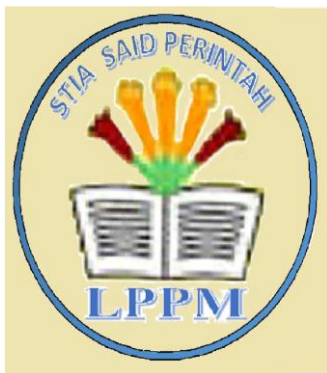

Public Policy:

Jurnal Aplikasi Kebijakan Publik dan Bisnis

The Effectiveness of Weighing Scale Calibration/Recalibration in Consumer

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LPPM STIA Said Perintah

Volume 5 No. 2, September 2024

<https://stia-saidperintah.e-journal.id/ppj>

Received; 2024 - 05 - 15

Accepted; 2024 - 07 - 09

Published; 2024 - 08 - 05

Abstract

The activity of calibration/re-calibration has influenced consumer behavior in purchasing goods. The purpose of this study is to understand consumer behavior in determining purchases from sellers whose measuring, weighing, and related equipment (UTTP) have been calibrated/re-calibrated, and its implications on seller income. This research uses a qualitative method. The data used is primary data obtained by conducting interviews with 50 consumers and 50 sellers using incidental sampling techniques. Data and information obtained were analyzed qualitatively through descriptive analysis and narrative. The research results indicate that consumers tend to choose sellers whose UTTP equipment has been calibrated/re-calibrated, except in situations of necessity, such as indebtedness or hurry. This has an impact on increasing seller income than before calibration/re-calibration.

Keywords : *UTTP Tools, Consumer Behavior, Satisfaction*



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Introduction

Consumer protection has become an absolute concern for various parties such as the government, the business world, and social institutions with competencies like the Indonesian Consumers Foundation (LKI). This is intended to provide certainty to consumers not only about health and safety but also about the quantity and quality of goods transaction. Economic transaction certainty is important considering the continued existence of fraudulent practices and even scams carried out by certain individuals, thus harming consumers. The way to implement consumer protection is to carry out market operations in the form of raids on UTTP users which can lead to the confiscation of problematic UTTP and court action on the spot (Darnia, 2017).

A form of economic transaction is buying and selling, which is an economic activity that occurs at all times. Buying and selling can be defined as an economic transaction conducted by two parties: the merchant as the business actor and the buyer as the consumer. Buying and selling transactions often result in one party feeling aggrieved, especially consumers. This happens due to dishonesty from the seller or business actor. Therefore, laws regulating consumer protection have been enacted. Although many people are still unaware of the importance of consumer protection, especially in buying and selling activities (Apandy et al., 2021).

Consumer protection law is currently receiving significant attention because it concerns rules and principles to promote the welfare of society, not only consumers but also sellers or business actors. Everyone has the same right to get protection, each with rights and obligations. Consumer protection, whether material or formal, is increasingly considered crucial given the advancement of technology, which enhances productivity, efficiency, and the distribution of goods and services. However, the impact of these advancements is often felt by consumers (Niru Anita Sinaga & Nunuk Sulisrudatin, 2014).

The calibration/recalibration carried out at the Binaya Masohi market is a form of consumer protection because it is carried out at that market so that consumers can find out directly the identity of sellers whose scales or measurement tools have been recalibrated. As of the first quarter of 2024, 174 UTTPs have been calibrated, consisting of 161 units of spring scales, 11 units of electronic scales, and 2 units of centimeter scales.

Buying and selling transactions in society often involve the use of measuring instruments such as scales or measurement tools for weight, length, and volume. These measurement tools typically form the basis for determining the price of a product. It is essential to ensure the accuracy and precision of these measurement tools through calibration or recalibration. In the context of calibration or recalibration, it is a metrological service provided by the State to protect the public from fraud by business actors or sellers who use measuring instruments (Ferizone, 2022).

The implementation of calibration and recalibration is based on Law Number 2 of 1981 concerning measuring instruments, weights, measures, and their equipment (UTTP), which mandates that instruments used in business activities must undergo calibration or recalibration according to their classification, as well as Minister of Trade Regulation Number 115 of 2018 concerning Legal Metrology Units, which states that Legal Metrology Units must carry out legal metrology activities such as recalibration services and supervision.

