

## Real Effects of Hedge Accounting Standards: Evidence from ASU 2017-12

Compliance with Data Policy for the *Journal of Accounting Research*

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### 1. *A description of which author(s) handled the data and conducted the analyses*

All authors were involved in planning the analyses. Ali was the primary handler of the data, while Bens and Cassar reviewed the raw data as well as the output of analyses. Ali wrote the computer code that performed the analyses, and Bens and Cassar reviewed outputs (along with Ali) at each step of the research process.

### 2. *A detailed description of how the raw data were obtained or generated, including data sources, the date(s) on which data were downloaded or obtained, and the instrument used to generate the data (e.g., for surveys or experiments). We recommend that more than one author is able to vouch for the stated source of the raw data.*

- Raw data on companies' fundamentals were obtained through our institutional WRDS account from Compustat, CRSP, and IBES. The majority of data were downloaded from July 2020 through December 2020, and some complementary data were downloaded in August 2023.
- We also obtained data on economic indices (including the Producer Price Index, the Federal Reserve Board trade-weighted U.S. dollar index, and the London Interbank Offered Rate) from Datastream by Refinitiv, in July 2020.
- Detailed derivative disclosures (fair values, accounting gains-and-losses, hedge accounting type classifications, hedged risks, hedging instruments, hedged currencies/commodities, notional values, ASU 2017-12 adoption dates, ASU 2017-12's prescribed elements, and qualitative risk management discussions) were obtained from quarterly SEC filings per EDGAR. Ali closely supervised this process, with additional oversight by Bens and Cassar. The data were manually collected from July 2021 through January 2024. Please refer to Appendix A for detailed steps for hand-collecting the data.

### 3. *If the data are obtained from an organization on a proprietary basis, the authors should privately provide the editors with contact information for a representative of the organization who can confirm data were obtained by the authors. The editors would not make this information publicly available. The authors should also provide information to the editors about the data sharing agreement with the organization (e.g., non-disclosure agreement, any restrictions imposed by the organization on the authors with respect to publishing certain results).*

Not applicable to the paper as all sources of the data have been identified in the paper.

### 4. *A complete description of the steps necessary to download, obtain or collect as well as process the data used in the final analyses reported in the paper. For experimental and survey papers, we require information about the instructions and instruments used to generate the*

*data, subject eligibility and/or selection, as well as any exclusion criteria. The full set of instructions and instruments can be provided in the online appendix.*

The first section of the R-Studio code (Code ABC 2025 R file) details the steps we took to collect data from standard WRDS databases and Appendix A details steps taken to hand-collect hedging data to be merged with WRDS and IBES data. Additionally, Section 3 of the manuscript and Figure 2 complement Appendix A and Appendix B of this datasheet.

*5. After downloading or obtaining the raw data, all manipulations of the data should be done via computer programs. The code for these manipulations should be included in the code submitted upon acceptance (see below). No manipulations of raw data can take place manually or outside the computer code provided. If compliance with this requirement is not feasible, the authors need to explain and disclose any manipulations of the raw data (e.g., manually created variables or file conversions). When feasible, we also encourage the authors to share the code that downloads the data.*

All manipulations to construct variables from data downloaded from standard WRDS databases are included in the R-studio code except those for hand-collected data that we deem proprietary. Please refer to point 6, in which we describe the proprietary section of raw data which were hand-collected per the steps detailed in Appendix A. Steps 2 – 8 in Appendix A detail the manual review and corrections of the hand-collected data.

*6. The computer programs (i.e., code) used to (1) convert the raw data into the final dataset used in the analysis, (2) to execute the statistical or econometric analysis, and (3) to generate the tables or to produce the output used in constructing tables of the manuscript. A brief description that enables other researchers to understand and run the code should be provided. The purpose of this requirement is to facilitate replication and to help other researchers understand in detail how the raw data were processed, the final sample was formed, variables were defined, outliers were treated, and which commands were used in the analysis, etc. This code or programming is in most circumstances not proprietary. However, we recognize that some parts of the code or data generation process may be proprietary, including from the authors' perspective. Therefore, instead of disclosing the proprietary portion of the code or program, researchers can provide a detailed step-by-step description of the code or the relevant parts of the code such that it enables other researchers to arrive at the same results that the authors obtained and presented in their manuscript. In such cases, the authors should inform the editors upon initial submission, so that the editors can consider an exemption allowing the step-by-step description. Whenever feasible, authors are required to provide the identifiers (e.g., CIK, CUSIP) for their final sample. Authors should consult our FAQ Sheet on the JAR website for further details.*

The R-Studio code is divided into table-wise sections of the paper. Appendix B of this datasheet is a helper table that maps the variable names used in the paper to the variable names in the code.

