


**DISPOSITION EFFECT: DOES INVESTOR CONFIDENCE MATTER? EXAMINING SERVICE FROM SECURITIES BROKERAGES**

Arief Yulianto<sup>A</sup>, Angga Pandu Wijaya<sup>B</sup>



ARTICLE INFO	ABSTRACT
<p><b>Article history:</b></p> <p>Received 21 November 2022</p> <p>Accepted 09 February 2023</p> <p><b>Keywords:</b></p> <p>Training Program; Investor Experience; Investor Confidence; Investor Satisfaction.</p>	<p><b>Purpose:</b> This study aims to analyze the role of training program to develop novice investors confidence in buying a stock. Novice investors undergo dilemma to buy stock due to limited knowledge which resulting disposition effect. Research regarding disposition effect which associated with training for novice investors is still limited</p> <p><b>Theoretical framework:</b> The disposition effect is the tendency when investors sell stocks that have the potential to experience future profits early, otherwise investors tend to hold stocks that have the potential to experience losses for too long so that investors tend to experience losses.</p> <p><b>Design/methodology/approach:</b> The research using quantitative approach and employ purposive sampling method with a total sample of 192 respondents. Respondent criteria are novice investor and have limited knowledge in stock market. Each respondent is required to fill questionnaire to obtain data which consist of strongly disagree and strongly agree. Validity, reliability, and hypothesis testing is examined</p> <p><b>Findings:</b> The results indicate investor training influence investor experience. The result also showed that the training program and investor experience impact investor confidence. The result implies investor need training and experience to reduce disposition effect. The result represents training program, investor experience, and investor confidence affect investor satisfaction</p> <p><b>Research, Practical &amp; Social implications:</b> The research is asserted that novice investor with limited experience and knowledge need do practice. Novice investor understanding to buy stock will develop investor confidence.</p> <p><b>Originality/value:</b> The result elaborate training for novice to develop investor confidence and experience. The more experienced investor will reduce disposition effect. Previous research is lack of disposition effect elaboration and its implication on investor satisfaction.</p>
	<p>Doi: <a href="https://doi.org/10.26668/businessreview/2023.v8i2.1384">https://doi.org/10.26668/businessreview/2023.v8i2.1384</a></p>

**EFEITO DE DISPOSIÇÃO: A CONFIANÇA DO INVESTIDOR É IMPORTANTE? EXAME DO SERVIÇO DE CORRETAGEM DE TÍTULOS**

**RESUMO**

**Objetivo:** Este estudo visa analisar o papel do programa de treinamento para desenvolver a confiança dos investidores novatos na compra de uma ação. Os investidores novatos passam por um dilema para comprar ações

<sup>A</sup> Doctoral degree in Business Administration from Universitas Brawijaya, Indonesia, Department of Management, Faculty of Economics, Universitas Negeri Semarang, Indonesia.

E-mail: [ariefyulianto@mail.unnes.ac.id](mailto:ariefyulianto@mail.unnes.ac.id) Orcid: <https://orcid.org/0000-0003-3933-4908>

<sup>B</sup> Master of Science in Management from Universitas Gadjah Mada, Indonesia, Department of Management, Faculty of Economics, Universitas Negeri Semarang, Indonesia. E-mail: [apwijaya@mail.unnes.ac.id](mailto:apwijaya@mail.unnes.ac.id) Orcid: <https://orcid.org/0000-0003-4631-6513>

devido ao conhecimento limitado que resulta no efeito de disposição. A pesquisa relativa ao efeito de disposição, associada ao treinamento para investidores novatos, ainda é limitada.

**Estrutura teórica:** O efeito de disposição é a tendência quando os investidores vendem ações que têm o potencial de experimentar lucros futuros antecipadamente, caso contrário, os investidores tendem a manter ações que têm o potencial de experimentar perdas por muito tempo, de modo que os investidores tendem a experimentar perdas.

