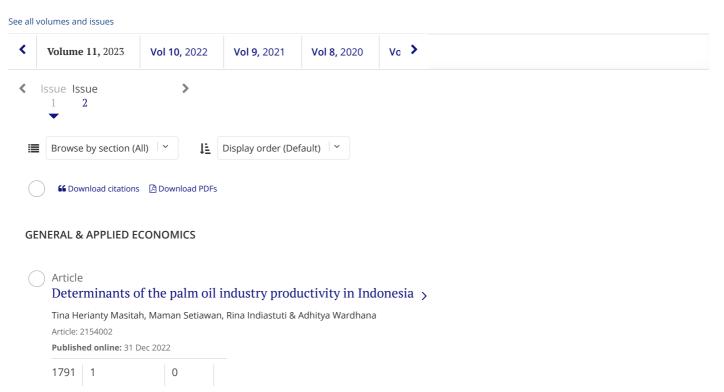
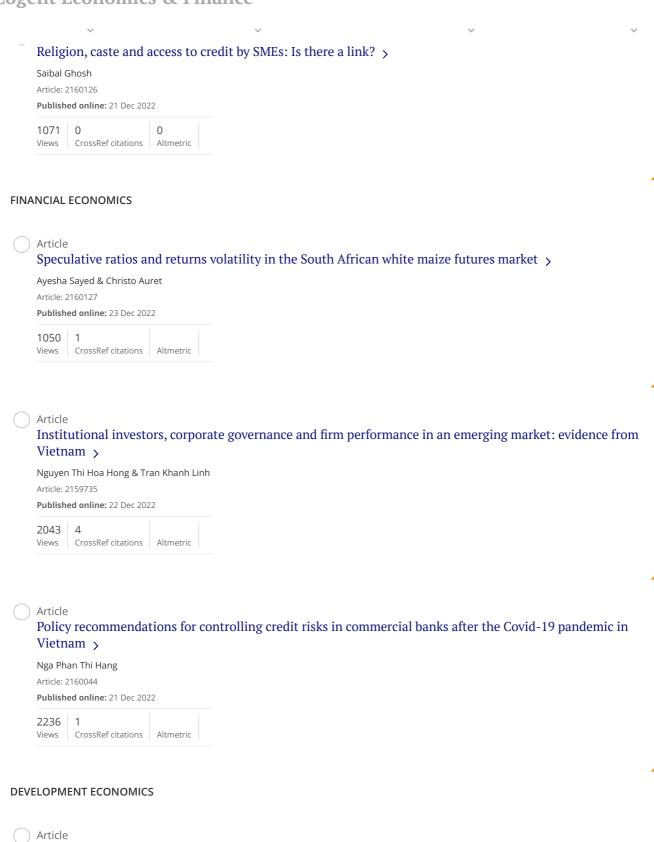


Cogent Economics & Finance, Volume 11, Issue 1 (2023)

Economics, Finance, Business & Industry Journals >> Sign in here to start your access





Non-linearity between financial inclusion and economic growth in sub-saharan Africa: What implications for the West African Economic and Monetary Union (WAEMU)?

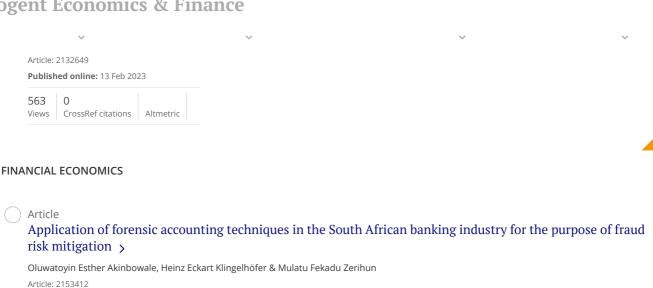
Fabrice-Gilles Ndombi Avouba, A.IBN-Saïd Akougbe & Christel le Ines Leticia Ndombi Ondze

Article: 2158630

Published online: 28 Dec 2022

1141	1		
Views	CrossRef citations	Altmetric	





Article

Does investment in education and health impact youth employment outcomes? Evidence from Sub-Saharan Africa >

Oluchukwu F Anowor, Hyacinth E Ichoku, Vincent A Onodugo, Chinedu Ochinanwata & Peter Chika Uzomba Article: 2160128

Published online: 16 Feb 2023

Published online: 16 Feb 2023

Views CrossRef citations Altmetric

941 1 Views CrossRef citations Altmetric

GENERAL & APPLIED ECONOMICS

Article Determination of the effects and optimal thresholds of monetary policy instruments: A study of Central Bank Lending system in Kingdom of Eswatini >

Samuel Nkosinathi Dlamini & Dr Pfano Mashau

Article: 2160582

Published online: 31 Dec 2022

Views CrossRef citations Altmetric

Article

Modeling the impact of green energy consumption and natural resources rents on economic growth in Africa: An analysis of dynamic panel ARDL and the feasible generalized least squares estimators >

Sulemana Mumuni & Thomas Mwimba

Article: 2161774

Published online: 28 Dec 2022

1807 7 Views CrossRef citations Altmetric



Article: 2160132 Published online: 26 Dec 2022 Views CrossRef citations Altmetric FINANCIAL ECONOMICS Article The impact of digital transformation towards blockchain technology application in banks to improve accounting information quality and corporate governance effectiveness > Ayman Mohammad Al Shanti & Mohammad Salim Elessa Article: 2161773 Published online: 25 Dec 2022 4446 2 Views CrossRef citations Altmetric Article Determinants of bank stability in Ethiopia: A two-step system GMM estimation Mekonnen Kumlachew Yitayaw, Yohannes Kefale Mogess, Habtamu Legese Feyisa, Wondmagegn Biru Mamo & Salah Mohammed Abdulahi Article: 2161771 Published online: 26 Dec 2022 2135 2 Views CrossRef citations Altmetric Article Intangible investments and cost of equity capital: An empirical research on Vietnamese firms > Trinh Hiep Thien & Nguyen Xuan Hung Article: 2163075 Published online: 11 Jan 2023 972 \cap Views CrossRef citations Altmetric Article CEO characteristics and bank performance: Case of Vietnamese commercial banks Nam Hai Pham Article: 2162687 Published online: 03 Jan 2023 1604 1 CrossRef citations Altmetric Article The informational value contained in the different types of auditor's opinions: Evidence from Portugal

Published online: 03 Jan 2023

https://www.tandfonline.com/toc/oaef20/11/1

Article: 2162688

Paulo Viegas de Carvalho, Joaquim Ferrão, Joaquim Santos Alves & Manuela Sarmento

Foreign capital flow, institutional quality and human capital development in sub-Saharan Africa

Published online: 31 Dec 2022

1591 1 Views CrossRef citations Altmetric

The impact of managerial ownership on audit fees: Evidence from Portugal and Spain >

Sandra Alves

Article: 2163078

Published online: 31 Dec 2022

1222 Views CrossRef citations Altmetric

Article

Efficiency of Indian Banks – private versus public sector banks: A two-stage analysis >

Biswajit Patra, Purna Chandra Padhan & Puja Padhi

Article: 2163081

Published online: 31 Dec 2022

2567 3 Views CrossRef citations Altmetric

Financial development and export diversification in Ethiopia: ARDL approach

Teshager Mazengia, Misikir Bezabih & Fasika Chekol

Article: 2163079

Published online: 09 Jan 2023

1459 Views CrossRef citations Altmetric

GENERAL & APPLIED ECONOMICS

Analysis of factors affecting technical efficiency of A1 smallholder maize farmers under command agriculture scheme in Zimbabwe: The case of Chegutu and Zvimba Districts

FINANCIAL ECONOMICS

Article
The role of organizational culture in supporting better accounting information systems outcomes >

Adel M. Qatawneh
Article: 2164669

Published online: 09 Jan 2023

2746 | 1

GENERAL & APPLIED ECONOMICS

Views CrossRef citations Altmetric

Article
Internal audit effectiveness as a boon to public procurement performance: a multi mediation model >
Michael Karikari Appiah, Newman Amaning, Paul Kwaku Tettevi, Daniel Frimpong Owusu & Emmanuel Opoku Ware
Article: 2164968
Published online: 08 Jan 2023

2263 | 1
Views | CrossRef citations | Altmetric | Altmetric

FINANCIAL ECONOMICS

Article
The effect of a moveable collateral registry on MSME access to finance: Evidence from Malawi >

Susan Pendame & Joseph Oscar Akotey

Home ► All Journals ► Cogent Economics & Finance ► List of Issues ► Volume 11, Issue 1

Cogent Economics & Finance

GENERAL & APPLIED ECONOMICS Article Tax incentives, ease of doing business and inflows of FDI in Africa: Does governance matter? Adamu Braimah Abille & Sulemana Mumuni Article: 2164555 Published online: 08 Jan 2023 1408 0 Views CrossRef citations Altmetric **DEVELOPMENT ECONOMICS** Article Islamic finance education: Current state and challenges for Pakistan Minhas Akbar, Ahsan Akbar, Hafiz Sajid Yaqoob, Ammar Hussain, Libuše Svobodová & Fakhra Yasmin Article: 2164665 Published online: 18 Jan 2023 Views CrossRef citations Altmetric **GENERAL & APPLIED ECONOMICS** Article Foreign Direct Investment and child health outcomes in Africa Mustapha Immurana, Abdul-Aziz Iddrisu, Samuel Owusu & Hadrat Mohammed Yusif Article: 2164565 Published online: 14 Jan 2023 904 Views CrossRef citations Altmetric Article Asymmetric effect of tax systems on poverty and inequality: Exploring the distributional impact of domestic resource mobilization systems in Ghana > Frank Adu, Imhotep Paul Alagidede, Dennis Boahene Osei & Michael Effah Asamoah Article: 2166211 Published online: 16 Jan 2023 1075 Views CrossRef citations Altmetric FINANCIAL ECONOMICS

Anti-money laundering regulations' effectiveness in ensuring banking sector stability: Evidence of Western Balkan

Esat Durguti, Erëza Arifi, Emine Gashi & Muhamet Spahiu

Home ► All Journals ► Cogent Economics & Finance ► List of Issues ► Volume 11, Issue 1

Cogent Economics & Finance

Article Introducing electronic transaction levy in Ghana: A possible curse or a blessing? The public's perception Victoria Nutassey, Samuel Agyei, Siaw Frimpong & Kaku NoKoe Article: 2167361 Published online: 16 Jan 2023 Views CrossRef citations Altmetric **DEVELOPMENT ECONOMICS** Article Moderating remittance and economic growth relationship with exchange rate: What new can we learn from Africa's economy? > Gyasi Genevieve, Joseph Magnus Frimpong & Mireku Kwame Article: 2167577 Published online: 21 Jan 2023 Views CrossRef citations Altmetric 2167369 The threat of political extraction and corporate cash holdings: The case of the GCC countries Ghada Tayem Article: 2167369 Published online: 21 Jan 2023 578 1 Views CrossRef citations Altmetric **Financial Economics** Socio-economic inclusion and sustainable economic growth: Empirical analysis of Nigeria and South Africa Olajumoke Rebecca Ogunniyi, Abiodun Funso Okunlola, Michael Akinade Alatise & Rafiu Adewale Aregbeshola Article: 2163077 Published online: 01 Feb 2023 810 Views CrossRef citations Altmetric FINANCIAL ECONOMICS

