aml/cft journal
journal of anti-money laundering / countering the financing of terrorism

Original paper

Anti Money Laundering Policy and Income Inequality: What Does the Data Say?

Ricky Eka Prastianto[1, 2*], **Diah Widyawati**[1]
[1]Indonesia Financial Transaction Report and Analysis Centre (INTRAC), Jakarta, Indonesia
[2]Graduate Program in Economics, Faculty of Economics and Business, University of Indonesia, Campus Depok 16424, West Java, Indonesia

Corresponding author: ricky.eka@ppatk.go.id

Keywords:
Anti-money laundering regulation, Fixed effects model, Gini coefficient, Income inequality, Panel data analysis

Abstract

Income inequality remains a persistent global challenge, with growing evidence linking it to illicit financial activities such as money laundering, corruption, and tax evasion. Although many countries have adopted Anti-Money Laundering (AML) frameworks to strengthen financial system integrity, empirical research directly examining the relationship between AML policy effectiveness and income distribution outcomes remains extremely limited. This study aims to investigate the relationship between AML policy effectiveness and income inequality across countries, addressing a critical gap at the intersection of financial governance and development economics. Using annual panel data from 80 countries over the period 2012-2019, the study employs a fixed-effects regression model with time-fixed controls to account for cross-country heterogeneity and global economic shocks. Income inequality is captured through the Gross Gini and Net Gini coefficients sourced from Solt's Standardized World Income Inequality Database (SWIID), AML effectiveness is measured using the Basel Institute on Governance's AML Index, originally a risk score where higher values reflect weaker institutional capacity, which is mathematically transformed so that higher values indicate stronger AML implementation, while control variables are drawn from the World Bank World Development Indicators (WDI). The findings reveal that higher AML effectiveness is significantly associated with lower income inequality, as measured by both Gross and Net Gini coefficients. These results suggest that strengthening AML frameworks serves not only as a financial crime deterrent but also as an indirect instrument for promoting more equitable income distribution, with implications for global development agendas, particularly SDG Goal 10.

Submitted: 13 April 2026
Accepted: 30 June 2026
Published: 4 November 2026

Copyright (c) Author

To cite this article: Prastianto, R. E. & Widyawati, D. 2026. *Anti Money Laundering Policy and Income Inequality: What Does the Data Say? AML/CFT Journal: The Journal of Anti Money Laundering and Countering the Financing of Terrorism* 5(1):1-17, https://doi.org/10.59593/amlcft.2026.v5i1.289

Introduction

One of the major obstacles to achieving sustainable development worldwide is the persistent problem of income inequality. Although many Asian countries have recorded

remarkable economic growth over the past few decades, the region continues to face increasing income inequality.[1] Prior studies consistently highlight that inequality is closely linked to corruption,[2] [3] the increase in the underground economy,[4] criminal activity,[5] and tax evasion.[6] These challenges are often reinforced by the presence of money laundering, which enables illicit gains to circulate back into the legitimate economy. Against this backdrop, Anti-Money Laundering (AML) frameworks emerge as a critical policy instrument for disrupting the financial channels that sustain corruption, illicit flows, and tax evasion, all of which underpin systemic income disparities. However, despite the relevance of AML to various economic and institutional risks, empirical research directly examining the relationship between AML policy effectiveness and income inequality remains extremely limited. While prior studies have explored AML in the context of financial stability, FDI flows, and governance quality, no published cross-country empirical study has yet specifically tested the association between AML effectiveness and income distribution outcomes, a gap that the present study aims to address. To address this research gap, the study explores the relationship between AML policy effectiveness and inequality outcomes.

Money laundering plays a central role in sustaining corruption, as noted by Bezlov and Gounev,[7] who argue that laundering mechanisms allow perpetrators to enjoy illicit profits while staying beyond the reach of law enforcement. Corruption, in turn, harms economic performance by distorting how resources are allocated, inflating project costs, and weakening innovation and investment incentives.[8] Moreover, corruption contributes to unequal economic outcomes because wealth and public resources become concentrated among political elites and capital owners, while lower-income groups receive minimal benefits.[9]

Tax evasion represents another illicit activity strongly associated with money laundering and is widely viewed as a major driver of inequality. When individuals or corporations evade taxes, the redistributive function of taxation is undermined.[10] Many tax evasion schemes rely on concealing wealth in low-tax jurisdictions or tax havens. Zucman[11] estimates that roughly 8% of global household wealth, equivalent to around USD 5.9 trillion, is hidden offshore. These unreported assets cannot be captured in official statistics or redistributed through fiscal policy,

[1] Binbing Huang and Guanghua Wan, Demystifying Rising Inequality in Asia (*Manila: Asian Development Bank*, 2019).

[2] Shrabani Saha, Hamid Beladi, and Saibal Kar, "Corruption Control, Shadow Economy and Income Inequality: Evidence from Asia," *Economic Systems* 45, no. 2 (2021): 100774, https://doi.org/10.1016/j.ecosys.2020.100774.

[3] Mathew Yee Wong, "Public Spending, Corruption, and Income Inequality: A Comparative Analysis of Asia and Latin America," *International Political Science Review* 38, no. 3 (2017): 298–315, https://doi.org/10.1177/0192512116642617.

[4] Aziz N. Berdiev and James W. Saunoris, "On the Relationship between Inequality and the Shadow Economy," *Eastern Economic Journal* 45, no. 2 (2019): 224–249, https://doi.org/10.1057/s41302-018-0120-y.

[5] Paul-Philippe Paré and Richard Felson, "Income Inequality, Poverty and Crime across Nations," *British Journal of Sociology* 65, no. 3 (2014): 434–458, https://doi.org/10.1111/1468-4446.12083.

[6] Amedeo Argentiero et al., "Tax Evasion and Inequality," *Economics of Governance* 22, no. 4 (2021): 309–320, https://doi.org/10.1007/s10101-021-00261-y.

[7] Philip Gounev and Tihomir Bezlov, Examining the Links between Organised Crime and Corruption (*Sofia: Center for the Study of Democracy*, 2010), 45.

[8] Klaus Gründler and Niklas Potrafke, "Corruption and Economic Growth: New Empirical Evidence from 175 Countries," *European Journal of Political Economy* 60 (2019), https://doi.org/10.1016/j.ejpoleco.2019.08.001.

[9] Sönke C. Schwuchow, "Organized Crime as a Link between Inequality and Corruption," *European Journal of Law and Economics* (2023), https://doi.org/10.1007/s10657-023-09764-x.

[10] Argentiero et al., "Tax Evasion and Inequality," 310.