**Design/metodologia/abordagem:** A pesquisa utiliza abordagem quantitativa e emprega um método de amostragem proposital com uma amostra total de 192 entrevistados. Os critérios dos respondentes são investidores novatos e têm conhecimento limitado no mercado de ações. Cada respondente é obrigado a preencher um questionário para obter dados que consistem em forte desacordo e forte concordância. A validade, confiabilidade e teste de hipóteses são examinados

**Conclusões:** Os resultados indicam que o treinamento do investidor influencia a experiência do investidor. O resultado também mostrou que o programa de treinamento e a experiência do investidor influenciam a confiança do investidor. O resultado implica que o investidor precisa de treinamento e experiência para reduzir o efeito de disposição. O resultado representa o programa de treinamento, a experiência do investidor e a confiança do investidor afetam a satisfação do investidor.

**Pesquisa, implicações práticas e sociais:** A pesquisa afirma que o investidor iniciante com experiência e conhecimento limitados precisa praticar. A compreensão do investidor novato para comprar ações desenvolverá a confiança do investidor.

**Originalidade/valor:** O resultado é um treinamento elaborado para que o novato desenvolva a confiança e experiência do investidor. O investidor mais experiente reduzirá o efeito de disposição. A pesquisa anterior é a falta de elaboração do efeito de disposição e sua implicação na satisfação do investidor.

**Palavras-chave:** Programa de Treinamento, Experiência do Investidor, Confiança do Investidor, Satisfação do Investidor.

## EFECTO DISPOSICIÓN: ¿IMPORTA LA CONFIANZA DEL INVERSOR? EXAMINANDO EL SERVICIO DE LAS AGENCIAS DE VALORES

### RESUMEN

**Objetivo:** Este estudio pretende analizar el papel del programa de formación para desarrollar la confianza de los inversores noveles a la hora de comprar acciones. Los inversores noveles se enfrentan al dilema de comprar acciones debido a sus limitados conocimientos, lo que provoca un efecto de disposición. La investigación sobre el efecto de disposición asociado a la formación de los inversores noveles sigue siendo limitada.

**Marco teórico:** El efecto de disposición es la tendencia de los inversores a vender anticipadamente acciones con potencial de generar beneficios en el futuro, mientras que los inversores tienden a mantener durante demasiado tiempo acciones con potencial de generar pérdidas.

**Diseño/metodología/enfoque:** La investigación utiliza un enfoque cuantitativo y emplea un método de muestreo intencional con una muestra total de 192 encuestados. Los criterios de selección de los encuestados son que sean inversores principiantes y tengan conocimientos limitados del mercado bursátil. Cada uno de los encuestados debe rellenar un cuestionario para obtener datos que se clasifican en "totalmente en desacuerdo" y "totalmente de acuerdo". Se examinan la validez, la fiabilidad y la comprobación de hipótesis.

**Resultados:** Los resultados indican que la formación del inversor influye en su experiencia. Los resultados también indican que el programa de formación y la experiencia del inversor influyen en su confianza. El resultado implica que el inversor necesita formación y experiencia para reducir el efecto de disposición. El resultado representa que el programa de formación, la experiencia del inversor y la confianza del inversor afectan a la satisfacción del inversor

**Implicaciones sociales, prácticas y de investigación:** La investigación afirma que el inversor novato con experiencia y conocimientos limitados necesita practicar. Si el inversor principiante comprende cómo comprar acciones, desarrollará su confianza.

**Originalidad/valor:** El resultado elabora la formación para que los principiantes desarrollen la confianza y la experiencia del inversor. Cuanto más experimentado sea el inversor, menor será el efecto de disposición. Las investigaciones anteriores carecen de una elaboración del efecto de disposición y su implicación en la satisfacción del inversor.

