

CHAPTER V

CONCLUSION

5.1. Conclusion

Based on the results of data analysis and discussions that have been explained and explained in the previous chapter, the conclusions that can be drawn are as follows:

1. The hypothesis 1 Bank Performance has a positive effect on Bank Value is not supported.
2. The hypothesis 2 Bank Risk has a negative effect on Bank Value is supported.

5.2. Research Limitation

1. The banking companies used in the research are only commercial banks.
2. There is only one measurement for each variable, so that the measurement cannot truly describe the influence of the independent variables to dependent variable.
3. There are many data with extreme value found during data collection.

5.3. Research Suggestion

1. For future researchers, can use other measures for each variable, such as Bank Performance, can use Return on Equity or Net Interest Margin.
2. For future researchers, can take samples of banks as a whole, not just commercial banks.

REFERENCES

- Abuzayed, B., Molyneux, P., & Al-Fayoumi, N.-F. (2009). Market value, book value and earnings: is bank efficiency a missing link? *Managerial Finance*.
- Alamsyah, I. E. (2023, January 10). *Ekonomi Republika*. Retrieved from OJK: Kinerja Perbankan 2022 Dorong Optimisme di Tengah Gejolak Global: <https://ekonomi.republika.co.id/berita/ro9viu349/ojk-kinerja-perbankan-2022-dorong-optimisme-di-tengah-gejolak-global>
- Ali, M., & Puah, C. H. (2018). The internal determinants of bank profitability and stability: An insight from banking sector of Pakistan. *Management Research Review*.
- Anthony, R., & Govindarajan, V. (2005). *Sistem Pengendalian Manajemen, Edisi 11 Buku 1*. Jakarta: Salemba Empat.
- Ayalew, Z. A. (2021). Capital structure and profitability: Panel data evidence of private banks in Ethiopia. *Cogent Economics & Finance*.
- Basuki, A. T., & Prawoto, N. (2016). Analisis Regresi dalam Penelitian Ekonomi & Bisnis: Dilengkapi Aplikasi SPSS & Eviews. Jakarta: Rajawali Pers.
- Connelly, B., Certo, S., Ireland, R., & Reutzel, C. (2011). Signaling Theory: A Review and Assessment. *Journal of Management*.
- DPNP No 13/24. (2011). *Surat Edaran Bank Indonesia perihal Penilaian Tingkat Kesehatan Bank Umum*.
- DPNP No 3/30. (1997). *Surat Edaran Bank Indonesia perihal Laporan Keuangan Publikasi Triwulan dan Bulanan Bank Umum serta Laporan Tertentu yang Disampaikan kepada Bank Indonesia*.
- Febrianto, G. N. (2020). ANALISIS MAKRO EKONOMI, PROFIL RISIKO TERHADAP KINERJA PERUSAHAAN DAN NILAI PERUSAHAAN PADA BANK UMUM YANG TERDAFTAR DI BURSA EFEK INDONESIA. *Jurnal Ekonomi Manajemen*.

- Ghozali, I. (2007). *Aplikasi Analisis Multivariate dengan Program SPSS*. Semarang: Universitas Diponegoro.
- Gunawan, A. (2019, December 27). *CNBC Inonesia*. Retrieved from Duh! Naga-Naganya Industri Perbankan Tumbuh Melambat di 2019: <https://www.cnbcindonesia.com/news/20191227223001-4-126207/duh-naga-naganya-industri-perbankan-tumbuh-melambat-di-2019>
- Halimah, S., & Komariah, E. (2017). PENGARUH ROA, CAR, NPL, LDR, BOPO TERHADAP NILAI PERUSAHAAN BANK UMUM. *Jurnal Akuntansi, Ekonomi dan Manajemen Bisnis*.
- Hartono, J. (2016). *Teori Portofolio dan Analisis Investasi*. Yogyakarta.
- Ido, G. A. (2016). Analisis Bank Size, LDR, CAR, NPL di Sektor Perbankan yang Terdaftar di Bursa Efek Indonesia. *Artikel Ilmiah*.
- Kasmir. (2014). *Analisis Laporan Keuangan*. Jakarta: PT Raja Grafindo Persada.
- Katrodia, A. (2012). Corporate Governance Practices in The Banking Sector. *Journal of Research in Commerce and Management*.
- Mawarti, W., Negoro, D. A., & Syah, T. Y. (2022). Pengaruh Komponen Risk Based Bank Rating Pada Nilai Perusahaan Perbankan Pengaruh Komponen Risk Based Bank Rating Pada Nilai Perusahaan Perbankan Stock Exchange for the 2015-2019 Period). *Budapest International Research and Critics Institute-Journal*.
- Mehzabin, S., Shahriar, A., Hoque, M., Wanke, P., & Azad, M. (2022). The Effect of Capital Structure, Operating Efficiency and Non-Interest Income on Bank Profitability: New Evidence from Asia. *Bank Profitability in Asia*.
- Meliza. (2021). The Influence of Banking Risk on Share Price and the . *Indonesian Capital Market Review 13*.