Government healthcare financing and dwindling oil prices: Any alternatives for OPEC countries? >

https://www.tandfonline.com/toc/oaef20/11/1

Salem Al Mustanyir Article: 2166733

Article

Article

529

Serebour Quaicoe Article: 2170766

11/10/23, 10:53 AM

The role of social responsibility accounting in mitigating the economic impacts of the COVID-19 pandemic in Jordan >

Laith Akram Al-Qudah Article: 2171575 Published online: 29 Jan 2023



Article Mebratu-B-PLC theory implication on developing country's oxygen of bank >

Agumas Alamirew Mebratu Article: 2166210 Published online: 02 Feb 2023

1 CrossRef citations Altmetric Views

FINANCIAL ECONOMICS

Article The firms' debt reversibility trend: An application to a large sample of industrial SMEs > António Carvalho, Filipe Sardo & Luís Pacheco Article: 2172802 Published online: 01 Feb 2023

428 0 Views CrossRef citations Altmetric

GENERAL & APPLIED ECONOMICS

Article Impact of rural out-migration on poverty of households in southern Ethiopia

Fassil Eshetu, Jema Haji, Mengistu Ketema & Abule Mehare

Article: 2169996

Published online: 01 Feb 2023

Article Do environmental taxes affect energy consumption and energy intensity? An empirical analysis of OECD countries > Gideon Link Sackitey Article: 2156094 Published online: 11 Feb 2023 1210 0 Views CrossRef citations Altmetric Article Employing a generalized reduced gradient algorithm method to form combinations of steel price forecasts generated separately by ARIMA-TF and ANN models > Salvatore Joseph Terregrossa & Uğur Şener Article: 2169997 Published online: 12 Feb 2023 701 1 Views CrossRef citations Altmetric FINANCIAL ECONOMICS Article Do trust in financial institution and financial literacy enhances intention to participate in stock market among Indian investors during COVID-19 pandemic? > Mohd Adil, Yogita Singh, Mohammad Subhan, Mamdouh Abdulaziz Saleh Al-Faryan & Mohd Shamim Ansari Article: 2169998 Published online: 07 Feb 2023 1762 0 CrossRef citations Altmetric **DEVELOPMENT ECONOMICS** Article Tax revenue mobilization effort in Southern African Development Community (SADC) bloc: Does ICT matter? Olufunmilayo Olayemi Jemiluyi & Leward Jeke Article: 2172810 Published online: 13 Feb 2023 1043 1 Views CrossRef citations Altmetric

FINANCIAL ECONOMICS

Article Pension funds and capital market development in Africa: The role of institutional quality Kathryn A.A.O Assefuah, Joshua Y. Abor, Saint Kuttu & Lordina Amoah Article: 2172809 Published online: 07 Feb 2023

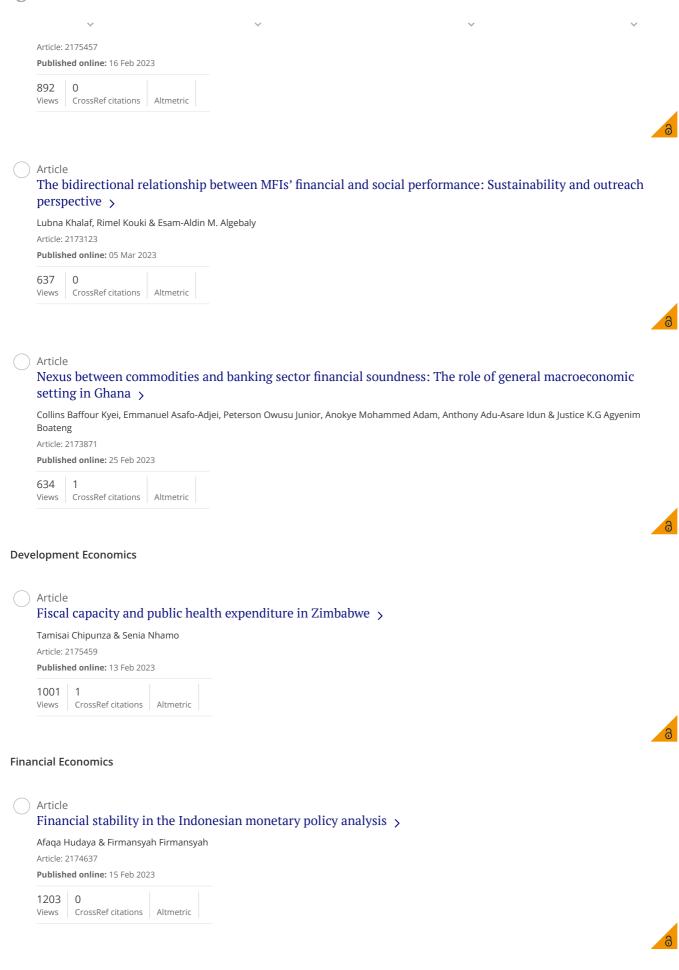
Published online: 12 Feb 2023

CrossRef citations Altmetric

Article: 2175463

1030 1

Cornelius Yao Azumah, Anthony Owusu-Ansah, Godfred Amewu & Williams Ohemeng



Article

	*	
1057	0	
Views	CrossRef citations	Altmetric

8

FINANCIAL ECONOMICS

	_		
/	1	Article	,
(-)	ALUCK	

MAX, lottery-type stocks, and the cross-section of stock returns: Evidence from the Chinese stock market >

Hoang Van Hai

Article: 2175471

Published online: 20 Feb 2023

628 0
Views CrossRef citations Altmetric



Article

Examining the role of financial innovation on economic growth: Fresh empirical evidence from developing and developed countries

Mohd Hammad Naeem, Mohammad Subhan, Md Shabbir Alam, Mamdouh Abdulaziz Saleh Al-Faryan & Mohammad Yameen

Article: 2170000

Published online: 26 Feb 2023

1882	0	
Views	CrossRef citations	Altmetric



Article

Corporate governance disclosure and annual reports quality: An investigation in Vietnam context >

Manh Dung Tran & Hong Hanh Ha

Article: 2173125

Published online: 22 Feb 2023

1204	0	
Views	CrossRef citations	Altmetric



Article

Asymmetric relationships among financial sector development, corruption, foreign direct investment, and economic growth in sub-Saharan Africa

Emmanuel Asafo-Adjei, Peterson Owusu Junior, Anokye M. Adam, Clement Lamboi Arthur, Ebenezer Boateng & Kwadwo Ankomah Article: 2182454

Published online: 26 Feb 2023

967	3		
Views	CrossRef citations	Altmetric	



DEVELOPMENT ECONOMICS

Article

Climate variability impacts on agricultural output in East Africa >

Jean-Luc Mubenga-Tshitaka, Johane Dikgang, John W. Muteba Mwamba & Dambala Gelo

Article: 2181281

Published online: 24 Feb 2023

https://www.tandfonline.com/toc/oaef20/11/1

Views CrossRef citations Altmetric

775

farmers in Northern Ghana > Agness Mzyece, Aleksan Shanoyan, Vincent Amanor-Boadu, Yacob Abrehe Zereyesus, Kara Ross & John N. Ng'ombe Article: 2184062 Published online: 26 Feb 2023 782 0 Views CrossRef citations Altmetric FINANCIAL ECONOMICS Article

comparative analysis for the pre and COVID-19 periods >
Muhammad Zahid, Syeda Um-Ul-Baneen Naqvi, Amin Jan, Haseeb Ur Rahman & Said Wali
Article: 2183654

The nexus of environmental, social, and governance practices with the financial performance of banks: A

Published online: 26 Feb 2023

1510 2
Views CrossRef citations Altmetric

Article
Insurance and economic growth nexus: New Evidence from OECD countries >
Issa Dawd & Noureddine Benlagha

Article: 2183660

Published online: 27 Feb 2023

1324 | 1 Views | CrossRef citations | Altmetric |

Article

Does Economic Policy Uncertainty Affect Foreign Remittances? Linear and Non-linear ARDL Approach in BRIC Economies >

Rana Yassir Hussain, Namarta Kumari Bajaj, Sonia Kumari & Mamdouh Abdulaziz Saleh Al-Faryan

Article: 2183642

Published online: 05 Mar 2023

820 0 Views CrossRef citations Altmetric

Article

Witching days and abnormal profits in the us stock market >

Guglielmo Maria Caporale & Alex Plastun

Article: 2182016

Published online: 02 Mar 2023

646 0 Views CrossRef citations Altmetric

DEVELOPMENT ECONOMICS



Article

Meeting European exporting certification standards as a sustainable marketing choice among mango farmers in Ghana >

Richard Kwasi Bannor, George Osei & Samuel Kwabena Chaa Kyire Article: 2185344 Published online: 06 Mar 2023 0

FINANCIAL ECONOMICS

Views CrossRef citations Altmetric

Hedge and safe-haven properties of Cryptocurrencies: evidence in east asia-5 market Chiang-Ching Tan, Pick-Soon Ling, Siew-Ling Sim & Kelvin Lee Yong Ming Article: 2183640 Published online: 05 Mar 2023 574 Views CrossRef citations Altmetric

DEVELOPMENT ECONOMICS

Article

Determinants of rural households' livelihood diversification strategies: In the case of north Wollo zone, Amhara National Regional State, Ethiopia >

Andualem Kassegn & Umer Abdinasir Article: 2185347 Published online: 15 Mar 2023 1894 2 Views CrossRef citations Altmetric

GENERAL & APPLIED ECONOMICS

Article

The urban informal sector as a means of livelihood improvement among youth: Evidence from Hawassa city, Ethiopia >

Tariku Lorato, Tasew Tadesse, Yodit Abebe Mamo & Berhanu Getinet

Article: 2185346

Published online: 06 Mar 2023

Views CrossRef citations Altmetric

FINANCIAL ECONOMICS

Published online: 05 Mar 2023					
1042 Views	0 CrossRef citations	Altmetric			

2

GENERAL & APPLIED ECONOMICS

Article Analysis of profit efficiency of smallholder beef cattle farms in South-West Nigeria	>
Suliyat Omolade Jimoh, Olayinka Isiaka Baruwa & Adetomiwa Kolapo	
Article: 2181786	
Published online: 09 Mar 2023	
1340 0 Views CrossRef citations Altmetric	