**Palabras clave:** Programa de Formación, Experiencia del inversor, Confianza del inversor, Satisfacción del Inversor.

## INTRODUCTION

Securities brokers provide a service to buy stock. However, it also teaches novice investors to understand strategies to select stocks. Securities brokerage is a service that provides buying and selling of shares to investors, especially retail investors. The role of securities brokers is essential to encourage services to satisfy investors and develop success in increasing capital through stock transactions. Investment is an effort to maintain asset values, so investors need it to maintain and increase capital ownership. Investors still learning to analyze and understand market conditions need experience in investment activities. Novice investors need a process that requires learning activities to understand the market dynamics comprehensively. The process of understanding market dynamics requires learning that is not only conducted independently; however, it requires through securities brokers. Novice investors mostly desire a high return on investment; hence, need to learn more to understand the market. Securities brokers provide the learning process or training to assist novice investors in understanding investing in various instruments, especially stocks, as part of excellent service. Stock investment is to provide capital gains to novice investors (Da Costa et al., 2013).

Investing in the capital market provides capital gain and risk to obtain capital loss; therefore, learning to select appropriate stock is essential (Novak et al., 2022). Making profits in the capital market requires adequate accuracy and knowledge, so experience comes from the ability to analyze stocks that have the potential to earn profits. The inability of novice investors to analyze stocks that will experience an increase results in the risk of obtaining losses, so the experience is needed to determine the right stocks. Selection of the right stock requires experience gained through the process. To accelerate this process, one of the services provided by securities brokers is to conduct training for novice investors to analyze stocks that have the potential to increase. Investors who do not have experience will potentially have a larger capital loss, reducing the amount of capital held in the investor's account (Frino et al., 2015). Honkanen (2020) shows that information is an essential aspect of getting a signal so that investors have the knowledge to buy certain stocks that have the potential to increase when investors do not have adequate information and knowledge to buy and sell stocks, it has the potential to increase losses. Bhootra & Hur (2015) explained that a process is needed to get optimal returns, especially for investors with risk aversion criteria to study and prioritize psychological stability to obtain maximum profits in investing in stocks. Stabilizing psychology and knowledge requires a process through learning in investing in facing market volatility (Dai et al., 2020). The inability of investors to determine which stocks will increase is determined by knowledge and experience, so a learning process is needed for novice stock investors (Yu et al., 2021).

When investors do not have sufficient knowledge and experience, it raises a disposition effect which indicates that investors buy stocks that will experience a decline and ignore stocks that will experience an increase (Afi, 2017; Fenner et al., 2020)

Novice investors who receive training programs from securities brokers will have a high confidence level to perform risky decisions. This study investigates the role of investors in determining the choice of understanding when investors choose stocks that have the potential to experience losses and take stocks that have the potential to experience price increases in the future, and it is referred to as the disposition effect. This study analyzes the role of investors affected by the disposition effect so that they choose stocks that are not right and suffer a loss when investing. The low disposition effect determines the level of satisfaction of novice investors. When the disposition effect is high, investor satisfaction is lower. This is due to investors selling shares quickly but having a high rate of increase (Bouteska & Regaieg, 2018). On the other hand, investors maintain assets in the form of shares that have decreased so that the money owned by investors decreases, thus obtaining a capital loss. A low disposition effect will determine the level of satisfaction with using a security broker and the training program that is loyalty (Dhar & Zhu, 2006; Richards et al., 2018).

### **Effect Training Program on Investor Confidence**

Training organized by securities brokers will increase the confidence of novice investors. This confidence arises from the knowledge and skills to analyze stocks that novice investors buy. The analysis process requires training organized by a securities broker. The essential aspect that securities brokers should do is to ensure smooth transactions for novice investors (Tang et al., 2019). However, suppose there are additional programs in the form of training organized by securities brokers. In that case, this will lead to a high level of satisfaction, and trust in securities brokers is getting stronger. When investors make stock selections self-taught, their level of confidence stagnates. Different conditions occur when investors receive training programs from securities brokers who have experienced trainers so that they can improve stock selection criteria so that investors can make the right stock selection in the capital market. The selection of investors for stocks will increase confidence if accompanied by training from a securities broker (Talpsepp, 2011).