[11] Gabriel Zucman, "The Missing Wealth of Nations: Are Europe and the United States Net Debtors or Net Creditors?" *Quarterly Journal of Economics* 128, no. 3 (2013): 1321–1364, https://doi.org/10.1093/qje/qjt012.

thereby worsening income disparities. Such hidden wealth also complicates economic analysis because traditional tax and administrative records cannot fully detect or measure it.[12]

Strengthening AML frameworks can help curb these problems by making it more difficult for criminals to disguise the proceeds of unlawful activities. When laundering channels are restricted, the incentives for engaging in corruption, tax evasion, and other financial crimes are reduced. More effective AML implementation also improves the ability of authorities to trace, freeze, and recover illicit assets and resources that could in turn support redistribution initiatives and reduce inequality.

Despite its importance, empirical research directly examining the relationship between AML enforcement and income inequality remains extremely limited. Yet, AML policies interact directly with several determinants of inequality, such as corruption, illicit financial flows, and financial sector transparency. This connection motivates the present study, which seeks to provide empirical evidence on how AML policies relate to income inequality across countries. The importance of this relationship is further underscored by the United Nations Sustainable Development Goals (SDGs), particularly Goal 10, which calls for reducing inequality within and among countries. AML policies, as instruments that restrict illicit wealth accumulation and support fair redistribution, represent a potentially underexplored lever for achieving this global development target.

Given the limited availability of research linking AML and inequality, prior studies on good governance provide useful theoretical guidance. Goldbarsht and de Koker[13] argue that AML frameworks function as extensions of governance mechanisms at national and global levels, incorporating core principles like transparency, accountability, and the rule of law. Specifically, effective AML implementation enhances institutional integrity.[14] Consequently, by strengthening financial sector governance, AML contributes directly to the stability and integrity necessary for sustainable economic growth. Demetriades and Vassileva[15] further demonstrate that AML policies and good governance are positively linked and mutually reinforcing.

Previous research on governance and inequality offers mixed findings. Shafique and Haq[16] find that stronger regulations, legal enforcement, and anti-corruption measures help reduce income disparities in SAARC nations. Sittha[17] finds similar results for Thailand, while Oueslati and Labidi[18] find that governance does not exert a statistically significant influence on income inequality in MENA countries. More recently, Huang and Ho[19] find that good governance lowers inequality in developing economies but not in more advanced economies, based on data from 10 Asian countries from 1996 to 2015. Unlike prior governance-inequality studies that

[12] Gabriel Zucman, "Global Wealth Inequality," *Annual Review of Economics* 11, no. 1 (2019): 109–138, https://doi.org/10.1146/annurev-economics-080218-025852.

[13] Doron Goldbarsht and Louis de Koker, eds., Financial Crime, Law and Governance: Navigating Challenges in Different Contexts, Ius Gentium: *Comparative Perspectives on Law and Justice* 116 (Cham: Springer, 2024), https://doi.org/10.1007/978-3-031-59547-9.

[14] International Monetary Fund, 2023 Review of the Fund's Anti-Money Laundering and Combating the Financing of Terrorism Policies, *Policy Paper* No. 2023/053 (Washington, DC: International Monetary Fund, 2023).

[15] Panicos O. Demetriades and Radostina Vassileva, "Money Laundering and Central Bank Governance," *Journal of International Economic Law* 23, no. 2 (2020): 509–533, https://doi.org/10.1093/jiel/jgaa01.

[16] Sadia Shafique and Rukhsana Haq, "Governance and Income Inequality," *Pakistan Development Review* 45, no. 4 (2006): 751–760, https://doi.org/10.30541/v45i4iipp.751-760.

[17] Pitipat Vanichaka Sittha, "Governance and Poverty Reduction in Thailand," *Modern Economy* 3, no. 5 (2012): 487–497, https://doi.org/10.4236/me.2012.35064.

[18] Abdelkader Oueslati and Mohamed Ali Labidi, "Growth, Inequality and Governance: Evidence from a Panel of MENA Countries," *SSRG International Journal of Economics and Management Studies* 2, no. 2 (2015): 28–34.

[19] Chiung-Ju Huang and Yi-Hsuan Ho, "The Impact of Governance on Income Inequality in Asian Countries," *Journal of Reviews on Global Economics* 7 (2018).

focus on single regions, the present study employs a large cross-country panel from all major regions to test whether AML effectiveness has a universal or context-dependent relationship with inequality. The inclusion of both developed and developing countries allows an examination of whether this relationship differs by income group, thus contributing to the broader debate on governance and inequality in heterogeneous country settings. These studies suggest that institutional quality influences income distribution, which provides theoretical support for expecting AML policies to have a similar effect.

Conceptually, stronger AML implementation should be associated with lower income inequality. Higher AML index values, indicating more effective AML systems, should be linked to lower Gini coefficients. This relationship is expected because AML policies reduce corruption, illicit financial flows, and tax evasion, all of which are key contributors to income disparities.

The empirical approach used to test this relationship, including the data, variable measurement, and estimation strategy, is described in detail in the Methodology section.

This study contributes to the literature in two significant ways. First, it addresses the near-absence of empirical analysis on the interaction between AML regulation and income inequality. Second, this research provides empirical evidence that AML effectiveness is not simply a matter of criminal law enforcement, but also functions as an indirect fiscal policy instrument by curtailing tax evasion and illicit financial flows that can meaningfully support a more equitable distribution of income across countries.

Methodology

This study utilizes data from 80 countries covering the period from 2012 to 2019. The AML index is sourced from the Basel Institute on Governance, Gini coefficient data from Solt's Standardized World Income Inequality Database (SWIID), and control variables from the World Bank World Development Indicators (WDI). Countries with missing data exceeding 25% of the observation period (i.e., more than two years out of eight) were excluded from the analysis, resulting in a final sample of 80 countries. This threshold was applied consistently across all variables to maintain the integrity and balance of the panel. Table 1 presents the countries used in the analysis, representing nations from every region of the world.

Table 1. List of Countries

1	Albania	17	Denmark	33	Ireland	49	Netherlands	65	Singapore
2	Argentina	18	Dominican Republic	34	Israel	50	New Zealand	66	Slovakia
3	Armenia	19	Ecuador	35	Italy	51	Nigeria	67	Slovenia
4	Australia	20	Egypt	36	Japan	52	Norway	68	South Africa
5	Austria	21	El Salvador	37	Kazakhstan	53	Pakistan	69	South Korea
6	Belgium	22	Estonia	38	Kyrgyzstan	54	Panama	70	Spain
7	Bolivia	23	Finland	39	Latvia	55	Paraguay	71	Sweden
8	Brazil	24	France	40	Lithuania	56	Peru	72	Switzerland
9	Bulgaria	25	Georgia	41	Luxembourg	57	Philippines	73	Thailand
10	Chile	26	Germany	42	Malaysia	58	Poland	74	Turkiye
11	China	27	Greece	43	Malta	59	Portugal	75	Ukraine
12	Colombia	28	Honduras	44	Mexico	60	Romania	76	United Arab Emirates
13	Costa Rica	29	Hungary	45	Moldova	61	Russia	77	United Kingdom
14	Croatia	30	Iceland	46	Mongolia	62	Saudi Arabia	78	United States
15	Cyprus	31	India	47	Montenegro	63	Serbia	79	Uruguay
16	Czech Republic	32	Indonesia	48	Myanmar	64	Sierra Leone	80	Vietnam

