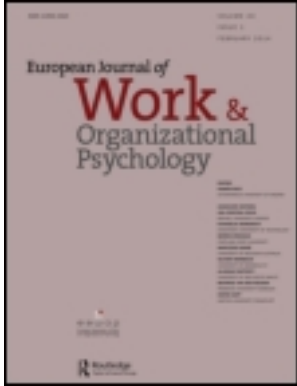


This article was downloaded by: [National Chiao Tung University 國立交通大學]

On: 28 April 2014, At: 16:09

Publisher: Routledge

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



European Journal of Work and Organizational Psychology

Publication details, including instructions for authors and subscription information:

<http://www.tandfonline.com/loi/pewo20>

Modelling perceived corporate citizenship and psychological contracts: A mediating mechanism of perceived job efficacy

Mei-Liang Chen^a & Chieh-Peng Lin^b

^a Department of International Business, China University of Science and Technology, Taipei, Taiwan

^b Institute of Business & Management, National Chiao Tung University, Taiwan

Published online: 12 Oct 2012.

To cite this article: Mei-Liang Chen & Chieh-Peng Lin (2014) Modelling perceived corporate citizenship and psychological contracts: A mediating mechanism of perceived job efficacy, *European Journal of Work and Organizational Psychology*, 23:2, 231-247, DOI: [10.1080/1359432X.2012.734455](https://doi.org/10.1080/1359432X.2012.734455)

To link to this article: <http://dx.doi.org/10.1080/1359432X.2012.734455>

PLEASE SCROLL DOWN FOR ARTICLE

Taylor & Francis makes every effort to ensure the accuracy of all the information (the "Content") contained in the publications on our platform. However, Taylor & Francis, our agents, and our licensors make no representations or warranties whatsoever as to the accuracy, completeness, or suitability for any purpose of the Content. Any opinions and views expressed in this publication are the opinions and views of the authors, and are not the views of or endorsed by Taylor & Francis. The accuracy of the Content should not be relied upon and should be independently verified with primary sources of information. Taylor and Francis shall not be liable for any losses, actions, claims, proceedings, demands, costs, expenses, damages, and other liabilities whatsoever or howsoever caused arising directly or indirectly in connection with, in relation to or arising out of the use of the Content.

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden. Terms & Conditions of access and use can be found at <http://www.tandfonline.com/page/terms-and-conditions>

Modelling perceived corporate citizenship and psychological contracts: A mediating mechanism of perceived job efficacy

Mei-Liang Chen¹ and Chieh-Peng Lin²

¹Department of International Business, China University of Science and Technology, Taipei, Taiwan

²Institute of Business & Management, National Chiao Tung University, Taiwan

Corporate citizenship presented by a business organization is important for eventually improving its employees' anticipations about their responsibilities in an employment exchange relationship with the organization (i.e., psychological contracts). This study examines both direct and indirect effects of perceived corporate citizenship on psychological contracts and their key mediator. In the proposed model herein, transactional and relational contracts are affected by four dimensions of perceived corporate citizenship directly and indirectly through the mediation of job self-efficacy. Empirical testing using a survey of personnel from 20 high-tech corporations fully or partially supports eight of our nine hypothesized model paths. Finally, managerial implications and limitations of our findings are discussed.

Keywords: Corporate citizenship; Job self-efficacy; Corporate social responsibility; Ethical citizenship; Philanthropic citizenship.

Corporate citizenship—also known as corporate social responsibility (CSR), sustainable responsible business, responsible business, corporate responsibility, and corporate social performance—is a type of corporate self-regulation integrated into business and organizational models (Lin, 2010a; Wood, 1991). Corporate citizenship has been a mainstream topic globally (Taneja, Taneja, & Gupta, 2011). Most organizations across developed or developing nations have a strong awareness of thinking, planning, and implementing corporate citizenship activities (Taneja et al., 2011). Such emerging awareness not only drives business practitioners to innovate new strategies for implementing corporate citizenship but also motivates academic scholars to test and validate the same (Taneja et al., 2011).

Few previous studies have discussed psychological contracts from a social perspective related to corporate citizenship (e.g., Thompson and Hart, 2006). For example, a study by Simon and Martinez (2002) suggests that the implementation of

corporate citizenship policy influences the employees' reaction and psychological contract, because corporate citizenship policy represents a set of social and corporate incentives (resting on solidarity and social support) in which employees may wish to incorporate their mentality when developing their perception about the organization and its estimated value. A study by Van Buren (2000) applies a theory of corporate social responsibility in downsizing to explain the binding nature of psychological contracts, suggesting a significant relationship between corporate citizenship and psychological contracts. Sims (1991) indicates that, if properly reinforced, the ethical requirements of the firm (e.g., corporate citizenship) can serve as the solid base of employees' psychological contracts with the firm offering a culture that encourages ethical behavior, suggesting a close relationship between corporate citizenship and psychological contracts. Collectively, for business organizations, a willingness to behave ethically and assume responsibility for social and

Correspondence should be addressed to Mei-Liang Chen, 3-1 No. 1, Sec. 3, Lane 88, Min Sheng E. Rd., Zhongshan Dist., Taipei City 104, Taiwan. E-mail: cml491012@yahoo.com.tw

This research is financially supported by the National Science Council, Taiwan

environmental consequences of their activities has significant implications for understanding the psychological contracts being created today (O'Donohue & Nelson, 2009).

Although previous literature has suggested that a continuum of philanthropic citizenship (i.e., a dimension of corporate citizenship) provides solid argumentation and foundation for psychological contracts (Bennett & Stamper, 2001), the literature has rarely clarified how such self-regulated corporate citizenship affects the psychological contracts of employees, which becomes an important research gap for this study. Indeed, despite growing consensus among academic researchers about psychological contracts being personal and idiosyncratic (Raja, Johns, & Ntallianis, 2004), previous research has not empirically explored corporate citizenship contributions to such contracts in depth (e.g., Andersson, 1996). For that reason, the goal of this study is to investigate through what mechanisms the four dimensions of perceived corporate citizenship may eventually drive psychological contracts.

In addition to the direct relationship between corporate citizenship and psychological contracts, an indirect relationship between the two factors may also exist through potential mediators. A potential explanation for the indirect relationship between corporate citizenship and psychological contracts can be provided through a self-evaluation whereby psychological contracts are affected indirectly through job self-efficacy (e.g., Raja et al., 2004). Job self-efficacy is defined as a cognitive self-appraisal of the ability to perform well in one's job (Bozeman, Perrewe, Hochwarter, & Brymer, 2001; Lubbers, Loughlin, & Zweig, 2005). The basic idea of "reflected appraisal" is foundational to sociological theories of the self (Gecas, 1982) and has been extended to describe how members' perceptions of being treated by the firm influence their understanding of who they are in their firm (e.g., Brockner, 1988; McAllister & Bigley, 2002; Tyler, Kramer, & John, 1999). In other words, good corporate citizenship as perceived by employees provides a basis for a positive view of themselves—i.e., a view of themselves as being valuable, ethical, trustworthy, and contributing—leading to increased job self-efficacy (e.g., Carroll, 1991; Cartwright & Holmes, 2006; Joyner & Payne, 2002).

This study differs from previous research in three important ways. First, previous studies (Andersson, 1996; Van Buren, 2000) linking corporate citizenship to psychological contracts do not examine how various dimensions of such citizenship (i.e., economic, legal, ethical, and philanthropic citizenship) affect both transactional and relational contracts. For that reason, this study evaluates four dimensions of perceived corporate citizenship regarding their

influence on psychological contracts, which is important because some research has failed to take the multidimensional nature of corporate citizenship into account from employees' psychological perspective (e.g., De los Salmones, Crespo, & del Bosque, 2005). Corporate citizenship will remain as a black box if different dimensions of corporate citizenship are not assessed respectively (Lin, 2010a). Indeed, various dimensions of corporate citizenship do not always mean exactly the same thing for everyone (Turker, 2009). It would be managers' mistake, for example, to only focus on employees' job career development (i.e., economic citizenship) if it is the ethical citizenship that goes wrong (e.g., Lin, 2010a).

Second, this study is pioneering in empirically validating whether job self-efficacy fully or partially mediates the relationship between perceived corporate citizenship and psychological contracts. Third, while a majority of empirical studies rely on a one-time-only survey, this study is different in using primary survey data obtained from working professionals at two different time points (e.g., the outcomes are surveyed at Time 2, whereas the other factors are surveyed at Time 1) to test the formation of psychological contracts from the aspect of corporate citizenship. Based on the critical advantages of our research indicated above, a clear understanding of how perceived corporate citizenship actually drives psychological contracts can be effectively developed.

THEORY AND DEVELOPMENT OF HYPOTHESES

Corporate citizenship

Corporate citizenship represents organizational activities and status related to the organization's societal and stakeholder obligations (Luo & Bhattacharya, 2006). A growing interest for corporate citizenship shows up in both practices and academics that discuss how business organizations incorporate social demands into their operations and what benefits the organizations may expect (Maignan & Ferrell, 2001). Examples of benefits from corporate citizenship for business organizations may result in the ability to charge a premium price for their products, to obtain a good business image, to attract investment, to enhance employees' job satisfaction, to boost work engagement, to encourage organizational citizenship behavior, or to increase business performance (e.g., Carmeli, Gilat, & Waldman, 2007; Lin, 2010a; Lin, Lyau, Tsai, Chen, & Chiu, 2010; Maignan & Ferrell, 2001).

Previous literature proposes four dimensions of corporate citizenship (Lin, 2010a; Lin, Tsai, Joe, & Chiu, 2012) in terms of employees as stakeholders: (1) economic citizenship, referring to the firm's obligation

to bring utilitarian benefits to its employees such as a quality working environment, training, and education (e.g., Maignan & Ferrell, 2000; Zahra & LaTour, 1987); (2) legal citizenship, referring to the firm's obligation to fulfill its business mission within the framework of legal requirements; (3) ethical citizenship, referring to the firm's obligation to abide by moral rules defining society's proper behavior; and (4) philanthropic citizenship, referring to the firm's obligation to engage in activities that are not mandated, not required by law, and not expected of business in an ethical sense (Maignan & Ferrell, 2000). Note that philanthropic citizenship and discretionary citizenship are exchangeable variable names (i.e., synonyms) that have been accepted and popularly used in the literature (Maignan, 2001; Pinkston & Carroll, 1994, 1996; Rego, Leal, & Cunha, 2011).

