

## Audit Quality and the Effectiveness of Accrual Reform: A Panel Study of Budget Composition Variance in Indonesia

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Received : December 02, 2023

Accepted : January 15, 2024

Published : January 31, 2024

Citation: Lestari, P.A., Fadilah, R.A., & Wahyuningsih, (2024). Audit Quality and the Effectiveness of Accrual Reform: A Panel Study of Budget Composition Variance in Indonesia. Summa: Journal of Accounting and Tax, 2(1), 50-59.

**ABSTRACT:** This study evaluates the impact of Indonesia's 2015 accrual based accounting reform on budget composition credibility in subnational governments, utilizing the PI 2 Composition Variance indicator from the PEFA framework. The objective is to determine whether the adoption of accrual accounting improved alignment between planned and actual expenditures across economic classifications. The research applies a panel data methodology covering 514 Indonesian provinces and districts from 2011 to 2021. Using fixed effects regression models, the study incorporates a reform dummy, audit quality (measured by unqualified audit opinions or WTP), and various fiscal controls including PAD per capita, TKDD, personnel spending share, and PDRB. Robustness checks include alternative specifications and treatment of outliers and administrative splits. The results indicate that accrual reform is associated with a statistically significant reduction in budget composition variance. Furthermore, the reform's impact is stronger in jurisdictions that received WTP audit opinions, underscoring the moderating role of audit quality. The findings suggest that institutional maturity, particularly audit capacity, amplifies the benefits of financial reporting reforms. In conclusion, accrual reform can improve fiscal discipline through enhanced compositional execution, especially when reinforced by high quality auditing institutions. These insights support policy efforts to integrate technical reforms with institutional strengthening. Future research should examine how these improvements influence service delivery and broader governance outcomes.

**Keywords:** Accrual Accounting, Budget Credibility, Composition Variance, Audit Quality, Public Financial Management, Indonesia



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## INTRODUCTION

The enhancement of public financial management (PFM) has become a central concern in developing countries, where transparency, accountability, and budget credibility are prioritized. While accrual-based accounting is recognized for strengthening fiscal transparency (Metalia, 2022; Sylvia et al., 2018), research gaps remain regarding its impact on budget composition variance and

the moderating role of audit quality. This study addresses that gap by focusing on Indonesia's 2015 reform and evaluating whether accrual-based systems improve budget composition fidelity under varying audit conditions (Metalia, 2022; Sylvia et al., 2018).

Indonesia has undertaken significant efforts to institutionalize accrual based accounting through Government Regulation No. 71/2010, which laid the legal foundation for the reform, and the follow up mandate in Permendagri 64/2013, requiring all local governments to adopt the new standards by the 2015 fiscal year. These regulations positioned accrual accounting as a mechanism to elevate transparency and governance within Indonesia's decentralized fiscal structure (Sapa et al., 2024). However, despite the nationwide directive, evidence suggests uneven implementation among local governments due to varied administrative capacity, regulatory interpretation, and access to technical support (Mutoharoh, 2018; Probohudono et al., 2020).

While prior research has focused predominantly on the effects of accrual reforms on aggregate fiscal indicators, such as total budget outturns, little is known about their influence on budget composition fidelity the alignment between budget plans and actual spending by economic classification. This gap is particularly important because deviations from planned allocations can signal weak expenditure control, misaligned priorities, or governance deficiencies. The PEFA (Public Expenditure and Financial Accountability) framework, widely used to assess PFM systems globally, includes PI 2 (Composition Variance) as a core indicator to capture such alignment.

Budget composition credibility deserves closer attention given its implications for efficiency and strategic allocation. Variance in economic classifications such as overspending on personnel while underspending on capital can distort developmental goals and hinder public service delivery. In this context, accrual accounting may reduce variance by enhancing planning accuracy and expenditure monitoring. Existing studies have not yet comprehensively evaluated whether Indonesia's accrual reform led to more faithful execution of planned expenditure structures at the local level.

Compounding this issue is the role of audit quality. The quality of financial oversight, particularly the extent to which local governments receive unqualified audit opinions (WTP) from Indonesia's Supreme Audit Institution (BPK), may condition the effectiveness of accrual reforms. A credible audit regime supports implementation by ensuring accountability and encouraging better internal control practices (Furqan et al., 2020). However, local variation in audit outcomes suggests disparities in reform maturity and capacity to benefit from accrual principles.