In this study, the dependent variable is income inequality, measured using the Gini coefficient, which is widely recognized as the standard indicator for analysing income distribution in empirical research. The data for the Gini coefficient are obtained from Solt's[20] Standardized World Income Inequality Database (SWIID). SWIID is among the most extensive international datasets on income inequality, as it consolidates information from various sources, including the UNU-WIDER WIID database, the Luxembourg Income Study (LIS), Branko Milanovic's World Income Distribution dataset, the Socioeconomic Database for Latin America and the Caribbean, and household income and expenditure surveys compiled by the International Labour Organization (ILO).

SWIID provides two versions of the Gini coefficient based on different income concepts: the Gross Gini, which reflects inequality based on market income, i.e., income measured before taxes and before government transfers such as pensions or cash benefits; and the Net Gini, which is calculated using disposable income, i.e., income after taxes and transfers.

This study employs the effectiveness of anti-money laundering (AML) policies as its main explanatory variable. To capture this, the analysis uses the annually released Basel Anti-Money Laundering Index produced by the Basel Institute on Governance. Rather than measuring AML performance directly, the index reflects the extent of money laundering and terrorist financing (ML/TF) risks faced by each country alongside the robustness of national institutions in managing those risks. Its construction is based on five weighted components: the AML/CFT regulatory framework (65%), financial transparency and adherence to international standards (15%), levels of bribery and corruption (10%), legal and political risk considerations (5%), and public accountability and transparency (5%).

The index originally ranges from 0 (lowest risk) to 10 (highest risk). Following Agoba et al.[21], the index is transformed using the formula: AML_Effective = -1 × (AMLR-10), so that higher values in our operationalized variable reflect stronger AML policy effectiveness. This transformation ensures intuitive alignment between the variable and our theoretical expectations, where a higher index value corresponds to more effective AML implementation.

To avoid biased estimates and isolate the relationship between AML effectiveness and income inequality, a set of control variables is incorporated. These variables are selected based on established theoretical and empirical frameworks in the cross-country inequality literature. Control variables include urban population, industry sector employment, and domestic credit, which represent economic development. Following the structural transformation literature[22], these variables serve as controls to account for development-driven factors that co-determine income distribution, rather than directly testing the Kuznets curve. Macroeconomic conditions, fiscal and monetary policy variables, and natural resource rents are also incorporated. For robustness checks, GDP per capita and additional fiscal/monetary policy indicators are included to test the sensitivity of the AML-inequality relationship.

This research uses a fixed effects (FE) model with the inclusion of time-fixed effects. According to Gösser and Moshgbar,[23] incorporating time-specific effects is standard in panel data settings, as it controls for external shocks or global events that influence all countries simultaneously. In the period covered by this study, a major global shock occurred in 2016 with the leak of the Panama Papers, originating from the Panamanian law firm Mossack Fonseca.

[20] Solt, "Measuring Income Inequality," 1184.

[21] Anthony M. Agoba et al., "Central Bank Independence, Political Instability and the Incidence of Currency Crises," *International Journal of Emerging Markets* 14, no. 5 (2019): 809–830, https://doi.org/10.1108/IJOEM-08-2018-0423.

[22] Simon Kuznets, "Economic Growth and Income Inequality," American Economic Review 45, no. 1 (1955): 1–28; W. Arthur Lewis, "Economic Development with Unlimited Supplies of Labour," Manchester School 22, no. 2 (1954): 139–191.

[23] Niklas Gösser and Nima Moshgbar, "Smoothing Time Fixed Effects," *CESifo Working Paper* (2020), https://hdl.handle.net/10419/222263.

This event triggered significant changes in tax transparency and AML regulations across multiple jurisdictions, a pattern later reinforced by the 2021 Pandora Papers leak, making the use of time-fixed effects essential.

To estimate the relationship between AML policy effectiveness and income inequality, we adapt the empirical modeling frameworks used by Furceri and Ostry,[24] Saha et al.[25], and Ofoeda et al.[26] The model incorporates the main variables of interest, relevant controls, and country and time fixed effects. The following is the empirical model that we use for estimation:

$$\boldsymbol{Inq_{it} = \beta_0 + \beta_1 AMLR_{it} + \beta_2 Urpop_{it} + \beta_3 EmployInd_{it} + \beta_4 Domcred_{it} + \beta_j X_{it} + \varepsilon_{it}}$$

$$\boldsymbol{Inq}(Brt)_{it} = \boldsymbol{\beta_0 + \beta_1 AMLR_{it} + \beta_2 Urpop_{it} + \beta_3 EmployInd_{it} + \beta_4 Domcred_{it} + \varepsilon_{it}} \quad \text{.....(1)}$$

$$\boldsymbol{Inq}(Brt)_{it} = \boldsymbol{\beta_0 + \beta_1 AMLR_{it} + \beta_2 Urpop_{it} + \beta_3 EmployInd_{it} + \beta_4 Domcred_{it} + \beta_j X_{it} + \varepsilon_{it}} \quad \text{.....(2)}$$

$$\boldsymbol{Inq}(Net)_{it} = \boldsymbol{\beta_0 + \beta_1 AMLR_{it} + \beta_2 Urpop_{it} + \beta_3 EmployInd_{it} + \beta_4 Domcred_{it} + \varepsilon_{it}} \quad \text{.....(3)}$$

$$\boldsymbol{Inq}(Net)_{it} = \boldsymbol{\beta_0 + \beta_1 AMLR_{it} + \beta_2 Urpop_{it} + \beta_3 EmployInd_{it} + \beta_4 Domcred_{it} + \beta_j X_{it} + \varepsilon_{it}} \quad \text{.....(4)}$$

$$\boldsymbol{Inq}(Brt)_{it} = \boldsymbol{\beta_0 + \beta_1 AMLR_{it} + \beta_2 Urpop_{it} + \beta_3 EmployInd_{it} + \beta_4 Domcred_{it} + \beta_j X_{it} + GDPcap + \varepsilon_{it}} \quad (5)$$

$$\boldsymbol{Inq}(Net)_{it} = \boldsymbol{\beta_0 + \beta_1 AMLR_{it} + \beta_2 Urpop_{it} + \beta_3 EmployInd_{it} + \beta_4 Domcred_{it} + \beta_j X_{it} + Govex + \varepsilon_{it}} \quad ..(6)$$

The variable Inq_{it} represents the income inequality of country i at time t. This variable is measured via two Gini coefficients, specifically the Gross Gini (*InqBrt*) and the Net Gini (*InqNet*). $AMLR_{it}$ is an anti-money laundering (AML) regulation. The value of this variable is approximated by the AML index from the Basel Institute on Governance. $Urpop_{it}$ represents the urban population as a percentage of total population. $EmployIn_{it}$ represents the number of workers in the industrial sector as a percentage of total employment. $Domcred_{it}$ represents the percentage of domestic credit to the private sector as a share of total GDP. X_{it} represents additional control variables: (1) macroeconomic conditions (GDP growth rate and unemployment rate); (2) fiscal policy (government consumption expenditure as a share of GDP); (3) monetary conditions (inflation rate); (4) natural resource rents as a percentage of GDP; and (5) for robustness models (Models 5–6), GDP per capita. εit is an error term.