We hand-collected novel derivative disclosures dataset over 2.5 years by applying technical hedge accounting expertise and training more than 15 RAs to compile over 11,000 raw quarterly hedge positions. We consider the compilation of this unique data proprietary and intend to utilize it for follow-up projects. Therefore, we do not wish to share the manual and electronic coding of the raw hand-collected data before it is merged with the standard WRDS databases. We provide detailed step-by-step guidance in Appendix A below to enable researchers to compile the equivalent of the same data on their own.

Along with this datasheet, we provide CIK code identifiers of companies.

*7. A comprehensive log file that shows the execution of the entire code. This log file should cover all the steps that convert the raw data into a final dataset and the execution of all statistical and econometric analyses presented in the tables of the manuscript. The portion of the log file that shows proprietary code or data may be masked. In this case, the reader should be referred to the step-by-step description provided as per the requirements in Item 6.*

The code file Code ABC (2025) is the comprehensive log file. It covers all steps that convert the raw data into a final dataset and then shows all econometric procedures Table-wise.

*8. An assurance that the data and programs will be maintained by at least one author (usually the corresponding author) for at least six years, consistent with National Science Foundation guidelines.*

We assure the data and programs will be maintained by Waqar Ali for at least six years.

**Appendix A:**  
Templates and Guidelines for Hand-collecting Hedging Data

**Templates:**

**1<sup>st</sup> set of Variables of Interest: Firm-wide Overall Hedge Positions for circa 11,000 firm-quarters (2013 – 2019)**

GVKEY	CIK	Data Date	Sample [H or NH]	ASU 2017-12 Adopted? [0,1]	Quarter	10Q Link	Sum of Absolute Fair Values in millions		
							Total Derivative use (A)	Total Designated use (B)	HA use (A/B)

**2<sup>nd</sup> set of Variables of Interest: Hedge Accounting Type-wise Designated Use for circa 11,000 Firm-Quarters (2013 – 2019)**

GVKEY	CIK	Data Date	Sample [H or NH]	ASU 2017-12 Adopt [0,1]	Quarter	10Q Link	Sum of Absolute Fair Value in millions					
							<u>Fair value hedge</u>			<u>Cash flow hedge</u>		
							Commodity	FX	Libor	Commodity	FX	Libor
												<u>Net investment hedge</u>

**3<sup>rd</sup> set of Variables of Interest: Risk Exposure-wise Designated Use for circa 11,000 Firm-Quarters (2013 – 2019)**

GVKEY	CIK	Data Date	Sample [H or NH]	ASU 2017-12 Adopt [0,1]	Quarter	10Q Link	Sum of Absolute Fair Value in millions		
							<u>Commodity</u>	<u>FX</u>	<u>Libor</u>
							Designated use	Designated use	Designated use

**Guidelines:****Step 1:**Initial Databases' Merge, Initial Compustat-based Derivative Usage, Quarterly Reports

Merge CRSP-Compustat-IBES and single out derivative users if any of Compustat derivative variables indicate non-zero values: derac (derivative assets current), deralt (derivative assets long-term), derlc (derivative liabilities current), derllt (derivative liabilities long-term), cidergl (comprehensive income derivative gains/losses), derhedgl (gains/losses on derivatives and hedging), hedgerl (gain/loss on ineffective hedges), aocidergl (accumulated other comprehensive income derivatives unrealized gain/loss). Then, drop observations if any required variables are missing. For the remainder of the sample, gather/scrape 10Q HTML links from Edgar.

**Step 2:**ASU 2017-12 Adoption Date and Reliefs

Capture the date the firm adopts ASU 2017-12. The adoption time is most frequently stated in the New Accounting Pronouncements' section of Accounting Policies or Basis of Preparation. If the ASU's adoption is undisclosed, assume the ASU was adopted on its mandatory adoption date. Firms invariably adopt the ASU for all quarters of the fiscal year. Collect ASU 2017-12 adoption dates for the CRSP-Compustat-IBES sample (in Step 1) before hand-collecting the remaining hedging variables. This is so that firms without pre- and post-ASU observations can be dropped; otherwise, data collection would be much more voluminous.

Capture and tabulate ASU 2017-12 reliefs described by treated firms in their accounting pronouncements to produce percentages in Table 1 Panel B.

**Step 3:**Fair values of Derivatives

Simultaneously capture 1<sup>st</sup> through 3<sup>rd</sup> set of variables of interest in templates above to ensure arithmetic accuracy of totals. However, a non-trivial minority sample does not decompose hedge positions into Hedge Accounting type and/or Risk Exposure Category. The fair values of derivatives are mainly presented in the Derivatives Note. However, other locations include Fair Value Measurements Note, Debt Note, Commitments and Contingency Note. Ensure that data collection focuses on absolute quantities of all tabulated derivative asset and liability subtotals without netting. Master netting agreements with counterparties are also invariably in place, which should also be ignored, and preceding gross amounts related to derivative assets and liabilities should be compiled.