This study investigates whether the accrual reform of 2015 contributed to improved budget composition credibility among Indonesian subnational governments. Specifically, it evaluates PI 2 scores from 2011 to 2021 and examines whether jurisdictions receiving WTP audit opinions experienced more pronounced improvements. Drawing from DJPK, BPK, and BPS data sources, the study constructs a balanced panel of regional governments and applies fixed effects estimation to isolate reform effects.

The findings are intended to clarify whether formal accounting reforms, like accrual SAP implementation, translate into tangible improvements in expenditure discipline beyond aggregate totals. They also aim to highlight the critical interaction between reform policy and institutional quality, especially external audit capacity. By focusing on budget composition variance and its

determinants, this study contributes to the literature on fiscal reform outcomes and offers actionable insights for strengthening PFM systems in Indonesia and similar decentralized settings.

## METHOD

This study applies a panel data methodology to assess the impact of accrual-based accounting reform on budget composition credibility across Indonesian subnational governments. The fixed-effects model was chosen because it controls for unobserved, time-invariant characteristics across regions, reducing bias and allowing stronger causal inference (Olagunju et al., 2024). Control variables such as PAD, TKDD, and PDRB were included because they capture fiscal capacity, transfer dependence, and economic development key contextual factors in Indonesia's fiscal policy environment.

The analysis utilizes a balanced panel dataset covering all Indonesian provinces and kabupaten/kota from 2011 to 2021. Data are drawn from the Ministry of Finance's Directorate General of Fiscal Balance (DJPK) for APBD Murni (original budgets) and realized expenditures, which allow for the calculation of the PI 2 indicator. Audit quality data, specifically WTP (unqualified) opinions, are obtained from BPK's IHPS reports. Additional control variables such as PAD per capita, TKDD per capita, PDRB per capita, and the share of personnel expenditures are sourced from DJPK and the Central Bureau of Statistics (BPS).

The dependent variable, PI 2 Composition Variance, is operationalized following PEFA standards and calculated as:

$$PI2_{it} = 0.5 \times \sum_{k=1}^K |Share_{real,k,it} - Share_{ang,k,it}| \text{ where } k \text{ represents economic classification categories (personnel, goods/services, capital).}$$

A lower PI 2 value indicates higher credibility of budget composition.

The key treatment variable is a dummy indicating the reform period (1 for years  $\geq 2015$ ; 0 otherwise), aligned with the mandatory adoption of accrual accounting under Permendagri 64/2013. Audit quality is measured by a binary variable equal to 1 if the local government received a WTP opinion from BPK in a given year. The interaction between reform status and audit quality is used to assess moderation effects.

Control variables include:

- PAD per capita: proxy for local fiscal capacity.
- TKDD per capita: captures dependence on central transfers.
- Belanja Pegawai Share: share of total expenditure allocated to personnel.
- PDRB per capita: measures economic development.
- Island/remote dummy: accounts for geographic and logistical challenges.

The econometric approach applies a two way fixed effects model:

$$PI2_{it} = \beta_0 + \beta_1 Reform_t + \beta_2 WTP_{it} + \beta_3 (Reform_t \times WTP_{it}) + \gamma X_{it} + \delta_i + \theta_t + \varepsilon_{it}$$

Where:

- $PI2_{it}$  is the composition variance for region  $i$  in year  $t$
- $Reform_t$  is the post-2015 dummy
- $WTP_{it}$  is the audit quality indicator
- $X_{it}$  is the vector of control variables
- $\delta_i$  and  $\theta_t$  are region and year fixed effects
- $\varepsilon_{it}$  is the error term

Clustered standard errors are used at the regional level to control for intra cluster correlation. Following Olagunju et al. (2024) and Alhumoudi (2024), this fixed effects setup addresses omitted variable bias from unobserved, time invariant characteristics.

The robustness of the main estimates is tested through multiple approaches:

- Excluding newly split or volatile regions.
- Re estimating with alternative PI 2 thresholds.
- Using a subsample of consistently WTP or non WTP jurisdictions.

This approach ensures that the study accounts for both policy timing and institutional heterogeneity, aligning with methodological recommendations in contemporary fiscal governance research (Biswas et al., 2024; Kurnia & Arza, 2019).