Discussion

To address the potential issue of endogeneity commonly arising in panel data analysis, we conduct a two-step diagnostic procedure to examine whether there is endogeneity in the main variable of our model, the AML policy index. First, we examine the correlation between the main independent variable (AML policy index) and the residuals obtained from the baseline fixed-effects regression. The Pearson correlation coefficient indicates no statistically significant correlation between the AML policy variable and the residuals. Second, we perform an auxiliary regression of the AML policy variable on the residuals. The results show that the AML policy variable does not significantly predict the residuals, confirming the absence of systematic correlation between the explanatory variable and the error term. This two-step procedure directly tests the core condition for endogeneity (correlation between the independent variable and the error term) and is consistent with diagnostic approaches in comparable cross-country panel studies using composite institutional indices. [27] We acknowledge that IV-based endogeneity tests would provide additional robustness; however,

[24] Davide Furceri and Jonathan D. Ostry, "Robust Determinants of Income Inequality," *Oxford Review of Economic Policy* 35, no. 3 (2019): 460–517, https://doi.org/10.1093/oxrep/grz014.

[25] Saha et al., "Corruption Control," 100774.

[26] Isaac Ofoeda, Ebo Kweku Agbloyor, and Joshua Yindenaba Abor, "How Do Anti-Money Laundering Regulations Affect Bank Risk-Taking?" *Cogent Economics & Finance* 10, no. 1 (2022): 2058735, https://doi.org/10.1080/23322039.2022.2058735.

[27] See, e.g., Saha et al., "Corruption Control," 100774; Ofoeda, Agbloyor, and Abor, "Anti-Money Laundering Regulations."

the identification of valid external instruments for the Basel AML composite index is not feasible within the current data framework, and this is noted as a limitation for future research.

However, it is important to acknowledge that despite these tests, there may still be the possibility of endogeneity affecting the estimation results due to certain limitations in our research. These limitations include the following:

The data on AML policy are derived from the Basel Institute's AML Index, which combines five components of the index. Owing to data access issues, we used the composite index in our study. The largest component within the AML index is the AML framework, which integrates assessments of AML policy implementation and effectiveness, as well as counterterrorism financing. Although the counterterrorism financing component has a relatively small proportion, there are some interrelated policy assessments between the AML and counterterrorism financing. Our research did not account for country-specific characteristics. In the implementation of AML policy, each country implements policies aligned with the Financial Action Task Force (FATF) 40 Recommendations, adapting them to its own specific context and characteristics.

To commence the research, a comprehensive descriptive analysis was conducted for each variable employed in the study. The findings of this descriptive analysis concerning the variables included in the analytical model are presented in Table 2.

Table 2. Descriptive Analysis of Variables

VARIABLES	OBS	MEAN	STDDEV	MIN	MAX
INQ (GROSS GINI)	640	46.28	5.96	31.8	71.8
INQ (NET GINI)	640	35.50	7.32	22.6	63
AMLR	640	4.79	1.09	1.91	8.22
GDPCAP	640	22,788.27	23,331.9	484.44	123,678.7
DOMCRED	640	75.14	46.55	4.77e-06	254.66
UNEMPLOY	640	7.28	4.87	0.25	27.47
EMPLOYIND	640	22.05	5.46	5.48	38.12
INFL	640	3.47	4.74	0.0083	53.55
URPOP	640	69.46	16.85	29.26	100
GOVEX	640	16.51	4.46	4.40	30.003
NATRES	640	3.12	5.44	0	48.50

Source: Author's calculation, using estimation data

In this study, data from 80 countries were collected over the research period from 2012 to 2019, with the highest number of observations reaching 640. The dependent variable, income inequality (Inq), is measured via two indicators: Gross Gini and Net Gini. The Gross Gini coefficient had a minimum value of 31.8 and a maximum value of 71.8, with a mean of 46.28 and a standard deviation of 5.96. On the other hand, the Net Gini coefficient ranged from 22.60 to 63, with a mean of 35.50 and a standard deviation of 7.32.

In Table 2, it is evident that the Gross Gini value is relatively higher than the Net Gini value. By comparing the mean values of the two Gini coefficients, it can be observed that the use of Gross Gini (46.28) indicates a worse income inequality condition than the measurement

using the Net Gini coefficient (35.5). This disparity is likely because the measurement of the Gross Gini coefficient utilizes income components before income redistribution, such as tax deductions and welfare transfers.

The independent variable, the anti-money laundering policy index (Amlr), has observed values spanning from 1.91 at the lower bound to 8.22 at the upper bound. The mean value of the Amlr variable is 4.79, with a standard deviation of 1.09. Similar to the Inq variable, the Amlr variable exhibits a characteristic where the standard deviation is smaller than the mean value, indicating that the Amlr variable is less varied or approaches homogeneity. To examine the prediction of the relationship between the two main variables, Figure 1 displays a graph illustrating the relationship between the two variables.

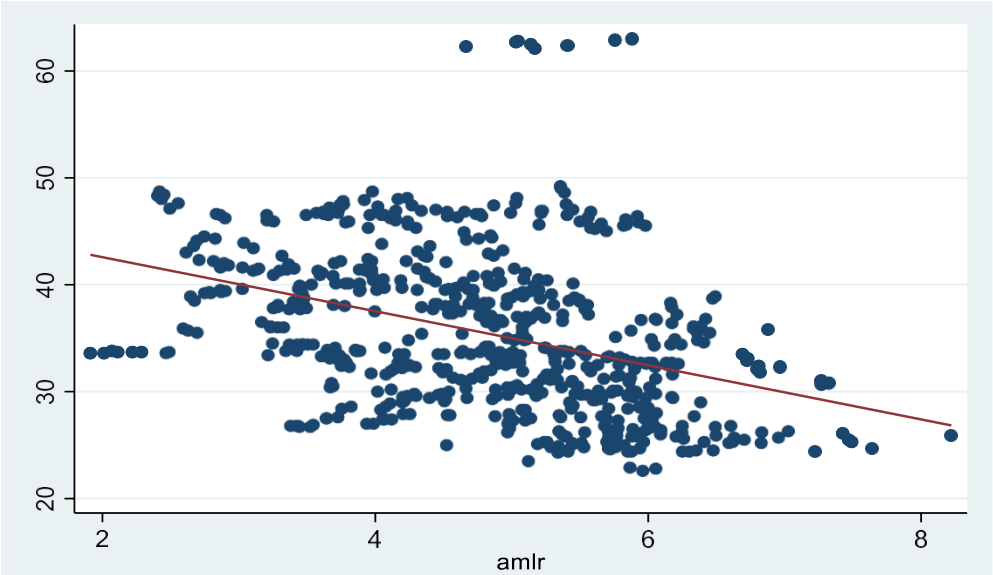


Figure 1. Correlation Prediction between AML Policies and Income Inequality
Source: Author's calculation, using estimation data

