:

> "… Because of conflict it is often very hard for a client to move its business from one network to another. There are not that many networks that have a particular gap for the business."

Thus, our assumption that these clients had an easier time finding replacement agencies seems to have been incorrect because of their specific demands on agencies, as well as apparent strategizing by agencies toward their larger clients. The largest clients (i.e., those with the largest advertising expenditures) may even see a merger as an effort to provide better client service by providing a single point of contact at a

multi-service advertising firm. In contrast, smaller clients may perceive that a merger is an effort by the merging advertising firms to increase bargaining power, and they in turn respond by reducing their exchange with the merged firm. Finally, although an agency merger is an attention getting event for the majority of the clients, for the largest clients the merger may be sufficiently small that it does not attract attention; making the client less likely to respond by reducing its exchange.

High advertising agency status made clients with ties to both agencies pre-merger less likely to dissolve their ties, as predicted. This is evidence of a status effect counteracting the main effect. While the high status of the post-merger advertising firm is a benefit to the client, the merger itself is a potentially threatening move that suggests that worse terms of trade may be coming. Nevertheless, given the relatively few high-status advertising agencies, clients may be less able to dissolve their relationships even if motivated to do so. The finding confirms earlier work showing that status has benefits in exchanges (e.g., Castellucci and Ertug 2010, Podolny 1993), but extends it by showing greater stability when one partner makes an action that puts the relation at increased risk of dissolution.

Status devaluation arguments predict that mergers between high status ad agencies and low status ad agencies would be met by increased reduction of exchange with clients with ties to both agencies. This finding was not obtained in the saturated model, so the analysis provides a suggestion rather than evidence. Additional investigation is important because findings that exchange partners react adversely to status inequality would provide us with confirmation of the importance of clear categorization in markets (i.e., Zuckerman 1999).

The findings regarding the effect of mergers on long duration ties were not significant, possibly because the norm violation effect we posited is countered by increased task interdependence over time. If it is indeed correct that there are counteracting effects of increasing interdependence and increasing norm violation as relationship duration increases, then a finding of higher exits may be seen in contexts with weaker task interdependence. Alternatively, a U-shaped effect of duration is also possible as a result of rapidly increasing task interdependence earlier followed by an increasing emphasis on norms, but in these

data we did not find any curvilinear effects.

The findings are substantively strong as well as statistically significant. In Model 2 of Table 2, the coefficient estimate of 0.63 for the indicator for having ties to both agencies pre-merger in Model 2 implies an 88 percent increase in the rate of dissolutions (exp[0.63]-1=0.88). In full model (Model 6), the main effect shows that client firms with ties to both agencies pre-merger were nearly certain to dissolve their relation post-coalition, but the effect was strongly decreased by the status of the advertising firm and the size of the client firm.

Robustness Checks

The findings are robust to different model specifications. First, we estimated the models including fixed effects for each merger. We excluded agency awards in the fixed effects model because this variable does not vary within a merger, hence we cannot test Hypotheses 3 and 4 with fixed effects. The fixed effects do not alter our findings for the other explanatory variables. Second, we estimated the models using observations from years 1 to 3, years 1 to 2 and year 1 only. Third, we estimated the models including the annual billings of the advertising firms and revenues of the client firms as performance controls.[5] In both analyses the sample size drops significantly (e.g., N=1450 in the year 1 only analysis and N=2005 in the models with performance controls). Nevertheless, the results for all hypotheses are consistent with the main analysis. We conclude that these results show some degree of robustness to the model specification and sample. Perhaps most important is our finding that the results are maintained in shorter sample spans, as it not a priori obvious what time span one should allow for observing client countermoves against the mergers.

We also made robustness checks on the definitions of the variables. Because clients with large advertising budgets may be disproportionately important to the agencies, we created indicators of medium and large SGA clients, and reproduced the results using these categorical measures. Both large and

[5] Due to high collinearity between ad firm employees and ad firm annual billings, the controls for ad firm employees and the employee growth rate were not included in the performance controls model. The selection correction was also dropped from the performance controls models due to collinearity.

medium clients had less dissolution, and the effect was stronger for large clients. Likewise, because clients with large revenues have been seen as especially important for agencies (Khaire 2010), we entered indicators of medium and large revenue firms. For revenue, only large clients showed a significant effect, which was to have less dissolution. Regarding agency status, we changed the threshold of the awards indicator and found that the results were consistent with those reported here for values of three awards or greater, but a count of awards by the two firms did not yield results, suggesting a threshold effect.