Psychological contracts

Psychological contracts are defined as employees' perceptions and anticipations about their responsibilities in an employment exchange relationship with their firm (Chen, Tsui, & Zhong, 2008). Psychological contracts comprise transactional contracts and relational contracts. Transactional contracts refer to an exchange relationship based exclusively on job-related extrinsic, monetizable, and material conditions (e.g., payoff) from a short-term perspective (Morrison & Robinson, 1997). Relational contracts refer to an employment relationship based on intrinsic and extrinsic job conditions from a long-term perspective (Mauno, Kinnunen, Mäkikangas, & Nätti, 2005). Previous literature indicates that psychological contracts are mostly held by employees alone (Morrison & Robinson, 1997), and such contracts may be substantially fostered or damaged due to social responsibilities presented by their firms. It is difficult for employees to expect mutual responsibilities in an employment exchange relationship as soon as they perceive that their firm does not care about social responsibilities for various stakeholders including themselves.

Employees' relational contracts contain a social-emotional element and trust in their firm's intention, revealing what they will do for the firm (Kidder, 2005). Theory provides a good basis for forecasting that relational contracts may be facilitated by positive personal and organizational factors (e.g., organizational support) better than transactional contracts will (e.g., Bellou, 2007; Raja et al., 2004; Rousseau, 1995; Suazo & Turnley, 2010). Particularly, previous literature shows that relational contracts connect positively (and transactional contracts negatively) to organizational commitment, job commitment, and expected job tenure (Millward & Hopkins, 1998; Raja et al., 2004; Rousseau, 1989, 1990).

Job self-efficacy

Consistent with social-cognitive theory (Bandura, 1986, 1997) and a cognitive-mediational perspective (Lazarus, 1999), individuals' job self-efficacy is substantially associated with their work-related psychological responses such as psychological contracts, occupational commitment and turnover intention (e.g., Klassen & Chiu, 2011; Mulki, Lask, & Jaramillo, 2008; Panatik, O'Driscoll, & Anderson, 2011; Franco, Bennett, & Kanfer, 2002; Shore & Tetrick, 1994).

It has been emphasized that self-efficacy beliefs play a major role in influencing psychological outcomes among adult workers (Lubbers et al., 2005). For example, previous research indicates that job self-efficacy is a cognitive mediator between perceived work quality (e.g., legal and ethical works) and psychological health (Lubbers et al., 2005). Bandura (1997) suggests that *intrinsically motivating work* (e.g., the meaningfulness of corporate citizenship) fosters enactive mastery experiences, which are an important source of job self-efficacy (Lubbers et al., 2005). Call and Mortimer (2001) suggest that intrinsic job quality (e.g., ethical work environments or ethical citizenship) is an important factor in the development of workers' perceptions of job self-efficacy (Lubbers et al., 2005).

Development of hypotheses

This study proposes a model that examines the relationship between perceived corporate citizenship, psychological contracts, and their mediator named job self-efficacy. More specifically, transactional contracts and relational contracts are both influenced by four dimensions of perceived corporate citizenship directly and indirectly through the mediation of job self-efficacy. The development of our hypotheses is justified in detail as follows.

A belief that employees can do well in their job (i.e., job self-efficacy) is likely to positively boost their psychological states in the long run and may preclude a shortsighted or negative career development. For instance, previous literature finds that high job self-efficacy among adult workers positively influences their psychological beliefs such as their career stability in a particular organization (Clausen, 1991) and sense of identity towards the organization, consequently making progress in their job career (Lubbers et al., 2005), and boosting their effort, coping, and persistence in the organization (i.e., relational contracts) (Gist & Mitchell, 1992). Employees with high job self-efficacy tend to exude strong confidence for obtaining opportunities of future growth and success, and they then naturally form relational contracts that promise such opportunities. Employees' preference for growth and

success likely drives them to seek a long-term and supportive relationship (i.e., relational contracts) rather than purely a monetary, short-term relationship (i.e., transactional contracts) (Raja et al., 2004).

Explanation of the relationship between job self-efficacy and relational contracts might come from social psychologists who examined the relationship between *personal competencies* and *personal efforts to help the firm* and found it to be highly significant (e.g., Dovidio, Piliavin, Gaertner, Schroeder, & Clark, 1991; Midlarsky, 1984; Todd & Kent, 2006). When employees feel competent in their jobs, they are more likely to commit themselves to the firm by lending a helping hand overall to protect the benefits of the firm (Todd & Kent, 2006). A strong sense of job self-efficacy enables the employees to persevere to overcome obstacles and make personal efforts to reach the goals of their firm (i.e., high relational contracts) (Allen-Brown, 1998). Specifically, a high level of job self-efficacy enhances the employees' confidence in their judgments to execute the necessary courses of action required for the success of the firm (Allen-Brown, 1998). On the contrary, employees without job self-efficacy often reveal low perseverance and an absence of long-term commitment in their job performance attainments (i.e., high transactional contracts) (Allen-Brown, 1998; Bandura, 1986), suggesting a negative relationship between job self-efficacy and transactional contracts. Consequently, we predict the following.

Hypothesis 1: Transactional contracts are negatively influenced by job self-efficacy, while relational contracts are positively influenced by job self-efficacy.

Following the preceding rationales concerning the effect of job self-efficacy on psychological contracts, this study further hypothesizes that such job self-efficacy is driven by four dimensions of perceived corporate citizenship, which are discussed as follows.

Some previous research has examined self-efficacy as an outcome that is driven by organizational care, training, education, and ethics (i.e., forms of corporate citizenship) (Kaler, 2000; McAllister & Bigley, 2002; Muafi & Gusaptono, 2010; Yadav & Iqbal, 2009), implying a potential influence of perceived corporate citizenship on job self-efficacy. Existing literature indicates that psychological contracts may vary due to the changes taking place at the business corporations (Bellou, 2007). For example, when employees realize that their firm is ignorant about their career development (i.e., economic citizenship), performs consumer fraud (i.e., legal citizenship), or cheats its business partners (i.e., ethical citizenship), they are less likely to maintain their employment relationship with the firm in the long run (e.g.,

Schwepker, 2001; Valentine & Barnett, 2003), consequently weakening relational contracts and enhancing transactional contracts (e.g., to have no commitment to the firm and only remain in the firm for a short time). Collectively, psychological contracts are impacted by perceived corporate citizenship directly and indirectly through the mediation of job self-efficacy. To better clarify each relationship in the proposed model of this study, we justify the relationship individually in the following.

The necessary and foremost social responsibility of a business organization is economic in nature, because the organization is a basic economic unit in society (Carroll, 1979) that takes care of its employees or other stakeholders (Maxfield, 2008; Turker, 2009). As such, it has a responsibility to provide high-quality working conditions, training, education, and career development (i.e., forms of economic corporate citizenship) while producing goods (or services) and selling them at a profit (Weyzig, 2009). Bandura (2000) argues that supportive relationships between employees and their firm in their job career (e.g., training and education) can enhance job self-efficacy through modelling attitudes and strategies for managing problems, and providing positive incentives and resources for effective coping (Lubbers et al., 2005).

Previous literature suggests that task knowledge is a stable factor that shapes personal job self-efficacy (Gist & Mitchell, 1992). Management should upgrade training for employees and implement a continuing education program (i.e., economic citizenship) to maintain their confidence of doing the job (i.e., job self-efficacy). By providing high-quality working conditions, training, education, and career development (i.e., economic corporate citizenship), management can help employees understand the nuances of their jobs, and thus they are more likely to feel confident that they can do their job and be creative in their work roles (Tierney & Farmer, 2002). Previous literature indicates that good employee training provided by the firm (i.e., economic citizenship) can have a positive influence on job self-efficacy (e.g., Earley, 1994; Mathieu, Martineau, & Tannenbaum, 1993), indicating a positive effect of perceived economic citizenship on job self-efficacy.

Meanwhile, perceived economic citizenship affects relational contracts positively and transactional contracts negatively. Previous research emphasizes the importance of career development and training (i.e., economic citizenship), representing the promised relational obligations for employees (Robinson & Morrison, 1995) and consequently strengthening their relational contracts. Indeed, the training, education, or career development provided by an organization (i.e., contexts of economic citizenship) can improve employees' expected length of stay with the firm, decreasing their transactional contracts and

encouraging relational contracts (e.g., Rousseau, 1990). Previous research indicates that relational contracts entail the exchange of socioemotional currency, involving the firm's provision of training and professional career development, as well as long-term job security, in exchange for the employees' fulfillment of generalized role obligations (Thompson & Bunderson, 2003). Collectively, based on the above rationale, the hypotheses can be derived as follows.

Hypothesis 2: Transactional contracts are influenced by perceived economic citizenship directly and indirectly via the mediation of job self-efficacy.

Hypothesis 3: Relational contracts are influenced by perceived economic citizenship directly and indirectly via the mediation of job self-efficacy.

Members of society expect a business to fulfill its mission within the framework of legal requirements (Carroll, 1979). Given that job self-efficacy refers to a sense of mastery and control over one's work environment, if employees are forced by their firm to work reluctantly in illegitimate environments, then they are likely to bear the blame and reproach themselves (e.g., guilty conscience) owing to the job, thus hurting their job self-efficacy (i.e., a positive relationship between perceived legal citizenship and job self-efficacy).

Meanwhile, legal citizenship perceived by employees has a negative effect on transactional contracts, but a positive effect on relational contracts. On one hand, when employees perceive, for example, serious gender or racial discrimination in their workplaces, against the law, they are affected by such organizational transgressions becoming discouraged, leading to their increased transactional contracts (e.g., stay in the firm for a limited time only) (e.g., Flanagan, 1978; Shaffer, Joplin, Bell, Lau, & Oguz, 2000). On the other hand, a firm that cautiously engages in legitimate business practices is more likely to motivate its employees to make personal efforts for the firm and retain its employees to stay over a long period of time (Bosell & Olson-Buchanan, 2004; Duggin, 2003), resulting in increased relational contracts. Consequently, the hypotheses are developed as follows.