### **Effect Training Program on Investor Experience**

Training for investors is a method and strategy used by securities brokers to improve their investment experience. Experience is gained through a self-taught process, and securities

brokers play an essential role in improving the investment experience. When a securities broker provides training to investors, there is knowledge and practice that investors can take to gain comprehensive knowledge of the capital market and select the right stocks. Choosing the right stock will reduce the disposition of securities that occur to investors so that investors will get optimal capital gains. Investors get capital gain; the amount of Capital loss that has the potential to reduce the amount of investor capital is decreasing. The training program will improve the experience of more investors so that with this experience, it will reduce the disposition effect that occurs when investing. The investment process requires experience choosing the right stocks to obtain optimal capital gains (Liu & Kan, 2021). Investor experience is not formed immediately but requires training and time to gain adequate experience. Improving investor experience takes time, so based on this experience, the training program's success rate can be optimized. The investment process requires a level of experience in choosing the right stocks to obtain optimal capital gains. Investor experience is not formed quickly but requires training and time to gain adequate experience. Improving investor experience takes time, so based on this experience, the training program's success rate can be optimized.

### **Effect of Training Program on Investor Satisfaction**

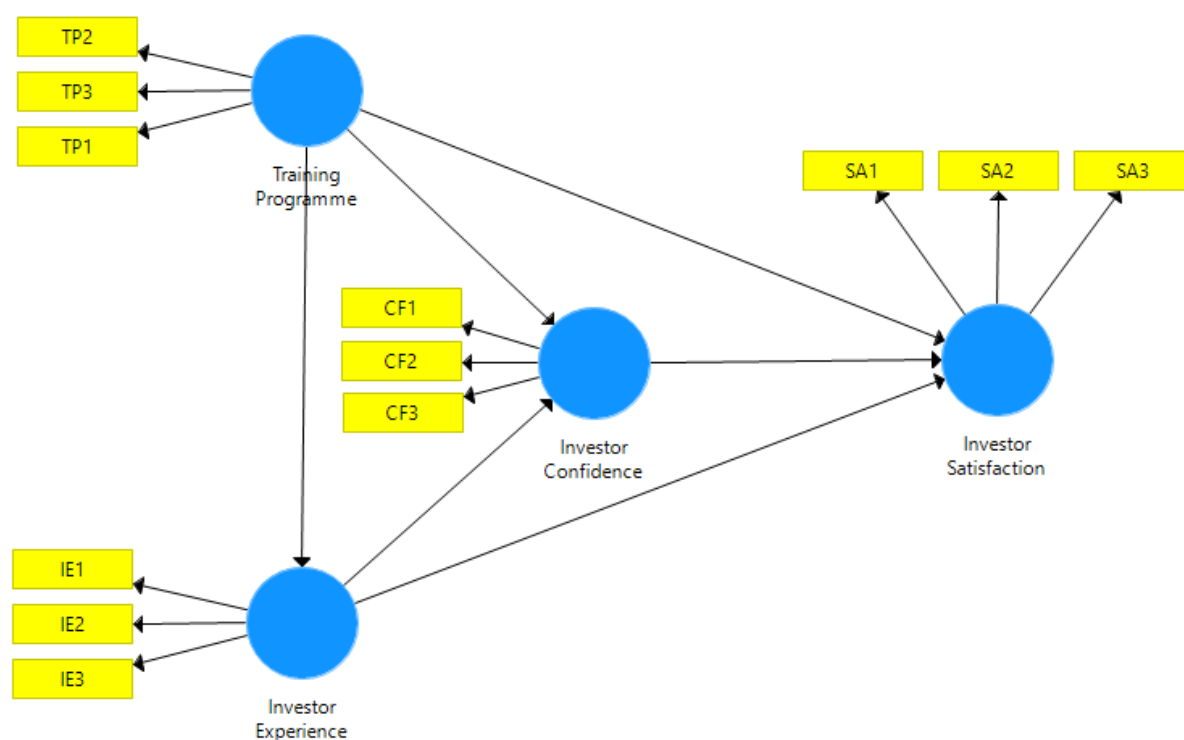
A training program is a form of training for novice investors to choose decent stocks. The selection of appropriate shares is an effort to increase capital gains and the amount of capital owned by investors. The amount of capital owned by investors will increase when the selected shares increase and reduce the decline in the value of shares held by investors. Training in the form of training is a facility provided by securities brokers to increase investor satisfaction. The main task of a securities broker is to provide services on investments desired by investors. When investors receive training program services, it will increase the satisfaction of novice investors who have not been able to determine which shares are eligible for investment (Kotomin & Varma, 2022).