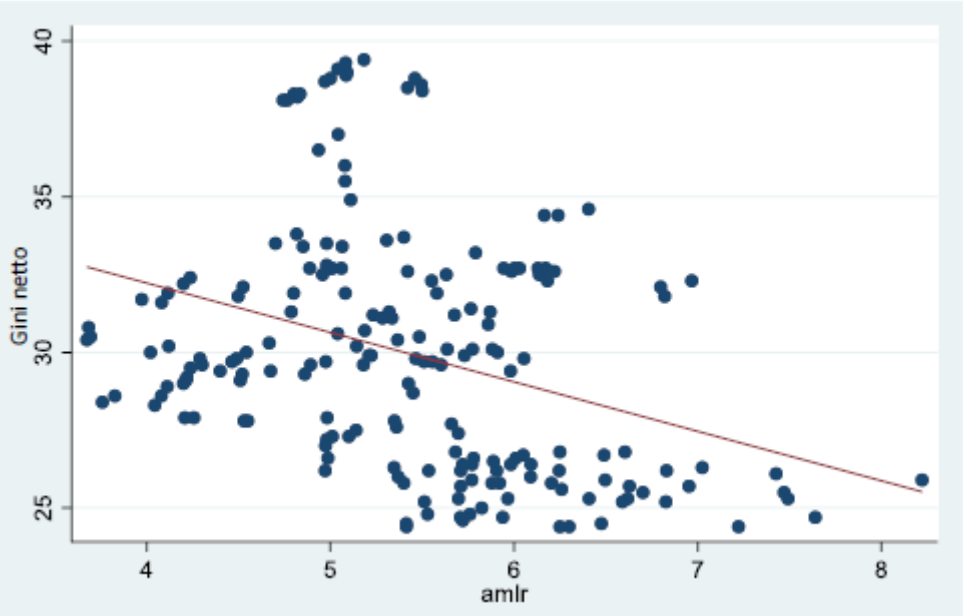


Figure 1a. Correlation Prediction between AML Policies and Income Inequality (Developed Country)

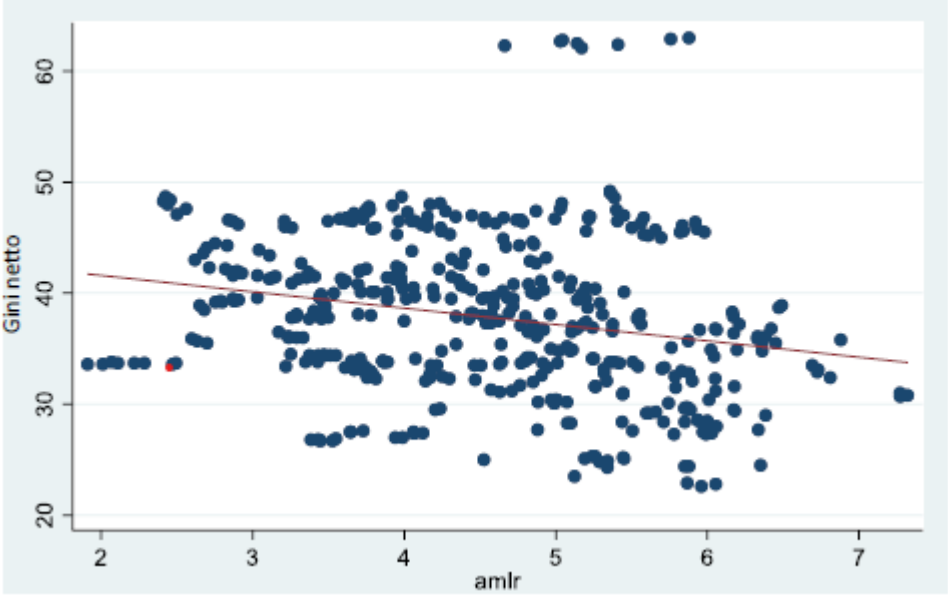


Figure 1b. Correlation Prediction between AML Policies and Income Inequality (Developing Country)

Figure 1 presents a scatter plot illustrating the bivariate relationship between the AML effectiveness index and income inequality as measured by the Gross Gini coefficient for the full sample of 80 countries. The fitted regression line shows a clear negative slope, indicating that countries with higher AML effectiveness tend to have lower income inequality. Data points are differentiated by country group: developed countries shown with solid markers, developing countries with open markers. The negative correlation appears stronger in developing countries compared to developed countries, which may reflect the greater baseline exposure to money laundering and illicit financial flows in developing economies. This aligns

with Huang and Ho,[28] who find that governance quality has a stronger inequality-reducing effect in developing than in advanced economies. The relationship between these two variables in the entire dataset of countries is negative, and this pattern is consistent across both developed and developing country subgroups.

Regarding the relationship between income inequality and AML policy, there is no difference in the direction of the relationship across all country groups. This finding indicates that a high level of the AML policy index is correlated with low levels of income inequality, and vice versa. Similarly, a low AML policy index is correlated with high levels of income inequality.

This study estimates the partial model and the complete model via two Gini coefficient measures, namely, the Gross Gini coefficient and the Net Gini coefficient. The Gross Gini coefficient is applied to Model 1 and Model 2, whereas the Net Gini coefficient is applied to Model 3 and Model 4 (see Table 3). The partial models include Model 1 and Model 3, whereas the complete models include Model 2 and Model 4 (see Table 3). Below are the results of the regression estimations using the fixed effects method with the addition of time fixed effects for the relationship between income inequality and the anti-money laundering policy, as presented in Table 3.