DEVELOPMENT ECONOMICS

Article
Human capital and its impact on Ethiopian economic growth: ARDL approach to co-integration >

Hinsene Lemma Wegari, Sisay Tolla Whakeshum & Negese Tamirat Mulatu

Article: 2186046

Published online: 06 Mar 2023

1273 | 1

Views | CrossRef citations | Altmetric



FINANCIAL ECONOMICS

Article

Exploring the dynamic connectedness between commodities and African equities >

Samuel Kwaku Agyei & Ahmed Bossman

Article: 2186035

Published online: 08 Mar 2023

551 | 2

Views | CrossRef citations | Altmetric



GENERAL & APPLIED ECONOMICS

Testing the consistency of asymmetric interest rate pass-through: The case of Indonesia >

R. Dimas Bagas Herlambang, Rudi Purwono & Rumayya

Article: 2178124

Published online: 08 Mar 2023

582 0

Views CrossRef citations Altmetric

6

FINANCIAL ECONOMICS

Co

oge	ent Economics & Finance	
	· · · · · · · · · · · · · · · · · · ·	
	Published online: 08 Mar 2023	
	1414 0 Views CrossRef citations Altmetric	
DEV	ELOPMENT ECONOMICS	0
	Article The effects of currency devaluation on Ethiopia's major export commodities: The case of coffee and khat: Evidence from the vector error correction model and the Johansen co-integration test >	
	Abdelkaf Elias, Amsalu Dachito & Shabu Abdulbari Article: 2184447 Published online: 13 Mar 2023	
	1544 0 Views CrossRef citations Altmetric	4
FINA	ANCIAL ECONOMICS	C
	Article Central Bank Independence and stock market outcomes: An event study on Borsa Istanbul >	
	Ahmad Bash & Abdullah M. Al-Awadhi Article: 2186032 Published online: 08 Mar 2023	
	644 1 Views CrossRef citations Altmetric	
		9
\bigcirc	Article Annual report readability and stock return synchronicity: Evidence from India	
	Vismaya Gangadharan & Lakshmi Padmakumari Article: 2186034 Published online: 08 Mar 2023	
	768 0 Views CrossRef citations Altmetric	
	Article The determinants of financial distress cost: A case of emerging market.	<u>(</u>
	The determinants of financial distress cost: A case of emerging market > Muhammad Farooq, Ahmed Imran Hunjra, Saif Ullah & Mamdouh Abdulaziz Saleh Al-Faryan Article: 2186038 Published online: 08 Mar 2023	

1515 0 Views CrossRef citations Altmetric

Article

Board meeting, promoter CEO and firm performance: Evidence from India >

Minati Sahoo, Kailash B.L. Srivastava, Neeraj Gupta, Sachin Kumar Mittal, Priti Bakhshi & Tarun Agarwal Article: 2175465

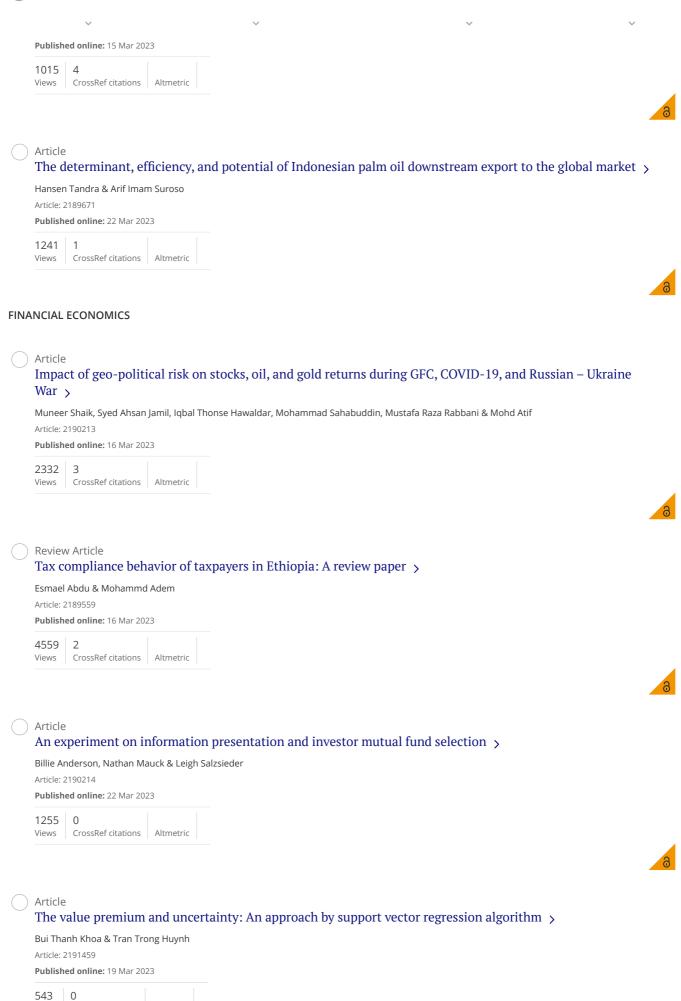
Article Contactless digital financial innovation and global contagious COVID-19 pandemic in low income countries: Evidence from Uganda > George Okello Candiya Bongomin, Waswa Balunywa, Edith Mwebaza Basalirwa, Muhammed Ngoma & Joseph Mpeera Ntayi Article: 2175467 Published online: 19 Apr 2023 1 Views CrossRef citations Altmetric Article How does the corporate life cycle influence Vietnamese firms corporate social responsibility? > Luu Bich Thu & Nguyen Vinh Khuong Article: 2186043 Published online: 13 Mar 2023 0 Views CrossRef citations Altmetric **GENERAL & APPLIED ECONOMICS** Article Impact of COVID-19 lockdowns on retail stock trading patterns Christos Sigalas Article: 2188713 Published online: 13 Mar 2023 651 1 Views CrossRef citations Altmetric FINANCIAL ECONOMICS Article More on the profit shifting costs function. Analysis of the literature and other modelling approaches Mohamed Rachidi & Abdeslam El Moudden Article: 2181603 Published online: 22 Mar 2023 Views CrossRef citations Altmetric Article Related party transactions and firm value in an emerging market: Does corporate social responsibility matter? Nguyen Vinh Khuong, Tran Trung Kien, Le Ong Tieu Bang, Dinh Ho Tuyet Anh, Van Cong Danh, Pham Xuan Hung & Nguyen Ai Ngan Article: 2186036 Published online: 13 Mar 2023

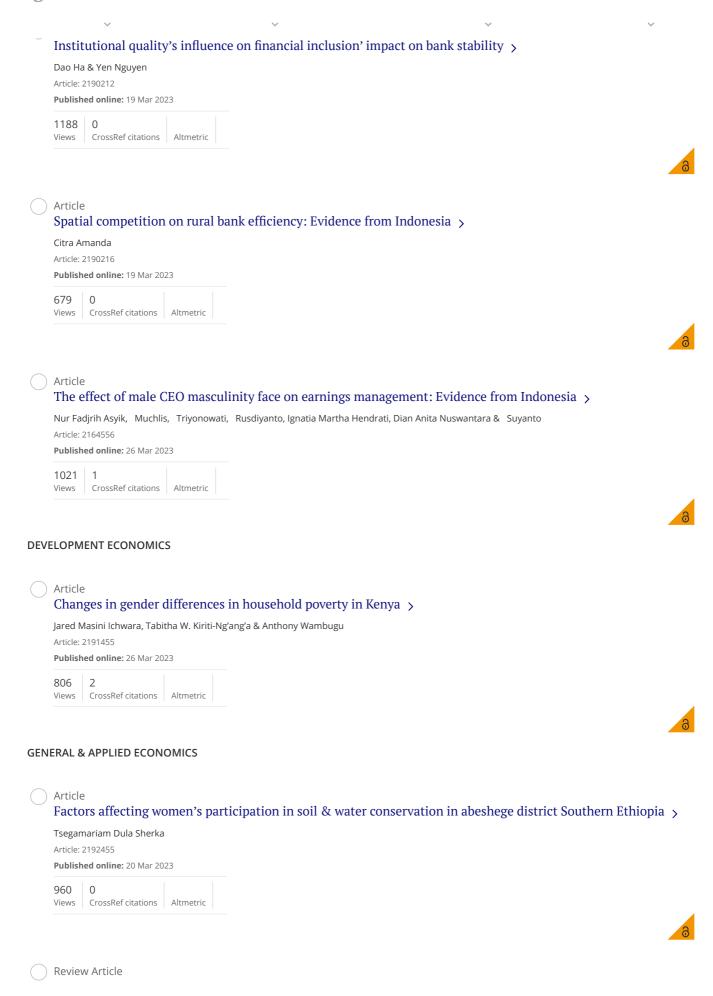
Home ► All Journals ► Cogent Economics & Finance ► List of Issues ► Volume 11, Issue 1

Cogent Economics & Finance

× ×	V		~	~
Article The dynamics of the relationship	n hatrican fancien arr	.h	ad immont domain d fo	un ation
The dynamics of the relationshi	_	mange reserves ar	ia import demana it	anction >
Article: 2189623	Turraidi			
Published online: 15 Mar 2023				
1176 2 Views CrossRef citations Altmetric				
Article Does COVID-19 affect small and	modium enterprises	conital atrustura	in viotnam?	A
Quoc Trung Nguyen Kim	medium enterprises	capital structure	iii vietilaiii? >	
Article: 2190268				
Published online: 15 Mar 2023				
910 0				
Views CrossRef citations Altmetric				
Lithin B M, Suman Chakraborty, Vishwanat Article: 2189589 Published online: 15 Mar 2023 1206 0 Views CrossRef citations Altmetric	ıan Iyer, Nikhil M N & Sanket	Ledwani		
Article Predicting financial statement is models	nanipulation in South	ı Africa: A compar	ison of the Beneish	and Dechow
Alastair Marais, Claire Vermaak & Patricia S	hewell			
Article: 2190215				
Published online: 15 Mar 2023				
1212 0 Views CrossRef citations Altmetric				
EVELOPMENT ECONOMICS				
Article				
The effect of labor and capital o	n transportation logis	stics' development	: The case of Ho Ch	ı Mınh, Vietnam
Vu Thi Kim Hanh & Nguyen Hong Nga Article: 2189562				
Published online: 15 Mar 2023				
626 0				
Views CrossRef citations Altmetric				

GENERAL & APPLIED ECONOMICS







Article

858

0

Views CrossRef citations Altmetric

Remittances and economic growth: What lessons for the CEMAC zone? >

Louis Bernard Tchekoumi & Patrick Danel Nya Article: 2191448 Published online: 22 Mar 2023 639 1 Views CrossRef citations Altmetric