Supervision aims to evaluate the extent to which regulations can be implemented, both by the government as the executor or regulator and by the community involved in those regulations. The results of supervision can eliminate deviations that occur in the field and serve as a basis for planning future activities to provide guidance and legal sanctions to those who deviate from legal provisions. This supervision is important for creating an orderly measurement area (Alfarisa, 2021).

The implementation of the legal basis for the calibration or recalibration of UTTP instruments in various regions is still not optimal. This is due to the lack of understanding and information among business actors about the importance of calibration or recalibration of UTTP instruments in economic transactions, including education for economic actors (Fitriasari & Apriliana, 2022). Calibration or recalibration of UTTP instruments is carried out in both traditional and modern markets involving parties engaged in buying and selling transactions.

Based on the previous description, the main problem in this research is "Does calibration/recalibration influence consumers' decision to buy goods from sellers who use UTTP? This research is considered important because it can provide information about consumers in determining purchasing decisions for daily necessities that are useful for sellers

in the Binaya Masohi market in particular and business actors in general which differentiates it from previous research.

Theoretical Framework.

The dynamics of the global and domestic economy, along with the assurance of accuracy in the measurement of measuring instruments, weights, and related equipment, especially in trade transactions, play a crucial role in supporting macroeconomic growth. Indirectly, the economic impact of measurement processes, particularly those related to trade transactions, can significantly influence the Gross Regional Domestic Product (GRDP) of each region, both at the provincial and district/city levels. Especially Regional Original Income (PAD) (Tahir et al., 2021; Elvi Sa'ada & Qarni, 2022).

According to Permendagri no. 21 of 2011 concerning Guidelines for State Financial Management, effectiveness is the achievement of program results with predetermined targets, namely by comparing output with results (output-outcome). Outcomes can be interpreted as anything that reflects the functioning of the output of activities in a program.

Effectiveness indicators describe the range of consequences and impacts (outcomes) of program outputs in achieving program goals. The more the contribution of the output produced plays a role in achieving the specified goals or targets, the more effective the work process of an organizational unit will be. Measuring effectiveness can be done only by measuring outcomes. A service may be provided efficiently, but it is not necessarily effective if the service does not add value to customers. Therefore, efficiency and effectiveness indicators must be used together. If a program is declared effective and efficient, then the program can be said to be cost-effective (Halim, 2008).

Calibration/recalibration is related to legal metrology, which involves managing measurement units, measurement methods, and measuring instruments concerning technical requirements and legal regulations aimed at protecting public interests regarding measurement accuracy. Institutionally, the organizational structure of calibration/recalibration implementation is hierarchical, starting from the central government, namely the Ministry of Trade, the Directorate General of Consumer Protection and Trade Order, and the Directorate of Metrology. At the provincial level, it consists of the

Governor, the Trade Department, and the legal metrology unit, while at the district/city level, it consists of the Regent/Mayor, the Trade Department, and the legal metrology unit.

The effectiveness of calibration/recalibration activities can be seen from the wide range of services provided by the relevant institutions. As of the first quarter of 2024, there are around 60 traders who have not yet had their re-calibration carried out, and 74.36% have been carried out and will be implemented in September 2024 (Central Maluku Regency Trade and Industry Service, 2024). A large service reach is not only limited to certainty and protection for consumers but also has an impact on regional revenues (Nurti Lestari¹ & Ratnaningtyas Widyani P, 2020).

The purpose of calibration/recalibration implementation is to ensure that measuring instruments, weights, measures, and related equipment are correct in their use and the accuracy of measurement results, weighing, and balancing, as evidenced by legitimate calibration/recalibration marks. This aims to provide consumer protection and ensure the accuracy and precision of purchased goods (Fitria Nita Bella et al., 2022).

Regulations governing calibration/recalibration are enshrined in various government regulations. Some of them include;

1. Republic of Indonesia Law No. 2 of 1981 concerning legal metrology.
2. Memorandum of Understanding between the Ministry of Trade of the Republic of Indonesia and the National Police of the Republic of Indonesia No. 30/M-DAG/MoU/1/2013 and No. B/1/I/2013 concerning the enhancement of law enforcement in consumer protection and legal metrology.
3. Regulation of the Minister of Trade of the Republic of Indonesia No. 26/M-DAG/PER/5/2017 concerning the supervision of legal metrology.
4. Regulation of the Minister of Trade of the Republic of Indonesia No. 67 of 2018 concerning measuring instruments, weights, measures, and related equipment that must undergo calibration and recalibration.
5. Regulation of the Minister of Trade of the Republic of Indonesia No. 115 of 2018 concerning legal metrology.
6. Central Maluku Regional Regulation No. 3 of 2022 concerning service fees for calibration/recalibration.

