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# Political Connections and Related-Party Transactions: Evidence from Iranian Firms

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#### ABSTRACT

The present study aims to investigate the association between political connections and related-party transactions for the firms listed on the Tehran Stock Exchange (TSE). Sample includes the 485 firm-year observations from companies listed on the Tehran Stock Exchange during the years 2013 to 2017 and research hypothesis was tested using multivariate regression model based on panel data. We find that political connections are negatively associated with related-party transactions. In other words, politically connected firms are less inclined to exercise opportunistic behaviours by related-party transactions in comparison to other firms. Moreover, additional analysis reveals that the negative relationship between political connections and related-party transactions is more pronounced in larger firms. Our findings not only extend the extant theoretical literature concerning the stock political economy in developing countries including emerging capital market of Iran, but also help investors, managers, capital market regulators, policy makers and accounting standard setters to make informed decisions.

## 1 Introduction

The extant empirical literature shows consensus on the claim that politically-connected firms are characterized by high influence [10], low dividend payout ratio and profitability [16], high rent-seeking activities [4,11,12,33], and resource diversion [29]. Despite the substantial breakthroughs achieved in the understanding of the impact of political connections, the process that underlies this effect is almost unknown. Literature on related-party transactions abounds with the studies which consider these transactions as mechanisms whereby political connections are exploited at the expense of minority investors. Undertaking related-party transactions enable politically-connected firms to meet their self-interests. This has been intensified owing to the lack of the protection of minority shareholders' interests as well as weak enforcement of the rules in the Iranian capital market. A Related- Party transaction is a transfer of resources, services, or obligations between related parties, regardless of whether a price is charged.

As items of concern, these transactions are mostly diversified and complicated transactions that occur between a firm and managers, CEOs, major owners or related parties. There have been controversial views on the value of the existing related-party transactions in business transactions. Examples of their benefits include low transaction cost, high firm value [7,18,19, 22], shorter negotiation processes [19], and renewal of corporate operations [8]. Nevertheless, since related-party transactions are likely to take advantage of shareholders control to implement earnings management, it may appear to be a

source of loss to shareholders [8,13,19,20,25]. Although the literature considers related-party transactions a contributing factor to improve efficacy [24], related-party loans seem to spoil firm value [2], Firms use abnormal sale transactions, as a kind of related-party transactions, to divert the available resources. For example, Wang and Yuan [36], put forward the view that earnings offer less information content for firms with related-party sale level. Related- party transactions has received a great attention to the academicians and several studies have been carried out both in developed and developing countries. However, a very few attention is done in the emerging countries in general and Iran in particular. The capital market in Iran is very new and somewhat inefficient. Furthermore, presence of the government in the ownership structure of Iranian companies, ownership concentration, and other external and political factors such as trade and economic sanctions against Iran that distinguish it from other countries, makes this country a good sample for research. As such, the focus of the study is to acquire an understanding of whether the political connections affect the related-party transactions amongst Iranian public listed companies.

This study also aims to provide additional evidence that supports or rejects prior research findings in developed countries and to determine whether the findings can be generalized in Iranian market. For this reason, we selected a sample of 485 firm-year observations from companies listed on the Tehran Stock Exchange. The availability of data restricted our research horizon only on a five-year period from 2013 to 2017. We find that political connections are negatively associated with related-party transactions. Our paper contributes to the existing accounting and finance literature written on the topic, in the following ways: First, the results of the study can advance theorizing about corporate related-party transactions in the emerging capital markets in the developing countries like Iran. Second, the evidence points to the extent to which political connections can influence corporate related-party transactions. These findings contribute to the debate regarding the role of political connections in reducing the related-party transactions, and provide valuable insights for managers, investors, capital market regulators and accounting standard-setters. In closing, the findings can raise novel ideas for further study in the domain of political economy.