### **Effect of Investor Experience on Investor Satisfaction**

The experience of investors will affect the satisfaction of investors in investing in certain securities brokers. This level of satisfaction is shown when investors succeed in reducing the disposition effect of the experiences that have been carried out. Investor experience is a valuable aspect in determining investment decisions to reduce the disposition of securities. Disposition is a condition that occurs when investors maintain assets that are reduced or reduced at any time. The disposition of securities also indicates that investors sell their shares too quickly so

they do not enjoy a high percentage increase in shares. Disposition can be reduced when investors have a lot of experience, so the number of shares owned follows the potential increase (Frino et al., 2015). This research indicates that investor experience affects investor satisfaction in investing, which is also influenced by training programs and self-confidence. The level of investor experience also influences the success of investing. Investors have high experience then, which will affect the satisfaction level caused by the success of investing. Investment success is defined as the ability of investors to develop their capital and increase their profits through Capital skins obtained from the capital market (Bouteska & Regaieg, 2018).

Figure 1. Research Model



Source: prepared by the authors (2023)

## METHOD

The study was conducted on novice investors who become customers of securities brokers in Indonesia. This study aims to investigate the effect of training held by securities brokers on the confidence of novice investors and the experience that also influences the level of satisfaction of novice investors. The study was conducted involving 192 samples spread across several securities in Indonesia. The study used a purposive random sample to obtain the expected sample. The variables used in this study are securities broker training programme, investor confidence, investor experience, and investor satisfaction

## RESULT

Based on the results of the analysis of the validity test, all indicators have met the validity test rules shown in Table 1, the validity of which is tested using loading factor  $> 0.7$ .

Table 1. Validity Test Result

	Investor Confidence	Investor Experience	Investor Satisfaction	Training Programme
CF1	0.704			
CF2	0.823			
CF3	0.825			
IE1		0.868		
IE2		0.772		
IE3		0.752		
SA1			0.841	
SA2			0.864	
SA3			0.772	
TP2				0.902
TP3				0.889
TP1				0.821

Source: prepared by the authors (2023)

The results of the validity test contained in Table 1 are strengthened by the results of the Fornell-Larcker test contained in Table 2 to analyze the discriminant validity of the research results indicate that based on the Fornell-Larcker all has met the degree of validity in accordance with the rules.

Table 2. Fornell-larcker Criterion Test

	Investor Confidence	Investor Experience	Investor Satisfaction	Training Programme
Investor Confidence	0.786			
Investor Experience	0.740	0.799		
Investor Satisfaction	0.587	0.65	0.827	
Training Programme	0.655	0.477	0.529	0.871

Source: prepared by the authors (2023)

The results of hypothesis testing are in Table 3 which shows the influence between the variables tested in the study.