7. Regulation of the Minister of Trade of the Republic of Indonesia No. 06 of 2023 concerning legitimate marks for the year 2023.

Consumer decisions to purchase goods can be approached using consumer behavior theory. The market for a particular item is seen as the meeting point of supply and demand for that item. The concept of the market is not only in physical form but most importantly, it involves the interaction between supply and demand (Sudarsono Heri, 2002). Nowadays, competition among entrepreneurs to capture market share is becoming increasingly intense. Entrepreneurs must be more astute in anticipating market conditions. According to Kotler Philip, (2005) several factors influence purchases, namely factors related to the buyer, factors related to the product, factors related to the sales situation, and factors related to cultural situations. Kotler & Keller, (2012) state that consumer decisions to make purchases include;

1. The buyer will recognize a problem or need.
2. Information search, where an individual will be driven to seek information. If this drive is strong and objects that can fulfill their needs are available, then the consumer will be willing to make a purchase.
3. Evaluation of alternatives, where consumers have suitable options and make careful and appropriate choices regarding the product they intend to purchase.
4. Purchase decision, which occurs after consumers have evaluated alternatives, leading them to decide to purchase.

Consumer behavior theory essentially aims to achieve maximum satisfaction. According to (Irwansyah et al., 2021), consumer behavior is the behavior exhibited by consumers in selecting and deciding on several alternative products or services to be purchased and owned. Meanwhile, according to Firmansyah(2018), consumer behavior is a decision-making process by consumers in choosing, buying, using, and utilizing products, services, ideas, or experiences to satisfy consumer needs and desires. Furthermore, Firmansyah, (2018) explains that several stimuli can influence consumer decisions from the consumer behavior model, namely marketing stimuli (marketing mix) consisting of culture, social class, reference groups, and family. Another factor that can influence consumer decisions is the characteristics of the consumers themselves (psychological factors), which include motivation, learning perception, attitude, and personality (Djafar et

al., 2023).

Consumer behavior is a common occurrence in everyday life. Consumer behavior can be said to complement economic activities. Therefore, it is necessary to study consumer behavior as the main foundation for understanding consumers in their behavior, actions, and thoughts. According to Khairiyah, (2007) cited in Wijayanti et al., (2022), consumer behavior is the decision-making process and activities of each individual carried out in the evaluation of obtaining, using, or arranging goods and services.

Consumer behavior then shapes consumer attitudes. According to Firmansyah, (2018) attitude is a learned tendency, which means that attitudes related to buying behavior are formed as a result of direct product experiences, oral information obtained from others, or exposure to advertisements in mass media, the internet, and various forms of direct marketing. Therefore, attitude is a learned tendency to behave consistently favorably or unfavorably toward a particular object. Some factors play an important role in shaping attitudes, namely family influence, direct experience, peer groups, direct marketing, personality, and mass media exposure.

According to Damiasi et al., (2017), the multi-attribute attitude model depicts consumers based on their attitudes toward an object (such as products, services, brands, stores, individuals, advertisements, events, etc.). There are three multi-attribute attitude models according to Fishbein in Damiasi et al., (2017), namely: object-attribute attitude model, behavior-attribute attitude model, and reason-based attitude model.

Research Method

This research is descriptive with a qualitative approach. The data used is primary data obtained by conducting structured interviews with several sample respondents. The number of respondents taken was 100 people using an incidental technique, namely a sampling technique based on chance, anyone who happens to meet the researcher can be taken as a sample if deemed appropriate. The number of samples was 50 consumers and 50 sellers. Respondents were taken using the following criteria:

1. Consumers who are knowledgeable about the calibration/recalibration of UTP instruments.
2. Consumers who frequently purchase goods that utilize UTP instruments, such as rice,

sugar, bulk coconut oil, and fruit and horticultural products.