Hypothesis 4: Transaction contracts are influenced by perceived legal citizenship directly and indirectly via the mediation of job self-efficacy.

Hypothesis 5: Relational contracts are influenced by perceived legal citizenship directly and indirectly via the mediation of job self-efficacy.

A firm's ethical corporate citizenship represents its behaviors and activities that are not necessarily codified into law, but nevertheless are anticipated by members of society and the firm's employees

(Carroll, 1979). Ethics is a fundamental part of a performance culture in a successful firm (O'Donohue & Nelson, 2009), and thus employees' confidence about performing it (e.g., job self-efficacy) may be enhanced if they work in a firm with strong ethical citizenship. Ethical citizenship presented by a firm helps its employees to do their job in a right and self-confident way (Jensen & Wygant, 1990), thus leading to their increased job self-efficacy (i.e., a positive relationship between perceived ethical citizenship and job self-efficacy).

In the meantime, an important way for linking ethical corporate citizenship and employees' psychological contracts is through inferences drawn from how their firm ethically treats people (e.g., McAllister & Bigley, 2002; Rosenberg, 1979). When a firm treats various stakeholders (including its employees) ethically, the employees are encouraged to strive for a long-term employment relationship with the firm (Schwepker, 2001), suggesting a positive relationship between perceived ethical citizenship and relational contracts. On the other hand, employees prefer to keep a short-term relationship with their firm if the firm treats others unethically (Grover, 1993), suggesting a negative relationship between perceived ethical citizenship and transactional contracts. It is understandable that employees feel they may be mistreated by their firm one day if they see that the firm often treats others unethically.

Job self-efficacy expectations are directly associated with ethical perceptions of employees to have successfully navigated past work situations and circumstances provided by their firm (e.g., Jones, 1986). In other words, if ethical cues about the firm provided in the immediate work contexts were previously positive and supportive of success (e.g., treat business partners fairly), then self-efficacy will be elevated. Conversely, job self-efficacy will be attenuated if the work environment provided by the firm reveals the questionable likelihood of success (e.g., fraudulent business practices).

Psychological contracts may represent a proxy for measuring an organization's ethical citizenship (e.g., ethical climate) (Thompson & Hart, 2006). An organization's ethical citizenship (e.g., integrity) is reflected in how well it lives up to its obligations to employees (Thompson & Hart, 2006). The misconduct by the organization (i.e., unethical citizenship) often discourages relational contracts (e.g., psychological contract violation) among an organization's workforce (Thompson & Hart, 2006). Specifically, low corporate citizenship perceived by employees often results in less commitment and efforts for the firm on their part (i.e., strong transactional contracts) (e.g., Appelbaum, Deguire, & Lay, 2005; Jaramillo, Mulki, & Solomon, 2006), and weak relational contracts with, for example, strong intention to find

another job (e.g., Hart, 2005; Jaramillo et al., 2006). Collectively, work environments historically fraught with ethical conflict inherently lead employees to question their personal competency, eventually devastating job self-efficacy. Collectively, the hypotheses about ethical citizenship are described as follows.

Hypothesis 6: Transactional contracts are influenced by perceived ethical citizenship directly and indirectly via the mediation of job self-efficacy.

Hypothesis 7: Relational contracts are influenced by perceived ethical citizenship directly and indirectly via the mediation of job self-efficacy.

Philanthropic corporate responsibilities are those about which society has no clear-cut message for business organizations and they are left to individual judgment and choice (Carroll, 1979). When employees observe that their firm performs philanthropic citizenship well and reveals good voluntary citizenship in society, their psychological confidence about working in their firm is likely boosted (Lin, 2010a; Maerki, 2008), suggesting a positive effect of perceived philanthropic citizenship on job self-efficacy (i.e., a positive relationship between perceived philanthropic citizenship and job self-efficacy).

Given that transactional contracts are short term, have a purely materialistic focus, and entail limited involvement by employees (Raja et al., 2004), philanthropic citizenship is unlikely to have a positive effect on transactional contracts. Previous literature confirms that philanthropic citizenship is not always good for employees, because a firm's activities for accomplishing philanthropic citizenship share some materialistic resources that could be provided to its employees (Lin et al., 2010).

In reality, a business firm has limited resources to invest in a variety of business activities, such that it is not possible for the firm to actively perform philanthropic citizenship (e.g., sponsorships and charity contributions) without using its existing limited resources in operations, fringe benefits, compensation, or additional healthcare insurance (Lin et al., 2010). Previous studies suggest that using corporate resources for philanthropic citizenship not related to primary stakeholders (e.g., a firm's employees and consumers) may not be helpful for shareholders or employees (Bergeron, 2007; Hillman & Keim, 2001). In fact, employees could complain that their resources are being excessively used for philanthropic citizenship activities instead of their welfare, leading to a negative relationship between perceived philanthropic citizenship and transactional contracts.

Relational contracts that represent employees' perceptions and expectations about their obligations in their employment relationship with their firm (Raja et al., 2004) can be positively driven by the

firm's socially discretionary obligations (i.e., philanthropic citizenship). A survey reveals that more than half of UK employees care very much about the social and environmental responsibilities of their work firm (Dawkins, 2004). The philanthropic actions presented by a firm (e.g., preserving environmental resources) help increase its credits and reliability (Lin, 2010a), which motivate its employees to commit themselves to the firm and make efforts for the firm, resulting in increased relational contracts. Based on the above rationales, the hypotheses about philanthropic citizenship can be stated as follows.

Hypothesis 8: Transactional contracts are influenced by perceived philanthropic citizenship directly and indirectly via the mediation of job self-efficacy.

Hypothesis 9: Relational contracts are influenced by perceived philanthropic citizenship directly and indirectly via the mediation of job self-efficacy.

METHODS

Subjects and procedures

The research hypotheses described above were empirically tested using a survey of working professionals from IT firms in Taiwan. This study initially invited part-time MBA students working professionally in the IT industry to help conduct the survey, targeting a total of 20 large IT firms in Taiwan. These sample firms mainly specialize in one or few of the five high-tech areas (i.e., electronics; computer peripherals and components; computers and communication; semiconductors; and optical electronics). Subjects were invited to fill out the surveys, linked by a four-digit identifier (the last four digits of their home or cell phone number). Two sets of questionnaires were distributed at two different time points to the same subjects set apart by one month. Although there is no consensus in the literature regarding a perfect time span between two consecutive surveys, one acceptable option is a gap of one month, which has been applied in previous studies (Hunt & Morgan, 1994; Lin & Bhattacharjee, 2009; Lin, Tsai, Wang, & Chiu, 2011; Petty, Singleton, & Connell, 1992) as an appropriate span for research surveys across two points of time.

Of 1000 questionnaires distributed to the subjects at Time 1, a total of 753 usable questionnaires were returned, for a response rate of 75.30%. After a month (i.e., at Time 2), another 1000 questionnaires were distributed; eventually 598 usable questionnaires were returned, for a response rate of 59.80%. After the questionnaires collected from the two time points were matched up based on their four-digit identifier, there were 506 usable matched pairs, for a response

rate of 50.06%. In our sample, 224 participants have a bachelor's degree or higher (44.71%). A total of 82 respondents in the survey are managers (16.37%). The sample characteristics are listed in Table 1.

Measures

The constructs in this study were measured using five-point Likert scales drawn or modified from previous literature (Dabos & Rousseau, 2004; Lin, 2010a; Maignan & Ferrell, 2000; Mosley, Boyar, Carson, & Pearson, 2008; Turker, 2009) with the technique of back-translation (Reynolds, Diamantopoulos, and Schlegelmilch, 1993). The outcomes, transactional contracts, and relational contracts were surveyed for Time 2; job self-efficacy and corporate citizenship were surveyed for Time 1. Three steps were employed to design our measurement items. First, the original items in the English language from previous studies were translated into Chinese and then simultaneously modified (or dropped in case of their inappropriateness in Chinese) by a focus group of five persons familiar with organizational behavior research, including four graduate students and one professor.

Second, following the questionnaire design, this study conducted a pilot test (prior to the actual survey) with a sample of 62 working professionals by using an exploratory factor analysis with the promax oblique to assess the quality of our scale items and to improve questionnaire readability. Note that the subjects investigated in the pilot test were excluded from the subsequent actual survey. Some inappropriate items based on the pilot test results were further

reworded or removed from our survey questionnaire. Last, key points of back-translation (Reynolds et al., 1993) were applied to examine an English version questionnaire as well as a Chinese one by an outside professor who was not an author of this study. A high degree of correspondence between the two questionnaires (evaluated and confirmed by the outside professor) assures this research that the translation process did not introduce substantial translation biases in the Chinese version of our questionnaire. Appendix A lists all the scale items. Note that economic citizenship can be related to consumers or employees. Given our major focus on employees, we modified the scale items for measuring the economic citizenship from the work of Lin (2010a), who also focused on the scope of employees rather than the scope of consumers (Maignan & Ferrell, 2001). Nevertheless, we had referred to two other studies (Maignan & Ferrell, 2000; Turker, 2009) in the development of our scale items.

With regard to the scale items herein, this study tried to retain the similar meaning of the original items by slightly rewording them. For example, the third item for measuring *perceived economic citizenship* was originally stated in the literature as "My firm provides a quality working environment for employees." Due to its slightly low factor loading in the pilot test, this study reworded this item to "My firm provides a quality and safe working environment for employees." Similarly, the third item for measuring *perceived philanthropic citizenship* was originally stated in the literature as "My firm sponsors to improve the public well-being of society." Owing to its low factor loading in the pilot test, this study reworded this item to "My firm is concerned about the improvement of the public well-being of society." Likewise, while the third item for measuring *transactional contracts* was originally stated in the literature as "Research collaboration for a specified time period only," this study modified this item into "I want to work in the firm for a limited time only."