- Menicucci, E., & Paolucci, G. (2016). The determinants of bank profitability: empirical evidence from European banking sector. *Journal of Financial Reporting and Accounting*.
- Mkadmi, J. E., Baccari, N., & Ncib, A. (2021). The Determinants of Banking Stability: The Example of Tunisia. *Journal of Accounting and Financial Management*.
- Murwani, J., & Taufiq, A. (2022). Tingkat Kesehatan Bank: Pendekatan Risk Based Bank Rating terhadap Nilai Perusahaan. *Riset & Jurnal Akuntansi*.
- PBI No 25/2/PBI/2013. (2013). *Peraturan Bank Indonesia No 15/2/PBI/2013 Tentang Penetapan Status dan Tindak Lanjut Pengawas Bank Umum Konvensional*.
- POJK 40/03. (2019). *Peraturan Otoritas Jasa Keuangan Republik Indonesia tentang Penilaian Kualitas Aset Bank Umum*.
- Purwoko, D., & Sudiyatno, B. (2013). FAKTOR-FAKTOR YANG MEMPENGARUHI KINERJA BANK (STUDI EMPIRIK PADA INDUSTRI PERBANKAN DI INDONESIA). *Jurnal Bisnis dan Ekonomi (JBE)*.
- Rachman, A. (2023, December 21). *CNBC Indonesia*. Retrieved from Dibayangi Likuiditas & Ekonomi Global, Kondisi Bank di RI?: <https://cnbcindonesia.com/market/20231221150001-17-499271/dibayangi-likuiditas-ekonomi-global-kondisi-bank-di-ri>
- Rahman, S. M., Chowdhury, M. A., & Tania, T. C. (2021). Nexus among Bank Competition, Efficiency and Financial Stability: A Comprehensive Study in Bangladesh. *Journal of Asian Finance, Economics and Business*.
- Rankin, E. A. (2012). *Contemporary Issues in Accounting*. Australia, Queensland: John Wiley & Sons Australia Ltd.

- Rossiana, G. (2018, February 23). *CNBC Indonesia*. Retrieved from Laba Bank Umum Naik 23,1% di Tahun 2017: <https://www.cnbcindonesia.com/news/20180223081703-4-5197/laba-bank-umum-naik-231-di-tahun-2017>
- Rossiana, G. (2018, February 23). *Retrieved from Laba Bank Umum Naik 23,1% di Tahun 2017*. Retrieved from CNBC Indonesia.
- Savitri, K. K., & Ramantha, I. (2019). Pengaruh Komponen Risk Based Bank Rating Pada Nilai Perusahaan Perbankan. *Jurnal Akuntansi*.
- SEOJK No 28 / SEOJK.03. (2019). *Surat Edaran Otoritas Jasa Keuangan Tentang Sistem Penilaian Tingkat Kesehatan Bank Pembiayaan Rakyat Syariah*.
- Sidik, S. (2020, July 30). *CNBC Indonesia*. Retrieved from Awas! Profit Bank Bakal Tergerus Tahun Ini: <https://www.cnbcindonesia.com/news/20200730183100-4-176627/awas-profit-bank-bakal-tergerus-tahun-ini>
- Spence, M. (1973). Job Market Signaling. *Quarterly Journal of Economics*.
- Subramanyam, K. R. (2014). Financial Statement Analysis - Eleventh Edition. In K. R. Subramanyam, *Financial Statement Analysis - Eleventh Edition*. Pen Plaza: Mc Graw Hill.
- Sudiyanto, B. (2010). Analisis Pengaruh Dana Pihak Ketiga, BOPO, CAR, dan LDR terhadap Kinerja Keuangan pada Sektor Perbankan yang Go Public di BEI.
- Sutianto, F. D. (2021, April 1). *Kumparan Bisnis*. Retrieved from Setahun Dihantan Pandemi, OJK Sebut Kondisi Perbankan Masih Naik Turun: <https://www.cnbcindonesia.com/market/20190111185538-17-50292/ojk-pertumbuhan-kredit-sepanjang-2018-capai-1288>
- Usman, B., & Lestari, H. S. (2019). Determinants of Bank Performance in Indonesia. *Jurnal Minds: Manajemen Ide dan Inspirasi*.