GENERAL & APPLIED ECONOMICS

Article How monetary policy affects industrial activity in Malawi: Evidence from ARDL and VAR models >

Joseph Upile Matola Article: 2190643 Published online: 01 Apr 2023 1404 0

CrossRef citations Altmetric Views

FINANCIAL ECONOMICS

Factor affecting technical efficiency of the banking sector: Evidence from Ethiopia >

Salah Mohammed Abdulahi, Mekonnen Kumlachew Yitayaw, Habtamu Legese Feyisa & Wondmagegn Biru Mamo Article: 2186039

Published online: 26 Mar 2023

1328 0 CrossRef citations Altmetric Views

DEVELOPMENT ECONOMICS

Article

Households' participation in agri-food based livelihoods: Insights from urban and peri-urban contexts of

Tanzania > https://www.tandfonline.com/toc/oaef20/11/1

Views CrossRef citations Altmetric

Article

GENERAL & APPLIED ECONOMICS

(

ogen	t Economics & Finance
	· · · · · · · · · · · · · · · · · · ·
10 Vie	22 0 ws CrossRef citations Altmetric
	ticle
	ne influence of off-farm work on farm income among smallholder farm households in northern Ghana >
	njamin Tetteh Anang & Clever Kwasi Apedo icle: 2196861
Pu	blished online: 05 Apr 2023
83 Vio	
Vie	ws CrossRef citations Altmetric
Ar	ticle
/	ne determinants of non-traditional agricultural exports' growth in Ghana >
	vester N. Ayambila, Umar Adam & Benjamin Tetteh Anang
	icle: 2197322 blished online: 05 Apr 2023
	06 0
Vie	
D	ticle o migrant remittances have state de-legitimizing tendencies? A micro-survey based evidence from Africa > reham Adera
	icle: 2197323
Pu	blished online: 05 Apr 2023
72 Vie	
_	
IANC	CIAL ECONOMICS
/	ticle entral bank coordinated policies and bank market power: an insight from the African context >
	niel Ofori-Sasu, Elikplimi Komla Agbloyor, Emmanuel Sarpong-Kumankoma & Joshua Yindenaba Abor
	icle: 2196851
	blished online: 05 Apr 2023
45 Vie	
Ar	ticle
Te	erritorial Marketing Impacts on Foreign Direct Investment Attraction(Empirical Evidence in Nghe An
	rovince, Vietnam) >
	anh Cuong Dang, Thi Thao Banh, Thi Hang Trinh, Thi Viet Hoang & Thi Ngoc Han Doan icle: 2197367
	blished online: 12 Apr 2023

lome	► All lournals	Cogent Franchics & Finance	► List of Issues	Volume 11 Issue

/	
	wrticle mpact of statutory audit and corporate taxation on profitability of selected listed companies in Nigeria
A	irace Awotayo-Ayeni Oyinkansola & Cordelia Onyinyechi Omodero rticle: 2199552 ublished online: 01 May 2023
	112 0 liews CrossRef citations Altmetric
JE	RAL & APPLIED ECONOMICS
I	article mpact of Urban expansion on income of evicted farmers in the peri-Urban areas of Amhara Regional State, Ethiopia: Endogenous switching regression approach >
Т	adele Alamneh, Melkamu Mada & Tora Abebe rticle: 2199596
1	367 0 CrossRef citations Altmetric
A۱	CIAL ECONOMICS
	orticle Determinants of WCM of Indian listed firms: A GMM regression approach >
5	atish Chandra Tiwari, Munawar Sayyad, Md Sikandar Azam & N S Sudesh rticle: 2199550
8	ublished online: 12 Apr 2023 85
/EI	OPMENT ECONOMICS
	orticle Determinants of rural household poverty in Pakistan with multilevel approach >
I S	Determinants of rural household poverty in Pakistan with multilevel approach > ehar Saleem, Maria Aslam, Rehan Ahmad Khan Sherwani, Atif Khan Jadoon, Ambreen Sarwar & Ijaz Butt rticle: 2202048
I S A F	Determinants of rural household poverty in Pakistan with multilevel approach > ehar Saleem, Maria Aslam, Rehan Ahmad Khan Sherwani, Atif Khan Jadoon, Ambreen Sarwar & Ijaz Butt
II S F G V	Determinants of rural household poverty in Pakistan with multilevel approach > ehar Saleem, Maria Aslam, Rehan Ahmad Khan Sherwani, Atif Khan Jadoon, Ambreen Sarwar & Ijaz Butt rticle: 2202048 ublished online: 17 Apr 2023
I S S A A F F G S V T S NEI	Determinants of rural household poverty in Pakistan with multilevel approach > ehar Saleem, Maria Aslam, Rehan Ahmad Khan Sherwani, Atif Khan Jadoon, Ambreen Sarwar & Ijaz Butt rticle: 2202048 ublished online: 17 Apr 2023 771 0 CrossRef citations Altmetric

11/10/23, 1 Home		Cogent Economics & Finance List of Issues Volume 1	nomics & Finance: Vol 11, No 1
Coge	ent Economics	& Finance	
	*	~	~
	Article Chinese stock market	volatility and herding behavior asyn	nmetry during the COVID-19 pandemic >
	Fan Fei & Jianing Zhang Article: 2203436 Published online: 17 Apr 2023		

835

1

Corporate social responsibility expenditure and financial performance: A comparison of Vietnamese listed and unlisted banks >

Le Ha Diem Chi & Bui Thi Thu Hang Article: 2203987 Published online: 19 Apr 2023 889 0 CrossRef citations Altmetric

Views CrossRef citations Altmetric

GENERAL & APPLIED ECONOMICS

Article Examining the factors influencing fintech adoption behaviour of gen Y in India Meghna Aggarwal, Keyurkumar M Nayak & Viral Bhatt Article: 2197699 Published online: 26 Apr 2023

2409 0 CrossRef citations Altmetric Views

Article

The moderating role of ICT on the relationship between foreign direct investment and the quality of environment in selected African countries >

Aminu Hassan Jakada, Suraya Mahmood, Umar Ahmad Ali & Danmaraya Ismail Aliyu

Article: 2197694

Published online: 23 Apr 2023

Views CrossRef citations Altmetric

FINANCIAL ECONOMICS

Does the market respond differently to the timing of the announcement of corporate actions? >

Juniarti Juniarti, Dea Devina Theja, Novita Tenoyo & Alan Darmasaputra

Article: 2203986

Published online: 25 Apr 2023

DEVELOPMENT ECONOMICS

Article
An empirical analysis of the relationship between FDI and economic growth in Tanzania >

Benedict Huruma Peter Mwakabungu & Jignesh Kauangal
Article: 2204606

Published online: 10 May 2023

1469 0
Views CrossRef citations Altmetric

FINANCIAL ECONOMICS

Article
Banking performance before and during the Covid-19 pandemic: Perspectives from Indonesia >

Susanti, Rediyanto Putra & Moh. Danang Bahtiar

Article: 2202965

Published online: 29 Apr 2023

1408 0

Views CrossRef citations Altmetric

Article

An investigation of financial contagion between cryptocurrency and equity markets: Evidence from developed and emerging markets >

Olivier Niyitegeka & Sheunesu Zhou

Article: 2203432

Published online: 29 Apr 2023

		*
Article		
Agent liquidity: A catalyst f	for mobile money banking ar	mong the unbanked poor population in rural sub-
Saharan Africa >		
George Okello Candiya Bongomin, Ch Article: 2203435	harles Akol Malinga, Alain Amani Manz	zi & Rebecca Balinda
Published online: 11 Jun 2023		
425 0		
Views CrossRef citations Altmetric		
Article		
Corporate governance mech	hanisms and efficiency of ins	surance firms: evidence from an emerging market
Samuel Nduati Kariuki Article: 2207265		
Published online: 04 May 2023		
614 0		
Views CrossRef citations Altmetric		
Article		damas from Damala dash
	sustainability: Empirical evi	
Article: 2202964	ochammad Fahlevi, Annuar MD Nassir	& Padzii Mond Hasnim
Published online: 01 May 2023		
902 0		
Views CrossRef citations Altmetric		
Towards a taxonomy for cry		
Towards a taxonomy for cry	/pto assets >	
John Fry & Olamide Ibiloye		
John Fry & Olamide Ibiloye Article: 2207266 Published online: 01 May 2023		
John Fry & Olamide Ibiloye Article: 2207266 Published online: 01 May 2023 466 0		
John Fry & Olamide Ibiloye Article: 2207266 Published online: 01 May 2023		
John Fry & Olamide Ibiloye Article: 2207266 Published online: 01 May 2023 466 0		
John Fry & Olamide Ibiloye Article: 2207266 Published online: 01 May 2023 466 0		
John Fry & Olamide Ibiloye Article: 2207266 Published online: 01 May 2023 466 0 Views CrossRef citations Altmetric		
John Fry & Olamide Ibiloye Article: 2207266 Published online: 01 May 2023 466 0 Views CrossRef citations Altmetric ERAL & APPLIED ECONOMICS Article		
John Fry & Olamide Ibiloye Article: 2207266 Published online: 01 May 2023 466 0 Views CrossRef citations Altmetric ERAL & APPLIED ECONOMICS Article Irrigated Onion Production	n Efficiency in Humbo Distric	t, Southern Ethiopia >
John Fry & Olamide Ibiloye Article: 2207266 Published online: 01 May 2023 466 0 Views CrossRef citations Altmetric ERAL & APPLIED ECONOMICS Article Irrigated Onion Production Alula Tafesse, Samuel Dema & Abrha	n Efficiency in Humbo Distric	rt, Southern Ethiopia >
John Fry & Olamide Ibiloye Article: 2207266 Published online: 01 May 2023 466 0 Views CrossRef citations Altmetric ERAL & APPLIED ECONOMICS Article	n Efficiency in Humbo Distric	rt, Southern Ethiopia >
John Fry & Olamide Ibiloye Article: 2207266 Published online: 01 May 2023 466	n Efficiency in Humbo Distric	rt, Southern Ethiopia >
John Fry & Olamide Ibiloye Article: 2207266 Published online: 01 May 2023 466	n Efficiency in Humbo Distric	rt, Southern Ethiopia >

Financial development, interest rate pass-through and interest rate channel of monetary policy > Published online: 08 May 2023 934 1

Article

Accrual-based, real activities earnings management and corporate social responsibility: A virtuous circle? emerging market evidence >

Nguyen Vinh Khuong, Huynh Thi Ngoc Ly & Le Huu Tuan Anh

Article: 2209955

Published online: 08 May 2023

753 0 Views CrossRef citations Altmetric

Views CrossRef citations Altmetric

DEVELOPMENT ECONOMICS

Impact of government expenditure on economic growth in different states in South Africa >