For the two surveys of this study, we planned three critical measures to reduce and detect the potential threat of common method bias. First, collecting our data from surveying the same subjects twice at two different time points (i.e., one month apart) effectively reduces the threat of common method bias. Specifically, in this study, psychological contracts are surveyed at Time 2 while the other constructs are surveyed in Time 1. It is important to note that this measure (i.e., data collection from subjects over time and one month apart) is better than any post-hoc statistical methods used for detecting or eliminating common method bias (Bal, De Lange, Ybema, Jansen, & Van der Velde, 2011; Lin, 2010b; Podsakoff, MacKenzie, Lee, & Podsakoff, 2003; Sanford & Oh, 2010). Second, this study surveyed respondents

TABLE 1
Sample characteristics

Characteristic	N = 506
<i>Gender</i>	
Male	277 (54.74%)
Female	229 (45.26%)
<i>Age (years)</i>	
20–29	185 (36.56%)
30–39	249 (49.20%)
40–49	50 (9.89%)
50 or above	22 (4.35%)
<i>Department</i>	
Research & development	72 (14.23%)
Human resource/Training	25 (4.94%)
Finance/Accounting	46 (9.09%)
Sales/Service	198 (39.13%)
Production	144 (28.46%)
Others	21 (4.15%)
<i>Tenure (years)</i>	
Less than 1	68 (13.44%)
1–5	242 (47.83%)
6–10	123 (24.31%)
11–15	29 (5.73%)
16–20	25 (4.94%)
21 or more	19 (3.75%)

without obtaining their names to reduce their suspicion or hesitation in terms of factually filling out our survey questionnaires. Respondents were assured of complete anonymity in the cover letter, confirming that neither their personal names nor the names of their organizations would be disclosed. Third, Harman's single factor test was performed (Podsakoff & Organ, 1986), revealing that no single factor that accounts for a majority of the variances was found. Based on the above three measures, common method bias is unlikely a threat in our data sample.

Data analysis

The final survey data with a sample size of 506 usable responses were analyzed via a two-step structural equation modelling (SEM) approach suggested by Anderson and Gerbing (1988). The procedure of CALIS in SAS software was used for the data analysis of SEM. While confirmatory factor analysis (CFA) was performed in the first stage to analyze the collected data for assessing validity, the structural model in the second stage was empirically evaluated for the purpose of testing our hypotheses. The correlation matrix of the data is provided in Appendix B. Test results from the two stages are given next.

CFA analysis was done on all items corresponding to the seven research constructs. The goodness-of-fit of the hypothesized CFA model was assessed by applying a variety of fit metrics as shown in Table 2. The figures of CFI, NFI, GFI, and NNFI were all larger than or equal to 0.9. The normalized chi-square (chi-square/degrees of freedom) of the CFA model was smaller than the recommended value of 3.0, the RMR was smaller than 0.05, and the RMSEA was smaller than 0.08. These figures suggest that this study's hypothesized CFA model fits the empirical data well (Bentler & Bonett, 1980).

Convergent validity was assessed through three criteria suggested by previous literature (Fornell & Larcker, 1981; Lin, Hung, & Chiu, 2008; Lin, 2009). First, all factor loadings in Table 2 were significant at $p < 0.001$, which assures convergent validity of our research constructs (Anderson & Gerbing, 1988). Second, the values of Cronbach's alpha for the constructs were all larger than 0.70 (see Table 2), satisfying the requirement of reliability for research instruments. Third, the average variance extracted (AVE) for all the constructs exceeded 0.50, revealing that the overall measurement items adequately capture sufficient variance in the underlying construct over and above that attributable to measurement error (Fornell & Larcker, 1981). To sum up, the empirical data collected by this study met all three criteria required to assure convergent validity.

This study used chi-square difference tests based on the Bonferroni method suggested by previous

literature (Levin, Serlin, & Seaman, 1994; Lin, Chen, Chiu, & Lee, 2011; Lin & Chiu, 2011) for assessing discriminant validity. The Bonferroni method is applied to solve the potential problem of multiple comparisons. It is a correction utilized when several dependent or independent statistical tests are being conducted simultaneously. Specifically, a given alpha value (α) may be proper for the comparison of each individual, but it is inappropriate for the entire set of all simultaneous comparisons. The popular and most conservative solution is the application of the Bonferroni method, which sets α for the entire set of (n) comparisons equal to (α) by taking the alpha value for each comparison equal to (α/n). Therefore, by controlling for the experiment-wise error rate at the overall significance level of 0.01, this study used the critical value $\chi^2(1, 0.01/21) = 12.21$ as the chi-square difference based on Bonferroni method. Since chi-square difference statistics for all pairs of constructs in Table 3 exceeded this critical value of 12.21, discriminant validity for this study's data sample is confirmed—that is, the empirical results of this study show that the instruments used for measuring the constructs of interest in this study are statistically acceptable.

TABLE 2
Standardized loadings and reliabilities

Construct	Indicators	Standardized loading	AVE	Cronbach's α
Transactional contracts	TR1	0.76 ($t = 18.87$)	0.63	0.84
	TR2	0.76 ($t = 18.92$)		
	TR3	0.87 ($t = 22.30$)		
Relational contracts	RE1	0.76 ($t = 18.95$)	0.58	0.80
	RE2	0.82 ($t = 20.75$)		
	RE3	0.70 ($t = 16.76$)		
Job self-efficacy	SE1	0.77 ($t = 19.64$)	0.63	0.80
	SE2	0.75 ($t = 18.92$)		
	SE3	0.78 ($t = 19.88$)		
	SE4	0.87 ($t = 23.37$)		
Perceived economic citizenship	EC1	0.72 ($t = 17.25$)	0.51	0.81
	EC2	0.71 ($t = 16.91$)		
	EC3	0.77 ($t = 18.79$)		
	EC4	0.66 ($t = 15.58$)		
Perceived legal citizenship	LE1	0.90 ($t = 25.26$)	0.69	0.89
	LE2	0.85 ($t = 23.24$)		
	LE3	0.81 ($t = 21.39$)		
	LE4	0.77 ($t = 19.91$)		
Perceived ethical citizenship	ET1	0.79 ($t = 20.13$)	0.55	0.83
	ET2	0.79 ($t = 20.05$)		
	ET3	0.76 ($t = 19.05$)		
	ET4	0.64 ($t = 15.14$)		
Perceived philanthropic citizenship	PH1	0.91 ($t = 25.82$)	0.66	0.90
	PH2	0.78 ($t = 20.17$)		
	PH3	0.76 ($t = 19.57$)		
	PH4	0.81 ($t = 21.25$)		

Goodness-of-fit indices ($N = 506$): $\chi^2_{278} = 690.82$ ($p < 0.001$); NNFI = 0.93; NFI = 0.91; CFI = 0.94; GFI = 0.90; RMR = 0.02; RMSEA = 0.05.

Structural model

Based on the above CFA model, this study further performed structural model testing that reflects the hypothesized associations for purposes of hypotheses testing. The structural model herein was tested only using first-order constructs. Although second-order applications in SEM models may be used to reduce the number of first-order constructs, this practice of simplification by reducing the number of latent constructs is achieved at the expense of rigor, leaving the constructs of interest as an opaque construct to be elucidated (Lin & Ding, 2009). That is, the second-order factor is often like a “black-box” concept (Narayan, Rajendran, & Sai, 2008), revealing less information for construct relationships. This study includes age, marriage status, gender, education, job position, job career, and tenure as control variables to avoid inappropriate inferences in case of unpredictable effects caused by the control variables. Typically in SEM, exogenous variables are allowed to covary freely (Hatcher, 1994), and thus this study follows general practices of SEM (Hatcher, 1994; Lin, 2009, 2010a) to allow our four dimensions of corporate citizenship to covary to one another. Table 4 presents the test results of this analysis.

TABLE 3
Chi-square difference tests for examining discriminate validity

Construct pair	$\chi^2_{278} = 690.82$ (unconstrained model)	
	χ^2_{279} (constrained model)	χ^2 difference
(F1, F2)	961.98***	271.16
(F1, F3)	1258.60***	567.78
(F1, F4)	1194.33***	503.51
(F1, F5)	1207.63***	516.81
(F1, F6)	1264.73***	573.91
(F1, F7)	1226.01***	535.19
(F2, F3)	996.11***	305.29
(F2, F4)	921.63***	230.81
(F2, F5)	933.88***	243.06
(F2, F6)	940.87***	250.05
(F2, F7)	1009.39***	318.57
(F3, F4)	1119.39***	428.57
(F3, F5)	1146.37***	455.55
(F3, F6)	1366.55***	675.73
(F3, F7)	1499.29***	808.47
(F4, F5)	1032.38***	341.56
(F4, F6)	1098.34***	407.52
(F4, F7)	919.43***	228.61
(F5, F6)	986.29***	295.47
(F5, F7)	1426.21***	735.39
(F6, F7)	1165.73***	474.91

***Significant at the 0.001 overall significance level using the Bonferroni method. F1 = transactional contracts; F2 = relational contracts; F3 = job self-efficacy; F4 = perceived economic citizenship; F5 = perceived legal citizenship; F6 = perceived ethical citizenship; F7 = perceived philanthropic citizenship.

The test results for our nine hypotheses are explained in the following (see Figure 1). First, job self-efficacy has no influence on transactional contracts, but has a positive effect on relational contracts. Second, both perceived economic and legal citizenships have positive effects on job self-efficacy and relational contracts, and negative effects on

TABLE 4
Path coefficients and *t* values

Model paths	Standardized coefficient	<i>t</i> value
<i>Paths</i>		
Job self-efficacy → Transactional contracts	0.02	0.47
Job self-efficacy → Relational contracts	0.18**	3.56
Perceived economic citizenship → Job self-efficacy	0.15*	2.07
Perceived economic citizenship → Transactional contracts	-0.25**	-3.29
Perceived economic citizenship → Relational contracts	0.24**	3.68
Perceived legal citizenship → Job self-efficacy	0.17**	2.45
Perceived legal citizenship → Transactional contracts	-0.25**	-3.27
Perceived legal citizenship → Relational contracts	0.30**	4.56
Perceived ethical citizenship → Job self-efficacy	0.30**	3.61
Perceived ethical citizenship → Transactional contracts	0.12	1.43
Perceived ethical citizenship → Relational contracts	0.02	0.29
Perceived philanthropic citizenship → Job self-efficacy	0.02	0.49
Perceived philanthropic citizenship → Transactional contracts	-0.13*	-2.19
Perceived philanthropic citizenship → Relational contracts	0.16**	3.15
<i>Control variables</i>		
Gender → Transactional contracts	0.04	0.92
Age → Transactional contracts	-0.03	-0.29
Tenure → Transactional contracts	0.23**	2.94
Education → Transactional contracts	-0.03	-0.55
Job position → Transactional contracts	0.13**	2.64
Job career → Transactional contracts	-0.32**	-3.06
Marriage → Transactional contracts	-0.06	-1.17
Gender → Relational contracts	-0.03	-0.70
Age → Relational contracts	0.14	1.61
Tenure → Relational contracts	-0.05	-0.70
Education → Relational contracts	-0.06	-1.57
Job position → Relational contracts	0.01	0.01
Job career → Relational contracts	0.08	0.89
Marriage → Relational contracts	0.01	0.27

p* < 0.05; *p* < 0.01. Goodness-of-fit indices (*N* = 506): $\chi^2_{447} = 946.69$ (*p*-value < 0.001); NNFI = 0.94; NFI = 0.90; CFI 0.95; GFI = 0.90; RMR = 0.02; RMSEA = 0.05. The control variables are observable variables while research constructs in the hypotheses are latent factors. Age, tenure, and job career are all continuous variables. Dummy variables include gender (1 = males; 0 = females), education (1 = high school or under; 0 = college, university or above); job position (1 = managers; 0 = nonmanagers); marriage (1 = married; 0 = unmarried or others).