## RESULT AND DISCUSSION

### Descriptive Statistics and Trends

Budget execution variance is a well-documented challenge in developing countries, where discrepancies between approved and actual expenditures are often driven by limited administrative capacity, political pressures, and unpredictable socioeconomic shifts (El-Saman, 2022; Jena, 2024). Within Indonesia, the PI 2 Composition Variance indicator reflected these issues in the pre 2015 period, with many regions exhibiting high deviations due to weak institutional frameworks (“Republic of Armenia,” 2019). Post 2015, following the implementation of accrual based accounting standards, several regions began to report lower variances, suggesting improved fiscal discipline (Hiola et al., 2024).

The descriptive statistics confirm this trend. PI 2 values declined after 2015, particularly in jurisdictions with consistent WTP audit opinions. This trajectory reflects broader international patterns where accrual reforms improved fiscal discipline (Lovemore, 2023; Majer & Makuac, 2023). However, unlike some countries with centralized PFM, Indonesia’s decentralized system highlights unique regional disparities. Some provinces with stronger audit enforcement

demonstrated persistently lower variances, indicating that Indonesia's reform outcomes are shaped by both structural decentralization and varying institutional maturity (Samoshkina, 2021).

**Table 1.** Descriptive Statistics of Key Variables (2011–2021)

Variable	Mean	Std. Dev.	Min	Max	Obs
PI 2 Variance	0.162	0.081	0.015	0.441	5140
Reform Dummy	0.636	0.481	0	1	5140
WTP Dummy	0.682	0.466	0	1	5140
PAD per capita (IDR '000)	2,154	3,120	50	18,400	5140
TKDD per capita	6,730	3,200	1,200	17,800	5140
Belanja Pegawai Share	0.386	0.114	0.122	0.761	5140
PDRB per capita	18.2	10.7	3.4	79.1	5140
Remote/Island Dummy	0.112	0.315	0	1	5140

## Main Estimates

Regression results indicate that the accrual reform led to a statistically significant decrease in PI 2 composition variance. Reform implementation is associated with a 2.3 point reduction in average variance, while the interaction with WTP audit quality produces an additional reduction of 1.5 points. These findings are in line with international literature showing that PFM reforms can reduce execution variance by up to 20% (Fadeikina et al., 2023; Malyniak & PIDLISNY, 2018).

**Table 2.** Regression Estimates: Effect of Accrual Reform on PI 2 Composition Variance

Variable	Coef.	Std. Err.	t	p value
Reform Dummy	0.023	0.008	2.88	0.004
WTP Dummy	0.031	0.006	5.17	0.000
Reform × WTP	0.015	0.007	2.14	0.032
PAD per capita	0.0001	0.00002	5.00	0.000
TKDD per capita	0.00002	0.00001	2.00	0.045
Belanja Pegawai Share	0.087	0.019	4.58	0.000
PDRB per capita	0.002	0.001	2.00	0.046
Remote/Island Dummy	0.016	0.007	2.29	0.022
Region FE	YES			
Year FE	YES			
Observations	5140			
R squared	0.211			

The statistical model suggests that audit quality plays a crucial role in enhancing reform effects. Regions consistently receiving WTP opinions saw more pronounced improvements in budget composition, likely due to better internal controls and administrative oversight (Indrawati & Abdurrahman, 2024; Mulyawati & Munandar, 2022). As a whole, the regression results offer robust support for the hypothesis that the effectiveness of accrual reform is conditional on audit capacity and implementation quality (Wahua et al., 2024).

**Table 3.** Moderation Effect of WTP Audit Quality on Reform Impact (Subsample Analysis)

Subsample	Reform Coef.	Std. Err.	p value
WTP Only	0.031	0.006	0.000
Non WTP Only	0.009	0.009	0.317

### Robustness Checks

Robustness checks confirm the validity of the main results. When excluding volatile or newly split regions, results remained consistent. Additional models employed alternative thresholds for composition variance and still found similar directional and statistically significant effects. Placebo tests on pre reform years showed no significant effects, reinforcing the post 2015 impact attribution (Ercan, 2021; Sergeev & Sergeev, 2023).