UU No 10 Tahun 1998. (1998). *Undang-Undang Republik Indonesia Nomor 10 Tahun 1998 Tentang Perbankan.*

Wareza, M. (2021, December 30). *CNBC Indonesia*. Retrieved from Bagaimana Perbankan RI di 2021? OJK: Semua Aman!: <https://www.cnbcindonesia.com/market/20211230101700-17-303199/bagaimana-perbankan-ri-di-2021-ojk-semua-aman>

Woodward, D., Edwards, P., & Birkin, F. (1996). Organizational Legitimacy and Stakeholder Information Provision. *British Journal of Management*.

Yogatama, B., & Santi, J. (2022, January 27). *Laba Perbankan 2021 Tumbuh Signifikan*. Retrieved from Kompas: <https://www.kompas.id/baca/ekonomi/2022/01/27/perbankan-lewati-2021-dengan-pertumbuhan-laba>

APPENDICES

APPENDIX 1

RESEARCH SAMPLE LIST

No	Company Name	Code
1	PT Bank Raya Indonesia Agroniaga, Tbk	AGRO
2	PT Bank IBK Indonesia, Tbk	AGRS
3	PT Bank Jago, Tbk	ARTO
4	PT Bank MNC Internasional, Tbk	BABP
5	PT Bank Capital Indonesia, Tbk	BACA
6	PT Bank Central Asia, Tbk	BBCA
7	PT Bank Harda Internasional, Tbk	BBHI
8	Bank Mestika Dharma Tbk	BBMD
9	PT Bank Negara Indonesia (PERSERO), Tbk	BBNI
10	PT Bank Rakyat Indonesia (PERSERO), Tbk	BBRI
11	PT Bank Tabungan Negara (PERSERO), Tbk	BBTN
12	PT Bank Neo Commerce, Tbk	BBYB
13	PT Bank Danamon Indonesia, Tbk	BDMN
14	Bank Ganesha Tbk	BGTG
15	Bank Ina Perdana Tbk	BINA
16	PT Bank QNB Indonesia, Tbk	BKSW
17	Bank Maspion Indonesia Tbk	BMAS
18	Bank Mandiri (Persero) Tbk	BMRI
19	PT Bank Bumi Arta, Tbk	BNBA
20	PT Bank CIMB Niaga, Tbk	BNGA
21	PT Bank Maybank Indonesia, Tbk	BNII
22	PT Bank Permata, Tbk	BNLI
23	PT Bank Sianarmas, Tbk	BSIM
24	PT Bank of India Indonesia, Tbk	BSWD
25	PT Bank BTPN, Tbk	BTPN
26	PT Bank Victoria International, Tbk	BVIC
27	PT Bank OKE Indonesia, Tbk	DNAR
28	PT Bank Artha Graha Internasional, Tbk	INPC
29	PT Bank Mayapada International, Tbk	MAYA
30	PT Bank China Construction Bank Indonesia, Tbk	MCOR
31	PT Bank Mega, Tbk	MEGA
32	PT Bank OCBC NISP, Tbk	NISP
33	Bank Nationalnobu Tbk	NOBU
34	PT Pan Indonesia Bank, Tbk	PNBN
35	PT Bank Woori Saudara Indonesia 1906, Tbk	SDRA

APPENDIX 2

RESEARCH SAMPLE DATA

Code	YEAR	PBV (Y)	ROA (X1)	NPL (X2)	SIZE
AGRO	2017	3.03	1.19	2.59	30.42
AGRO	2018	1.51	1.25	2.86	30.78
AGRO	2019	0.74	0.27	7.66	30.93
AGRO	2020	4.85	0.23	4.97	30.96
AGRO	2021	11.75	- 19.58	3.98	30.46
AGRO	2022	2.95	0.84	2.90	30.26
AGRO	2023	2.00	1.03	4.40	30.15
AGRS	2017	3.72	- 0.19	5.45	28.99
AGRS	2018	2.45	- 0.72	6.44	29.05
AGRS	2019	0.49	- 4.03	11.68	29.49
AGRS	2020	1.40	- 1.75	5.14	29.92
AGRS	2021	0.08	0.07	2.07	30.29
AGRS	2022	0.56	0.52	1.99	30.54
AGRS	2023	0.53	0.91	1.48	30.60
ARTO	2017	0.22	- 1.48	8.33	27.45
ARTO	2018	0.21	- 2.76	6.17	27.22
ARTO	2019	0.51	- 8.99	2.05	27.91
ARTO	2020	96.68	- 8.70	0.00	28.41
ARTO	2021	26.50	0.07	0.58	30.14
ARTO	2022	3.79	0.12	1.81	30.46
ARTO	2023	4.44	0.44	0.84	30.69
BABP	2017	0.88	- 8.46	7.23	30.00
BABP	2018	0.76	0.73	5.72	30.02
BABP	2019	0.81	0.29	5.78	29.99
BABP	2020	1.45	0.14	5.69	30.09
BABP	2021	2.25	0.16	4.42	30.27
BABP	2022	1.01	0.91	3.53	30.46
BABP	2023	0.47	0.67	3.96	30.53
BACA	2017	1.45	0.70	2.77	30.43
BACA	2018	1.32	0.79	2.95	30.52
BACA	2019	1.89	0.13	3.01	30.57
BACA	2020	1.94	0.39	0.00	30.64
BACA	2021	0.66	0.22	0.00	30.74
BACA	2022	0.81	0.20	0.00	30.66
BACA	2023	0.77	0.68	0.08	30.59
BBCA	2017	0.78	3.89	1.49	34.25
BBCA	2018	0.79	3.97	1.41	34.35
BBCA	2019	0.86	3.95	1.34	34.45