Table 3. Estimation Result

VARIABLES	MODEL 1 INQ (GROSS)	MODEL 2 INQ (GROSS)	MODEL 3 INQ (NET)	MODEL 4 INQ (NET)
AMLR	-0.239*** (0.070)	-0.230*** (0.069)	-0.174** (0.069)	-0.166** (0.069)
URPOP	-0.072* (0.0408)	-0.095** (0.040)	-0.127*** (0.040)	-0.141*** (0.040)
EMPLOYIND	-0.119*** (0.026)	-0.085*** (0.0277)	-0.127*** (0.026)	-0.104*** (0.027)
DOMCRED	0.004* (0.0025)	-0.0007 (0.0028)	-0.0007 (0.0025)	-0.003 (0.002)
UNEMPLOY		0.069*** (0.019)		0.045*** (0.019)
INFL		-0.003 (0.008)		0.003 (0.008)
NATRES		0.027* (0.0147)		0.018 (0.014)
CONSTANT	54.98 (2.775)	55.367 (2.758)	48.355 (2.751)	48.491 (2.755)
OBSERVATIONS	640	640	640	640
R-SQUARED (WITHIN)	0.191	0.2138	0.2206	0.2305
NUMBER OF ID	80	80	80	80

Robust standard errors in parentheses; ***p<0.01, **p<0.05, *p<0.1.

Source: Author's calculation, using estimation data

[28] Huang and Ho, "Impact of Governance."

The estimates reported in Model (1) reveal that the anti-money laundering indicator (Amlr) is negatively and significantly associated with income inequality (Inq). The coefficient of -0.239 suggests that a one-point improvement in the AML index corresponds to a 0.239-point reduction in the Gross Gini measure. Two additional variables—the share of the urban population (urpop) and employment in the industrial sector (EmployInd)—also display significant negative effects, with coefficients of -0.072 and -0.119, respectively. Conversely, domestic credit (Domcred) exerts a positive and statistically significant influence on inequality.

Model (2), which incorporates the full set of control variables, produces a consistent pattern. The AML index remains negatively related to inequality, with a coefficient of -0.230, indicating that an increase in AML effectiveness continues to coincide with lower Gini values. Similar to the first model, urpop (-0.095) and EmployInd (-0.085) retain their negative and significant impacts. In contrast, the unemployment rate (Unemploy) and natural resource rents (NatRes) emerge as positive and significant determinants, with coefficients of 0.069 and 0.027, respectively.

In Model (3), the negative relationship between AML policy strength and income inequality persists. The coefficient of -0.174 implies that a one-unit improvement in the AML index is linked to a 0.174-point decrease in the Net Gini coefficient. Urban population share (-0.127) and industrial employment (-0.127) continue to show significant negative effects.

The estimation results from Model 4, which includes all control variables, indicate a negative and significant relationship between the anti-money laundering policy (Amlr) and income inequality (Inq), with a coefficient value of -0.166. This means that for every one-point increase in the AML index, the Net Gini coefficient decreases by 0.166 points. Other variables in this model that have a negative and significant impact are urpop (-0.141) and EmployInd (-0.104).

The estimation outcomes from Models 1 through 4 consistently demonstrate a significant negative association between anti-money laundering regulations (Amlr) and income inequality (Inq). An examination of the Amlr coefficients across these specifications shows that the influence of Amlr is more pronounced on the Gross Gini index than on the Net Gini index. Despite the statistical significance of the relationship, the magnitude of the impact remains modest in economic terms. Specifically, a one-unit rise in the Amlr index is associated with a 0.166-point decline in Inq in Model 4. Given that the divergence between Gross and Net Gini measures reflects the role of redistributive mechanisms and fiscal transfers, these results imply that Amlr may affect inequality partly through channels related to taxation or income redistribution. This aligns with theoretical expectations suggesting that the link between Amlr and inequality operates, among other factors, via reductions in tax evasion. The negative AML-inequality relationship can be understood through several transmission channels. First, effective AML enforcement disrupts tax evasion schemes, particularly offshore wealth concealment by high-income groups, thereby preserving government tax revenue for redistributive programs. Second, by reducing illicit financial flows that disproportionately benefit economic elites, AML policies constrain the accumulation of illegitimate wealth at the top of the distribution. Third, improved AML compliance enhances financial transparency, which reduces rent-seeking behavior that concentrates resources among politically connected groups. Together, these channels support a more equitable income distribution across countries.

The indicators of economic development, urpop and EmployInd, both show a strong negative association with income inequality (Inq). The share of the population living in urban areas (urpop) is negatively and significantly linked to inequality. As noted by Wan et al.[29], urbanization helps narrow the disparity between rural and urban regions. Urban centers typically offer higher average wages and more diverse employment opportunities compared to

[29] Guanghua Wan, Xi Zhang, and Mengdong Zhao, "Urbanization Can Help Reduce Income Inequality," *NPJ Urban Sustainability* 2, no. 1 (2022), https://doi.org/10.1038/s42949-021-00040-y.

rural areas. Consequently, the movement of residents from rural communities to cities tends to raise their income levels. At the same time, the outmigration from rural areas may leave greater access to local resources for those who remain. Taken together, these dynamics suggest that urbanization can play a role in shrinking the rural-urban divide and lowering overall income inequality.

The proportion of workers employed in the industrial sector also shows a negative association with income inequality. This suggests that a larger industrial workforce is linked to a reduction in inequality. Saha et al.[30] included this indicator to assess its capacity to mitigate disparities, noting that rising industrial employment often reflects a structural shift from agriculture toward industry alongside improvements in mid-level educational attainment. These developments typically correspond to higher overall income levels. This result is consistent with Mehic,[31] who found that in advanced economies, greater employment in industry is significantly connected to lower income inequality.

On the other hand, the variable representing income from natural resource profits has a positive correlation with income inequality. This implies that higher income from natural resource profits leads to higher levels of income inequality. Menuet[32] and Ogwang et al.[33] suggest that natural resources contribute to a curse for societies by reinforcing rent-seeking competition and civil conflicts. Consequently, income from natural resources becomes concentrated within specific groups, exacerbating income disparities among different segments of society.

The variable of financial development, represented by domestic credit to the private sector (Domcred), exhibits a positive and significant correlation in Model (1). A possible explanation is that the growing financial sector is utilized by higher-income groups to their advantage, whereas lower-income groups may not be able to access this sector to increase their income. As a result, income inequality is likely to increase.

These results are consistent with the research hypothesis that more effective implementation of anti-money laundering policies will lead to lower levels of income inequality. Unlike Shafique and Haq[34] and Sittha,[35] which use composite governance indices as proxies, this study employs the Basel AML Index, a purpose-built, multi-dimensional measure of AML risk and institutional capacity, to directly test the AML-inequality nexus. This specificity represents a methodological advance that allows more targeted policy recommendations for strengthening anti-money laundering frameworks as inequality reduction tools. The regression results align with previous studies by Shafique and Haq and Sittha, who reported a negative correlation between good governance, used as a predictor for the Amlr variable, and income inequality.

