

The Factor Analysis on Professionalism in Family Businesses

Denny Bernardus K. W.
Ciputra University

Christina Whidya Utami
Ciputra University

Liliana Dewi*
Ciputra University

— Review of —
**Integrative
Business &
Economics**
— Research —

ABSTRACT

Research abounds with the nuances of family business. Our study contributes to the family business literature by showing how professionalism can influence family business. Professionalism refers to the extent owners manage to fulfill their assigned roles and commitments to the companies. This article is a quantitative study using exploratory factor analysis to describe variability among variables. We analyzed professionalism factors by involving 49 family businesses. While exploring professionalism factors from the owners of family businesses, we confirmed the data using Confirmatory Factor Analysis. There were four indicators of professionalism factors in Family Business: lines of authority, respect for the hierarchy, control management, and future investment. The results of this research indicated respect for the hierarchy had the highest factor value of 0.846.

Keywords: Professionalism, Family Business.

1.1 INTRODUCTION

Family business management is closed to outsiders because it consists of people who are bound in a family relationship. The existence of emotional ties from upper management who still have relationships often hampers progress, as often professional relationships are colored by personal interest conflicts by *Price Waterhouse Cooper* (PwC), 2015. Berent-Braun and Uhlaner (2012) mention four types of Ownership Behaviors such as *professionalism, active governance, owners as a resource, and basic duties*. *Professionalism* factors in a family business also include lines of authority, respect for the hierarchy, control management, and future investment (Aminoff, *et al.*, 2004: 17). Family business management is often influenced by

family's environment (Handoyo, 2010). In family business, every member has many role and responsibility depend on the member incentive (*World Bank Group*, 2011). In addition to investigating the strength or weakness of professionalism factors, this study was also intended to elaborate which the highest factor value affected professionalism.

1.2 METHOD

To analyze the factor values of professionalism, the researchers referred to Basilevsky's method (2009: 351). A random field survey was carried out to involve 49 family businesses respondent. They were the students of Universitas Ciputra. This study took place from 2016 to 2017.

Furthermore, the researchers admitted that the numbers of family business respondents did not fully represent the definition professionalism.

1.3 ECONOMETRIC MODELS

To analyze professionalism factors (X1) in family business, the following equation was employed as follows (Widardjono, 2012):

$$X1.1 = \lambda 1.1 X1 + \varepsilon 1$$

$$X1.2 = \lambda 1.2 X1 + \varepsilon 2$$

$$X1.3 = \lambda 1.3 X1 + \varepsilon 3$$

$$X1.4 = \lambda 1.4 X1 + \varepsilon 4$$

Where:

X1.1 = authority

X1.2 = respect for the hierarchy

X1.3 = control management

X1.4 = future investment

λ = loading factor

ε = error specific factor

1.4 RESULT

Table 1 indicates the total indicators for further analysis because their significant values were lower than 0.05.

Table 1. KMO and Bartlett’s Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.509
Bartlett's Test of Sphericity	Approx. Chi-Square	53.169
	df	6
	Sig.	.000

As shown in Table 2, the lowest was control management with 0.811 and the highest was respect for the hierarchy with 0.846. The respect for the hierarchy such as heritage of the family business owners was regarded an important indicator that affected professionalism. About 51% of the total population had family businesses who had been running their business for three generations. Their involvement in businesses was influenced by Indonesian’s culture. This finding also showed that control management was less important in professionalism. As a result, the family business was more likely to become family oriented business than professional one. All of indicators such as authority, respect for the hierarchy, control management, and future investment had values above 50%.

Table 2. Communalities

	Initial	Extraction
x1.1	1.000	.842
x1.2	1.000	.846
x1.3	1.000	.811
x1.4	1.000	.822

Table 3 showed the total percentages of variance of the factors whose values were almost 85. It meant 15% was described by the other factors.

Table 3. Total Variance Explained

Extraction Method: Principal Component Analysis.

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.889	47.219	47.219	1.889	47.219	47.219
2	1.431	35.785	83.004	1.431	35.785	83.004
3	.391	9.765	92.768			
4	.289	7.232	100.000			

The researchers took these results as evidence. Authority, respect for the hierarchy, control management, and future investment had significant impacts on professionalism of the family business at Ciputra University.