BBCA	2020	0.83	3.12	1.79	34.61
BBCA	2021	4.44	3.16	2.16	34.74
BBCA	2022	4.36	3.84	1.71	34.81
BBCA	2023	4.73	4.27	1.86	34.88
BBHI	2017	0.32	- 1.89	3.18	28.53
BBHI	2018	0.43	0.48	4.07	28.45
BBHI	2019	0.30	0.61	10.16	28.56
BBHI	2020	4.90	1.77	2.76	28.58
BBHI	2021	49.98	4.73	0.52	29.17
BBHI	2022	5.42	3.19	0.01	30.03
BBHI	2023	3.72	4.51	0.08	30.18
BBMD	2017	1.74	2.99	2.58	30.10
BBMD	2018	1.72	2.94	2.33	30.12
BBMD	2019	1.92	2.56	2.26	30.19
BBMD	2020	1.22	2.97	1.69	30.28
BBMD	2021	1.78	4.16	1.18	30.40
BBMD	2022	1.73	4.04	1.26	30.44
BBMD	2023	1.68	3.33	1.37	30.41
BBNI	2017	0.72	2.42	2.29	34.20
BBNI	2018	0.66	2.45	1.96	34.33
BBNI	2019	0.49	2.29	2.33	34.37
BBNI	2020	0.46	0.57	4.20	34.42
BBNI	2021	0.47	1.30	3.70	34.50
BBNI	2022	0.55	2.20	2.81	34.57
BBNI	2023	1.24	2.36	2.13	34.62
BBRI	2017	1.94	3.28	2.10	34.66
BBRI	2018	1.77	3.22	2.14	34.80
BBRI	2019	2.06	3.06	2.62	34.89
BBRI	2020	1.71	1.98	2.94	34.95
BBRI	2021	1.84	2.44	3.08	35.06
BBRI	2022	2.14	3.46	2.82	35.16
BBRI	2023	2.63	3.89	3.12	35.21
BBTN	2017	1.46	1.48	2.66	33.20
BBTN	2018	0.88	1.18	2.82	33.36
BBTN	2019	0.64	0.13	4.50	33.37
BBTN	2020	0.75	0.63	4.13	33.52
BBTN	2021	0.71	0.80	3.64	33.55
BBTN	2022	0.52	0.96	3.38	33.63
BBTN	2023	0.60	1.00	3.09	33.71
BBYB	2017	2.04	0.40	4.98	29.24
BBYB	2018	2.01	- 3.05	15.75	29.14
BBYB	2019	1.68	0.35	4.32	29.26
BBYB	2020	3.89	0.29	4.05	29.32

BBYB	2021	6.79	- 8.74	1.75	30.06
BBYB	2022	1.55	- 3.99	2.56	30.61
BBYB	2023	0.82	- 3.16	3.73	30.53
BDMN	2017	1.35	3.01	2.92	32.81
BDMN	2018	1.66	2.64	2.94	32.86
BDMN	2019	0.65	2.84	3.21	32.90
BDMN	2020	0.65	1.03	2.98	32.93
BDMN	2021	0.46	1.19	2.84	32.89
BDMN	2022	0.54	2.23	2.86	32.92
BDMN	2023	0.54	2.12	2.28	33.03
BGTG	2017	1.61	1.48	0.81	29.15
BGTG	2018	0.83	0.16	4.25	29.13
BGTG	2019	0.47	0.30	2.28	29.20
BGTG	2020	1.08	0.09	5.49	29.31
BGTG	2021	1.00	0.17	5.13	29.78
BGTG	2022	0.36	0.64	2.01	29.82
BGTG	2023	0.51	1.37	1.62	29.87
BINA	2017	1.12	0.78	4.60	28.77
BINA	2018	1.67	0.44	2.43	28.98
BINA	2019	1.96	0.19	1.43	29.29
BINA	2020	9.85	0.34	1.43	29.76
BINA	2021	8.74	0.33	2.62	30.34
BINA	2022	7.20	0.99	1.73	30.65
BINA	2023	7.06	1.10	3.44	30.82
BKSW	2017	0.92	- 3.86	1.85	30.84
BKSW	2018	0.82	0.13	2.49	30.65
BKSW	2019	0.71	0.02	5.63	30.77
BKSW	2020	0.49	- 0.15	4.66	32.84
BKSW	2021	0.85	8.38	0.08	30.50
BKSW	2022	0.43	- 2.40	3.80	30.45
BKSW	2023	0.55	0.59	0.77	30.10
BMAS	2017	0.47	1.54	1.52	29.43
BMAS	2018	0.48	1.42	2.14	29.53
BMAS	2019	0.31	1.06	2.34	29.66
BMAS	2020	0.48	0.89	1.93	29.94
BMAS	2021	1.91	0.71	1.67	30.29
BMAS	2022	2.33	1.01	1.21	30.34
BMAS	2023	1.47	0.43	2.59	30.61
BMRI	2017	0.84	2.41	3.46	34.66
BMRI	2018	0.70	2.82	2.75	34.72
BMRI	2019	0.64	2.76	2.33	34.82
BMRI	2020	0.69	1.71	3.09	34.90
BMRI	2021	0.69	2.22	2.72	35.08