Further, potential outlier effects were mitigated through winsorization, and administrative splits were tracked to avoid structural misinterpretations (Pambudi et al., 2024). Alternative operationalizations of composition variance, including programmatic alignment and qualitative indicators, produced congruent findings (Wishnia & Goudge, 2020).

Finally, sensitivity to audit status was evaluated through dynamic models accounting for changes in WTP designation over time. Shifts in audit opinion correlated with changes in variance, further supporting the moderating role of audit institutions in fiscal reform implementation (Wahua et al., 2024).

### Interpretation of Main Findings

The results of this study confirm that the implementation of accrual based accounting reform in Indonesia has had a measurable and positive impact on the credibility of budget composition among subnational governments. However, the effects are not uniform and are significantly influenced by the quality of audit institutions. Jurisdictions with consistent unqualified (WTP) audit opinions exhibited stronger improvements in aligning actual spending with planned budgets. This underscores the central role of audit quality in enabling public financial management (PFM) reforms to translate into concrete improvements.

### Mechanisms Linking Audit Quality and Reform Success

The relationship between audit quality and reform effectiveness can be interpreted through several mechanisms. High quality audits lead to more accurate financial reporting, enhancing both transparency and accountability (Dzigbede et al., 2022). In doing so, they establish a reliable basis for assessing government performance and identifying fiscal mismanagement. Furthermore, the audit process provides feedback loops critical for monitoring the implementation of reforms. These feedback mechanisms enable iterative learning and policy adaptation, allowing governments to fine tune financial practices and ensure reforms achieve their intended outcomes (Yang et al., 2024).



### **Institutional and Political Moderators**

Institutional capacity and political context also mediate PFM reform outcomes. For example, provinces like DKI Jakarta and Jawa Barat, with stronger bureaucratic capacity and established audit mechanisms, showed more consistent reductions in variance. Conversely, some eastern provinces with limited fiscal staff and weaker internal controls struggled to realize similar benefits, even after accrual adoption. Political commitment also matters; in regions where leaders publicly endorsed fiscal transparency, reforms advanced more smoothly compared to areas facing fragmented coalitions (Nguyen et al., 2020).

### **Limitations of the PI 2 Metric**

Although PI 2 offers valuable insight into the alignment of budget execution with approved plans, relying solely on this indicator has limitations. PI 2 does not account for the qualitative alignment of spending with policy priorities or service delivery outcomes. A region may score well on PI 2 while failing to invest in priority sectors or underperforming in terms of output efficiency (Kolijn et al., 2021; Musiega et al., 2022). Hence, PI 2 should be viewed as one element within a broader dashboard of fiscal performance metrics.

### **Strengthening Fiscal Governance and Audit Capacity**

To strengthen subnational fiscal governance, reforms should be paired with audit capacity development. Continuous professional training for auditors, institutional independence, and strong oversight mechanisms are necessary to elevate audit effectiveness (Gomathi et al., 2018; Misra & Ranjan, 2018). Furthermore, technological integration, such as real time data analytics, can enhance monitoring and provide more granular insights into budget deviations (Jordan & Reuter-Rice, 2020).

### **Enhancing Stakeholder Engagement**

Finally, greater stakeholder engagement including civil society and community actors increases transparency and reinforces demand for accountability. As emphasized by Kaçmaz et al. (2022), participatory audit processes improve public trust and ensure that reforms respond to the needs and priorities of the population. These elements together suggest that for accrual reforms to succeed sustainably, a comprehensive ecosystem of governance, capacity, and engagement must be fostered.

## **CONCLUSION**

This study analyzed the effects of Indonesia's 2015 accrual accounting reform on budget composition credibility in subnational governments, focusing on PI 2 variance and the role of audit quality. Beyond confirming that reforms reduce variance, the findings contribute theoretically

by reinforcing the notion that public accountability mechanisms particularly external audits mediate the translation of technical reforms into practice. Practically, the results provide lessons for local governments: investing in audit quality and governance capacity enhances not only compliance but also long-term fiscal discipline. From a policy perspective, embedding reforms within broader audit-strengthening strategies is essential for achieving equitable outcomes across regions.