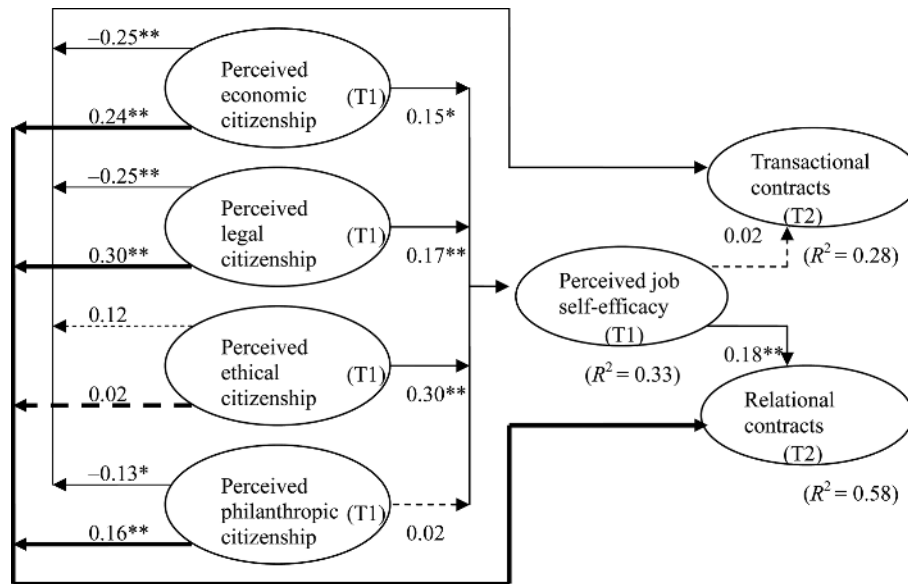


Figure 1. Test results. The broken lines indicate insignificant test results for such model paths; the solid lines confirm their significance. T1 = time 1; T2 = time 2. * $p < 0.05$; ** $p < 0.01$.

transactional contracts. Third, perceived ethical citizenship has a positive effect on job self-efficacy, but no effect on transactional and relational contracts. Lastly, perceived philanthropic citizenship has no effect on job self-efficacy, but a negative effect on transactional contracts and a positive effect on relational contracts. Table 5 summarizes the results of research hypotheses of this study. Finally, the post hoc analysis of Sobel tests (see Appendix C) indicates the significance of mediation in the statistical models (MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002; Preacher & Hayes, 2008), thus significantly supporting our justification about the mediating role of job self-efficacy between three corporate citizenship dimensions and psychological contracts.

DISCUSSION

This study is one of the first to examine how different dimensions of corporate citizenship directly or indirectly affect psychological contracts. Previous literature often asserts either direct or indirect effects generated by corporate citizenship without understanding that different dimensions of such corporate citizenship may have direct, indirect, or both effects on their outcome (e.g., Brammer, Millington, & Rayton, 2007; Lin et al., 2010). An important theoretical contribution of this study is its seamless integration of various theoretical rationales that include psychological contract theory (e.g., O'Donohue & Nelson, 2009; Seck & Parzefall, 2008), job self-efficacy based on social cognitive theory (Lubbers et al., 2005), and corporate citizenship. Such integration highlights the theoretical need to recognize a full range of corporate citizenship dimensions and their complex direct and

indirect effects on psychological beliefs via the mediation of job self-efficacy. Particularly, in psychological contract research, little attention has been paid to the bidimensional (transactional/relational) interpretive framework (see, for example, O'Donohue & Nelson, 2007) with the simultaneous inclusion of corporate citizenship and job self-efficacy. For that reason, this study is one of the few that complement previous theoretical research by providing a unified model of three alternative perspectives (i.e., psychological contracts, self-efficacy, and corporate citizenship) that may inform organizational behavior, at least in IT workplace settings.

This study presents important complementary research to previous literature. It establishes a critical bridge between perceived corporate citizenship and psychological contracts by empirically testing job self-efficacy as a key mediator, while many previous studies directly link corporate citizenship to its outcomes such as profits or financial performance (e.g., Becker-Olsen, Cudmore, & Hill, 2006) without empirically exploring its potential mediator.

The insignificant influence of job self-efficacy on transactional contracts may suggest that transactional contracts are affected only by an immediate impetus (e.g., safe daily working environments) without a need for job self-efficacy. More specifically, the findings of this study indicate that transactional contracts are only directly and negatively affected by perceived economic, legal, and philanthropic citizenship, warning that management should recheck and improve such citizenship in case they detect strong transactional contracts among employees.

Relational contracts are affected by ethical citizenship indirectly and affected by philanthropic

TABLE 5
The summarized results of research hypotheses

<i>Hypothesis</i>	<i>Results</i>
<i>H1</i> : Transactional contracts are negatively influenced by job self-efficacy, while relational contracts are positively influenced by job self-efficacy.	Partially supported
<i>H2</i> : Transactional contracts are influenced by perceived economic citizenship directly and indirectly via the mediation of job self-efficacy.	Partially supported
<i>H3</i> : Relational contracts are influenced by perceived economic citizenship directly and indirectly via the mediation of job self-efficacy.	Supported
<i>H4</i> : Transactional contracts are influenced by perceived legal citizenship directly and indirectly via the mediation of job self-efficacy.	Partially supported
<i>H5</i> : Relational contracts are influenced by perceived legal citizenship directly and indirectly via the mediation of job self-efficacy.	Supported
<i>H6</i> : Transactional contracts are influenced by perceived ethical citizenship directly and indirectly via the mediation of job self-efficacy.	Unsupported
<i>H7</i> : Relational contracts are influenced by perceived ethical citizenship directly and indirectly via the mediation of job self-efficacy.	Partially supported
<i>H8</i> : Transactional contracts are influenced by perceived philanthropic citizenship directly and indirectly via the mediation of job self-efficacy.	Partially supported
<i>H9</i> : Relational contracts are influenced by perceived philanthropic citizenship directly and indirectly via the mediation of job self-efficacy.	Partially supported

citizenship directly, indicating that these two kinds of corporate citizenship have complementary and positive influences (direct vs. indirect) on relational contracts. A positive and multiplier effect on relational contracts can be possible if these two kinds of corporate citizenship are well developed at the same time. Given an indirect effect of perceived ethical citizenship on relational contracts through job self-efficacy, management should make good use of job self-efficacy as a key checkpoint for understanding how relational contracts are gradually driven by ethical citizenship.

The unsupported results for some relationships in our hypotheses suggest that not all elements of corporate citizenship can equally influence psychological contracts through the same paths, showing that different dimensions of corporate citizenship have different meanings and weights for different employees. Specifically, perceived ethical citizenship having no direct effects on transactional and relational contracts may suggest that the influence of ethical citizenship on employees' psychological contracts takes time to yield results (due to an inherently implicit feature of ethical citizenship), and thus ethical citizenship has only an indirect effect on relational contracts through the mediation of job self-

efficacy. By contrast, the perceived philanthropic citizenship having only direct effects on psychological contracts (rather than indirect ones) may suggest that philanthropic citizenship has little to do with employees' job self-efficacy, but can directly motivate psychological contracts in a timely manner (due to an inherently explicit feature of philanthropic citizenship). Nevertheless, the unexpected results for the four insignificant model paths warrant further study, so that the real causes behind the unsupported relationships between research constructs are not misinterpreted.

Practical implications

The findings of this study have two substantial implications for the strategic implementation of corporate citizenship within firms. First, the relationship between corporate citizenship and job self-efficacy suggests that the benefits of corporate citizenship contributions (e.g., environmental protection) are not restricted to external reputation and customer relationship management (CRM) but may also be reflected in the psychological contracts of internal stakeholders (i.e., employees). Such a phenomenon suggests that managers and practitioners should efficiently facilitate the communication of corporate citizenship policies that are related to employees, consequently boosting their job self-efficacy. Second, the significant relationship between each aspect of employees' perceived corporate citizenship and psychological contracts emphasizes the payoff in terms of relational contracts that may flow from corporate investments in corporate citizenship. Psychological contracts cannot be changed or constrained by managers' authority or instructions, but rather they are likely improved or repaired after employees identify themselves with their firm's actions from different social perspectives (e.g., ethical citizenship).

Relational contracts that are affected by both perceived economic and legal citizenship directly and indirectly through the mediation of job self-efficacy suggest that these two kinds of corporate citizenship are the most powerful factors to stimulate relational contracts (with both direct and indirect effects), and thus management should always keep an eye on organizational changes related to such citizenship (e.g., new training programs, or new guidance for business alliances with others). In other words, internal customers (i.e., employees) should be satisfied when the firm provides, for example, good career development before they can produce quality goods or service for their customers. The key role of perceived economic and legal citizenship is theoretically and practically justifiable, because employees' relational contracts are unlikely to improve if the employees lack self-confidence and experience poor economic and

legal conditions in the workplace (e.g., King & Bu, 2005). Managers as well should promote business codes and regulations related to law and clarify any confusion so as to avoid employees' misunderstanding legal citizenship issues. Management should be determined to eliminate illegal opportunistic behavior that hazards business legitimacy (Lin, 2010a), because such behavior actually results in a guilty conscience and a lack of confidence for employees, and eventually weakens their relational contracts. Future actions or plans that could continuously improve economic and legal citizenship should be embedded as a part of an organization's visions. Consequently, employees' relational contracts can be strongly built up by both direct and indirect effects of perceived economic and legal citizenship.