Eugene Msizi Buthelezi

Article: 2209959

Published online: 08 May 2023

1841 3 Views CrossRef citations Altmetric

FINANCIAL ECONOMICS

Article Financial shock and the United States multinational and domestic corporations leverage

Article
Article
Article
Article
A LASSO-based model for financial distress of the Vietnamese listed firms: Does the covid-19 pandem
matter? >
Nam Thanh Vu, Ngoc Hong Nguyen, Thao Tran, Binh Thien Le & Duc Hong Vo
Article: 2210361
Published online: 08 May 2023
586 1
Views CrossRef citations Altmetric
Article Do Jelamic hanks have their banchmarks for financing rates in the dual hanking system?
Do Islamic banks have their benchmarks for financing rates in the dual-banking system? > Agus Widarjono & Abdur Rafik
Article: 2209954
Published online: 08 May 2023
603 0
Views CrossRef citations Altmetric
Tafirenyika Sunde Article: 2210857 Published online: 11 May 2023
913 1 Views CrossRef citations Altmetric
ANCIAL ECONOMICS
Article BP neural network-based early warning model for financial risk of internet financial companies >
Xiaoling Song, Yage Jing & Xuan Qin
Article: 2210362
Published online: 10 May 2023
700 1
Views CrossRef citations Altmetric
NOMETRICS
DNOMETRICS
ONOMETRICS Article Efficacies of artificial neural networks ushering improvement in the prediction of extant credit risk mo

https://www.tandfonline.com/toc/oaef20/11/1

Published online: 10 May 2023

Article: 2210916

Published online: 14 May 2023 946 Views CrossRef citations Altmetric

GENERAL & APPLIED ECONOMICS

Article Welfare impact of improved maize varieties adoption among smallholder farmers in Amuru district of Horo Guduru Wollega, Ethiopia >

Application of triple-hurdle model >

K. Nirmal Ravi Kumar, S.N. Mishra, Adinan Bahahudeen Shafiwu, Shailendra Gajanan, Suresh Chandra Babu & A. Sandhya Neelima Article: 2207939

Published online: 21 May 2023

773 Views CrossRef citations Altmetric

Article

Farmers' participation in small-scale irrigation in Amhara region, Ethiopia

Getasew Daru, Degsew Melak, Wondim Awoke & Sinkie Alemu

Article: 2213951

Published online: 17 May 2023

· · · · · · · · · · · · · · · · · · ·	V	~
) Article		
Day-of-the-week effect: Petroleum and petroleum product	S >	
Andrew C. Meek & Seth A. Hoelscher Article: 2213876		
Published online: 17 May 2023		
475 0 Views CrossRef citations Altmetric		
VELOPMENT ECONOMICS		4
Article "Analyze of inflation and economic growth relationship in	Burundi" >	
Jean Tony Ezako		
Article: 2210914 Published online: 19 May 2023		
924 0 Views CrossRef citations Altmetric		
Article Potential risks of liquidity and credit affecting the efficience Md. Asad Iqbal Chowdhury, Mohammad Shamsu Uddin, Monir Ahmmed, Md. R Article: 2209950 Published online: 19 May 2023 963 0		
Views CrossRef citations Altmetric		
Article Further evidence of contagion effect between the Chinese pandemic: A time-varying copula approach >	and the G20 stock markets during the	e COVID-19
Nadia Sghaier, Mondher Kouki & Samia Ben Messaoud Article: 2210363 Published online: 21 May 2023		
477 0 Views CrossRef citations Altmetric		
Article Greenspan's adherence to the Taylor rule: examining Fede	ral Reserve chairmen policy regimes	and deviatior
from the Taylor rule >	1 7 0	
Kyle Rechard & Narendra Raj Regmi		
Article: 2209951		

Research Article

Article

How justified is abandoning money from monetary policy? Evidence from dynamically simulated ARDL > Masudul Hasan Adil & Neeraj R. Hatekar Article: 2213015

Published online: 31 May 2023 Views CrossRef citations Altmetric

DEVELOPMENT ECONOMICS

Article Impact of banking sector competition on emerging market banks' safety and soundness - A study on Indian

Sabyasachi Mohapatra, Arun Kumar Misra & Molla Ramizur Rahman

Article: 2216980

Published online: 29 May 2023

604 Views CrossRef citations Altmetric

Financial Economics

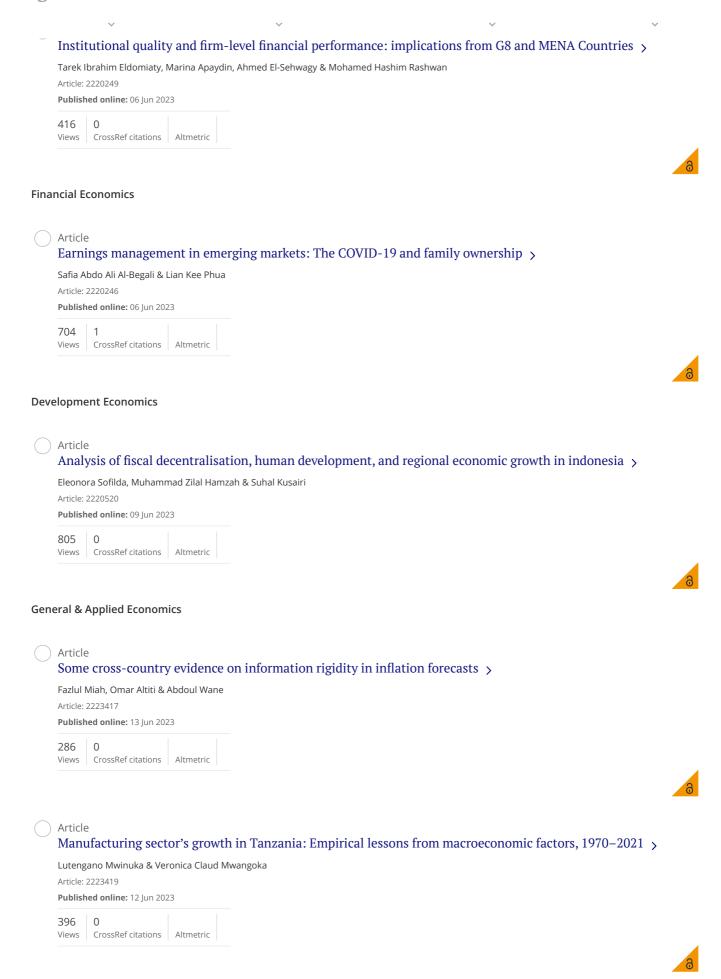
Perceptions about FinTech: New evidences from the Middle East

Syed Akmal, Mohammad Talha, Syed Mohammad Faisal, Moid Ahmad & Ahmad Khalid Khan

Article: 2217583

Article: 2220250 Published online: 06 Jun 2023 836

Cogent Economics & Finance





Article Structure of R&D capital expenditure and national total factor productivity > Iuniours Marire Article: 2223423 Published online: 13 Jun 2023

355 0 Views CrossRef citations Altmetric

General & Applied Economics

Article Economic policy uncertainty and corporate leverage - does cash holdings matter? Evidence from the U.S. Zahid Jumah, Zahid Irshad Younas, Nabeel Safdar & Mamdouh Abdulaziz Saleh Al-Faryan Article: 2223809 Published online: 19 Jun 2023 738 0

Views CrossRef citations Altmetric

Development Economics

Article Foreign direct investment and economic growth in Côte d'Ivoire: An application of the bounds testing approach to cointegration >

B. G. Jean Jacques Iritié & Jean Baptiste Tiémélé Article: 2223940 Published online: 19 Jun 2023

809 Views CrossRef citations Altmetric

General & Applied Economics

Ecological based environmental Kuznets curve for Africa: Evidence from the fishery sector at continental, regional and country-specific levels >

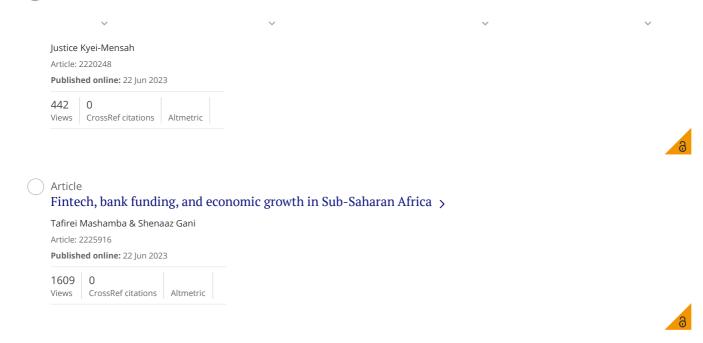
Andrew Phiri & Danai Tembo

Article: 2225917

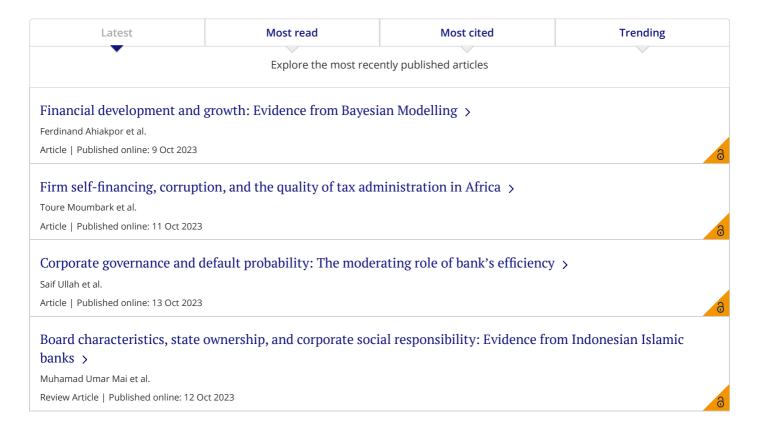
Published online: 19 Jun 2023

358 0 Views CrossRef citations Altmetric

Cogent Economics & Finance



Explore articles



Home ► All Journals ► Cogent Economics & Finance ► List of Issues ► Volume 11, Issue 1

Cogent Economics & Finance

Editors
Librarians
Societies
Opportunities

Reprints and e-prints

Advertising solutions

Accelerated publication

Corporate access solutions

Open Select

Dove Medical Press F1000Research

Help and information

Help and contact Newsroom

All journals Books

Keep up to date

Register to receive personalised research and resources by email



Sign me up









Copyright © 2023 Informa UK Limited Privacy policy Cookies Terms & conditions Accessibility

Registered in England & Wales No. 3099067 5 Howick Place | London | SW1P 1WG



Cogent Economics & Finance



ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/oaef20

Democracy, economic growth, and income inequality: Evidence from province level data

Irwan Trinugroho, Aldy Fariz Achsanta, Putra Pamungkas, Nugroho Saputro & Sari Yuniarti