Discussion and Conclusions

We have proposed new theory of resource dependence dynamics with a main prediction that exchange partners react to perceived coalition building by reducing their commitment to the exchange relation through withdrawal from the exchange. Empirically we have focused on mergers in agency-client relations, and we have shown that agency mergers trigger withdrawals from their common clients. We have also shown a role of the existing power balance in the reaction, as clients of high-status agencies did not withdraw. Finally we demonstrated an effect of the availability of alternatives, though counter to our assumption it was large rather than small clients who had few alternatives. The main prediction of countermoves is a major extension of resource dependence theory, which has so far only posited a relation from power structures to balancing actions. Our argument is that (perceived) balancing operations also matter, because a move by one actor can trigger a response by the counterparty in the exchange. Whether a response occurs or not is of key importance to the exchange relation as nonresponse means a loss of client structural power while a response through moving exchanges elsewhere retains the power advantage of the client.

Our theory and findings have important implications for research on power in exchange relationships. The most important is the introduction of counterbalancing operations, which gives the theory a dynamic element it has lacked so far. Whether it was intended to change the power structure or not, a merger that creates a coalition is an attention-getting event, and it can trigger a response from a counterparty that either did not pay attention to the exchange or did pay attention but was satisfied with its

current structure. A key step in the reasoning is that a balancing operation may trigger a re-evaluation of the relation. This occurs because the balancing operation introduces a perceived disequilibrium in the relation, which managers of the counterparty may act to address. Clearly, this issue is not unknown in resource dependence theory, which includes theory on the organizational enactment of environments (Pfeffer and Salancik 1978). However, such effects are ignored by the usual static interpretation of resource dependence theory, whereas the novel extension we propose highlights exactly these dynamics of move and countermove. We expect this theoretical extension to produce fruitful investigations into other kinds of coalitions, such as alliances. It is likely that other balancing operations would lead to counterbalancing operations as well, and investigation of such effects could lead to a significant revitalization of research on power in exchange relationships.

Our evidence demonstrates the utility of the dynamic view by showing both the main effect of countermoves and moderating effects, and it leaves some opportunities for additional research to test parts of the theory that we did not examine. In our arguments, we suggested that mergers are sometimes intended to shift power relations, but not necessarily so. The intentions of the merging partners (advertising agencies) are not essential for the theory, because it is the counterparty (client) side perception of reduced choice and power loss that drives the countermoves. On the client side, as noted in our discussion of the results, we do have qualitative evidence consistent with the argument that power has a role in account dissolutions after a merger, which is a good confirmation of the quantitative results. Further research that examines the actor motivations in addition to their actions would be helpful.

The reason intentions are a concern is that these findings suggest that mergers have a broad range of outcomes, from successes to reversals. The possibility that the merging actors experience a reversal because they miscalibrate the response to a balancing operation has been overlooked because a static analysis of balancing operations does not include the countermoves that we have examined. If countermoves are taken into account, however, the cost-benefit calculus of the merging actors changes completely. If two firms merge to improve the power balance in one exchange relation, or even multiple

relations, how can the firms be sure that the merger will be beneficial when other exchange partners also may react? Every exchange partner could potentially make a countermove; both those with a prior relation to only one of the merging firms and especially, as we show, those with prior relations to both merging firms. Thus, the theory and practice of balancing operations in exchange networks should consider the indirect impact of each action on the full exchange network. Because the impact may be either positive or negative depending on the strength of the countermoves, further research to examine performance consequences of balancing actions would be promising.

A particular reason to continue research on tie dissolution as an outcome is the potential cost to the exchange partners. Firms enter into alliances because of compatibilities in their resources (Gulati and Gargiulo 1999, Mitsuhashi and Greve 2009), which means that alliance dissolution is likely to involve costs of a finding a less well-matched partner. The same mismatch cost may occur in the dissolution of exchange relations, especially when they involve services that call for a close understanding of client needs, as in advertising. The countermoves studied here are thus potentially costly for the client as well as for the agency.