# 2 Literature review and Hypothesis Development

Political connections between firms and political figures can be traced to their mutual demands. Owing to various factors including the weakness of marketplace in meeting the requirements of enterprises, avoiding political costs and tunneling economical and information resources, firms are motivated to join these connections. Likewise, on the basis of resource dependence theory, political connections degrade certainty in business environment through providing firms with key and valuable resources [38]. On the other hand, political parties require government's support to achieve their political, economic, social and cultural goals. Moreover, political parties tend to have the support of corporates to provide their necessary financial resources to meet their political needs like establishing campaign headquarters. In addition, these connections can improve the government's efficacy in dealing with country's vast needs [15]. Prior literature provided ample evidence on the benefits of political connections for firms, among which lower capital and debt costs, access to profitable public transactions, higher growth opportunity, lower commitment to rules and weaker control and surveillance are of paramount importance [11,4, 30,17]. Also, these firms enjoy tax benefits and bear less competitive pressure imposed by marketplace. Additionally, political connections appear to exert adverse impact on firms, especially on minority shareholders as they seem to provoke firms to tunnel corporate resources and carry out earnings management [5].

Related-party relationship is a typical characteristic of every business activity. For example, some enterprises delegate parts of their responsibilities to secondary enterprises, joint venture and related enterprises. Under these circumstances, firms with control, mutual control or considerable influence manage to influence financial position, performance and flexibility of those enterprises. Related parties may engage in undertaking transactions which unrelated parties do not conduct. A secondary enterprise, for instance, tend to sell its products to a primary enterprise at prices different from those sold to customers. Likewise, prices of transactions between related parties are likely to be different from those between unrelated parties.

Financial position, performance and flexibility of a business enterprise may be affected by Related-Party relationship, even if no transaction is conducted. The presence of the relationship is in its own merit sufficient to influence the enterprise's transactions with related parties. For example, when a firm is taken over by another one, it may terminate its relationship with that business due to the competition between this business and one of the businesses in the group [4]. Moreover, the linkage with related parties seem to compel either of the parties to avoid a certain activity as a result of the appreciable influence of the other party. For example, a secondary enterprise is likely to be halted from engaging in research and development activities according to the orders issued by the primary enterprise. Given the mentioned arguments, the awareness of transactions, account balance and relatedparty relationship seem to influence financial statement users while evaluating business activities like risk evaluation opportunities. Paying attention to the content of the relationship, rather than its legal format is of paramount significance in assessing every possible relationship with related parties [11]. Various views have been proposed about the pros and cons of employing related-party transactions in politically-connected firms. In the absence of effective market mechanism, transaction costs rise, and firms are inclined to utilize related-party transactions to enhance operational efficacy, reduce transaction costs and increase return on assets. On the contrary, related-party transactions like borrowing and exchange of assets can be characterized as an opportunistic behaviour undertaken to expropriate corporate resources and shareholders' rights. Additionally, tunnelling corporate resources through related-party transactions, due to complexity and possibility of concealing its consequences by manipulating financial reporting, is less likely to be discovered. Overall, politically-connected firms are more inclined to use related-party transactions due to the ease of resource exchange between firms and political parties [15].

From a different perspective, the relationship between political figures and firms are founded upon goals beyond business profitability. In other words, while non-politically-connected firms merely accentuate profitability and use any instruments like related-party transactions, politically-connected firms operate regarding various goals like wealth equality, employment, industry renewal, economic stability and national self-sufficiency [23,24, 3]. Habib et al. [15] Political connections, financing and firm performance: Evidence from Chinese private firms, investigated political connections and related-party transactions in a sample of 1775 firms listed on the Indonesia Stock Exchange during the years 2007-2013. They finally documented that politically-connected firms use more related-party transactions in comparison to their non-political counterparts. They also put forward the view that the variable of political connections is significantly correlated with the variable of related-party transactions. This appears to demotivate politically-connected firms to undertake abnormal related-party transactions to promote business profitability. As stated before, very little attention is paid to the empirical investigation of the effects of political connections on the related-party transactions. Nevertheless, a stream of research which have separately employed the variables of the current study are presented as follow: Wong et al. [37] examined the increase or decrease of sale value in related-party

transactions among similar business groups. They found that these transactions can enhance firm value. In a study entitled "The relationship between related-party transactions and control ownership", Minjung et al. [26] concluded that although these transactions reduce firm value in Korean firms, they are more pronounced when ownership is greatly controlled. Boubakri et al. [4] was concerned with exploring whether political connections affect corporate performance and financial decisions. They documented that political connections facilitate firms' access to funding resources. Chen et al. [6] considered the effect of political costs on earnings management in listed Chinese firms and concluded that firms implement earnings management to lower political pressures. Niessen and Ruenzi [27] lent support to claim that politically-connected firms in Germany operate financially better than their non-political counterpart. Song et al. [34] studied earnings management in politically connected firms in China during the years 2006-2008. Their findings revealed that politically-connected firms are less engaged in earnings management than other firms.