**Step 4:**Review of Hand-collected Data

Train research assistants using trial data. Ensure 95% accuracy before assigning formal samples to collect. Once RAs collect the actual data, perform at least two rounds of review of allocated RA work to ensure accuracy. The review should randomly select at

least one observation from each fiscal year. If errors persist, increase the number of review observations until several randomly selected entries are error-free.

#### **Step 5:**

##### **Firms Retained and Classified as Hedge Accounting Users or Non-Hedge Accounting Users Post-Hand-collection**

Retain firms if at least one observation exists pre- and post-ASU 2017 adoption to ensure a loosely constant sample. This is to ensure the integrity of difference-in-difference tests. Retain firms that consistently use derivatives as Compustat classifications show derivative usage not intended for risk management. Retain firms that use derivatives for risk management and not for capital structure-related reasons (e.g., drop firms that use equity or debt-related derivatives such as convertibles, hybrid securities with embedded derivatives, or equity warrants). Classify firms into H (hedge accounting users) or NH (non-hedge accounting users). H firms use hedge accounting in any sampled years, and NH firms do not apply hedge accounting to their derivatives in sampled years.

#### **Step 6:**

##### **Unrealized Gains and Losses for Hedge Accounting Derivatives**

Compile unrealized gains and losses (UGLs) for hedge accounted derivatives using annual reports (10Ks) as they cover the entire fiscal year's movements in UGLs. Sum the absolute values of UGLs before reclassifications for each of Fair Value Hedges, Cash Flow Hedges, and Net Investment Hedges. UGLs are primarily found in the Derivative Note, and if unavailable in the Derivative Note, in the Statement of Other Comprehensive Income for Cash Flow Hedges and Net Investment Hedges. Wherever possible, use pre-tax values.

#### **Step 7:**

##### **Hedging Instruments and Hedged Items Data**

Please refer to Figure 2 of the paper to see we form indicator and count variables for instrument / derivative type and FX and commodity hedged items' data for a fiscal year were collected. In collecting this data, infer 'active' positions from quantitative disclosures of open or outstanding hedge positions throughout a firm's fiscal year. Ignore boilerplate mentions of generic hedging strategies unbacked by quantitative fair values attached to specific deployed derivatives.

#### **Step 8:**

##### **Fiscal Year Values, Scaling, and Winsorization**

Average the hand-collected quarterly designated use and derivative use to obtain firm-year variables. Then, scale the yearly values by lagged assets. Finally, winsorize at 1% and 99% intervals before merging this hand-collected data with the Compustat-CRSP-IBES intersection data.

## Appendix B: Variable Name Mapping

Variable in Manuscript	Variable in Code	Variable in Manuscript	Variable in Code
Bid-Ask	bid_ask_annual	Inventory	inventory
Cash Flow Volatility	cashflow_vol_scaled	Level of Earnings	level_of_earnings
Commodity Price Exposure	comm_exp	Leverage	leverage
Debt	debt	Liquidity	liquidity
Debt Issuance	debt_issuance	Loss	loss
Earnings Volatility	earnings_vol_scaled	Number of Estimates	number_of_estimates
FX Rate Exposure	fx_exp	PPE	ppe
Firm Risk	sd_reg_resid	ROA	roa
Equity Issuance	equity_issuance	Sales Growth	sales_growth
Investment	investment_2	SD Returns	sd_returns
Interest Rate Exposure	libor_exp	Size	size
ASU 2017	asu_2017 or asu	STInvestments	stinvestments
H	H or treat	Tangible Assets	tangible_assets
NH	D	Tax	tax
-	N (non-derivative users)	Industry Exposures	ind_firm_risk, ind_comm, ind_fx, ind_libor
Designated Use	designated_use_scaled	Number of Hedged Risks	n_risks
Derivative Use	derivative_use_scaled	Hedging Instrument Types	n_inst_type
Hedge Acc Use	ha_use	FX Instrument Types	n_fx_inst
CFH&NIH Use	cfhnih_use	Interest Rate Instrument Types	n_libor_inst
FVH Use	fvh_use	Commodity Instrument Types	n_comm_inst
CFH&NIH Designated Use	cfhnih_designated_scaled	Options & Other Non-Linear	options_and_other_nonlinear
FVH Designated Use	fvh_designated_scaled	Swaps	swaps
UGLs Hedge Acc Use	ugls_ha_use	Futures & Forwards	futs_fwds
Annual Return	annual_return	Cross-currency Swaps	cross_currency_swaps
BigN	big_n	FX Debt NIH	fx_debt_nih
Book-to-Market	bm_ratio	Number of Currencies	n_currencies
Cash	cash	EUR	EUR
FE Dispersion	fe_dispersion	CNY	CNY
FE Error	fe_error	CHF	CHF
Foreign Sales	foreign_sales	Number of Commodities	n_commodities
Interest Burden	interest_burden		