A limitation of the study is that our data include few agencies that made mergers. Although this still left much variation on the relation and client side; which is most important given that each exchange dyad is the unit of analysis, there is less variation on the agency side. We could reproduce the findings with merger fixed effects, indicating some robustness to merger idiosyncrasies. In addition, we focused on one type of counterbalancing action, the reduction of exchange with a partner, both for parsimony and because account dissolutions are the most relevant actions for a client firm in the advertising industry. In theory and in other empirical contexts, exchange partners can counterbalance a relationship via other means, such as status-giving or co-optation. Future work could explore different or even multiple counterbalancing actions. We also tested our hypotheses in an empirical context in which post-merger integration of the merging agencies was limited. This choice of setting was ideal for testing power-dependence arguments as it allowed us to observe a shift in the power relation to a common client

without being concerned about the effects of other factors such as changes to the task interdependence of the relationships. Nevertheless, the trade-off of this approach is a limitation to the generalizability of our findings to other contexts that may be characterized by greater post-merger integration and changes to the levels of task interdependence of exchange relationships.

Our goal in this paper was to develop and test predictions for a dynamic theory of resource dependence. The pattern of findings is consistent with dynamic resource dependence theory, but the lack of support for two of the moderating effects suggests alternative explanations or counteracting effects. Although the lower likelihood of exchange reduction by large clients with ties to both agencies pre-merger could be explained by the lack of alternatives available to these clients, it is also possible that these clients experience higher switching costs due to greater complexity of tasks performed by the agencies in the relationship. Likewise, long-term client relationships could be characterized by higher task interdependence, which also increases switching costs for these clients. Research that empirically disentangles the effects of task complexity, task interdependence and power-dependence on exchange reduction represents an important next step in the study of the dynamics of interorganizational exchange (cf. Baum, Cowan and Jonard 2010).

In closing, this study offers three main contributions. First, it contributes to resource dependence theory (e.g., Emerson 1962, Pfeffer and Salancik 1978) by introducing counterbalancing operations, which gives the theory a dynamic element it has lacked so far. Consideration of both balancing operations and counterbalancing operations may explain changes, or lack of changes, in exchange relations that have so far not been well understood. Despite opportunities for weaker actors to increase their power via balancing operations, field evidence of such power shifts are rare (Grembowski *et al.* 2002). We have shown that the same balancing operation can be successful or can be met with a counterbalancing operation, and we have explored the reasons for this variation. Furthermore, counterbalancing operations may be triggered by actions motivated by concerns other than power, nevertheless producing a change in the power relationship. This adds an important nuance to the theory and opens the possibility for further

refinements.

Second, by investigating the influence of balancing operations on the dissolution of ties, this study brings additional insight to research on network dynamics, extending our understanding of inter-organizational relations. Starting such research now is timely because network scholars have moved from the exploration of static effects to work on additions and dissolutions of ties, and this work has yielded new insights on issues such as inter-organizational learning, trust, and monitoring (Brass *et al.* 2004). However, the network literature has emphasized collaborative ties such as alliances, which have different power dynamics than exchange relations; whereas here we offer arguments for the effects of power shifts on the stability of exchange networks.

Lastly, the new theory on heterogeneity in counterparty responses to mergers provides insights into when a shift in the power balance of a relationship will or will not be met by a reduction of exchange as a counterbalancing operation. This is valuable from a practical perspective but it also has implications for theory. Because the likelihood of a counterbalancing operation also depends on relational characteristics like its embeddedness (e.g., Gulati 1995, Uzzi 1997) or the status of the exchange partners (e.g., Benjamin and Podolny 1999, Podolny 1993, 2001), a dynamic view of power relations informs theories on these topics as well. Indeed, it is likely that our investigation has only scratched the surface of the research made possible by the dynamic view of exchange relations.