Nikoomaram et al. [28] examined connection-oriented economy, political connection and accruals quality in a sample of firms during the years 2005-2009. They indicated that political connections attenuate accruals quality. Darabi and Davoodkhani [9] reported that related-party transactions are negatively associated with firm value. Sarlak and Akbari [32] investigated the relationship between related-party transactions and earnings management in firms listed on the Tehran Stock Exchange. They come to this conclusion that related-party transactions are significantly correlated with earnings management. In addition, Salehi et al. [31] examine the impact of institutional ownership on the Relationship between tax and capital structure. They find that tax has a negative and significant impact and institutional ownership has a positive and significant impact on capital structure. In addition, the institutional ownership in corporate companies impacts and adjusts the relationship between tax and capital structure. In the light of this theoretical and empirical literature, it is possible to formulate the following hypothesis:

H<sub>1</sub>: There is a significantly negative association between political connections and related-party transactions.

# 3 Research Methodology

We select all publicly- listed companies in Tehran Stock Exchange (TSE) over the entire duration of the estimation time period (2013–2017) as initial samples. Of these initial samples, companies with long periods without transactions and firms that are either missing financial variables or that have insufficient data are eliminated. Financial institutions, banking, finance and investment firms are also eliminated, since their accounting and reporting environments differ from those in other industries. This gives a final sample of 485 firm-year observations from the fiscal years 2013 to 2017. Table 1 discusses the breakdown of sample procedure (panel A) as well as the number of sample per industry (panel B).

To investigate the association between political connections and related-party transactions, the authors estimate the following multivariate regression model:

$$RPT_{i,t} = \beta_0 + \beta_1 PCON_{i,t} + \beta_2 SIZE_{i,t} + \beta_3 LEV_{i,t} + \beta_4 GWTH_{i,t} + \beta_5 BIG_{i,t} + IND FE + YEAR FE + \varepsilon_{i,t}$$

$$\tag{1}$$

Where:

The dependent variable of the current study is the related-party transactions, which following Sarlak and Akbari [32], is calculated as sum of disclosed related-party transaction prices in notes to the annual financial statements divided by beginning assets of the firms.

The independent variable used in our study is political connections. We define political connections (PCON) as a dummy variable that equals 1 for politically connected firms and 0 otherwise. Theoretically speaking, previous literature has proposed such major characteristics for politically-connected firms as the presence of government- or parliament-dependent members of boards and/or the presence of government-affiliated majority shareholders (owning at least 10 percent of the firm's shares) in firms [28].

Table 1: Sample selection process

| Panel A: Sample selection procedure                     |              |  |
|---|--------------|--|
| Explanation   | Observations |  |
| Initial sample from 2013 to 2017                        | 1,525        |  |
| Less: Firm-years with long periods without transactions | (290)        |  |
| Less: Firm-years with insufficient or Missing data      | (505)        |  |
| Less: Financial institutions                            | (245)        |  |
| Final sample  | 485          |  |

Panel B: Industry distribution

| Industry                       | Observations | Percent |
|--------------------------------|--------------|---------|
| Automotive                     | 60           | 12.37%  |
| Mining and metal products      | 55           | 11.33%  |
| Non-metallic minerals          | 50           | 10.31%  |
| Cement and plaster             | 50           | 10.31%  |
| Metals                         | 50           | 10.31%  |
| Rubber and plastic             | 45           | 9.28%   |
| Machine tools                  | 40           | 8.25%   |
| Oil, gas and petrochemicals    | 45           | 9.28%   |
| Food                           | 45           | 9.28%   |
| Pharmaceuticals and healthcare | 45           | 9.28%   |
| Total                          | 485          | 100%    |

We include a set of control variables that prior research has found to be associated with the relatedparty transaction [31,1,21,35]. SIZE is the logarithm of firm's total sales.