3. Sellers who have UTTP instruments that have been calibrated/recalibrated.
4. Sellers who have UTTP instruments that have not been calibrated/recalibrated.

The data obtained was analyzed qualitatively by describing and narrating to conclude. The respondent's answer is written again while still including his initials.

Results and Discussion

Consumer Understanding of Calibration/Recalibration Activities

Calibration/recalibration is an activity conducted periodically by the Department of Trade to check the measuring instruments of sellers at Binaya Market, Masohi City. This activity is usually carried out once a year in March or April, but it can also be conducted outside the scheduled time. The purpose of this activity is to provide consumer protection as regulated by the Consumer Protection Law.

In general, consumers are aware of the calibration/recalibration program for measuring instruments conducted by the government. This awareness is due to the local government's efforts, specifically the Department of Trade, which not only conducts calibration/recalibration at Binaya Market but also provides socialization to consumers during these activities.

I often hear the officers explain that calibrated scales are usually marked. Coincidentally, I shop at the market, so we also know that the sellers here have their scales calibrated." (Interview with Mrs. T).

This explanation indicates that, in general, consumers are aware that every measuring instrument must be calibrated/recalibrated. This is intended to assure the accuracy of measurements for purchased goods. Consumer knowledge of this matter is considered important so that when consumers want to buy goods, they often ask about the UTTP device used by the sellers.

"The first thing I pay attention to when I buy goods from a vendor is the scale. I always ask if the scale has been calibrated." (Interview with Mr. G).

The statement is in line with the explanation provided by the officer from the Central Maluku Regency Trade and Industry Service:

"We always conduct socialization with the community about the importance of calibrating/recalibrating each measuring instrument, especially to the vendors. At the same time, we explain to consumers the characteristics of calibrated/recalibrated measuring instruments, so that people know and can differentiate between instruments that have been calibrated/recalibrated and those that have not. Because buyers often ask how we can distinguish instruments that have been calibrated/recalibrated, we often show examples of calibrated/recalibrated measuring instruments." (Interview with AK, Department of Trade officer).

Several measuring instruments that need to be calibrated/recalibrated can be seen in the image below.

Measuring instruments that need to be calibrated/recalibrated



Length Measuring
Meters



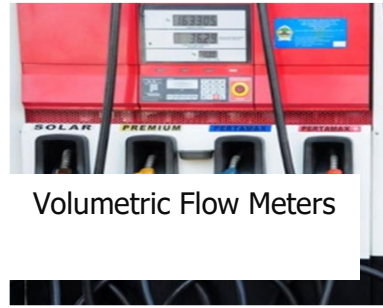
Wet and Dry Measuring
Containers



Tabletop/Frog Scales



Water Meters



Volumetric Flow Meters



Moisture Meters



Electric Meters

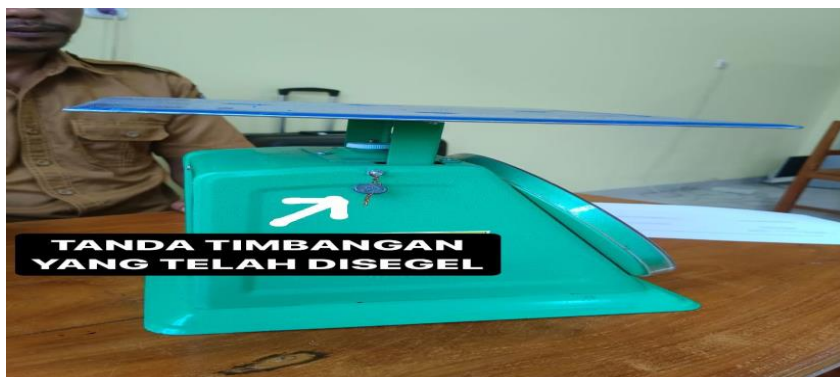
The calibration/recalibration process also serves as a socialization effort to the community by showcasing calibrated measuring instruments, as expressed by Mrs. J;

"At Binaya Market, the vendors have accurate scales. When the officers from the department come to inspect, they also show us the mark indicating that they have been calibrated." (Interview with Mrs. J)

Another respondent mentioned;

"I like shopping at Binaya Market because we usually wait for them to weigh our purchases before we weigh them ourselves, just like in malls, but not all stores do that." (Interview with Mrs. L).