BMRI	2022	0.83	2.83	1.99	35.23
BMRI	2023	2.05	3.44	1.19	35.32
BNBA	2017	0.32	1.74	1.70	29.58
BNBA	2018	0.36	1.73	1.51	29.62
BNBA	2019	0.33	0.93	1.53	29.66
BNBA	2020	1.00	0.70	2.63	29.66
BNBA	2021	2.82	0.68	3.04	29.79
BNBA	2022	0.93	0.61	4.56	29.74
BNBA	2023	0.69	0.72	4.43	29.71
BNGA	2017	0.62	1.56	3.75	33.22
BNGA	2018	0.53	1.82	3.11	33.22
BNGA	2019	0.34	1.80	2.79	33.25
BNGA	2020	0.46	1.05	3.62	33.27
BNGA	2021	0.44	1.67	3.46	33.37
BNGA	2022	0.59	2.14	2.80	33.36
BNGA	2023	0.83	2.50	1.96	33.44
BNII	2017	0.80	1.45	2.81	32.79
BNII	2018	0.65	1.71	2.59	32.81
BNII	2019	0.48	1.54	3.33	32.76
BNII	2020	0.93	1.05	4.00	32.79
BNII	2021	0.75	1.29	3.69	32.76
BNII	2022	0.58	1.27	3.46	32.71
BNII	2023	0.59	1.37	2.92	32.78
BNLI	2017	0.72	0.64	4.60	32.63
BNLI	2018	1.20	0.80	4.36	32.66
BNLI	2019	1.18	1.25	2.77	32.72
BNLI	2020	1.52	0.81	2.90	32.92
BNLI	2021	1.23	0.67	3.20	33.09
BNLI	2022	0.96	10.25	3.13	33.17
BNLI	2023	0.81	1.30	2.88	33.18
BSIM	2017	0.22	1.34	3.79	31.05
BSIM	2018	1.79	0.25	4.74	31.06
BSIM	2019	1.39	0.22	7.83	31.23
BSIM	2020	1.90	0.26	4.75	31.43
BSIM	2021	1.52	0.30	4.64	31.60
BSIM	2022	2.41	0.59	7.99	31.49
BSIM	2023	2.39	0.14	1.53	31.59
BSWD	2017	1.45	- 3.29	4.88	29.13
BSWD	2018	1.46	2.72	4.90	26.69
BSWD	2019	1.42	0.58	4.22	29.02
BSWD	2020	1.56	0.51	4.95	28.95
BSWD	2021	0.82	- 1.00	9.08	29.08
BSWD	2022	0.85	0.11	9.07	29.43