The indirect effect of perceived ethical citizenship on relational contracts through job self-efficacy implies that ethics adds to people's confidence in their own ability to do their job and thus strengthens their relational contracts. Since only a direct effect of perceived philanthropic citizenship on relational contracts exists (rather than an indirect one), management should establish efficient communication channels with employees and present the employees with timely information related to philanthropic actions taken by the firm. In that case, employees can perceive straightforward philanthropic citizenship conducted by their firm, therefore increasing their relational contracts.

In summary, the findings of this study show that psychological contracts can be directly and indirectly improved by strengthened corporate citizenship, suggesting that striving for corporate citizenship is of great worth to a firm. The viewpoint of multiple influencers (i.e., four dimensions of corporate citizenship) is quite different from that of the traditional literature solely focusing on firm structures or rewards (e.g., payrolls) in affecting psychological contracts without recognizing the necessity of corporate social responsibilities. The given definitions of the four dimensions of corporate citizenship are closely inter-related with the different concepts and values of employees (Turker, 2009). By understanding the dimensions in depth, management can learn to tailor a variety of firm policies to employees' needs in order to increase their relational contracts and restrain transactional contracts. For instance, in terms of economic citizenship, business firms might enforce a policy to avoid "off-the-clock" work (Royle, 2005), which is unpaid work and considered a deprivation of employees' benefit.

Limitations of the study

This study has three limitations associated with the interpretation of the empirical results. The first

limitation of the study is its generalizability, due to the highly delimited nature of the subject sample across IT firms in a single country setting (i.e., Taiwan). The inferences drawn from such a sample may not be completely generalizable to professionals from different industries or from other countries that have quite a different national culture.

Second, due to a research scope that focused on perceived corporate citizenship across employees, this study did not address institutional variables, such as firm ownership, firm sizes, firm structure, or firm profitability.

Third, the study did not use mixed-worded scales (e.g., reverse items), and thus there might be a potential problem of acquiescence. Although previous critics suggest that the use of mixed-worded scales might disrupt their dimensionality and lessen their internal consistency, the inclusion of few reverse-worded items could still be useful for reducing the dangers of response bias such as acquiescence (Wong, Rindfleisch, & Burroughs, 2003).

The fourth limitation is the possibility of a common method bias due to the use of self-reported scale items to measure all research constructs, which could sometimes inflate the strength of the relationships among these constructs.

Future scholars may try to mitigate these shortcomings by including more control variables, surveying more samples across various industries, and observing research subjects several times over a few months or years so that the genuine influences of perceived corporate citizenship on psychological contracts can be longitudinally examined. Future research may survey all the variables at both Time 1 and Time 2 in the context of corporate citizenship so that a good use of the longitudinal data by, for example, testing the reversed causation in the research can be accomplished. In addition to psychological contracts, some outcomes such as job performance, organizational citizenship behavior, and knowledge sharing may be included and tested in future studies. The findings of this study provide a contribution by showing a new direction that future research can take by continually searching for more potential antecedents and mediators of psychological contracts (e.g., organizational identification, self-esteem) in order to better understand the formation of psychological contracts.

REFERENCES

- Adèr, H. J., Mellenbergh, G. J., & Hand, D. J. (2008). *Advising on research methods: A consultant's companion*. Huizen, The Netherlands: Johannes van Kessel.
- Allen-Brown, V. (1998). African American women faculty and administrators: Surviving the multiple barriers of discrimination. In L. Valverde & L. Castenell, Jr. (Eds.), *The multicultural campus* (pp. 169–187). Walnut Creek, CA: AltaMira Press.

- Andersson, L. M. (1996). Employee cynicism: An examination using a contract violation framework. *Human Relations*, 49, 1395–1418.
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modelling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103, 411–423.
- Appelbaum, S. H., Deguire, K. J., & Lay, M. (2005). The relationship of ethical climate to deviant workplace behavior. *Corporate Governance*, 5, 43–57.
- Bal, P. M., De Lange, A. H., Ybema, J. F., Jansen, P. G. W., & Van der Velde, M. E. G. (2011). Age and trust as moderators in the relation between procedural justice and turnover: A large-scale longitudinal study. *Applied Psychology*, 60, 66–86.
- Bandura, A. (1986). *Social foundations of thought and action: A social-cognitive theory*. Englewood Cliffs, NJ: Prentice Hall.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York, NY: Freeman.
- Bandura, A. (2000). Self-efficacy: The foundation of agency. In W. J. Perrig & A. Grob (Eds.), *Control of human behaviour, mental processes and consciousness* (pp. 17–33). Mahwah, NJ: Lawrence Erlbaum Associates.
- Becker-Olsen, K. L., Cudmore, B. A., & Hill, R. P. (2006). The impact of perceived corporate social responsibility on consumer behaviour. *Journal of Business Research*, 59, 46–53.
- Bellou, V. (2007). Psychological contract assessment after major organizational change: The case of mergers and acquisitions. *Journal of Employee Relations*, 2, 68–88.
- Bennett, R. J., & Stamper, C. L. (2001). Corporate citizenship and deviancy: A study of work behavior. In C. Galbraith & M. Ryan (Eds.), *International research in the business disciplines: Strategies and organizations in transition* (pp. 265–284). Amsterdam, The Netherlands: Elsevier Science.
- Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness-of-fit in the analysis of covariance structures. *Psychological Bulletin*, 88, 588–606.
- Bergeron, D. M. (2007). The potential paradox of organizational citizenship behavior: Good citizens at what cost? *Academy of Management Review*, 32, 1078–1095.
- Bosell, W., & Olson-Buchanan, J. B. (2004). Experiencing mistreatment at work: The role of grievance filing, nature of mistreatment, and employee withdrawal. *Academy of Management Journal*, 47, 129–139.
- Bozeman, D. P., Perrewe, P. L., Hochwarter, W. A., & Brymer, R. A. (2001). Organizational politics, perceived control, and work outcomes: Boundary conditions on the effects of politics. *Journal of Applied Social Psychology*, 31, 486–503.
- Brammer, S., Millington, A., & Rayton, B. (2007). The contribution of corporate social responsibility to organizational commitment. *International Journal of Human Resource Management*, 18, 1701–1719.
- Brockner, J. (1988). *Self-esteem at work*. Lexington, MA: Lexington Books.
- Call, K. T., & Mortimer, J. T. (2001). *Arenas of comfort in adolescence: A study of adjustment in context*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Carmeli, A., Gilat, G., & Waldman, D. A. (2007). The role of perceived organizational performance in organizational identification, adjustment and job performance. *Journal of Management Studies*, 44, 972–992.
- Carroll, A. B. (1979). A three-dimensional conceptual model of corporate performance. *Academy of Management Review*, 4, 497–505.
- Carroll, A. B. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons*, 34, 39–48.
- Cartwright, S., & Holmes, N. (2006). The meaning of work: The challenge of regaining employee engagement and reducing cynicism. *Human Resource Management Review*, 16, 199–208.
- Chen, A. X., Tsui, A. S., & Zhong, L. (2008). Reactions to psychological contract breach: A dual perspective. *Journal of Organizational Behavior*, 29, 527–548.
- Clausen, J. S. (1991). Adolescent competence and the shaping of the life course. *American Journal of Sociology*, 96, 805–842.
- Dabos, G. E., & Rousseau, D. M. (2004). Mutuality and reciprocity in the psychological contracts of employees and employers. *Journal of Applied Psychology*, 89, 52–72.
- Dawkins, J. (2004). *The public's views of corporate responsibility 2003*. London, UK: MORI.
- De los Salmones, M. D. M. G., Crespo, A. H., & del Bosque, I. R. (2005). Influence of corporate social responsibility on loyalty and valuation of services. *Journal of Business Ethics*, 61, 369–385.
- Dovidio, J. F., Piliavin, J. A., Gaertner, S. L., Schroeder, D. A., & Clark, R. D. (1991). The arousal cost-reward model and the process of intervention: A review of the evidence. In M. S. Clark (Ed.), *Prosocial behavior* (pp. 86–118). Newbury Park, CA: Sage.
- Duggin, S. H. (2003). Internal corporate investigations: Legal ethics, professionalism and the employee interview. *Columbia Business Law Review*, 2003(3), 859–964.
- Earley, P. C. (1994). Self or group? Cultural effects of training on self-efficacy and performance. *Administrative Science Quarterly*, 39, 89–117.
- Efron, B., & Tibshirani, R. (1993). *An introduction to the bootstrap*. London, UK: Chapman and Hall.
- Flanagan, R. (1978). Discrimination theory, labor turnover, and racial unemployment differentials. *Journal of Human Resources*, 13, 187–207.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18, 39–50.
- Franco, L. M., Bennett, S., & Kanfer, R. (2002). Health sector reform and public sector health worker motivation: A conceptual framework. *Social Science and Medicine*, 54, 1255–1266.
- Gecas, V. (1982). The self concept. *Annual Review of Sociology*, 8, 1–33.
- Gist, M. E., & Mitchell, T. R. (1992). Self-efficacy: A theoretical analysis of its determinants and malleability. *Academy of Management Review*, 17, 183–211.
- Grover, S. L. (1993). Lying, deceit, and subterfuge: A model of dishonesty in the workplace. *Organization Science*, 4, 478–495.
- Hatcher, L. (1994). *A step-by-step approach to using the SAS system for factor analysis and structural equation modelling*. Cary, NC: SAS Institute.
- Hart, S. E. (2005). Hospital ethical climates and registered nurses' turnover intentions. *Journal of Nursing Scholarship*, 37, 173–177.
- Hillman, A. J., & Keim, G. D. (2001). Shareholder value, stakeholder management, and social issues: What's the bottom line? *Strategic Management Journal*, 22, 125–139.
- Hunt, S. D., & Morgan, R. M. (1994). Organizational commitment: One of many commitments or key mediating construct? *Academy of Management Journal*, 37, 1568–1587.
- Jaramillo, F., Mulki, J. P., & Solomon, P. (2006). The role of climate on salesperson's role stress, job attitudes, turnover intention, and job performance. *Journal of Personal Selling & Sales Management*, 26, 271–281.
- Jensen, L. C., & Wygant, S. A. (1990). A developmental self-valuing theory: A practical approach for business ethics. *Journal of Business Ethics*, 9, 215–225.
- Jones, G. (1986). Socialization tactics, self-efficacy, and newcomers' adjustments to organizations. *Academy of Management Journal*, 29, 262–279.
- Joyner, B. E., & Payne, D. (2002). Evolution and implementation: A study of values, business ethics and corporate social responsibility. *Journal of Business Ethics*, 41, 297–311.