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Table 1: Descriptive Statistics and Correlations (n=3888)

		Mean	S.D.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
1.	Count of dissolved accounts with client	.24	.56	1.00										
2.	Count of new accounts with client	.04	.25	.11	1.00									
3.	Account duration left truncated	.21	.41	.02	.09	1.00								
4.	Client relationship - 1 year only	.19	.40	-.03	-.04	-.25	1.00							
5.	Count of accounts with client	1.59	2.04	.35	.42	.31	-.12	1.00						
6.	Ln. count of accts in client SIC code	1.31	1.33	.02	.05	.03	-.06	.09	1.00					
7.	Count of SIC code overlaps pre-merger	13.89	42.37	-.02	.01	.02	.00	-.01	.71	1.00				
8.	Difference in SIC code overlaps, lagged	.03	3.45	.05	.07	.00	-.03	.05	.02	-.15	1.00			
9.	Ln. ad firm employees	8.55	2.67	-.09	-.01	.15	.01	.02	.06	.10	-.07	1.00		
10.	Ad firm employee growth rate	.00	.28	-.05	-.03	.06	.01	.01	-.01	.02	-.04	.52	1.00	
11.	Proportion ad firm executives departing	.79	.28	-.04	.02	-.01	-.04	.04	-.01	.03	-.09	-.04	-.19	1.00
12.	Ad firm industry concentration	.01	.01	.13	.03	-.12	.17	.04	-.04	-.03	-.01	.02	.14	.23
13.	Ln. count of ad firms in city	4.44	1.60	.04	.12	.07	.05	.23	-.04	-.07	.00	.24	.20	-.16
14.	Ln. client industry average expenditures	1.99	2.31	.09	.14	.05	.05	.26	.08	-.12	.07	-.06	.00	.05
15.	Client industry sectors	1.40	3.32	.10	.14	.07	-.02	.30	-.03	-.06	.02	-.02	.01	.01
16.	Change in client industry sectors	.07	.84	.05	.02	.00	.00	.04	.01	.00	.03	.00	-.01	-.03
17.	Client firm not ranked	.78	.41	-.12	-.15	-.09	.00	-.31	.02	.07	-.02	.00	-.02	-.02
18.	Client tied to both agencies pre-merger	.02	.14	.06	.07	.10	-.04	.20	.01	.01	.11	.07	.03	.01
19.	Ln. reverse coded client rank	4.72	4.58	.07	.12	.11	-.03	.23	-.02	-.05	-.02	-.03	.01	.10
20.	Both ad firm high awards	.16	.36	-.04	.05	-.02	-.01	-.01	-.07	-.05	.03	.25	.26	-.27
21.	Ad agency firm award difference	.64	.48	-.11	-.05	.12	-.14	.00	.11	.08	-.02	.03	-.19	.23
22.	Ln. average client acct duration	1.19	.69	-.02	.01	.31	-.84	.07	.01	-.01	.01	.05	.00	.03

		12.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.
13.	Ln ct. alt. ad firms in same city max.	.15	1.00									
14.	Ln. client industry average ad spend	.08	.10	1.00								
15.	Client industry segments	.10	.15	.19	1.00							
16.	Change in client industry segments	.01	.03	.05	.29	1.00						
17.	Client firm not ranked	-.12	-.10	-.24	-.66	-.15	1.00					
18.	Client tied to both agencies pre-merger	-.00	.14	.15	.17	.04	-.10	1.00				
19.	Ln. reverse coded client rank	.09	-.02	.15	.30	.07	-.38	.14	1.00			
20.	Both ad firm high awards	-.16	.03	-.04	-.00	.00	-.02	-.02	.02	1.00		
21.	Ad agency firm award difference	-.66	-.17	-.03	-.09	-.01	.10	.02	-.05	-.41	1.00	
22.	Ln. average client acct duration	-.21	-.02	-.07	-.00	-.01	.04	.04	.01	-.01	.18	1.00

Table 2: Poisson Models of Account Dissolution Counts without Offsetting Additions[a, b]