Table 4. Component Matrix

Component Matrix^a

	Component	
	1	2
x1.2	.814	-.427
x1.3	.713	.550
x1.1	.693	-.601
x1.4	.487	.765

Extraction Method: Principal Component Analysis.

a. 2 components extracted.

Table 4 showed two new factors, Owner Preference and Financial Investment Factors. Owner Preference Factor is shown by indicators x1.2, x1.3, and x1.1. They had bigger

value in component one than component two. Financial Investment Factor was shown by indicator x1.4 and it had a bigger value in component two than component one.

APPENDIX

```

FACTOR
/VARIABLES x1.1 x1.2 x1.3 x1.4
/MISSING LISTWISE
/ANALYSIS x1.1 x1.2 x1.3 x1.4
/PRINT INITIAL CORRELATION SIG KMO EXTRACTION
/FORMAT SORT
/CRITERIA MINEIGEN(1) ITERATE(25)
/EXTRACTION PC
/ROTATION NOROTATE
/METHOD=CORRELATION.
    
```

Factor Analysis

Notes		
Output Created		13-JUL-2017 08:27:05
Comments		
Input	Active Dataset	DataSet0
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	48
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax		FACTOR /VARIABLES x1.1 x1.2 x1.3 x1.4 /MISSING LISTWISE /ANALYSIS x1.1 x1.2 x1.3 x1.4 /PRINT INITIAL CORRELATION SIG KMO EXTRACTION /FORMAT SORT /CRITERIA MINEIGEN(1) ITERATE(25) /EXTRACTION PC /ROTATION NOROTATE /METHOD=CORRELATION.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.00
	Maximum Memory Required	3008 (2.938K) bytes

[DataSet0]

Correlation Matrix

		x1.1	x1.2	x1.3	x1.4
Correlation	x1.1	1.000	.676	.130	-.055
	x1.2	.676	1.000	.316	.063
	x1.3	.130	.316	1.000	.588
	x1.4	-.055	.063	.588	1.000
Sig. (1-tailed)	x1.1	.000	.000	.189	.355
	x1.2	.000		.014	.336
	x1.3	.189	.014		.000
	x1.4	.355	.336	.000	

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.509
Bartlett's Test of Sphericity	Approx. Chi-Square	53.169
	df	6
	Sig.	.000

Communalities

	Initial	Extraction
x1.1	1.000	.842
x1.2	1.000	.846
x1.3	1.000	.811
x1.4	1.000	.822

Extraction Method: Principal Component Analysis.

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.889	47.219	47.219	1.889	47.219	47.219
2	1.431	35.785	83.004	1.431	35.785	83.004
3	.391	9.765	92.768			
4	.289	7.232	100.000			

Extraction Method: Principal Component Analysis.

Component Matrix^a

	Component	
	1	2
x1.2	.814	-.427
x1.3	.713	.550
x1.1	.693	-.601
x1.4	.487	.765

Extraction Method: Principal Component Analysis.

a. 2 components extracted.

```

FACTOR
/VARIABLES x1.1 x1.2 x1.3 x1.4
/MISSING LISTWISE
/ANALYSIS x1.1 x1.2 x1.3 x1.4
/PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION
/FORMAT SORT
    
```

```

/CRITERIA MINEIGEN(1) ITERATE(25)
/EXTRACTION PC
/CRITERIA ITERATE(25)
/ROTATION VARIMAX
/METHOD=CORRELATION.
    
```

Factor Analysis

Notes

Output Created	13-JUL-2017 08:27:55	
Comments		
Input	Active Dataset	DataSet0
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	48
Missing Value Handling	Definition of Missing	MISSING=EXCLUDE: User-defined missing values are treated as missing.
	Cases Used	LISTWISE: Statistics are based on cases with no missing values for any variable used.
Syntax	FACTOR /VARIABLES x1.1 x1.2 x1.3 x1.4 /MISSING LISTWISE /ANALYSIS x1.1 x1.2 x1.3 x1.4 /PRINT INITIAL CORRELATION SIG KMO EXTRACTION ROTATION /FORMAT SORT /CRITERIA MINEIGEN(1) ITERATE(25) /EXTRACTION PC /CRITERIA ITERATE(25) /ROTATION VARIMAX /METHOD=CORRELATION.	
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.00
	Maximum Memory Required	3008 (2.938K) bytes