Table 2: Variable definitions

| Variables            | Definition   |
|----------------------|--|
| Dependent Variable   |  |
| RPT                  | Related-party transactions divided by total assets.  |
| Independent variable |  |
| PCON                 | Dummy variable, equal to 1 for politically connected firms, and 0 otherwise.                     |
| Control Variables    |  |
| SIZE                 | Firm size measured as the logarithm of firm's total sales.                                       |
| LEV                  | Leverage measured as the total debts divided by total assets.                                    |
| GWTH                 | Firm growth opportunities, defined as the market value of equity divided by book value of equity |
| BIG                  | Dummy variable, equal to 1 if the firm is audited by BIG auditing firms, and 0 otherwise.        |
| IND                  | Industry dummy to control for industry fixed effect.   |
| Year                 | Dummy variables to control for fiscal year effect.   |

LEV is financial Leverage measured as the total debts divided by total assets. GWTH is firm growth opportunities, defined as the market value divided by book value of equity. BIG is a dummy variable that takes a value of 1 if the firm is audited by BIG auditing firms, 0 otherwise. In the regression model we also control for industry and year effects. Table 2 summarizes the definition of variables used in this paper. Since the panel data are superior to time-series and cross-sectional models with respect to the number of observations, low probability of multicollinearity among variables, bias reduction in estimation and heterogeneity of variance [14], the multivariate regression model based on panel data was employed to test the research hypothesis.

# 4 Empirical Results

# 4.1 Descriptive statistics

Table 3 presents the descriptive statistics of the research variables for the sampled firms during the years 2013-2017.

| Table 3: Descrip | tive statistics | for all | variables |
|------------------|-----------------|---------|-----------|
|------------------|-----------------|---------|-----------|

| Variables | N   | Mean   | Median | Minimum | Maximum | Std. Deviation |
|-----------|-----|--------|--------|---------|---------|----------------|
| RPT       | 485 | 0.373  | 0.161  | 0.000   | 7.613   | 1.021          |
| PCON      | 485 | 0.462  | 0.000  | 0.000   | 1.000   | 0.407          |
| SIZE      | 485 | 12.086 | 11.967 | 9.865   | 14.563  | 0.761          |
| LEV       | 485 | 0.596  | 0.598  | 0.145   | 1.409   | 0.193          |
| GWTH      | 485 | 3.172  | 2.451  | -21.351 | 28.177  | 3.055          |
| BIG       | 485 | 0.262  | 1.000  | 0.000   | 1.000   | 0.442          |

**Notes:** RPT - related-party transactions divided by total assets; PCON - 1 for politically connected firms, and 0 otherwise; SIZE - log of firm's total sales; LEV - Total debt divided by total assets; GWTH- Market value of equity divided by book value of equity; BIG-1 if the firm is audited by a Big auditor, and 0 otherwise.

As indicated in the table, the price of related-party transactions accounts for 37 percent of the corporate assets. In addition, 46 percent of the sampled firms are politically connected. Moreover, the mean value of financial leverage implies that approximately 60 percent of the assets of the sample firms were financed by debt. It is also noteworthy that the market value of the owner's equity in the vast majority of the studied firms is believed to exceed its book value, which is confirmed by the mean value of growth opportunity (3.172).

## 4.2 Regression results

In panel data analysis, in order to distinguish the usage of pool or panel data method, it is necessary to test F-limer and to determine the fixed effect or random method usage, Hausman test was used.

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Table 4: The results of tests used for the research model

| Test                                 | Statistics                             | Result                  |  |
|--------------------------------------|--|-------------------------|--|
| F-limer test                         | 7.618**                                | panel data method       |  |
| Hausman Test                         | 19.062**                               | fixed effects method    |  |
| Jarque-Bera test                     | 2.103                                  | Normality of residuals  |  |
| LR test                              | 403.51**                               | Heteroscedasticity      |  |
| Wooldridge test                      | 1.337                                  | Lack of autocorrelation |  |
| Notes: ** and * denote signification | ance at the 0.01 and 0.05 levels, resp | ectively .              |  |

Additionally, Jarque-Bera test is performed to examine whether residuals show normal distribution or not and to identify heteroscedasticity and serial autocorrelation, the Likelihood Ratio (LR) test and Wooldridge test were employed respectively. The results of the tests are represented in Table 4.