To cite this article: Irwan Trinugroho, Aldy Fariz Achsanta, Putra Pamungkas, Nugroho Saputro & Sari Yuniarti (2023) Democracy, economic growth, and income inequality: Evidence from province level data, Cogent Economics & Finance, 11:1, 2220244, DOI: 10.1080/23322039.2023.2220244

To link to this article: https://doi.org/10.1080/23322039.2023.2220244

<u>a</u>	© 2023 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.
	Published online: 01 Jun 2023.
	Submit your article to this journal 🗹
hh	Article views: 794
Q	View related articles 🗗
CrossMark	View Crossmark data ☑







Received: 14 August 2022 Accepted: 26 May 2023

*Corresponding author: Irwan Trinugroho, Faculty of Economics and Business, Universitas Sebelas Maret, Jl. Ir. Sutami 36A, Surakarta, Indonesia E-mail: irwan_t@staff.uns.ac.id

Reviewing editor: Aviral Tiwari, Finance and Economics, Rajagiri Business School,

Additional information is available at the end of the article

DEVELOPMENT ECONOMICS | LETTER

Democracy, economic growth, and income inequality: Evidence from province level data

Irwan Trinugroho^{1,2}*, Aldy Fariz Achsanta^{1,2}, Putra Pamungkas^{1,2}, Nugroho Saputro^{1,2} and Sari Yuniarti

Abstract: Democracy is an essential aspect in national-level governance to safequard human rights and provide equal distribution of wealth among citizens that are also expected to bolster more rapid economic growth. However, the extant literatures show mixed result in providing evidence of how democracy will impact economic growth. In this paper, we, therefore, empirically examine the impact of democracy on economic growth and income inequality at the regional level by studying provinces in Indonesia. A panel data estimation is employed with 335 province-year observations to test our empirical model covering 34 provinces. We find that overall democracy is a detrimental factor to regional economic growth as higher level of democracy needs substantial cost to finance. However, our study reveals that democracy help reduce inequality across provinces as it may open up the possibilities to get more education for marginalized people which then implies for higher income for those people. Several policy implications are discussed.

Subjects: Development Studies; Economics and Development; Development Economics Keywords: democracy; economic growth; income inequality; province; indonesia

1. Introduction

Democracy has been an important issue in governance mechanism, particularly to the government in ensuring accountability and reducing any potential misuse of power. A democratic government allows public scrutiny of government projects, reducing any potential misconduct. Although that democratic government is beneficial to the public, the impact of democracy on economic growth still varies across previous empirical studies. A strand of the literature finds the positive impact of democracy on growth (Benhabib et al., 2013; Knutsen, 2011; Narayan et al., 2011; Rock, 2009; Salahodjaev, 2015). Furthermore (Knutsen, 2013), finds that democracy is positively associated with economic growth when examining the presence of democracy in sub-Saharan Africa. Moreover, the effect of democracy on economic growth is stronger for countries with weak capacities. Democracy in a country with weak capacity helps the government to better manage government policy, including tax collection and public services.

On the other hand, previous empirical research also shows that democracy does not directly affect economic growth, but indirectly through several channels, such as human capital, inflation, political stability, and economic freedoms (Doucouliagos & Ulubaşoğlu, 2008). Another strand of the literature shows negative effect of democracy on economic growth (Alesina & Perotti, 1996; Benhabib et al., 2013; Tavares & Wacziarg, 2001). Democratic countries are more likely to be







© 2023 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group. This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. The terms on which this article has been published allow the posting of the Accepted Manuscript in a repository by the author(s) or with their consent.



responsive to the demands of the poor. Hence, the government responded by providing more access to education. The democratic government also shapes the income distribution between capital and labor to be more favorable for the labor. By facilitating freedom of association, democracy has provided more voices to labor unions in order to promote labor interests. Thus, it allows labor wages to increase but at the cost of the return on capital. The reduced return on investment (ROI) ultimately gives lesser incentive for the capital to enter the democratic country. Therefore, the effect of democracy on economic growth and income inequality is still an important area to discuss.

To the best of our knowledge, this is the first study on the democracy-growth-inequality nexus conducted at provincial level in transitional economies. Indeed, previous studies have examined democracy's impact on growth and income inequality (e.g., Ahmad & Nayan, 2019; Ahmad, 2017; Balcázar, 2016; Papaioannou et al., 2008; Tarverdi et al., 2019; Zecca & Nicolli, 2021); however, the evidence is provided on country level. The development of democracy could vary across provinces in transitional economies leading to higher economic disparities between provinces. Hence we focus on Indonesia to conduct a thorough analysis examining the impact of democracy on economic growth and income inequality due to several reasons. First, Indonesia offers a unique setting regarding governance. During the reformation era or post-Soeharto regime, the government adopts a decentralization policy. This gives liberty for local government to allocate their budget independently. Therefore, the level of democracy could vary across provinces in Indonesia.

Secondly, using the provincial level, we are able to examine the impact of democracy on local government. This impact may be different with the central government, where scrutiny from the press and judiciary authorities is more common. Local government is less visible to press and judiciary authorities; therefore, they might have more opportunities to misuse the power compared to the central government (Cheung et al., 2010). Thirdly although the index on average shows a good level of democracy, there are still significant differences due to the development. Most likely, provinces in Java have higher democracy index compared to provinces outside Java due to the concentration of development before.

We use a combined dataset from Indonesia Statistics Office (BPS), Bank Indonesia, and the Indonesia Financial Services Authority (OJK). We obtain 335 province-year observations for the period 2010–2020. The democracy index is measured by several factors, such as freedom of association; police and military brutality; religious and domestic violence; freedom of religion; discrimination against minorities and disabilities; and the obstruction of voting right.

Our finding shows that democracy is negatively associated with economic growth and income inequality, implying that democratic province is more responsive to the demands of the poor, providing education to the marginalized people at the cost of physical capital accumulation due to raising wages. Hence democracy narrows the income equality gap but at the same time reduces the capital income reducing the incentive for the private sector.

This paper, therefore, has several contributions to the literature. First, it contributes to the literature by providing evidence on democracy and economic growth nexus in the context of an emerging economy with higher reliant on labor-intensive industry after the decentralization policy was enacted (Alesina & Perotti, 1996; Bjørnskov, 2010; Tarverdi et al., 2019; Yang, 2008; Zecca & Nicolli, 2021). Secondly, it contributes to the literature on politics and democracy by examining the role of politics and democracy (Aisen & Veiga, 2013; Fidrmuc, 2003; Przeworski & Limongi, 1994). Our findings, therefore, are of interest to policymakers in countries that exert to bolster their economies with the presence of democracy.

The rest of the paper is structured as follows. Section 2 presents the literature review. Section 3 describes our sample and defines our variable of interest, including employed methodology.



Section 4 presents empirical results. Section 5 presents the robustness check. Section 6 concludes the paper.

2. Literature review

There are three mechanisms by which democracy could reshape the distribution of income: (1) Median voter theory, which explains that higher taxation for the rich people is more likely to be chosen by the median voters based on their rational choice of redistribution if the median income is under the mean income. (2) Political participation mechanism, which argues that the presence of democracy will lower the cost of political participation, providing broader opportunity and strengthen the influence of labor unions, and later political parties and interest group who represent the low and middle-income groups. (3) Political competition mechanism, which argues that politicians are competing for citizen support by adopting more populist and redistributive policies, such as welfare spending, improving access to education, healthcare, and many other similar policies to meet the needs of low and middle-income which normally represent the larger segments of voters (Acemoglu et al., 2015; Ahmad & Nayan, 2019; Ahmad, 2017; Balcázar, 2016; Reuveny & Li, 2003).

However, studies on how a country with democracy process in their government can influence a country's economic growth and manage income inequality have contrasting views in the literature. Some argue that democracy increases the transparency in economic activities that can attract investment and finally boost economic growth and reduce income inequality by expecting a more egalitarian distribution of wealth

Papaioannou et al. (2008) find that democracy has a stable positive impact on growth in the mid and long run instead of the short run in transitional economics. Although the growth seems to drop substantially during the transition periods, the trend changes after the transition period ends and stabilizes at higher level. Moreover, Rock (2009) concludes by rejecting the hypothesis that democracy slows growth and shows that democracy causes growth and investment to rise. Knutsen (2011) finds that democracy is positively associated with economic growth when examining the presence of democracy in sub-Saharan Africa. Furthermore, the effect of democracy on economic growth is stronger for countries with weak capacities. Democracy in a country with weak capacity helps the government to better manage government policy, including tax collection and public services. In line with previous study, Ghardallou (2022) findings confirm the fact that the relationship between democracy and financial development is indeed non-linear. Furthermore, results demonstrate that the level of democracy and financial system development are correlated in a U-shaped manner. Some previous empirical research shows that democracy does not directly affect economic growth, but indirectly through several channels, such as human capital, inflation, political stability, and economic freedoms (Doucouliagos & Ulubaşoğlu, 2008).

The conflicting literature shows the negative effect of democracy on economic growth. Ghardallou (2016) finds that the transition to a democratic system raises the development of the financial sector. Particularly, these positive effects occurred in the long run. However, in the short run, the author finds that the move to democracy does not impact financial outcomes. Aisen and Veiga (2013) find that higher degrees of political instability is associated with lower growth rates of GDP per capita. They also find that political instability adversely affects growth by lowering the rates of productivity growth and, to a smaller degree, physical and human capital accumulation.

Tarverdi et al. (2019), based on their results, confirm that political freedom and civil rights influence the level of governance, but this effect is found to be nonlinear. Governance is typically higher in dictatorships than in countries that are partially democratized (electoral democracies). Another strand of literature shows negative effect of democracy on economic growth (Alesina & Perotti, 1996; Benhabib et al., 2013; Tavares & Wacziarg, 2001).



3. Data and methodology

We use combined data sets from Indonesia Statistics Office (BPS), Bank Indonesia, and the Indonesia Financial Services Authority (OJK). We end up with 335 province-year observations for the period 2010–2020 to test our empirical model covering 34 provinces.

3.1. Economic growth

After the decentralization post-Soeharto regime in Indonesia, local governments obtain independence to manage their own province or city without having significant intervention from the central government, along with a reduction of support from the national budget. Hence it leads to greater reliance on locally generated revenue to sustain their local budget. The decentralization also creates an incentive for local government to reallocate resources and land for more profitable industrial sectors (e.g., manufacture, mining, and property), reducing the available land for agricultural purposes except for palm oil industries. Thus, local economic growth varies across provinces in Indonesia. We use a set of economic growth measurements, such as regional GDP, regional GDP growth, and regional GDP per capita.