Table 3. Hypothesis Test

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
Investor Confidence -> Investor Satisfaction	0.461	0.569	0.011	5.553	0.001
Investor Experience -> Investor Confidence	0.554	0.555	0.064	8.638	0.000
Investor Experience -> Investor Satisfaction	0.480	0.475	0.095	5.057	0.000
Training Programme -> Investor Confidence	0.391	0.390	0.062	6.278	0.000
Training Programme -> Investor Experience	0.477	0.477	0.078	6.134	0.000
Training Programme -> Investor Satisfaction	0.260	0.259	0.084	3.115	0.002

Source: prepared by the authors (2023)

## DISCUSSION

The results showed a significant effect of training programs organized by securities brokers on investor confidence. The research indicates the training program provides knowledge and understanding to investors regarding way to select appropriate stock. With the ability and understanding of the investments made as well as a comprehensive understanding of the capital market and being able to choose the right stocks, investors will have a high confidence level. The training process carried out by novice investors will increase confidence so that through the training process, investors will have confidence in selecting the selected shares. Investors with a high level of self-confidence will easily choose stocks with a high win rate; self-confidence reflects that investors believe that the selected stock has a high win rate so that it will generate capital gains (Jin et al., 2021). The selection of shares cannot be done randomly because this will reduce the percentage of winnings or capital gains for investors. The training also affects investors' experience in choosing the right stock. Training is an effort to shape the knowledge and skills of novice investors so that they can choose the right stocks and obtain capital gains. Capital gain is a form that indicates that investors have succeeded in choosing the right stock. Obtaining capital gains is an effort to reduce the disposition of securities so that novice investors will get many wins and profits. Investments made through the Stock Exchange that will generate profits have the potential to increase satisfaction in using a broker (Trejos et al., 2019).

Investment is the essence of getting a profit by choosing the right stocks. The sale of shares is carried out when it has obtained a baby Talking so that it requires adequate experience. When novice investors have a small amount of experience, training will help novice investors in choosing the right stocks. This study has confirmed that training or training organized by securities brokers has a positive effect on the experience of novice investors. The limited ability of novice investors can be formed through training or training organized by a securities broker. Investment selection is a risky instrument through stock investment. Securities brokers offer



training to help novice investors understand these risks and choose the right stocks to invest their money in (Park et al., 2019). The choice of investment and understanding the risk is part of the training organized by a securities broker. Training organized by securities brokers has a positive effect on the level of satisfaction of novice investors. Satisfaction is not formed over time but gradually so that based on the training, which makes novice investors feel the benefits of the training, it has an important role in determining satisfaction (Wu et al., 2018). Novice investors are individuals who expect to get capital gains, so the training will help to get the expected profit level (Cai et al., 2018). Beginner investors need training because they have limited experience and low self-confidence in choosing the right stock. Selection of the right stocks can be done with training from securities brokers who present presenters who can comprehensively understand strategies for choosing stocks.

The results show that training is important in determining satisfaction through self-confidence and experience. Investors who have experience will produce a low disposition effect. The study results confirm that satisfaction is the total perceived by novice investors towards the service. Investment is a form of betting made by investors to get the expected profit level (Andreu et al., 2020). The experience of novice investors also determines the process for obtaining satisfactory investment returns. Through training organized by securities brokers, this experience can be more easily obtained by novice investors. Experience is a valuable part of investing money in the capital market in choosing the right stock (Pelster & Hofmann, 2018). Confidence plays an important role in the investment process. Without confidence, novice investors hesitate to place their money in stocks. Indecision in investing will result in investor disappointment when stock prices increase. Indecision can result in disappointment because investors do not invest their money in stocks that have the potential to rise (Shakatreh et al., 2022). Investors with low self-confidence will produce an unsatisfactory return on investment (Zahera & Bansal, 2019). The study results confirm that training is the key in determining satisfaction with securities brokers. Securities brokers not only strive to provide services in the field of stock transactions to novice investors but also provide more services (Richards et al., 2017), namely in education for novice investors to gain confidence and experience to reduce the disposition of securities (Tang et al., 2019).