As can be seen, F-limer test and its level of significance suggests the use of panel data method. The results of Hausman test and its level of significance indicate that the model has to be estimated using fixed effects method. Since the significance level of Jarque-Bera test is greater than 0.05, the normal distribution of residuals, is confirmed.

The results of LR test reveal that the research model suffers from heteroscedasticity, which can be removed by estimating the model using Generalized Least Square method. The level of significance for Wooldridge test points to the lack of serial autocorrelation in the model. In addition, to ensure the lack of multicollinearity among explanatory variables, the multicollinearity was assessed using Variance Inflation Factor (VIF). As indicated in Table 5, the values of this statistics for the explanatory variables are less than 10, thereby confirming the lack of multicollinearity. The results of testing the research hypothesis are presented in Table 5.

| Table 5: The r | esults of testing | the research | hypothesis |
|----------------|-------------------|--------------|------------|
|----------------|-------------------|--------------|------------|

| Variable    | Exp. Sign | Coefficient | Std. Error | t-Statistic            | VIF   |
|-------------|-----------|-------------|------------|------------------------|-------|
| С           | +/-       | 0.291**     | 0.093      | 3.108                  | -     |
| PCON        | +/-       | -0.113*     | 0.049      | -2.278                 | 1.22  |
| SIZE        | -         | -0.155**    | 0.052      | -2.988                 | 1.17  |
| LEV         | +         | 0.014       | 0.026      | 0.535                  | 1.23  |
| GWTH        | +         | 0.002       | 0.004      | 0.533                  | 1.14  |
| BIG         | -         | -0.061*     | 0.031      | -2.005                 | 1.19  |
| Industry FE |           | Yes         |            | 1                      |       |
| Year FE     |           | Yes         | XX         |                        |       |
| F-stat.     |           | 9.102**     | M          | Durbin-Watson stat     | 1.944 |
| $R^2$       | 0.561     |             | A          | djusted R <sup>2</sup> | 0.535 |

Notes: \*\* and \* denote significance at the 0.01 and 0.05 levels, respectively PCON - 1 for politically connected firms, and 0 otherwise; SIZE - log of firm's total sales; LEV - Total debt divided by total assets; GWTH- Market value of equity divided by book value of equity; BIG-1 if the firm is audited by a Big auditor, and 0 otherwise.

Considering F-statistics and level of significance, one can conclude that the fitted regression model is significant at the 5% level. Given the value of adjusted R<sup>2</sup>, the researchers reached the conclusion that independent and control variables explain about 53% of changes of the dependent variable. As indicated in the above table, the estimated coefficient and t-statistics of the variable of PCON are negative and significant at the 0.05 level. Therefore, the research hypothesis is accepted.

### 4.3 Sensitivity Analysis

To shed more lights on the topic of discussion and conduct a sensitivity analysis on the research findings, other tests were also performed. In the first test, the results of the study were meticulously considered with respect to the variable of firm size. To do so, firms were classified as large firms (with a size larger than the median of the whole sample) or small firms (with a size smaller than the median of the whole sample) such that large firms were assigned the value of 1 and small firms got the value of 0. Then, the moderating effect of firm size on the relation between political connections and related-party transactions were examined, and the results were presented in Table 6. As indicated, the estimated coefficient and t-statistics of the interactional variable of PCON\*SIZE is negative and significant at 0.05 level, i.e. association between political connections and related-party transactions is more pronounced in larger firms.