BSWD	2023	3.06	0.96	6.28	29.44
BTPN	2017	1.06	2.03	0.90	32.19
BTPN	2018	1.09	2.86	1.24	32.26
BTPN	2019	0.40	2.21	0.81	32.83
BTPN	2020	0.68	1.44	1.21	32.84
BTPN	2021	0.58	2.09	1.68	32.89
BTPN	2022	0.50	2.23	1.42	32.97
BTPN	2023	0.50	1.72	1.36	32.94
BVIC	2017	0.73	0.61	3.18	30.99
BVIC	2018	0.53	0.31	3.52	31.04
BVIC	2019	0.17	- 0.08	6.77	31.05
BVIC	2020	0.57	1.14	7.58	30.90
BVIC	2021	0.60	- 0.60	7.27	30.85
BVIC	2022	0.39	1.38	4.23	30.89
BVIC	2023	0.37	0.44	3.99	31.02
DNAR	2017	1.26	0.51	2.58	28.56
DNAR	2018	0.40	1.16	2.58	28.56
DNAR	2019	1.12	- 0.24	2.60	29.26
DNAR	2020	1.47	0.29	3.26	29.47
DNAR	2021	1.15	0.33	3.45	29.68
DNAR	2022	0.59	0.19	2.67	29.95
DNAR	2023	0.57	0.33	3.70	30.04
INPC	2017	0.32	0.31	6.11	30.95
INPC	2018	0.27	0.29	5.99	30.89
INPC	2019	0.18	- 0.30	5.70	30.87
INPC	2020	1.07	0.10	3.14	31.05
INPC	2021	0.51	- 0.80	2.73	30.87
INPC	2022	0.34	0.26	3.39	30.89
INPC	2023	0.33	0.70	1.74	30.89
MAYA	2017	0.74	1.22	5.65	31.95
MAYA	2018	1.32	0.69	5.54	32.10
MAYA	2019	1.12	0.77	3.85	32.17
MAYA	2020	0.52	0.11	4.09	32.16
MAYA	2021	0.28	0.06	3.93	32.41
MAYA	2022	0.23	0.04	4.70	32.54
MAYA	2023	0.23	0.04	3.77	32.58
MCOR	2017	1.35	0.48	3.04	30.39
MCOR	2018	1.06	0.85	2.54	30.40
MCOR	2019	0.45	0.59	2.62	30.57
MCOR	2020	0.98	0.25	2.94	30.86
MCOR	2021	0.62	0.40	4.39	30.90
MCOR	2022	0.49	0.70	3.40	30.85
MCOR	2023	0.44	1.11	2.87	30.96

MEGA	2017	0.69	2.00	2.01	32.04
MEGA	2018	1.12	2.39	1.60	32.06
MEGA	2019	1.06	2.49	2.46	32.24
MEGA	2020	1.80	3.31	1.39	32.35
MEGA	2021	1.70	3.73	1.12	32.52
MEGA	2022	2.87	3.55	1.23	32.59
MEGA	2023	2.69	3.29	1.57	32.51
NISP	2017	0.41	1.87	1.79	32.67
NISP	2018	0.73	2.01	1.73	32.79
NISP	2019	0.59	2.15	1.72	32.83
NISP	2020	0.60	1.35	1.93	32.96
NISP	2021	0.38	1.49	2.36	33.00
NISP	2022	0.45	1.77	2.40	33.11
NISP	2023	0.70	2.08	1.64	33.15
NOBU	2017	2.68	0.40	0.05	30.03
NOBU	2018	2.73	0.37	0.97	30.10
NOBU	2019	2.61	0.49	2.09	30.21
NOBU	2020	2.14	0.52	0.21	30.25
NOBU	2021	1.53	0.41	0.58	30.66
NOBU	2022	1.18	0.61	0.41	30.73
NOBU	2023	1.51	0.70	0.59	30.91
PNBN	2017	0.85	1.39	2.84	32.99
PNBN	2018	0.89	2.21	3.04	32.96
PNBN	2019	0.63	2.18	3.02	32.98
PNBN	2020	5.11	1.87	3.01	33.02
PNBN	2021	0.40	1.23	3.54	32.95
PNBN	2022	0.71	1.92	3.53	32.99
PNBN	2023	0.51	1.70	3.09	33.03
SDRA	2017	0.78	2.20	1.53	30.93
SDRA	2018	0.71	2.48	1.72	31.02
SDRA	2019	0.65	1.82	1.64	31.24
SDRA	2020	0.59	1.82	1.12	31.27
SDRA	2021	0.47	1.87	0.93	31.41
SDRA	2022	0.46	2.16	1.05	31.57
SDRA	2023	0.47	1.66	1.25	31.64

APPENDIX 3

RESULTS OF DATA PROCESSING USING EVIEWS

Descriptive Statistic Analysis Result

Descriptive Statistics

	Y	X1	X2	Z
Mean	2.062857	0.954816	3.095184	31.43788
Median	0.830000	0.960000	2.810000	30.91000
Maximum	96.68000	10.25000	15.75000	35.32000
Minimum	0.080000	-19.58000	0.000000	26.69000
Std. Dev.	7.167386	2.428329	2.036564	1.848454
Skewness	10.85698	-3.207821	1.906978	0.243754
Kurtosis	133.7790	27.02574	10.09606	2.293709
Jarque-Bera	179407.8	6312.800	662.5238	7.518543
Probability	0.000000	0.000000	0.000000	0.023301
Sum	505.4000	233.9300	758.3200	7702.280
Sum Sq. Dev.	12534.63	1438.815	1012.012	833.6949
Observations	245	245	245	245