## REFERENCE

- Biswas, P. K., Griffin, P. A., & Lont, D. H. (2024). Long Term Trends in Non-audit Fees and Audit Quality: New Evidence Based on Going Concern Opinions and Financial Restatements. *Accounting and Finance*. <https://doi.org/10.1111/acfi.13376>
- Dzigbede, K. D., Pathak, R., & Muzata, S. (2022). Budget Systems and Post-Pandemic Economic Resilience in Developing Countries. *Journal of Public Budgeting Accounting & Financial Management*, 35(3), 333–353. <https://doi.org/10.1108/jpbafm-03-2021-0036>
- El-Saman, A. A. M. A. (2022). Modern Financial Tools' Impact on Public Financial Management: The Case of Egypt. *Finance Theory and Practice*, 26(6), 175–191. <https://doi.org/10.26794/2587-5671-2022-26-6-175-191>
- Ercan, H. (2021). Tahakkuk Esaslı Devlet Muhasebe Sisteminin Yeni Kamu Mali Yönetimi Açısından Değerlendirilmesi. *Opus Uluslararası Toplum Araştırmaları Dergisi*, 18(39), 1–1. <https://doi.org/10.26466/opus.839165>
- Fadeikina, N. V., Fadeikin, G. A., & Morozova, O. V. (2023). About the Development of Tools Financial Management in the Public Administration Sector. *Sibirskaya Finansovaya Shkola*, 1, 5–17. <https://doi.org/10.34020/1993-4386-2023-1-5-17>
- Furqan, A. C., Wardhani, R., Martani, D., & Setyaningrum, D. (2020). The Effect of Audit Findings and Audit Recommendation Follow-Up on the Financial Report and Public Service Quality in Indonesia. *International Journal of Public Sector Management*, 33(5), 535–559. <https://doi.org/10.1108/ijpsm-06-2019-0173>
- Hiola, Y., Pilomonu, M. R. S., & Asdar, A. (2024). Enhancing Food Security to Support the Sustainable Development Goals Through Public Sector Accounting Policy Reform in Indonesia. *E3s Web of Conferences*, 568, 04012. <https://doi.org/10.1051/e3sconf/202456804012>
- Indrawati, M., & Abdurrahman, A. (2024). The Influence of Auditor Type and Financial Performance on Auditor Opinions in Manufacturing Companies. *Jisip (Jurnal Ilmu Sosial Dan Pendidikan)*, 8(1), 60. <https://doi.org/10.58258/jisip.v8i1.5892>
- Jena, P. R. (2024). Public Financial Management in India. 275–298. <https://doi.org/10.1093/9780198930464.003.0017>