Table 6: The results of the fitted model with respect to the variable of firm size

| Variable    | Exp. Sign | Coefficient | Std. Error | t-Statistic |       |
|-------------|-----------|-------------|------------|-------------|-------|
|             | Exp. Sign |             |            |             | VIF   |
| С           | +/-       | 0.295**     | 0.091      | 3.247       | =     |
| PCON        | +/-       | -0.125*     | 0.055      | -2.258      | 1.24  |
| SIZE        | -         | -0.171**    | 0.053      | -3.198      | 1.21  |
| PCON *SIZE  | +/-       | -0.118*     | 0.056      | -2.071      | 1.26  |
| LEV         | +         | 0.012       | 0.026      | 0.489       | 1.17  |
| GWTH        | +         | 0.002       | 0.004      | 0.535       | 1.19  |
| BIG         | -         | -0.064*     | 0.029      | -2.206      | 1.23  |
| Industry FE |           | Yes         |            |             |       |
| Year FE     |           | Yes         |            |             |       |
| F-stat.     | 9         | .834**      | Durbin-    | Watson stat | 1.962 |
| $R^2$       | 0         | .585        | Adjusted   | $IR^2$      | 0.561 |

and \* denote significance at the 0.01 and 0.05 levels, respectively.

In another test, the relation between political connections and related-party transactions was investigated for each research years. Table 7 represents the significance of the variable of political connections (PCON) separately for each year. As indicated in the table, the coefficients for PCON are negative across all years. As such, one can conclude that the results are still robust while the sample was reduced and the research hypothesis was examined for each individual year of the research period.

**Table 7:** The results of regression analysis in each research year

| Years | Coefficient | t-Statistic |
|-------|-------------|-------------|
| 2013  | -0.082      | -1.165      |
| 2014  | -0.122      | -1.672      |
| 2015  | -0.145*     | -2.051      |
| 2016  | -0.163*     | -2.226      |
| 2017  | -0.182**    | -2.603      |

#### 5 Conclusions

The available evidence on the significant effect of political connections seems to suggest that these connections not only enhance firm value, but also facilitates access to lenders, and hence reducing debt costs and the likelihood of bankruptcy. On the other hand, there have been dissenters to this view, suggesting that political connections appear to be at the expense of minority shareholders' interests. Empirical evidence reveals that politically-connected firms seek to achieve certain goals like high financial leverage, profitability and low dividend payout, high rent-seeking activities and tunneling. Despite considerable breakthrough in figuring out the impact of political connections, the source to which it is attributed is already unknown. On the other hand, related-party transactions refer to activities concerning the transfer of resources, services, or obligations between related parties, regardless of whether a price is charged. Therefore, related-party transactions seem to allow firms to expropriate resources and implement earnings management at the expense of minority shareholders. Thus, the current research aims at investigating the relationship between political connections related-party transactions in firms listed on the Tehran Stock Exchange. According to the theoretical framework and evidence reported by prior literature, the results of testing the research hypothesis are obtained as follows: The results of testing the research hypothesis point to a negative and significant correlation between political connections and related-party transactions.

To put it differently, increased political connections can mitigate related-party transactions, which, in turn, implies that politically-connected firms with such goals as wealth equality, employment, industry renewal, economic stability and national self-sufficiency seek to go beyond business profitability, in that they are less motivated to conduct abnormal related-party transactions to promote their business profitability. The findings of this study contradict those obtained by Habib et al. [15], which suggest that political connections seem to enhance Related- Party transactions. The different economic conditions of Iran and Indonesia lies at the heart of this issue. The findings of the study recommend investors and market activists to pay attention to corporate political connections while making investment decisions, and consider it as a factor influencing managerial behavior towards related-party transactions.

Monitoring institutions like stock exchange is also suggested to monitor financial reporting process of these firms and impose certain obligations upon firms to disclose information relating to their political connections. Moreover, accounting market regulators are expected to enhance their level of surveillance on the performance of audit firm which audit politically-connected firms to promote audit quality. In conclusion, it should be noted that our study has several limitations. First, it analyzes only five years of data (2013 to 2017) which limits the generalizability of the results to other time periods. Second, the model used in this study may omit some variables correlated with the related-party transactions. While we have added some control variables, we may not have successfully identified all potential correlated omitted variables. Despite the aforementioned limitations, our findings could be proved valuable to investors, managers and regulators since they have implications for all these related parties. كاه علوه الشاني ومطالعات فريخ