[DataSet0]

Correlation Matrix

	x1.1	x1.2	x1.3	x1.4
Correlation				
x1.1	1.000	.676	.130	-.055
x1.2	.676	1.000	.316	.063
x1.3	.130	.316	1.000	.588
x1.4	-.055	.063	.588	1.000
Sig. (1-tailed)				
x1.1		.000	.189	.355
x1.2	.000		.014	.336
x1.3	.189	.014		.000
x1.4	.355	.336	.000	

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.509
Bartlett's Test of Sphericity	Approx. Chi-Square	53.169
	df	6
	Sig.	.000

Communalities

	Initial	Extraction
x1.1	1.000	.842
x1.2	1.000	.846
x1.3	1.000	.811
x1.4	1.000	.822

Extraction Method: Principal Component Analysis.

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation .
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	1.889	47.219	47.219	1.889	47.219	47.219	1.714
2	1.431	35.785	83.004	1.431	35.785	83.004	1.606
3	.391	9.765	92.768				
4	.289	7.232	100.000				

Total Variance Explained

Component	Rotation Sums of Squared ...	
	% of Variance	Cumulative %
1	42.862	42.862
2	40.142	83.004
3		
4		

Extraction Method: Principal Component Analysis.

Component Matrix^a

	Component	
	1	2
x1.2	.814	-.427
x1.3	.713	.550
x1.1	.693	-.601
x1.4	.487	.765

Extraction Method: Principal Component Analysis.

a. 2 components extracted.

Rotated Component Matrix

	Component	
	1	2
x1.1	.916	-.045
x1.2	.904	.167
x1.4	-.089	.902
x1.3	.221	.873

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.^a

a. Rotation converged in 3 iterations.

Component Transformation Matrix

Component	1	2
1	.787	.617
2	-.617	.787

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

```
SAVE OUTFILE='/Users/drliliana/Documents/Untitled1 _xl.sav'
/COMPRESSED.
```

```
GET
FILE='/Users/drliliana/Documents/Penelitian hibah unggulan/SPSS/Untitled1 _xl.sav'.
DATASET NAME DataSet1 WINDOW=FRONT.
```

ACKNOWLEDGEMENTS

This research was supported by the “Direktorat Riset dan Pengabdian Masyarakat, Direktorat Jenderal Penguatan Riset dan Pengembangan Kementerian Riset, Teknologi dan Pendidikan Tinggi”, Indonesia and the Universitas Ciputra, Indonesia. The researchers would like to acknowledge Family Business Community Universitas Ciputra, Indonesia. The researchers acknowledge the responsibility for any errors present in this paper and should not cause ruin the reputation of the aforementioned individuals.

REFERENCES

- [1] Aminoff, P., Blom, A., Eco-Pa rsson, K., Helkama, J., Koironen, M., Nyman, K., and Paasikivi, K. (2004). On The Characteristics and Duties Involved in Responsible Ownership. *Family Business Network Finland, Helsinki*.
- [2] Basilevsky, A. (2009). Statistical Factor Analysis and Related Methods. Theory and Applications. New York: John Wiley and Sons, Inc.
- [3] Berent-Braun, M. M. and Uhlaner, L. M. (2012). Responsible Ownership Behaviors and Financial Performance in Family Owned Businesses. *Journal of Small Business and Enterprise Development. Vol. 19, No. 1, pp. 20-38*.
- [4] Handoyo, S. S. (2010). *A Conceptual View of a Family-Owned Corporation*. Makalah dalam Pelatihan yang diselenggarakan oleh Indonesia Institute for Corporate Directorship (IICD), Jakarta.
- [5] PwC. (2015). *95 persen perusahaan Indonesia adalah bisnis keluarga*. Jakarta: CNN Indonesia. Retrieved August 27, 2015. from <http://www.cnnindonesia.com/ekonomi/20141202100356-92-15176/pwc-95-persen-perusahaan-indonesia-adalah-bisnis-keluarga>.
- [6] Widardjono, A. (2012). 144 Analisis Statistika Multivariat Terapan. Yogyakarta: UPP STIM YKPN.
- [7] World Bank Group (2011). *Family Business Governance Handbook*. USA: International Finance Corporation.