- Kaler, J. (2000). Reasons to be ethical: Self-interest and ethical business. *Journal of Business Ethics*, 27, 161–173.
- Kidder, D. (2005). Is it “who I am”, “What I can get away with”, or “What you’ve done to me”? A multi-theory examination of employee misconduct. *Journal of Business Ethics*, 57, 389–398.
- King, R. C., & Bu, N. (2005). Perceptions of the mutual obligations between employees and employers: A comparative study of new generation IT professionals in China and the United States. *International Journal of HRM*, 16, 46–64.
- Klassen, R. M., & Chiu, M. M. (2011). The occupational commitment and intention to quit of practicing and pre-service teachers: Influence of self-efficacy, job stress, and teaching context. *Contemporary Educational Psychology*, 36, 114–129.
- Lazarus, R. S. (1999). *Stress and emotion: A new synthesis*. New York, NY: Springer.
- Levin, J. R., Serlin, R. C., & Seaman, M. A. (1994). A controlled, powerful multiple-comparison strategy for several situations. *Psychological Bulletin*, 115, 153–159.
- Lin, C. P. (2009). Learning online brand personality and satisfaction: The moderating effects of gaming engagement. *International Journal of Human-Computer Interaction*, 25, 220–236.
- Lin, C. P. (2010a). Modeling corporate citizenship, organizational trust, and work engagement based on attachment theory. *Journal of Business Ethics*, 94, 517–531.
- Lin, C. P. (2010b). Learning virtual community loyalty behavior from a perspective of social cognitive theory. *International Journal of Human-Computer Interaction*, 26, 345–360.
- Lin, C. P., & Bhattacharjee, A. (2009). Understanding online social support and its antecedents: A socio-cognitive model. *Social Science Journal*, 46, 724–737.
- Lin, C. P., Chen, S. C., Chiu, C. K., & Lee, W. Y. (2011). Understanding purchase intention during product-harm crises: Moderating effects of perceived corporate ability and corporate social responsibility. *Journal of Business Ethics*, 102, 455–471.
- Lin, C. P., & Chiu, C. K. (2011). Understanding helping intention and its antecedents among instant messaging users. *Online Information Review*, 35, 386–400.
- Lin, C. P., & Ding, C. G. (2009). Comparing the main effects and moderating effects of education among three models in IT service: A quantitative approach. *Quality & Quantity*, 43, 617–633.
- Lin, C. P., Hung, W. T., & Chiu, C. K. (2008). Being good citizens: Understanding a mediating mechanism of organizational commitment and social network ties in OCBs. *Journal of Business Ethics*, 81, 561–578.
- Lin, C. P., Lyau, N. M., Tsai, Y. H., Chen, W. Y., & Chiu, C. K. (2010). Modeling corporate citizenship and its relationship with organizational citizenship behaviors. *Journal of Business Ethics*, 95, 357–372.
- Lin, C. P., Tsai, Y. H., Joe, S. W., & Chiu, C. K. (2012). Modeling the relationship among perceived corporate citizenship, firms’ attractiveness, and career success expectation. *Journal of Business Ethics*, 105, 83–93.
- Lin, C. P., Tsai, Y. H., Wang, Y. J., & Chiu, C. K. (2011). Modeling IT relationship quality and its determinants: A potential perspective of network externalities in e-service. *Technological Forecasting and Social Change*, 78, 171–184.
- Lubbers, R., Loughlin, C., & Zweig, D. (2005). Young workers’ job self-efficacy and affect: Pathways to health and performance. *Journal of Vocational Behavior*, 67, 199–214.
- Luo, X., & Bhattacharya, C. B. (2006). Corporate social responsibility, customer satisfaction, and market value. *Journal of Marketing*, 70, 1–18.
- MacKinnon, D. P., Lockwood, C. M., Hoffman, J. M., West, S. G., & Sheets, V. (2002). A comparison of methods to test mediation and other intervening variable effects. *Psychological Methods*, 7, 83–104.
- Maerki, H. U. (2008). The globally integrated enterprise and its role in global governance. *Corporate Governance*, 8, 368–374.
- Maignan, I. (2001). Consumers’ perceptions of corporate social responsibilities: A cross-cultural comparison. *Journal of Business Ethics*, 30, 57–72.
- Maignan, I., & Ferrell, O. C. (2000). Measuring corporate citizenship in two countries: The case of the United States and France. *Journal of Business Ethics*, 23, 283–297.
- Maignan, I., & Ferrell, O. C. (2001). Antecedents and benefits of corporate citizenship: An investigation of French businesses. *Journal of Business Research*, 51, 37–51.
- Manly, B. F. J. (1997). *Randomization, bootstrap, and Monte Carlo methods in biology* (2nd ed.). London, UK: Chapman and Hall.
- Mathieu, J. E., Martineau, J. W., & Tannenbaum, S. I. (1993). Individual and situational influences on the development of self-efficacy: Implication for training effectiveness. *Personnel Psychology*, 46, 125–147.
- Mauno, S., Kinnunen, U., Mäkikangas, A., & Nätti, J. (2005). Psychological consequences of fixed-term employment and job insecurity among health care staff. *European Journal of Work and Organizational Psychology*, 14, 209–237.
- Maxfield S. (2008). Reconciling corporate citizenship and competitive strategy: Insights from economic theory. *Journal of Business Ethics*, 80, 367–377.
- McAllister, D. J., & Bigley, G. A. (2002). Work context and the definition of self: How organizational care influences organizational-based self-esteem. *Academy of Management Journal*, 45, 894–904.
- Midlarsky, E. (1984). Competence and helping: Notes toward a model. In E. Staub et al. (Eds.), *Development and maintenance of prosocial behavior* (pp. 291–308). New York, NY: Plenum Press.
- Millward, L. J., & Hopkins, L. J. (1998). Organizational commitment and the psychological contract. *Journal of Social and Applied Psychology*, 28, 16–31.
- Morrison, E. W., & Robinson, S. L. (1997). When employees feel betrayed: A model of how psychological contract violation develops. *Academy of Management Review*, 22, 226–256.
- Mosley, D. C., Jr., Boyar, S. L., Carson, C. M., & Pearson, A. W. (2008). A production self-efficacy scale: An exploratory study. *Journal of Managerial Issues*, 20, 272–285.
- Muafi, A. S. H., & Gusaptono, H. (2010). The role of life skills training on self-efficacy, self esteem, life interest, and role behavior for unemployed youth. *Global Journal of Management and Business Research*, 10, 132–139.
- Mulki, J. P., Lassk, F. G., & Jaramillo, F. (2008). The effect of self-efficacy on salesperson work overload and pay satisfaction. *Journal of Personal Selling and Sales Management*, 28, 285–297.
- Narayan, B., Rajendran, C., & Sai, L. P. (2008). Scale to measure and benchmark service quality in tourism industry. *Benchmarking*, 15, 469–493.
- O’Donohue, W., & Nelson, L. (2007). Let’s be professional about this: Ideology and the psychological contracts of registered nurses. *Journal of Nursing Management*, 15, 547–555.
- O’Donohue, W., & Nelson, L. (2009). The role of ethical values in an expanded psychological contract. *Journal of Business Ethics*, 90, 251–263.
- Panatik, S. A., O’Driscoll, M. P., & Anderson, M. H. (2011). Job demands and work-related psychological responses among Malaysian technical workers: The moderating effects of self-efficacy. *Work & Stress*, 25, 355–370.
- Pestian, J., Nasrallah, H., Matykiewicz, P., Bennett, A., & Leenaars, A. (2010). Suicide note classification using natural language processing: A content analysis. *Biomedical Informatics Insights*, 3, 19–28.
- Petty, M. M., Singleton, B., & Connell, D. W. (1992). An experimental evaluation of an organization incentive plan in the electric utility industry. *Journal of Applied Psychology*, 77, 427–436.