Examples of calibrated/recalibrated measuring instruments with markings



Calibration/recalibration provides consumer protection against various forms of fraud that sellers may engage in, such as under-measuring goods or adding certain devices to measuring instruments.

Consumer Behavior

Consumer behavior theory fundamentally explains how consumers achieve maximum satisfaction, as demonstrated by their decisions in selecting and acquiring goods or services. In other words, it is a process of decision-making by consumers to satisfy their needs and desires. This study identifies several variables that influence consumers' decisions when making purchases at specific stores, including item price, quality, store proximity, and other factors such as familial relationships.

The research findings indicate that consumers primarily choose a store to purchase goods due to the quality of the items, followed by price considerations, store proximity, and familial relationships. This indicates that consumers act rationally in the sense that their purchasing decisions are based on the assurance of good quality, both in terms of physical appearance and accuracy of measurements. This can be observed in the table below.

Reasons for Consumer Purchases

No.	Reasons for Consumer Purchases	Quantity	Percentage (%)
1.	Price	22	40,00
2.	Quality	25	45,45
3.	Distance to the store	7	12,73
4.	Family relationship	1	1,82
Quantity		55	100

Source: Field research findings, (2023)

The table above shows that the quality of the goods is the primary reason for consumers to purchase items, with 25 people or 45.45% citing it as their main consideration, followed by price with 22 people or 40%, then store proximity with 7 people or 12.73%, and the smallest reason being familial relationships with 1 person or 1.82%. This can

indicate that consumers desire certainty about the items they buy, including their measurements. As expressed by one of the respondents:

"Understanding the measuring tools enables us to ensure that the purchased items are the right size, eliminating any doubts about their accuracy" (Interview with Mrs. Y).

This statement is relevant when connected to the concept of quality not only referring to the product itself but also to the satisfaction value derived from it due to having measurement certainty. This is because consumers indeed pay close attention to the measuring instruments used by sellers. The majority of respondents pay attention to the sellers' measuring instruments, as seen in the following table.

Respondents' Perception of Sellers' Measuring Instruments			
No.	Respondents' Perception	Quantity	Percentage (%)
1.	Observing Measuring Instruments	52	94,55
2.	Not Observing Measuring Instruments	3	5,45
Quantity		55	100

Source: Field research findings, (2023)

The data in the table shows that the majority of respondents, 52 people or 94.55%, always pay attention to the seller's measuring instruments when purchasing goods, especially necessities that require measuring instruments. Meanwhile, the remaining 3 people, or 5.45% do not pay attention to the measuring instruments even though they know calibration/recalibration.

However, respondents are limited to paying attention to the accuracy of the measuring instruments used in basic necessity transactions. They do not pay much attention to whether the instruments have been calibrated/recalibrated or not. Some respondents occasionally purchase items from stores even though they are aware that the measuring instruments have not been calibrated/recalibrated, as seen in the table below.

Respondents' Feedback on Sellers' Calibrated Measuring Instruments

No.	Respondents' Perception	Quantity	Percentage (%)
1.	Know	40	72,73
2.	Do not know	0	0
3.	Sometimes	14	25,45
4.	Do not know if the scale has been calibrated	1	1,82
Quantity		55	100

Source: Field research findings, (2023)

The data in the table above shows that 40 people or 72.73% of respondents always purchase from vendors with calibrated/recalibrated measuring instruments, while 14 people, or 25.45% sometimes shop, indicating that they are not too concerned about whether the scales have been calibrated/recalibrated or not, possibly due to other factors, as stated by Mrs. B;

"Even though we know the scales haven't been calibrated, we still purchase because we need the items immediately, or because we're in a rush." (Interview with Mrs. B).

The research findings indicate that only 1 person or 1.82% is unaware of whether the scales have been calibrated or not. This respondent can be said to lack comprehensive knowledge about metrology, hence showing no concern for measuring instruments that meet the standards set by the government.

This relates to consumers' preference to always purchase from sellers whose measuring instruments have been calibrated/recalibrated. The reason is the assurance of accurate measurements and satisfaction with the purchased items, as shown in Table 4 below.