A robustness check involves evaluating whether the key regression coefficients remain stable when the model specification is altered, usually by including or excluding certain explanatory variables.[36] In this research, robustness tests were carried out by expanding the specifications of Model (2) and Model (4). Two additional variables were incorporated: GDP

[30] Saha et al., "Corruption Control," 100774.
[31] Adrian Mehic, "Industrial Employment and Income Inequality: Evidence from Panel Data," *Structural Change and Economic Dynamics* 45 (2018): 84–93, https://doi.org/10.1016/j.strueco.2018.02.002.
[32] Maxime Menuet, "Natural Resources, Civil Conflicts, and Economic Development," *GREDEG Working Paper* (2024), https://ideas.repec.org/s/gre/wpaper.html.
[33] Tom Ogwang, Frank Vanclay, and Albert Van Den Assem, "Rent-Seeking Practices, Local Resource Curse, and Social Conflict in Uganda's Emerging Oil Economy," *Land* 8, no. 4 (2019): 53.
[34] Shafique and Haq, "Governance and Income Inequality," 752.
[35] Sittha, "Governance and Poverty Reduction," 488.
[36] Xun Lu and Halbert White, "Robustness Checks and Robustness Tests in Applied Economics," *Journal of Econometrics* 178, no. 1 (2014): 194–206, https://doi.org/10.1016/j.jeconom.2013.08.016.

per capita (Gdpcap), used as an indicator of a country's level of economic development,[37] and government consumption expenditure (Govex), which serves as a proxy for fiscal policy. The inclusion of Govex is motivated by earlier findings showing that public spending patterns can contribute to income disparities, particularly in African countries.[38]

After adding the variables Gdpcap and Govex to Model (5) and Model (6) (see Table 4), the estimation results show that the relationship between the Amlr variable and Inq remains negative and significant. These results are consistent with the estimation results from Model (2) and Model (4). The addition of these variables does not affect the direction of the relationship or the level of significance of the core variables. These findings demonstrate that the regression models for the main variables are robust.

Table 4. Robustness Test Result

VARIABLES	5 (GROSS)	6 (NET)
AMLR	-0.204*** (0.068)	-0.151** (0.069)
URPOP	-0.101** (0.040)	-0.145*** (0.040)
EMPLOYIND	-0.080*** (0.027)	-0.102*** (0.027)
DOMCRED	-0.001 (0.002)	-0.004 (0.002)
UNEMPLOY	0.059*** (0.018)	0.040** (0.019)
INFL	0.006 (0.008)	0.001 (0.008)
NATRES	0.027* (0.014)	0.017 (0.015)
GDPCAP	-0.00004*** (9.08e-06)	-0.00002*** (9.21e-06)
GOVEX	0.013 (0.031)	0.014 (0.032)
CONSTANT	57.100 (2.823)	49.631 (2.866)
OBSERVATIONS	640	640
R-SQUARED (WITHIN)	0.2491	0.2413
NUMBER OF ID	80	80

Robust standard errors in parentheses; ***p<0.01, **p<0.05, *p<0.1.
Source: Author's calculation, using estimation data

Conclusion

This study demonstrates that the effectiveness of anti-money laundering (AML) policy is negatively and significantly associated with income inequality, for both the Gross Gini and the Net Gini. The stronger effect on the Gross Gini indicates that AML regulation not only suppresses the accumulation of illicit wealth but also reinforces national income redistribution mechanisms. Specifically, effective AML enforcement helps close the channels of tax evasion,

[37] Furceri and Ostry, "Robust Determinants," 462.
[38] Mark Edem Kunawotor, Godfred Alufar Bokpin, and Charles Barnor, "Drivers of Income Inequality in Africa: The Role of Institutions," *African Development Review* 32, no. 4 (2020): 718–729, https://doi.org/10.1111/1467-8268.12473.

capital flight, and corruption, thereby preserving the domestic tax base so that it can be reallocated to social welfare programs and the public sector.

These findings offer an important empirical contribution: AML policy functions not merely as an instrument of financial-sector stability, but also as a macroeconomic instrument capable of effectively reducing income inequality.

Policy Implications

Based on these findings, several policy recommendations emerge. First, countries should strengthen the core components of the AML index, particularly the AML legal and institutional framework, by improving transparency, accountability, and reducing legal and political risks. Second, financial transparency and compliance standards, which make up the second-largest component of the AML index, should be reinforced through strong collaboration with the financial sector. This would help curb tax evasion and corruption that exploit financial systems for laundering purposes. Third, policymakers should focus particularly on AML measures targeting tax evasion and corruption, as these crimes have a direct impact on inequality through their influence on state revenue and income redistribution. Fourth, given the inherently transnational nature of money laundering and illicit financial flows, policymakers should prioritize strengthening international cooperation frameworks. These include mechanisms such as the Automatic Exchange of Financial Account Information (AEOI), Mutual Legal Assistance Treaties (MLATs), and active engagement with the Financial Action Task Force (FATF) global network. Such cooperation is essential to close the gaps that allow illicit wealth to be concealed across borders, thereby reinforcing domestic AML efforts and their downstream effects on income inequality.

It is important to note, however, that the effectiveness of AML policies in reducing income inequality is not uniform across countries. The magnitude of the relationship is likely modulated by the quality of broader institutional frameworks, including judicial independence, rule of law, and administrative capacity. Countries with stronger institutional environments may realize larger inequality-reducing benefits from AML implementation, while those with weaker institutions may face greater challenges in translating AML compliance into tangible distributional outcomes. Strengthening these components of the AML framework will make it harder for perpetrators to hide or enjoy the proceeds of crime. As opportunities for tax evasion and corruption shrink and as illicit gains are recovered and redirected toward productive uses, income inequality can meaningfully decline.

Limitations and Future Research

This study is not without limitations. It relies on the composite Basel AML Index, which aggregates multiple components into a single measure. The study period 2012-2019 is constrained by the availability of the SWIID, the primary source of Gini coefficient data used in this study; the SWIID was not updated to cover the years from 2020 onward until April 2026, after the data collection phase of this research had already been completed, making it infeasible at the time to extend the analysis to more recent years, including the COVID-19 pandemic period and its aftermath. Future research is encouraged to revisit these dynamics as updated SWIID data become available, particularly to examine how pandemic-era disruptions and post-pandemic regulatory reforms may have affected the relationship between AML enforcement and income inequality. A further limitation concerns the contemporaneous specification of the model, in which AML policy and income inequality are measured in the same year; future research should explore the use of lagged AML variables (e.g., t-1 or t-2) to better capture the dynamic relationship. Future research would also benefit from analyzing the individual components of the Basel AML Index to better understand which elements have the strongest effect on inequality. Moreover, the implementation of AML policies varies greatly across countries, meaning the relationship between AML effectiveness and inequality may differ from

one context to another. Further studies could explore how each component of the AML index influences inequality within specific national settings.