- Pinkston, T. S., & Carroll, A. B. (1994). Corporate citizenship perspectives and foreign direct investment in the U.S. *Journal of Business Ethics*, 13, 157–169.
- Pinkston, T. S., & Carroll, A. B. (1996). A retrospective examination of CSR orientations: Have they changed? *Journal of Business Ethics*, 15, 199–207.
- Podsakoff, P. M., & Organ, D. W. (1986). Self-reports in organizational research: Problems and prospects. *Journal of Management*, 12, 531–544.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavior research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88, 879–903.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40, 879–891.
- Raja, U., Johns, G., & Ntallianis, F. (2004). The impact of personality on psychological contracts. *Academy of Management Journal*, 47, 350–367.
- Rego, A., Leal, S., & Cunha, M. P. (2011). Rethinking the employees' perceptions of corporate citizenship dimensionalization. *Journal of Business Ethics*, 104, 207–218.
- Reynolds, N., Diamantopoulos, A., & Schlegelmilch, B. B. (1993). Pretesting in questionnaire design: A review of the literature and suggestions for further research. *Journal of the Market Research Society*, 35, 171–182.
- Robinson, S. L., & Morrison, E. W. (1995). Psychological contracts and OCB: The effect of unturned obligations on civic virtue behavior. *Journal of Organizational Behavior*, 16, 289–298.
- Rosenberg, M. (1979). *Conceiving the self*. New York, NY: Basic Books.
- Rousseau, D. M. (1989). Psychological and implied contracts in organizations. *Employee Responsibilities and Rights Journal*, 2, 121–139.
- Rousseau, D. M. (1990). New hire perceptions of their own and their employer's obligations: A study of psychological contracts. *Journal of Organizational Behavior*, 11, 389–400.
- Rousseau, D. M. (1995). *Psychological contracts in organizations: Understanding written and unwritten agreements*. Thousand Oaks, CA: Sage.
- Royle, T. (2005). Realism or idealism? Corporate social responsibility and the employee stakeholder in the global fast-food industry. *Business Ethics: A European Review*, 14, 42–55.
- Sanford, C., & Oh, H. (2010). The role of user resistance in the adoption of a mobile data service. *Cyberpsychology, Behavior, and Social Networking*, 13, 663–672.
- Schwepeker, C. (2001). Ethical climate's relationship to job satisfaction, organisational commitment and turnover intention in sales force. *Journal of Business Research*, 54, 39–52.
- Seeck, H., & Parzefall, M. R. (2008). Employee agency: Challenges and opportunities for psychological contract theory. *Personnel Review*, 37, 473–489.
- Shaffer, M. A., Joplin, J. R. W., Bell, M. P., Lau, T., & Oguz, C. (2000). Gender discrimination and job-related outcomes: A cross-cultural comparison of working women in the United States and China. *Journal of Vocational Behavior*, 57, 395–427.
- Shore, L. M., & Tetrick, L. E. (1994). The psychological contract as an explanatory framework in the employment relationship. In C. Cooper & D. Rousseau (Eds.), *Trends in organizational behavior* (Vol. 1, pp. 91–109). Chichester, UK: Wiley.
- Simon, C., & Martinez, J. L. (2002). The impact of corporate social responsibility policies on the employees' psychological contract. Retrieved July 31, 2012, from www.latienda.ie.edu/working_papers_economia/WP02-33.pdf.
- Simons, R. (1991). The institutionalization of organizational ethics. *Journal of Business Ethics*, 10, 493–506.
- Suazo, M. M., & Turnley, W. H. (2010). Perceived organizational support as a mediator of the relations between individual differences and psychological contract breach. *Journal of Managerial Psychology*, 25, 620–648.
- Taneja, S., Taneja, P., & Gupta, R. (2011). Researches in corporate social responsibility: A review of shifting focus, paradigms, and methodologies. *Journal of Business Ethics*, 101, 343–364.
- Thompson, J. A., & Bunderson, J. S. (2003). Violations of principle: Ideological currency in the psychological contract. *Academy of Management Review*, 28, 571–586.
- Thompson, J. A., & Hart, D. W. (2006). Psychological contracts: A nano-level perspective on contract theory. *Journal of Business Ethics*, 68, 229–241.
- Tierney, P., & Farmer, S. M. (2002). Creative self-efficacy: Its potential antecedents and relationship to creative performance. *Academy of Management Journal*, 45, 1137–1148.
- Todd, S. Y., & Kent, A. (2006). Direct and indirect effects of task characteristics on organizational citizenship behavior. *North American Journal of Psychology*, 8, 253–268.
- Turker, D. (2009). Measuring corporate social responsibility: A scale development study. *Journal of Business Ethics*, 85, 411–427.
- Tyler, T. R., Kramer, R. M., & John, O. P. (1999). *The psychology of the social self*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Valentine, S., & Barnett, T. (2003). Ethics code awareness, perceived ethical values, and organizational commitment. *Journal of Personal Selling and Sales Management*, 23, 359–367.
- Van Buren, III, H. J. (2000). The bindingness of social and psychological contracts: Toward a theory of responsibility in downsizing. *Journal of Business Ethics*, 25, 205–219.
- Weyzig, F. (2009). Political and economic arguments for corporate social responsibility: Analysis and a proposition regarding the CSR agenda. *Journal of Business Ethics*, 86, 417–428.
- Wong N., Rindfleisch A., & Burroughs, J. E. (2003). Do reverse-worded items confound measures in cross-cultural consumer research? The case of the material values scale. *Journal of Consumer Research*, 30, 72–91.
- Wood, D. (1991). Corporate social performance revisited. *Academy of Management Review*, 16, 691–718.
- Yadav, P., & Iqbal, N. (2009). Impact of life skill training on self-esteem, adjustment and empathy among adolescents. *Journal of the Indian Academy of Applied Psychology*, 35, 61–70.
- Zahra, S. A., & LaTour, M. S. (1987). Corporate social responsibility and organizational effectiveness: A multivariate approach. *Journal of Business Ethics*, 6, 459–467.

Original manuscript received September 2011

Revised manuscript received August 2012

First published online month/year October 2012

APPENDIX A MEASUREMENT ITEMS

Transactional contracts (Source: Dabos & Rousseau, 2004)

- TR1. I have made no commitments to the firm regarding my future career.
- TR2. I only perform specific job activities for which I am compensated.
- TR3. I want to work in the firm for a limited time only.

Relational contracts (Source: Dabos & Rousseau, 2004)

- RE1. I am a steady employee and am not looking for a job elsewhere.
- RE2. I do my best to protect the firm's image.
- RE3. I commit myself personally to this company and make personal efforts for the firm.

Job self-efficacy (source: Mosley et al., 2008)

- SE2. I am confident in correcting the mistakes in my work.
- SE3. I am confident in following all of the safety rules on the job.
- SE4. I am confident in maintaining job performance.
- SE5. I am confident in keeping up with the operational pace of my firm.

Perceived economic citizenship (sources: Lin, 2010a; Maignan & Ferrell, 2000; Turker, 2009)

- EC1. My firm has flexible company policies that enable employees to better balance work and personal life.
- EC2. My firm provides important job training for employees.
- EC3. My firm provides a quality and safe working environment for employees.
- EC4. My firm encourages employees to develop their skills and careers.

Perceived legal citizenship (source: Lin, 2010a; Maignan & Ferrell, 2000; Turker, 2009)

- LE1. My firm follows the law to prevent discrimination in workplaces.
- LE2. My firm always fulfills its obligations of contracts.
- LE3. My firm always seeks to respect all laws regulating its activities.
- LE4. My firm always pays its taxes on a regular and continuing basis.

Perceived ethical citizenship (sources: Lin, 2010a; Maignan & Ferrell, 2000; Turker, 2009)

- ET1. My firm has a comprehensive code of conduct in ethics.
- ET2. Fairness toward coworkers and business partners is an integral part of the employee evaluation process in my firm.
- ET3. My firm provides accurate information to its business partners.
- ET4. We are recognized as a company with good business ethics.

Perceived philanthropic citizenship (sources: Lin, 2010a; Maignan & Ferrell, 2000; Turker, 2009)

- PH1. My firm sponsors partnerships with local schools or institutions.
- PH2. My firm is concerned about respecting and protecting the natural environment.
- PH3. My firm is concerned about the improvement of the public wellbeing of society.
- PH4. My firm encourages its employees to participate in volunteer activities.

APPENDIX B

TABLE B1
Correlation matrix

Variable	M	SD	1	2	3	4	5	6	7
1. Transactional contracts	2.65	0.87	(0.84)						
2. Relational contracts	3.72	0.68	-0.48**	(0.80)					
3. Job self-efficacy	4.01	0.51	-0.22*	0.45**	(0.80)				
4. Economic citizenship	3.79	0.64	-0.30*	0.50**	0.41**	(0.81)			
5. Legal citizenship	4.00	0.60	-0.34**	0.55**	0.46**	0.51**	(0.89)		
6. Ethical citizenship	3.73	0.66	-0.24*	0.50**	0.47**	0.55**	0.62**	(0.83)	
7. Philanthropic citizenship	3.78	0.70	-0.30*	0.46**	0.32*	0.43**	0.49**	0.49**	(0.90)

* $p < 0.05$; ** $p < 0.01$. Cronbach's alpha values shown in parentheses.

APPENDIX C

TABLE C1
Sobel tests of the mediations of this study

	Independent variables	Dependent variables	Unstandardized regression weights	Standard error	Sobel tests z-value	Result
<i>Mediation 1. Economic citizenship → Job self-efficacy → Relational contracts</i>						
Eq1a	Economic citizenship	Job self-efficacy	0.265	0.026	7.57**	Supported
Eq1b	Job self-efficacy	Relational contracts	0.747	0.066		
$p^{**} < 0.01$.						
<i>Mediation 2. Legal citizenship → Job self-efficacy → Relational contracts</i>						
Eq2a	Legal citizenship	Job self-efficacy	0.316	0.027	8.13**	Supported
Eq2b	Job self-efficacy	Relational contracts	0.747	0.066		
$p^{**} < 0.01$.						
<i>Mediation 3. Ethical citizenship → Job self-efficacy → Relational contracts</i>						
Eq3a	Ethical citizenship	Job self-efficacy	0.292	0.024	8.28**	Supported
Eq3b	Job self-efficacy	Relational contracts	0.747	0.066		

** $p < 0.01$. Structural equation modelling (SEM) is a multivariate method that can also control for measurement error, while Sobel test is a univariate method without controlling for measurement error. For that reason, it is appropriate that Sobel tests are conducted to further verify hypothesized indirect effects given the confirmation of SEM tests. Based on the simultaneous test results of SEM in Figure 1, none of the exogenous factors (i.e., corporate citizenships) could have indirect effects on transactional contracts through job self-efficacy due to the insignificant relationship between job self-efficacy and transactional contracts. Therefore, Sobel tests for such indirect effects are not conducted in this study. Similarly, perceived philanthropic citizenship is unlikely to have an indirect effect on relational contracts due to the insignificant relationship between perceived philanthropic and job self-efficacy, and thus Sobel tests for such indirect effect are not conducted by this study. Bootstrapping procedures are not used in this study for two reasons. First, bootstrapping procedures are useful in a situation when the sample size is insufficient for straightforward statistical inference (Adèr, Mellenbergh, & Hand, 2008). Second, bootstrapping does not provide general finite-sample guarantees, and thus it has a tendency to be overly optimistic (Efron & Tibshirani, 1993; Manly, 1997; Pestian, Nasrallah, Matykiewicz, Bennett, & Leenaars, 2010).