3.2. Income inequality

We employ the Gini index for urban and rural to take into account income inequality variation across provinces from rural and urban areas. On average, the growth of regional GDP is 4.9%. Regarding income inequality, on average, the Gini index for urban areas is 0.373, implicating that, on average, income inequality is considered low to medium. The Gini index for rural areas is 0.316, implicating that income inequality is considerably lower in the rural area compared to urban areas. These economic growth data were taken from Indonesia Statistics Office (BPS).

3.3. Democracy index

We follow (Trinugroho et al., 2015) to employ Democracy Index (*IDI*) as our proxy of democracy as it consists of several important aspects of democracy implementations at provincial level. We obtain the index from Indonesia Statistics Office (BPS). The index consisting several measurements on democracy, including the presence of police and military brutality that hinder the freedom of association; regulations that restrict freedom of religion; discriminative regulation on disabilities; the use of violence related to religion, and obstruction of voting right. The index, on average, shows a reasonably good level of democracy, with the lowest in Sulawesi Tenggara in 2013, with the highest in DKI Jakarta in 2019.

3.4. Econometric specification

To investigate the impact of democracy on economic growth, we first test, several regression methods using both Chow test and Hausman test, in which both tests suggest fixed effect estimator. Thus, we employ panel data using fixed effect technique to estimate our empirical model as it allows us to control time-invariant omitted variables. As shown by Table 2, we do not observe any collinearity between employed explanatory variables. Our econometric models are shown below:

EconomicGrowth_{it} =
$$\beta_0 + \beta_1 IDI_{it} + \sum_m \theta_m Control_{it} + \varepsilon_{it}$$
 (1)

IncomeInequality_{it} =
$$\beta_0 + \beta_1 IDI_{it} + \sum_m \theta_m Control_{it} + \varepsilon_{it}$$
 (2)

Where *IDI* is the Indonesian democracy index per province compiled by the Indonesian Statistics Office (BPS), we expect negative effect of democracy on the economic growth and Gini index. The democratic province will be more likely to be responsive to the demands of the poor, thus providing more resource allocation to education to promote income equality. Hence, democracy encourages



Table 1. De	scriptive statist	ics				
Variable	Definition	Obs	Mean	Std. dev.	Min	Max
RGDP	Regional GDP	371	268561.8	381245.1	14983.9	1836198.0
growth	Regional GDP growth	337	4.9	3.4	-15.8	21.8
RGDPcapita	Regional GDP per capita	303	3659205.0	2879111.0	931679.0	16600000.0
giniurban	Gini index in urban area	369	0.373	0.040	0.276	0.458
ginirural	Gini index in rural area	358	0.316	0.040	0.220	0.469
gini	province gini index	368	0.364	0.038	0.262	0.443
IDI	Indonesia democracy index	335	70.3	7.1	52.6	88.3
FDI	Foreign direct investment	374	786263.8	1220065.0	228.5	7124881.0
HDI	Human development index	371	68.6	4.5	54.5	80.8
regionsize	Province's size	371	56736.8	61495.3	664.0	319036.0
population	total population in a province	374	928745.2	2686549.0	7653.0	14700000.0

income allocation between capital and labor to be more favorable to labor by giving the union voices to promote labor interests. Therefore, in more democratic province income inequality and growth should be lower compared to their less democratic counterpart.

We also employ a set of control variables in Equation (1-2). All variables are defined in Table 1 with corresponding descriptive statistics. We include Foreign Direct Investment (FDI) to account for foreign capital influx contribution to the local economy and expect positive signs in affecting the local economic growth and positive sign in affecting the Gini index. Although the influx of foreign capital to the province could boost the local economy, it is more likely that this capital to be concentrated in Industries rather than SMEs and widen the income gap. We also employ the human development index (HDI) to take into account the quality of human resources and expect positive signs of economic growth and negative sign of the Gini index. The more developed the human resources in a province will increase the job qualification and the ability to have a better job, thus reducing the income gap. We also include the region size to account for the availability of the resources and land (regionsize) to facilitate the growth and expect positive signs to economic growth and negative sign to the Gini index. Lastly, we include the total population (population) and expect positive signs to economic growth and the Gini index.

4. Empirical result

Our results, as shown in Table 3 indicates that democracy is instead detrimental to economic growth. On the other hand, it is negatively associated with income inequality. Furthermore, a high level of democracy in a province allows the freedom of association, which could strengthen the labor union that facilitates labor to pursue their worker's right better (Ahmad & Nayan, 2019; Ahmad, 2017). Hence, the distribution of the income between capital and labor in democracy will favor more on labor instead of capital, resulting in the price of labor in provinces with a high level of democracy being more likely to be higher compared to their less democratic counterpart. Our

Table 2. Correlation matrix	matrix										
	RGDP	growth	RGDPcapita	giniurban	ginirural	gini	IDI	FDI	HDI	regionsize	population
RGDP	1										
growth	0725	1									
RGDPcapita	.159	-0.2218	1								
giniurban	.1908	0.1834	2608	1							
ginirural	1116	0.0602	0792	0.3865	1						
gini	.1326	0.1018	1096	0.7354	0.7695	1					
IDI	0946	-0.0261	.1176	0.0201	-0.1336	-0.0911	1				
FDI	.7278	-0.018	.1373	0.1978	-0.1223	0.2167	-0.0414	1			
HDI	.2217	-0.0229	.3409	0.136	-0.2823	-0.069	0.4598	0.1259	1		
regionsize	001	-0.2252	.3387	-0.2513	0.168	0.0302	-0.1559	0.1159	-0.4224	1	
population	.1406	-0.1236	.0437	0.1744	-0.2428	-0.2842	-0.2842 -0.1757 0.005	0.005	0.1378	0.044	1

Table 3. Baseline regression	gression					
	(1)	(2)	(3)	(4)	(2)	(9)
	RGDP	growth	RGDPcapita	gini	ginirural	giniurban
IDI	0112*	-0.0686**	00882**	-0.000818**	-0.000760**	-0.000292
	(-1.85)	(-2.40)	(-2.23)	(-2.57)	(-2.25)	(-0.80)
InFDI	.351***	0.189*	***6750.	0.00444***	-0.00237*	0.00499***
	(15.38)	(1.75)	(3.83)	(3.33)	(-1.85)	(3.81)
HDI	***8990.	-0.155***	***260.	0.000429	-0.000779	-0.000138
	(6.37)	(-2.60)	(1.01)	(0.59)	(-1.27)	(-0.20)
regionsize	.000000648	-0.0000154***	.00000458***	-4.09e-08	9.79e-08***	-0.000000225***
	(1.16)	(-2.69)	(12.11)	(-1.02)	(2.76)	(-5.98)
Inpopulation	.219***	-0.253***	0376***	-0.00539***	-0.00548***	-0.00190*
	(11.03)	(-3.17)	(-2.73)	(-5.66)	(-5.44)	(-1.71)
_cons	1.164*	21.73***	8.497***	0.402***	0.508***	0.377***
	(1.83)	(6.19)	(15.39)	(10.53)	(12.96)	(10.02)
Z	335	335	301	334	325	335
N_g	34	34	34	34	34	34
r2	.710	0.113	.541	0.0922	0.173	0.120
4						

Note: t statistics in parentheses $^*p < 0.1, ^{**}p < 0.05, ^{***}p < 0.01$

Table 4. Excluding capital Jakarta	pital Jakarta					
	(1)	(2)	(3)	(†)	(2)	(9)
	RGDP	growth	RGDPcapita	inig	ginirural	giniurban
IDI	0125**	-0.0675**	00992**	***628000'0-	**09/0000-	-0.000312
	(-2.06)	(-2.31)	(-2.50)	(-2.75)	(-2.25)	(-0.84)
InFDI	.331***	0.152	.0398***	0.00360***	-0.00237*	0.00471***
	(14.16)	(1.38)	(3.09)	(2.65)	(-1.85)	(3.56)
HDI	.0534***	-0.175***	.0836***	-0.0000867	-0.000779	-0.000337
	(5.12)	(-2.81)	(8.67)	(-0.11)	(-1.27)	(-0.45)
regionsize	608000000.	-0.0000150***	.00000472***	-3.39e-08	9.79e-08***	-0.000000223***
	(1.40)	(-2.60)	(12.09)	(-0.89)	(2.76)	(-5.92)
Inpopulation	.229***	-0.235***	0287**	-0.00501***	-0.00548***	-0.00175
	(11.66)	(-2.94)	(-2.03)	(-5.23)	(-5.44)	(-1.56)
_cons	2.238***	23.20***	9,458***	***9570	0.508***	0.393***
	(3.56)	(6.10)	(17.38)	(10.75)	(12.96)	(9.43)
Z	325	325	292	324	325	325
N_g	34	34	34	34	34	34
r2	.688	0.117	784;	0.0870	0.173	0.105
Noto: + ctatictics in payable	0000					

Note: t statistics in parentheses $^*p < 0.1, ^{**}p < 0.05, ^{***}p < 0.01$

Table 5. Excluding pr	Table 5. Excluding provinces in java Island					
	(1)	(2)	(3)	(7)	(2)	(9)
	RGDP	growth	RGDPcapita	gini	ginirural	giniurban
IDI	00621	-0.0663**	0117***	-0.000905***	-0.000935**	-0.000379
	(-1.22)	(-2.01)	(-2.82)	(-2.78)	(-2.58)	(-0.94)
InFDI	.180***	0.308	.0153	0.00423***	-0.0000695	0.00615***
	(8.33)	(1.57)	(96')	(2.69)	(-0.04)	(3.39)
HDI	.0805***	-0.222**	.109***	-0.00230***	-0.00229***	-0.00220***
	(7.63)	(-2.57)	(13.00)	(-4.19)	(-3.80)	(-3.01)
regionsize	.00000397***	-0.0000176**	.00000511***	-3.48e-08	5.64e-08	-0.000000243***
	(7.02)	(-2.50)	(13.08)	(-1.05)	(1.45)	(-5.69)
Inpopulation	.181***	-0.196**	0386***	-0.00436***	-0.00519***	-0.00128
	(12.56)	(-2.41)	(-2.81)	(-5.16)	(-5.36)	(-1.22)
cons	1.994***	24.14***	8.301***	0.577***	0.592***	0.498***
	(3.50)	(5.03)	(15.56)	(17.66)	(14.92)	(12.18)
Z	275	275	247	274	275	275
r2	469.	0.120	.562	0.180	0.222	0.101
10000 dtacatation of a second						

Note: t statistics in parentheses $^*p < 0.1, ^{**}p < 0.05, ^{***}p < 0.01$



results are in line with (Alesina & Perotti, 1996; Benhabib et al., 2013; Tavares & Wacziarg, 2001), which find that democracy instead has a negative impact on economic growth.