References

Agoba, A. M., J. Y. Abor, K. Osei, J. Sa-Aadu, B. Amoah, and G. C. O. Dzeha. 2019. "Central Bank Independence, Elections and Fiscal Policy in Africa." *International Journal of Emerging Markets* 14 (5): 809–830. https://doi.org/10.1108/IJOEM-08-2018-0423.

Argentiero, A., S. Casal, L. Mittone, and A. Morreale. 2021. "Tax Evasion and Inequality: Some Theoretical and Empirical Insights." *Economics of Governance* 22 (4): 309–320. https://doi.org/10.1007/s10101-021-00261-y.

Berdiev, A. N., and J. W. Saunoris. 2019. "On the Relationship between Income Inequality and the Shadow Economy." *Eastern Economic Journal* 45 (2): 224–249. https://doi.org/10.1057/s41302-018-0120-y.

Bezlov, T., and P. Gounev. 2012. "Bulgaria: Corruption and Organised Crime in Flux." In *Corruption and Organized Crime in Europe: Illegal Partnerships*, edited by P. Gounev and V. Ruggiero, 95–107. London: Routledge.

Demetriades, P. O., and R. Vassileva. 2020. "Money Laundering and Central Bank Governance in the European Union." *Journal of International Economic Law* 23 (2): 509–533. https://doi.org/10.1093/jiel/jgaa011.

Furceri, D., and J. D. Ostry. 2019. "Robust Determinants of Income Inequality." *Oxford Review of Economic Policy* 35 (3): 460–517. https://doi.org/10.1093/oxrep/grz014.

Goldbarsht, D., and L. de Koker, eds. 2024. *Financial Crime, Law and Governance: Navigating Challenges in Different Contexts.* Ius Gentium: Comparative Perspectives on Law and Justice 116. Cham: Springer. https://doi.org/10.1007/978-3-031-59547-9.

Gösser, N., and N. Moshgbar. 2020. "Smoothing Time Fixed Effects." DICE Discussion Paper No. 343. https://hdl.handle.net/10419/222263.

Gründler, K., and N. Potrafke. 2019. "Corruption and Economic Growth: New Empirical Evidence." *European Journal of Political Economy* 60. https://doi.org/10.1016/j.ejpoleco.2019.08.001.

Huang, B., and G. Wan. 2019. *Demystifying Rising Inequality in Asia.* Manila: Asian Development Bank.

Huang, C.-J., and Y.-H. Ho. 2018. "The Impact of Governance on Income Inequality in Ten Asian Countries." *Journal of Reviews on Global Economics* 7.

International Monetary Fund. 2023. *2023 Review of the Fund's Anti-Money Laundering and Combating the Financing of Terrorism Strategy—Background Papers.* Policy Paper No. 2023/053. Washington, DC: International Monetary Fund.

Kunawotor, M. E., G. A. Bokpin, and C. Barnor. 2020. "Drivers of Income Inequality in Africa: Does Institutional Quality Matter?" *African Development Review* 32 (4): 718–729. https://doi.org/10.1111/1467-8268.12473.

Kuznets, S. 1955. "Economic Growth and Income Inequality." *American Economic Review* 45 (1).

Lu, X., and H. White. 2014. "Robustness Checks and Robustness Tests in Applied Economics." *Journal of Econometrics* 178 (1): 194–206. https://doi.org/10.1016/j.jeconom.2013.08.016.

Mehic, A. 2018. "Industrial Employment and Income Inequality: Evidence from Panel Data." *Structural Change and Economic Dynamics* 45: 84–93. https://doi.org/10.1016/j.strueco.2018.02.006.

Menuet, M. 2024. "Natural Resources, Civil Conflicts, and Economic Growth." GREDEG Working Paper No. 2024-05. Université Côte d'Azur. https://ideas.repec.org/s/gre/wpaper.html.

Ofoeda, I., E. K. Agbloyor, and J. Y. Abor. 2022. "How Do Anti-Money Laundering Systems Affect FDI Flows across the Globe?" *Cogent Economics & Finance* 10 (1). https://doi.org/10.1080/23322039.2022.2058735.

Ogwang, T., F. Vanclay, and A. Van Den Assem. 2019. "Rent-Seeking Practices, Local Resource Curse, and Social Conflict in Uganda's Emerging Oil Economy." *Land* 8 (4): 53.

Oueslati, A., and M. A. Labidi. 2015. "Growth, Inequality and Governance: A Case of MENA Countries." *SSRG International Journal of Economics and Management Studies* 2 (2): 28–34.

Paré, P.-P., and R. Felson. 2014. "Income Inequality, Poverty and Crime across Nations." *British Journal of Sociology* 65 (3): 434–458. https://doi.org/10.1111/1468-4446.12083.

Saha, S., H. Beladi, and S. Kar. 2021. "Corruption Control, Shadow Economy and Income Inequality: Evidence from Asia." *Economic Systems* 45 (2): 100774. https://doi.org/10.1016/j.ecosys.2020.100774.

Schwuchow, S. C. 2023. "Organized Crime as a Link between Inequality and Corruption." *European Journal of Law and Economics.* https://doi.org/10.1007/s10657-023-09764-x.

Shafique, S., and R. Haq. 2006. "Governance and Income Inequality." *Pakistan Development Review* 45 (4). https://doi.org/10.30541/v45i4iipp.751-760.

Sittha, P. V. 2012. "Governance and Poverty Reduction in Thailand." *Modern Economy* 3 (5): 487–497. https://doi.org/10.4236/me.2012.35064.

Solt, F. 2020. "Measuring Income Inequality across Countries and over Time: The Standardized World Income Inequality Database." *Social Science Quarterly* 101 (3). https://doi.org/10.1111/ssqu.12795.

Todaro, M. P., and S. C. Smith. 2003. *Economic Development.* 11th ed. Boston: Addison-Wesley.

Wan, G., X. Zhang, and M. Zhao. 2022. "Urbanization Can Help Reduce Income Inequality." *NPJ Urban Sustainability* 2 (1). https://doi.org/10.1038/s42949-021-00040-y.

Wong, M. Y. 2017. "Public Spending, Corruption, and Income Inequality: A Comparative Analysis of Asia and Latin America." *International Political Science Review* 38 (3): 298–315. https://doi.org/10.1177/0192512116642617.

Zucman, G. 2013. "The Missing Wealth of Nations: Are Europe and the U.S. Net Debtors or Net Creditors?" *Quarterly Journal of Economics* 128 (3): 1321–1364. https://doi.org/10.1093/qje/qjt012.

Zucman, G. 2019. "Global Wealth Inequality." *Annual Review of Economics* 11 (1): 109–138. https://doi.org/10.1146/annurev-economics-080218-025852.