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Account duration left truncated	-0.11	-0.11	-0.11	-0.12	-0.13	-0.09	-0.08
	(0.13)	(0.13)	(0.13)	(0.13)	(0.13)	(0.13)	(0.12)
Client relationship is one year only	-0.17+	-0.17+	-0.16+	-0.17+	-0.17+	-0.43*	-0.42*
	(0.09)	(0.09)	(0.09)	(0.09)	(0.09)	(0.17)	(0.17)
Count of accounts with client	0.12***	0.12***	0.12***	0.12***	0.11***	0.11***	0.11***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Ln. count of accounts in client SIC code	0.05	0.06	0.05	0.06	0.05	0.05	0.05
	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
Count of SIC code overlaps pre-merger	-0.00+	-0.00*	-0.00*	-0.00*	-0.00*	-0.00*	-0.00*
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Difference in SIC code overlaps, lagged	0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Ln. Ad firm employees	-0.09***	-0.09***	-0.09***	-0.09***	-0.10***	-0.09***	-0.10***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Ad firm employee growth rate	-0.18	-0.17	-0.16	-0.16	-0.17	-0.17	-0.18
	(0.20)	(0.20)	(0.20)	(0.21)	(0.21)	(0.20)	(0.20)
Proportion of ad firm executives departing	-0.77***	-0.76***	-0.75***	-0.78***	-0.89***	-0.76***	-0.88***
	(0.20)	(0.20)	(0.20)	(0.21)	(0.23)	(0.20)	(0.24)
Ad firm industry concentration	26.44***	27.06***	26.50***	26.81***	31.39***	26.61***	32.07***
	(3.40)	(3.38)	(3.41)	(3.39)	(5.18)	(3.38)	(7.70)
Ln. count of ad firms in city	-0.07**	-0.08***	-0.08***	-0.08***	-0.08***	-0.08***	-0.08***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Ln. client industry average expenditures	-0.00	-0.01	-0.00	-0.00	-0.00	-0.01	-0.00
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Count of client industry sectors	-0.01	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Change in client industry sectors	0.04	0.04	0.03	0.04	0.04	0.04	0.03
	(0.05)	(0.05)	(0.04)	(0.05)	(0.05)	(0.05)	(0.05)
Client firm not ranked	-0.12	-0.14	-0.17	-0.15	-0.15	-0.13	-0.17
	(0.12)	(0.12)	(0.12)	(0.12)	(0.12)	(0.12)	(0.12)

		Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Client tied to both agencies pre-merger	H1		0.63**	99.71*	-0.22	0.12	0.59**	122.04*
			(0.22)	(45.93)	(0.20)	(0.37)	(0.22)	(47.72)
Ln. reverse coded client rank				-0.12*				-0.14**
				(0.05)				(0.06)
Client tied to both agencies *	H2			-16.19*				-20.06*
Ln. reverse coded client rank				(7.50)				(7.79)
Both ad firms highly awarded					-0.14			-0.02
					(0.13)			(0.20)
Client tied to both agencies *	H3				-13.19***			-13.47***
Both ad firms highly awarded					(0.75)			(0.82)
Ad agency firm award difference						0.13		0.17
						(0.13)		(0.20)
Client tied to both agencies *	H4					0.73+		0.65
Ad agency firm award difference						(0.42)		(0.44)
Ln. average client account duration							-0.19+	-0.18+
							(0.10)	(0.10)
Client tied to both agencies *	H5						0.24	0.20
Ln. average account duration							(0.32)	(0.33)
Selection correction		-0.81	-0.89	-0.66	-0.92	-0.81	-0.90	-0.80
		(0.59)	(0.57)	(0.60)	(0.57)	(0.57)	(0.58)	(0.59)
N		3888	3888	3888	3888	3888	3888	3888
Log Pseudo-likelihood		-2099.52	-2095.17	-2093.89	-2092.23	-2092.90	-2093.18	-2086.36
Degrees of Freedom		20	21	23	23	23	23	29
-2(LL1-LL2)[c]		-	8.71**	2.57	5.88*	4.54+	3.98	17.61*
BIC		4364.36	4363.91	4377.88	4374.56	4375.91	4376.46	4412.43

[a] Robust standard errors clustered by ad firm – client parent firm dyad in parentheses
[b] Duration indicators are estimated but not displayed
[c] Baseline comparison for Model 2 is Model 1. For Models 3 to 7, the baseline is Model 2.
+ p<0.10; * p<0.05; ** p<0.01; *** p<0.001

Figure 1: Client Account Dissolutions, Additions and Moves Post-Merger