Reasons for Respondents to Shop from Sellers with Calibrated/Recalibrated Measuring Instruments

No.	Respondents' Perception	Quantity	Percentage (%)
1.	Guaranteed measurements	24	43,63
2.	Feeling of satisfaction	30	54,55
3.	Others (do not know if the scale has been calibrated)	1	1,82
Quantity		55	100

Source: Field research findings, (2023)

The data in the table above shows that consumers who know metrology tend to

shop more at stores where the measuring instruments have been calibrated/recalibrated. Specifically, 24 people, or 43.63% feel assured of the measurements, 30 people, or 54.55% experience satisfaction, and only 1 person, or 1.82% continues shopping without being too concerned about calibration/recalibration, possibly due to lack of awareness or not prioritizing the legal aspect. This indicates that consumers always act rationally in their purchases or transactions. It means that satisfaction is the primary priority when buying or consuming goods. However, in certain situations, even if consumers are aware that the measuring instruments have not been calibrated/recalibrated, they still shop at that store due to necessity.

"Sometimes we are forced to make purchases because the store is nearby, especially if we need credit, hehe." (Interview with Mrs. F).

Many sellers benefit from the calibration/recalibration activities carried out by the Department of Trade. The research findings indicate that consumers are more inclined to buy from sellers with calibrated/recalibrated measuring instruments. This influences the sustainability of visits as well as sales revenue and income. The research results show that 41 people or 74.55% experienced an increase in income, while the remaining 14 people, or 25.45% reported no change, as seen in the table below.

Income of Sellers After their Measuring Instruments have been Calibrated/Recalibrated

No.	Note	Quantity	Percentage (%)
1.	There is an increase	41	74,55
2.	Remains the same	14	25,45
Quantity		55	100

Source: Field research findings, (2023)

The findings in the table above indicate that more sellers benefit from calibration/recalibration activities. This illustration shows that the legality aspect of measuring instruments has an impact on income increases. Meanwhile, those who feel that their income has not changed attribute say that it is not because of the lack of calibration/recalibration of their measuring instruments but rather due to market sluggishness and competition.

"Recently, there has been a decrease in visitors, leading to a quiet market. Additionally, the number of sellers has increased, making the competition even tighter." (Interview with Mr. K).

The results of this study show the importance of the seller's UTTP calibration/recalibration activities, not only for the interests of the sellers themselves but also for consumer protection in making decisions about purchasing goods.

Conclusion

Overall, consumers understand the importance of sellers calibrating/recalibrating their measuring instruments, as it assures the items being purchased. Therefore, people tend to choose sellers whose measuring instruments have been calibrated/recalibrated, which has implications for the increase in sellers' income after their measuring instruments have been calibrated/recalibrated. However, the government needs to oversee all sellers regarding the use of measuring instruments. This research has limitations because the method used is qualitative, only examining aspects related to consumer purchasing decisions. It is recommended that further research use quantitative methods by analyzing measurable variables.

Reference

- Alfarisa, S. (2021). Urgensi Pelaksanaan Pengawasan Kemetrolagian Legal Guna Mewujudkan Kabupaten Bangka Selatan Daerah Tertib Ukur. *JPAP: Jurnal Penelitian Administrasi Publik*, 7(2). <https://doi.org/10.30996/jpap.v7i2.5422>
- Apandy, P. A. O., Melawati, & Adam, P. (2021). Pentingnya Hukum Perlindungan Konsumen Dalam Jual Beli. *Jurnal Manajemen & Bisnis Jayakarta*, 3(1). <https://doi.org/10.53825/jmbjayakarta.v3i1.85>
- Darnia, M. E. (2017). Perlindungan Konsumen Penggunaan Alat Ukur, Takar, Timbangan dan Perlengkapannya (UTTP) Pasar Panam Pekanbaru. *Riau Law Journal*, 1(2). <https://doi.org/10.30652/rlj.v1i2.4566>
- Djafar, N. U., Suyanto, Moh. A., & Karundeng, D. R. (2023). Pembelian Konsumen Menggunakan Alat-Alat ukur, Takar, Timbangan dan Perlengkapannya (UTTP) yang