Data Panel Estimation Result

Chow Test Result

Redundant Fixed Effects Tests				
Equation: Untitled				
Test cross-section fixed effects				
		Statistic	d.f.	Prob.
Effects Test				
Cross-section F		1.390778	-34,207	0.0854
Cross-section Chi-square		50.406947	34	0.0347
Cross-section fixed effects test equation:				
Dependent Variable: Y				
Method: Panel Least Squares				
Date: 06/05/24 Time: 09:28				
Sample: 2017 2023				

Periods included: 7				
Cross-sections included: 35				
Total panel (balanced) observations: 245				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	18.16158	8.170158	2.222917	0.0271
X1	-0.789583	0.201981	-3.90919	0.0001
X2	-0.916317	0.224719	-4.07761	0.0001
Z	-0.397885	0.258454	-1.539482	0.125
Root MSE	6.715911	R-squared		0.118414
Mean dependent var	2.062857	Adjusted R-squared		0.10744
S.D. dependent var	7.167386	S.E. of regression		6.771415
Akaike info criterion	6.679489	Sum squared resid		11050.35
Schwarz criterion	6.736652	Log likelihood		-814.2374
Hannan-Quinn criter.	6.702509	F-statistic		10.79035
Durbin-Watson stat	1.937939	Prob(F-statistic)		0.000001

Hausman Test Result

Correlated Random Effects - Hausman Test				
Equation: Untitled				
Test cross-section random effects				
Test Summary		Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random		1.41439	3	0.7022
Cross-section random effects test comparisons:				
Variable	Fixed	Random	Var (Diff.)	Prob.
X1	-0.650742	-0.756737	0.009538	0.2778
X2	-1.014598	-0.937613	0.026238	0.6346
Z	-0.179675	-0.411407	0.915128	0.8086
Cross-section random effects test equation:				
Dependent Variable: Y				
Method: Panel Least Squares				
Date: 06/05/24 Time: 09:30				

Sample: 2017 2023				
Periods included: 7				
Cross-sections included: 35				
Total panel (balanced) observations: 245				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	11.47315	31.69422	0.361995	0.7177
X1	-0.650742	0.226711	-2.870362	0.0045
X2	-1.014598	0.283707	-3.576222	0.0004
Z	-0.179675	1.001172	-0.179464	0.8577
Effects Specification				
Cross-section fixed (dummy variables)				
Root MSE	6.059384	R-squared		0.282352
Mean dependent var	2.062857	Adjusted R-squared		0.154076
S.D. dependent var	7.167386	S.E. of regression		6.592139
Akaike info criterion	6.751297	Sum squared resid		8995.453
Schwarz criterion	7.29435	Log likelihood		-
				789.0339
Hannan-Quinn criter.	6.969984	F-statistic		2.201139
Durbin-Watson stat	2.381859	Prob(F-statistic)		0.00027

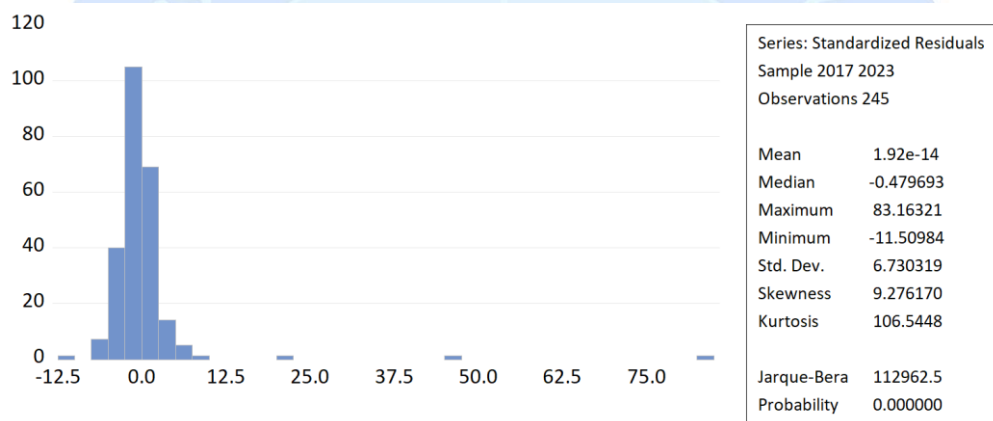
Lagrange Multiplier Test Result

Lagrange Multiplier Tests for Random Effects			
Null hypotheses: No effects			
Alternative hypotheses: Two-sided (Breusch-Pagan) and one-sided			
(all others) alternatives			
Test Hypothesis			
	Cross-section	Time	Both
Breusch-Pagan	1.626898	0.005631	1.632529
	-0.2021	-0.9402	-0.2014
Honda	1.275499	0.075039	0.954975
	-0.1011	-0.4701	-0.1698
King-Wu	1.275499	0.075039	0.563181
	-0.1011	-0.4701	-0.2867