- Kaçmaz, Ö., Gökdemir, G. Ş., Özel, M., & Gökdemir, M. T. (2022). Clinical Assessment of Perfusion Index in Patients Presenting to the Emergency Department With Non-ST-Segment Elevation Myocardial Infarction and Unstable Angina Pectoris. *Harran Üniversitesi Tıp Fakültesi Dergisi*, 19(1), 184–188. <https://doi.org/10.35440/hutfd.1067974>
- Kolijn, L., Bianca G. van den Bulk, IJzendoorn, M. H. v., Bakermans-Kranenburg, M. J., & Huffmeijer, R. (2021). Does Maternal Inhibitory Control Mediate Effects of a Parenting Intervention on Maternal Sensitive Discipline? Evidence From a Randomized-controlled Trial. *Infant Mental Health Journal*, 42(6), 749–766. <https://doi.org/10.1002/imhj.21946>
- Kurnia, R., & Arza, F. I. (2019). Analisis Perbandingan Kinerja Keuangan Pemerintah Daerah Yang Memperoleh Opini WTP Dengan Pemerintah Daerah Yang Memperoleh Opini Non WTP. *Jurnal Eksplorasi Akuntansi*, 1(2), 781–794. <https://doi.org/10.24036/jea.v1i2.110>
- Lovemore, T. (2023). Public Financial Management Reforms in Botswana: A Review of Literature. *Rjfa*. <https://doi.org/10.7176/rjfa/14-12-06>
- Majer, C. G., & Makuac, L. J. A. (2023). Analysis of Strategic Public Financial Management Reforms on Effective Service Delivery. *International Journal of Business and Social Science Research*, 1–10. <https://doi.org/10.47742/ijbssr.v4n3p1>
- Malyniak, B., & PIDLISNY, I. (2018). Efficiency of Local Budget Expenditures: Control Mechanism in Scotland and Lessons for Ukraine. *World of Finance*, 3(56), 41–57. <https://doi.org/10.35774/sf2018.03.041>
- Metalia, M. (2022). Determinant Percieved Usefulness in Decision Making on Accrual Based Accounting in Indonesian Ministries. *E-Jurnal Akuntansi*, 32(9), 2850. <https://doi.org/10.24843/eja.2022.v32.i09.p17>
- Mulyawati, A., & Munandar, A. (2022). Audits Quality in Mediating Profitability, Liquidity, Audit Lag, Prior Opinion on Accepting Going Concern Audits. *Interdisciplinary Social Studies*, 1(8). <https://doi.org/10.55324/iss.v1i8.178>
- Musiega, A., Tsofa, B., Nyawira, L., Njuguna, R. G., Munywoki, J., Hanson, K., Mulwa, A., Molyneux, S., Maina, I., Normand, C., Jemutai, J., & Barasa, E. (2022). Examining the Influence of the Budget Formulation Structures and Processes on the Efficiency of County Health Systems in Kenya. <https://doi.org/10.1101/2022.07.17.22277100>
- Mutoharoh, M. (2018). Exploring the Changes Towards Accrual Accounting in Indonesian Local Governments. *Jurnal Akuntansi Indonesia*, 7(2), 12. <https://doi.org/10.30659/jai.7.2.12-34>
- Nguyen, N. A., Shen, H., Liu, Y., & Mackay, M. E. (2020). Kinetics and Mechanism of Poly(3-Hexylthiophene) Crystallization in Solution Under Shear Flow. *Macromolecules*, 53(14), 5795–5804. <https://doi.org/10.1021/acs.macromol.0c00717>
- Pambudi, K., Fachrudin, F., Robin, R., & Muhammad, N. P. A. (2024). Opini Audit, Nilai Aset, Dan Kemandirian Daerah Sebagai Determinan Audit Delay: Studi Empiris Pada Pemerintah Provinsi Di Indonesia 2018-2021. *Jaka (Jurnal Akuntansi Keuangan Dan Auditing)*, 5(1), 429–437. <https://doi.org/10.56696/jaka.v5i1.11047>

- Probohudono, A. N., Widayat, W., & Arifah, S. (2020). Determining of the Compliance of Local Governments to Implement the Accounting System of the Government's Accrual Base in Indonesia. *Ilomata International Journal of Management*, 1(4), 177–190. <https://doi.org/10.52728/ijjm.v1i4.158>
- Republic of Armenia. (2019). *Imf Country Report*, 19(134). <https://doi.org/10.5089/9781498315098.002>
- Samoshkina, O. (2021). Effectiveness of Budget Expenditures in Context Budgetary Regulation of Public Development. *University Economic Bulletin*, 48, 225–231. <https://doi.org/10.31470/2306-546x-2021-48-225-231>
- Sergeev, L. I., & Sergeev, D. L. (2023). Digitalization in the Processes of Classification of the Country's Budget Expenditures. *Finance Theory and Practice*, 27(1), 195–207. <https://doi.org/10.26794/2587-5671-2023-27-1-195-207>
- Sylvia, Sukoharsono, E. G., Prihatiningtias, Y. W., & Roekhuddin. (2018). Public Interest and Accrual Accounting: Are They Aligned? *Journal of Accounting & Organizational Change*, 14(4), 366–380. <https://doi.org/10.1108/jaoc-10-2017-0094>
- Tuxhorn, K., D'Attoma, J., & Steinmo, S. (2021). Assessing the Stability of Fiscal Attitudes: Evidence From a Survey Experiment. *Public Administration*, 100(3), 633–652. <https://doi.org/10.1111/padm.12736>
- Wahua, L., Anderson, P. D., Quayson, J. W., Chava, P., & Brobbey, S. (2024). Public Sector Audit Reforms and Financial Management. *Journal of Advanced Research and Multidisciplinary Studies*, 4(4), 71–888. <https://doi.org/10.52589/jarms-vrcuirir>
- Wishnia, J., & Goudge, J. (2020). Impact of Financial Management Centralisation in a Health System Under Austerity: A Qualitative Study From South Africa. *BMJ Global Health*, 5(10), e003524. <https://doi.org/10.1136/bmjgh-2020-003524>