- Bertanda Tera Sah di Kabupaten Boalemo. *Bisnis-Net Jurnal Ekonomi Dan Bisnis*, 6(2).
<https://doi.org/10.46576/bn.v6i2.3336>
- Elvi Sa'ada, A., & Qarni, W. (2022). Analisis Retribusi Pelayanan tera/Tera Ulang dalam Meningkatkan Pendapatan Asli Daerah Kota Medan. *SIBATIK JOURNAL: Jurnal Ilmiah Bidang Sosial, Ekonomi, Budaya, Teknologi, Dan Pendidikan*, 1(5).
<https://doi.org/10.54443/sibatik.v1i5.72>
- Ferizone, F. (2022). Pelayanan Negara Melalui Kegiatan Tera dan Tera Ulang Alat-Alat Ukur, Takar dan Timbangan di Kabupaten Bintan. *JURNAL DIMENSI*, 11(1).
<https://doi.org/10.33373/dms.v11i1.4063>
- Firmansyah, M. A. (2018). Perilaku Konsumen. In *Nucl. Phys.* (Issue February). Deepublish.
- Fitria Nita Bella, Hayatun Hamid, & Yusman Djalil. (2022). Perlindungan Hukum Terhadap Konsumen Yang Melakukan Transaksi Jual Beli dengan Menggunakan Alat Ukur Tanpa Tera di Kabupaten Sukabumi dihubungkan dengan Undang-Undang Nomor 2 Tahun 19821 Tentang Metrologi Legal Jo. Undang-Undang Nomor 8 Tahun 1999 Tentang Perlindungan Konsumen. *NUSANTARA: Jurnal Ilmu Pengetahuan Sosial*, 9(10), 4056–4064. <https://doi.org/10.31604/jips.v9i10.2022.4056-4064>
- Fitriasari, E. T., & Apriliana, N. (2022). Efektifitas Tera/Tera Ulang Timbangan dalam Perlindungan Konsumen di Kabupaten Sekadau. *CENDEKIA: Jurnal Ilmu Pengetahuan*, 2(1). <https://doi.org/10.51878/cendekia.v2i1.900>
- Halim, A. (2008). Akuntansi Keuangan Daerah Edisi 3. *Salemba Empat*.
- Irwansyah, R., Listya, K., Setiorini, A., Hanika, I. M., Hasan, M., Utomo, K. P., Bairizki, A., Lestari, A. S., Rahayu, D. wahyudi S., Buratbutar, M., Nupus, H., Hasbi, I., & Triwardhany, D. (2021). Perilaku Konsumen. In *Widina* (Vol. 5). Widina Bhakti Persada.
- Kotler Philip. (2005). *Manajemen Pemasaran* (11th ed.). Erlangga.
- Kotler, P., & Keller, K. L. (2012). Manajemen Pemasaran Edisi Kedua Belas Jilid 1. *Penerbit: PT. Indeks. Jakarta*.
- Niru Anita Sinaga, & Nunuk Sulisrudatin. (2014). Pelaksanaan Perlindungan Konsumen di Indonesia. *Jurnal Ilmiah Hukum Dirgantara*, 5(2), 71–87.
<https://doi.org/10.35968/jh.v5i2.110>

- Nurti Lestari¹, & Ratnaningtyas Widyani P. (2020). Analisis Efisiensi, Efektivitas dan Capaian Pelayanan UPTD Metrologi Legal Kabupaten Semarang. *Media Informasi Penelitian Kabupaten Semarang*, 3(1). <https://doi.org/10.55606/sinov.v3i1.79>
- Sudarsono Heri. (2002). *Konsep Ekonomi Islam*. Ekonisia.
- Tahir, M., Nasruddin, N., & AS, M. S. (2021). Implementasi Kebijakan Retribusi Pelayanan Tera Ulang Sebagai Strategi Peningkatan Pendapatan Asli Daerah (PAD) Di Kabupaten Lombok Barat. *Journal of Government and Politics (JGOP)*, 3(2), 119–137. <https://journal.ummat.ac.id/index.php/JSIP/article/view/6611/pdf>
- Wijayanti, T., Bathara, L., & Yulinda, E. (2022). Pengaruh Perilaku Konsumen Terhadap Keputusan Pembelian Pecel Lele di Sepanjang Jalan Riau Kota Pekanbaru. *Jurnal Sosial Ekonomi Pesisir*, 3(April). <https://core.ac.uk/download/492769065.pdf>