Standardized Honda	1.586859	0.369262	-3.486033
	-0.0563	-0.356	-0.9998
Standardized King-Wu	1.586859	0.369262	-2.837629
	-0.0563	-0.356	-0.9977
Gourieroux, et al.	--	--	1.632529
			-0.2112

Classic Assumption Test Result

Normality Test Result



Autocorrelation Test Result

Dependent Variable: Y				
Method: Panel EGLS (Cross-section random effects)				
Date: 06/05/24 Time: 09:41				
Sample: 2017 2023				
Periods included: 7				
Cross-sections included: 35				
Total panel (balanced) observations: 245				
Swamy and Arora estimator of component variances				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	18.62125	9.351962	1.99116	0.0476
X1	-0.756737	0.204595	-3.698701	0.0003

X2	-0.937613	0.232919	-4.025492	0.0001
Z	-0.411407	0.295327	-1.393056	0.1649
Effects Specification				
			S.D.	Rho
Cross-section random			1.702684	0.0625
Idiosyncratic random			6.592139	0.9375
Weighted Statistics				
Root MSE	6.51656	R-squared	0.108507	
Mean dependent var	1.703157	Adjusted R-squared	0.09741	
S.D. dependent var	6.915882	S.E. of regression	6.570417	
Sum squared resid	10404.06	F-statistic	9.777681	
Durbin-Watson stat	2.056103	Prob(F-statistic)	0.000004	
Unweighted Statistics				
R-squared	0.118241	Mean dependent var	2.062857	
Sum squared resid	11052.52	Durbin-Watson stat	1.935471	

Multicorrelation Test Result

	X1	X2	Z
X1	1	-0.306374	0.4104314
X2	-0.306374185	1	-0.211902
Z	0.410431358	-0.211902	1

Heteroscedasticity Test Result

Panel Period Heteroskedasticity LR Test				
Equation: UNTITLED				
Specification: Y C X1 X2 Z				
Null hypothesis: Residuals are homoskedastic				
	Value	df	Probability	
Likelihood ratio	601.1904	35	0	
LR test summary:				
	Value	df		
Restricted LogL	-814.2374	241		

Unrestricted LogL	-513.6422	241		
Unrestricted Test Equation:				
Dependent Variable: Y				
Method: Panel EGLS (Period weights)				
Date: 06/10/24 Time: 08:36				
Sample: 2017 2023				
Periods included: 7				
Cross-sections included: 35				
Total panel (balanced) observations: 245				
Iterate weights to convergence				
Convergence achieved after 7 weight iterations				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.329719	1.188255	2.802192	0.0055
X1	0.051778	0.039806	1.30077	0.1946
X2	-0.025926	0.029708	-0.872668	0.3837
Z	-0.071088	0.038155	-1.863166	0.0637
Weighted Statistics				
Root MSE	7.223727	R-squared	0.019495	
Mean dependent var	7.438241	Adjusted R-squared	0.007289	
S.D. dependent var	8.015153	S.E. of regression	7.283429	
Akaike info criterion	4.225651	Sum squared resid	12784.65	
Schwarz criterion	4.282814	Log likelihood	-513.6422	
Hannan-Quinn criter.	4.24867	F-statistic	1.59723	
Durbin-Watson stat	0.845507	Prob(F-statistic)	0.190683	
Unweighted Statistics				
R-squared	-0.019947	Mean dependent var	2.062857	
Sum squared resid	12784.65	Durbin-Watson stat	1.738076	

Hypothesis Testing Result

Dependent Variable: Y				
Method: Panel EGLS (Cross-section random effects)				
Date: 06/05/24 Time: 10:00				
Sample: 2017 2023				
Periods included: 7				
Cross-sections included: 35				
Total panel (balanced) observations: 245				
Swamy and Arora estimator of component variances				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	18.62125	9.351962	1.99116	0.0476
X1	-0.75674	0.204595	-3.698701	0.0003
X2	-0.93761	0.232919	-4.025492	0.0001
Z	-0.41141	0.295327	-1.393056	0.1649
Effects Specification				
			S.D.	Rho
Cross-section random			1.702684	0.0625
Idiosyncratic random			6.592139	0.9375
Weighted Statistics				
Root MSE	6.51656	R-squared		0.108507
Mean dependent var	1.703157	Adjusted R-squared		0.09741
S.D. dependent var	6.915882	S.E. of regression		6.570417
Sum squared resid	10404.06	F-statistic		9.777681
Durbin-Watson stat	2.056103	Prob(F-statistic)		0.000004
Unweighted Statistics				
R-squared	0.118241	Mean dependent var		2.062857
Sum squared resid	11052.52	Durbin-Watson stat		1.935471