Moreover, this negative growth effect of democracy is also driven by the strong connection between the regional government and labor-intensive industry. In the post-reformation period, the enactment of the decentralization policy provides more liberty and self-determination to the regional government to develop and manage its own budget. However, the decentralization policy also reduces regional dependency on the state government, including budget allocation from the state forcing them to generate their own profit from regional taxes. Hence, many regions are forced to reduce their agriculture area to be able to provide and invite more labor-intensive industries that pay more taxes. This indeed shifts these regions to be more reliant on labor-intensive industries. Hence, going hand in hand with the development of democracy in the regional context, labor-intensive industries start facing challenges in dealing with labor unions regarding minimum wages, workers' rights, and working hours.

We find the strong result on FDI to economic growth and the Gini index implicating that the foreign capital influx into local economy could promote the local economic growth but at the same time widen the gap of income amongst local citizens. A plausible explanation for this is that FDIs allocation in Indonesia is concentrated in industry that exploits natural resources or industry that require more advance education, thus the job market is limited to local citizens and contributes less to the growth of the economy in hosting province and increases income inequality. We find consistent results with HDI on economic growth, we do not observe any significant effect of HDI on income inequality. Province with high HDI will be able to provide more labor with better competencies and qualifications.

We also find that the size of region is inconsistent in affecting the economic growth where it hinders the growth of GDP but increases the GDP per capita. We also observe mix result on the impact of region size on income inequality, where it has positive effect on inequality only for rural areas and negative effect on inequality in urban areas, indicating that there is a lack of efficiency in resource allocation in rural areas. Lastly, we find that the total population is reducing the growth and GDP per capita while also promoting income equality at the same time.

5. Robustness check

We run robustness checks to ensure that our result is robust and are not driven only by specific province. First, we exclude Jakarta from our sample and re-run our econometric models. As Jakarta is the capital city, the development is more advanced there compared to any other province in Indonesia. After excluding Jakarta, we still find similar results shown in Table 4 with our baseline regression. We also exclude provinces in Java as most provinces in Java are more developed compared to the rest of provinces in Indonesia. Also, Java is the most populous island in Indonesia, incentivizing the central government to provide more development there. Again, we observe similar results to our baseline regression. The results are shown in Table 5. These findings imply that our results are robust and are not driven by a specific sample.

6. Conclusion

Democratic governments are less likely to be corrupt and tend to promote equal improvement for the society leading to lower income inequality and are deemed to be able to promote economic growth. However, even in democratic governments, politicians tend to be more sensitive toward people needs and embrace populism to maintain voters to be able to remain in power. With the guaranteed freedom of speech and expression, labor union can easily gain influence over policies as long as the political cost of losing union voters outweighs the political and social cost of populism. This led to stronger union voices on raising wages and minimizing working hours, which is detrimental to firms' profitability and, in turn, hinders regional economic growth

Using the Indonesian dataset on the provincial level for the period 2010–2020, we examine the impact of democracy on economic growth and income inequality. The country experienced governance transformation after decentralization in the post-reformation era when many regions in Indonesia were forced to be less reliance on state budget allocation giving the incentives for them to sustain and increase their budget by maximizing tax via shifting from agriculture reliance to industry reliance that is more likely to be labor intensive. With this shifting trend, the regional government can pursue several different goals at the same time, where the regional government pursues to maximize their tax income while providing more job opportunities. These goals, thus, further strengthen regional government and labor-intensive industries. Hence, any policies related to raising minimum wages and fewer working hours from labor unions, which is facilitated by democracy will lead to growth reduction.

Our findings show democracy is instead detrimental to regional growth while, on the other hand, promoting income equality. A province with a high level of democracy is more likely to be responsive to the needs of the poor by expanding access to education that promotes equality among people and better wealth distribution. While in the other hand, democracy also fosters the voice of labor interest which, in turn, the increasing wages will lower the return on capital, thus, ultimately lowering the incentives for private investment to enter. Our findings, therefore, have important policy implications by arguing that the improvement of democracy at the regional level is important to promote equal distribution of wealth. Moreover, to be able to exert positive effect of democracy on bolstering economic growth, the development of democracy in regions that are more reliant on the labor-intensive industry has to be followed with a gradual transformation plan on industry diversification to reduce regional dependency on the labor-intensive industry.

Funding

The work was supported by the Universitas Sebelas Maret under the research grant 2021 with the contract number 260/UN27.22/HK.07.00/2021.

Author details

Irwan Trinugroho^{1,2} E-mail: irwan_t@staff.uns.ac.id ORCID ID: http://orcid.org/0000-0003-4911-7982 Aldy Fariz Achsanta^{1,2} Putra Pamungkas^{1,2} Nugroho Saputro^{1,2} Sari Yuniarti³

- ¹ Faculty of Economics and Business, Universitas Sebelas Maret, Surakarta, Indonesia.
- ² Center for Fintech and Banking, Universitas Sebelas Maret, Surakarta, Indonesia.
- ³ Faculty of Economics and Business, Universitas Merdeka, Malang, Indonesia.

Disclosure statement

No potential conflict of interest was reported by the authors.

Citation information

Cite this article as: Democracy, economic growth, and income inequality: Evidence from province level data, Irwan Trinugroho, Aldy Fariz Achsanta, Putra Pamungkas, Nugroho Saputro & Sari Yuniarti, *Cogent Economics & Finance* (2023), 11: 2220244.

References

- Acemoglu, D., Naidu, S., Restrepo, P., & Robinson, J. A. (2015). Democracy, redistribution, and inequality. In Handbook of Income Distribution (Vol. 2, pp. 1885–1966). Elsevier B.V. https://doi.org/10.1016/B978-0-444-59429-7.00022-4
- Ahmad, M. (2017). Economic freedom and income inequality: Does political regime matter? *Economies*, 5(2), 18. https://doi.org/10.3390/economies5020018

- Ahmad, M., & Nayan, S. (2019). Income inequality and middle-income trap: A panel data analysis on the effects of economic freedom and democracy. International Journal of Business and Society, 20(2).
- Aisen, A., & Veiga, F. J. (2013). How does political instability affect economic growth? European Journal of Political Economy, 29, 151–167. https://doi.org/10. 1016/j.ejpoleco.2012.11.001
- Alesina, A., & Perotti, R. (1996). Income distribution, political instability, and investment. European Economic Review, 40(6), 1203–1228. https://doi.org/10.1016/0014-2921(95)00030-5
- Balcázar, C. F. (2016). Long-run effects of democracy on income inequality in Latin America. *Journal of Economic Inequality*, 14(3), 289–307. https://doi.org/10.1007/s10888-016-9329-3
- Benhabib, J., Corvalan, A., & Spiegel, M. M. (2013). Income and democracy: Evidence from nonlinear estimations. *Economics Letters*, 118(3), 489–492. https://doi.org/10.1016/j.econlet.2012.12.015
- Bjørnskov, C. (2010). Do elites benefit from democracy and foreign aid in developing countries? *Journal of Development Economics*, 92(2), 115–124. https://doi. orq/10.1016/j.jdeveco.2009.03.001
- Cheung, Y.-L., Jiang, P., Limpaphayom, P., & Lu, T. (2010). Corporate governance in China: A step forward. European Financial Management, 16(1), 94–123. https://doi.org/10.1111/j.1468-036X.2008.00446.x
- Doucouliagos, H., & Ulubaşoğlu, M. A. (2008).

 Democracy and economic growth: A
 meta-analysis. American Journal of Political
 Science, 52(1), 61–83. https://doi.org/10.1111/J.
 1540-5907.2007.00299.X
- Fidrmuc, J. (2003). Economic reform, democracy and growth during post-communist transition. European Journal of Political Economy, 19(3), 583–604. https://doi.org/10.1016/S0176-2680(03)00010-7
- Ghardallou, W. (2016). Does democratic transition spur financial development?". *Journal of Financial*



- Economic Policy, 8(4), 499–513. https://doi.org/10.1108/JFEP-10-2015-0063
- Ghardallou, W. (2022). Financial System Development and Democracy: A Panel Smooth Transition Regression Approach for Developing Countries. *J Knowl Econ*, 13, 1714–1735. https://doi.org/10.1007/ s13132-022-00988-x
- Knutsen, C. H. (2011). Which democracies prosper? Electoral rules, form of government and economic growth. *Electoral Studies*, 30(1), 83–90. https://doi. org/10.1016/j.electstud.2010.09.006
- Knutsen, C. H. (2013). Democracy, state capacity, and economic growth. World Development, 43, 1–18. https://doi.org/10.1016/J.WORLDDEV.2012.10.014
- Narayan, P. K., Narayan, S., & Smyth, R. (2011). Does democracy facilitate economic growth or does economic growth facilitate democracy? An empirical study of Sub-Saharan Africa. *Economic Modelling*, 28 (3), 900–910. https://doi.org/10.1016/J.ECONMOD. 2010.11.004
- Papaioannou, E., Siourounis, G., Caselli, F., Commander, S., Fidrmuc, J., Gromb, D., Genakos, C., Perotti, E., Persson, T., Scott, A., & Tatsiramos, K. (2008). DEMOCRATISATION AND GROWTH.
- Przeworski, A., & Limongi, F. (1994). Political regimes and economic growth. *Desarrollo Económico*, 134(134), 163–179. https://doi.org/10.1257/JEP.7.3.51
- Reuveny, R., & Li, Q. (2003). Economic openness, democracy, and income inequality: An empirical analysis.

- Comparative Political Studies, 36(5), 575–601. https://doi.org/10.1177/0010414003036005004
- Rock, M. T. (2009). Has democracy slowed growth in Asia? World Development, 37(5), 941–952. https://doi.org/ 10.1016/j.worlddev.2008.09.002
- Salahodjaev, R. (2015). Democracy and economic growth:
 The role of intelligence in cross-country regressions.
 Intelligence, 50, 228–234. https://doi.org/10.1016/J.
 INTELL.2015.04.013
- Tarverdi, Y., Saha, S., & Campbell, N. (2019). Governance, democracy and development. *Economic Analysis & Policy, 63,* 220–233. https://doi.org/10.1016/j.eap. 2019.06.005
- Tavares, J., & Wacziarg, R. (2001). How democracy affects growth. European Economic Review, 45(8), 1341–1378. https://doi.org/10.1016/S0014-2921(00) 00093-3
- Trinugroho, I., Agusman, A., Ariefianto, M. D., Darsono, D., & Tarazi, A. (2015). Determinants of cross regional disparity in financial deepening: Evidence from Indonesian provinces. *Economics Bulletin*, 35(2), 896–910.
- Yang, B. (2008). Does democracy lower growth volatility? A dynamic panel analysis. *Journal of Macroeconomics*, 30(1), 562–574. https://doi.org/10.1016/j.jmacro.2007.02.005
- Zecca, E., & Nicolli, F. (2021). Inequality, democracy and green technological change. *Journal of Cleaner Production*, 306, 127061. https://doi.org/10.1016/j.jclepro.2021.127061