### References

- [1] Barton, J., Simko, P. J., The balance sheet as an earnings management constraint, The Accounting Review, 2002, 77, P. 1–27. Doi:10.2308/accr.2002.77.s-1.1
- [2] Berkman, H., Cole, R. A., Fu, L. J., Expropriation through loan guarantees to related parties: Evidence from China, Journal of Banking & Finance, 2009, 33, P. 141–156. Doi:10.1016/j.jbankfin.2007.11.001.
- [3] Borisova, G., Brockman, P., Salas, J. M., Zagorchev, A., Government ownership and corporate governance: Evidence from the EU. Journal of Banking & Finance, 2012, 36, P. 2917-2934. Doi:10 .1016/j.jbankfin.2012.01.008.
- [4] Boubakri, N., Cosset, J. C., Saffar, W., The impact of political connections on firms' operating performance and financing decisions, Journal of Financial Research, 2012, 35(3), P.397–423. Doi:10.1111/j.1475-6803.2012.01322.x

- [5] Boubakri, N., Guedhami, O., Mishra, D., Saffar, W., *Political connections and the cost of equity capital*, Journal of Corporate Finance, 2012, **18** (3), P. 541–559. Doi:10.1016/j.jcorpfin.2012.02.005
- [6] Chen, C. J. P., Y. Ding, C. Kim., *Political connection, legal enforcement and analysts' forecast characteristics*. Working paper, City University of Hong Kong, 2012.
- [7] Chen, S., Wang, K.,Li, X., Product market competition, ultimate controlling structure and Related-Party transactions, China Journal of Accounting Research, 2012, 5, P. 293–306. Doi:10.1016/j. cjar.2012.11.001
- [8] Cheung, Y.-L., Jing, L., Lu, T., Rau, P. R., Stouraitis, A., *Tunneling and propping up: An analysis of Related-Partytransactions by Chinese listed companies*, Pacific Basin Finance Journal, 2009, **17**, P. 372–393. Doi:10.1016/j.pacfin.2008.10.001
- [9] Darabi, R., Davoodkhani, M., *The impact of related-party transactions on firm value*. Financial Auditing and Accounting Studies, 2015, 7(28), P. 131-152, (in Persian).
- [10] Faccio, M., Differences between politically-connected and nonconnected firms: A cross-country analysis, Financial Management, 2010, P. 905–927. Doi:10.1111/j.1755-053X.2010.01099.x
- [11] Faccio, M., Politically connected firms, American Economic Review, 2006, 96(1), P. 369-386.
- [12] Frye, T., Shleifer, A., *The invisible hand and the grabbing hand*, American Economic Review,1997, **87**(2), P. 354–358.
- [13] Gordon, E. A., Henry, E., Related-Party transactions and earning management, 2005, Working paper. Doi:10.2139/ssrn.612234
- [14] Gujarati, D.N., Basic Econometrics, 5th edition, 2009, New York: Mc Graw-Hill.
- [15] Habib, A., Muhammadi, A.H., Jiang, H., *Political Connections and Related- Party Transactions: Evidence from Indonesia*, The International Journal of Accounting, 2017, **52**(1), P.45-63. Doi:10.1016/j.intacc.2017.01.004
- [16] Hassan, T., Hassan, M. K., Mohamad, S., *Political patronage and firm performance: Further evidence from Malaysia*, Thunderbird International Business Review, 2012, **54**(3), P. 373–393. Doi:10.1002/tie.21468
- [17] Heydari, M., Didar, H., Ghaderi, B., An investigation into the relationship between political costs hypotheses and corporate growth opportunity: A Structural equation modeling approach, Empirical Studies in Financial Accounting, 2016, 12(47), P. 141-157, (in Persian). Doi:10.22054/qjma.2015.2541
- [18] Izadikhah, M., Saen, RF., Roostaee, R., How to assess sustainability of suppliers in the presence of volume discount and negative data in data envelopment analysis?, Annals of Operations Research, 2018, **269** (1-2), 241-267, Doi: 10.1016/j.eswa.2014.08.019
- [19] Jian, M., & Wong, T. J., Propping through Related- Party transactions, Review of Accounting Studies, 2010, 15, P. 70–105.
- [20] Johnson, S., Porta, R. L., Lopez-de-Silanes, F., Schleifer, A., *Tunneling*, American Economic Review, 2000, **90**(2), P. 22–27.

- [21] Khabazkar Foomani, M., Sarlak, A, Investigating the relationship among information asymmetry, dividend policy and ownership structure. Advances in Mathematical Finance and Applications, 2018, 3(2), P. 69-80. Doi: 10.22034/amfa.2018.540832
- [22] Khanna, T., Palepu, K., Is group affiliation profitable in emerging markets? An analysis of diversified Indian business groups, The Journal of Finance, 2000, 55(2), P. 867–891.
- [23] Kole, S. R., Mulherin, J. H., The Government as a Shareholder: A Case from the United States, The Journal of Law & Economics, 1997, 40(1), P. 1-22.
- [24] Li, H., Meng, L., Wang, Q., Zhou, L., Political connections, financing and firm performance: Evidence from Chinese private firms, Journal of Development Economics, 2008, 87, P. 283-299. Doi:10.1016/j.jdeveco.2007.03.001
- [25] Liu, J. M., Liu, X., The empirical research on the relationship between Related- Partytransactions and internal corporate governance of listed companies, China Soft Science, 2007, 1, P. 79-89. Doi:10.1080/17487870903314575
- [26] Minjung K., Ho-Young Lee, Myung-Gun Lee and Jong Ch., The Association between Related-Party Transactions and Control-Ownership Wedge: Evidence from Korea, Pacific-Basin Finance Journal, 2014, 29, P. 272-296. Doi:10.1016/j.pacfin.2014.04.006
- [27] Niessen S. Ruenzi., Political Connectedness and Firm Performance: Evidence from Germany, CFR-Working Paper, 2012, 7(15). Doi:10.1111/j.1468-0475.2009.00482.x
- [28] Nikoomaram, H., Banimahd, B., Rahnamayroodposhti, F., Kiaei, A., Connections-oriented economy, political connections and accruals quality, Journal of Accounting Knowledge, 2014, 13(12), P. 1-13, (in Persian).
- [29] Qian, M., Pan, H., Yeung, B., Expropriation of minority interest shareholders in politically-connected firms, Working paper, 2011, NUS Business School.
- [30] Rezaei, F., Afroozi, L., The association between debt cost and corporate governance in politicallyconnected firms, Accounting Studies, 2015, 4(16), P. 85-112, (in Persian). Doi:10.22051/ijar.2015.2138

وعلوهزالساتي ومط

- [31] Salehi, A., Baharipour, A., Mohammadi, S., The Impact of Institutional Ownership on the Relationship between Tax and Capital Structure, Advances in Mathematical Finance and Applications, 2016, 1(2), P.57-67. Doi: 10.22034/amfa.2016.527820
- [32] Sarlak, N., Akbari, M., The relationship between related-party transactions and earnings management, Journal of Accounting and Auditing Review, 2014, 20(4), P. 77-92, (in Persian).
- [33] Skinner, D. J., Sloan, R. G., Earnings surprises, growth expectations, and stock returns or don't let an earnings torpedo sink your portfolio, Review of Accounting Studies, 2002, 7, P. 289-312. Doi:10.1023/A:1020294523516
- [34] Song, Y., Lina, W., Yan, Z., Impacts of Political Connections on Earnings Quality of Chinese Private Listed Companies, Advances in Education and Management Communications in Computer and Information Science, 2011, 211, P. 85-92.

- [35] Tehrani, R., Ardakani, R., Effect of Business Groups Affiliation on Cash Holdings and Return on Equity, Advances in Mathematical Finance and Applications, 2017, 2(4), P. 1-9. Doi:10.22034/amfa.2017.536262
- [36] Wang, J., Yuan, H., The impact of Related-Party sales by listed Chinese firms on earnings informativeness and earnings forecasts, International Journal of Business, 2012, 17(3), p. 258–275.
- [37] Wong, R. M. K., Kim, J. B., Lo, A. W. Y., Are Related-Party Sales Value-Adding or Value-Destroying? Journal of International Financial Management & Accounting, 2016, 26, P. 1-38. Doi:10. 1111/jifm.12023
- [38] Wu, W., Wu, C., Rui, O. M., Ownership and the value of political connections: Evidence from China. European Financial Management, 2012, 18(4), P. 695-729. Doi:10.1111/j.1468-036X.2010.00547.x