## CONCLUSION

The research aims to analyze training programs organized by securities brokers and investor experience influencing investor confidence and satisfaction. This study analyzes the disposition effect that occurs when investing. The tendency is that when novice investors do

not understand the stock market, investors tend to buy stocks that will experience decreasing and ignore stocks that have increased. This research investigated how training programs and investor experience affect investor confidence. When investors experience confidence, the level of satisfaction when investing is high. This research implies that training held by securities brokers plays an important role in determining experience investors and investor confidence. The limitation of the research lies in the fact that there is a research focus oriented towards novice investors. Further research is needed to analyze investors who have long invested in the stock market and are associated with psychological effects in making stock buying decisions.

## REFERENCE

- Afi, H. (2017). An examination of the relationship between the disposition effect and stock return, volatility, and trading volume: The evidence in US stock markets. *International Journal of Managerial and Financial Accounting*, 9(3). <https://doi.org/10.1504/IJMFA.2017.086690>
- Andreu, L., Ortiz, C., & Sarto, J. L. (2020). Disposition effect in fund managers. Fund and stock-specific factors and the upshot for investors. *Journal of Economic Behavior and Organization*, 176. <https://doi.org/10.1016/j.jebo.2020.04.002>
- Bhootha, A., & Hur, J. (2015). High Idiosyncratic Volatility and Low Returns: A Prospect Theory Explanation. *Financial Management*, 44(2). <https://doi.org/10.1111/fima.12057>
- Bouteska, A., & Regaieg, B. (2018). Investor characteristics and the effect of disposition bias on the Tunisian stock market. *Borsa Istanbul Review*, 18(4). <https://doi.org/10.1016/j.bir.2018.05.004>
- Cai, H., Wang, M., & Bai, C. (2018). An Empirical Study of Investors' Disposition Effect in China Based on Open Data from the Chinese Stock Markets. *International Journal of Economics and Finance*, 10(5). <https://doi.org/10.5539/ijef.v10n5p165>
- Da Costa, N., Goulart, M., Cupertino, C., Macedo, J., & Da Silva, S. (2013). The disposition effect and investor experience. *Journal of Banking and Finance*, 37(5). <https://doi.org/10.1016/j.jbankfin.2012.12.007>
- Dai, Z., Zhou, H., Wen, F., & He, S. (2020). Efficient predictability of stock return volatility: The role of stock market implied volatility. *North American Journal of Economics and Finance*, 52. <https://doi.org/10.1016/j.najef.2020.101174>
- Dhar, R., & Zhu, N. (2006). Up close and personal: Investor sophistication and the disposition effect. *Management Science*, 52(5). <https://doi.org/10.1287/mnsc.1040.0473>
- Fenner, R. G., Han, Y., & Huang, Z. (2020). Idiosyncratic volatility shocks, behavior bias, and cross-sectional stock returns. In *Quarterly Review of Economics and Finance* (Vol. 75). <https://doi.org/10.1016/j.qref.2019.05.004>
- Frino, A., Lepone, G., & Wright, D. (2015). Investor characteristics and the disposition effect. *Pacific Basin Finance Journal*, 31. <https://doi.org/10.1016/j.pacfin.2014.10.009>

Honkanen, P. (2020). Securities Lending and Trading by Active and Passive Funds. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3679808>

Jin, X., Li, R., & Zhu, Y. (2021). Could social interaction reduce the disposition effect? Evidence from retail investors in a directed social trading network. *PLoS ONE*, *16*(2 February). <https://doi.org/10.1371/journal.pone.0246759>

Kotomin, V., & Varma, A. (2022). Do large losses loom larger than gains? Salience, holding periods, and the disposition effect. *Financial Review*, *57*(2). <https://doi.org/10.1111/fire.12288>

Liu, H.-H., & Kan, F.-J. (2021). Overconfidence Behavior and Disposition Effect of Investors in Taiwan Stock Market: Another Features to Visit. *Journal of Finance and Economics*, *9*(5). <https://doi.org/10.12691/jfe-9-5-2>

Novak, A., Pravdyvets, O., Chorny, O., Sumbaieva, L., Akimova, L., & Akimov, O. (2022). Financial and Economic Security in the Field of Financial Markets at the Stage of European Integration. *International Journal of Professional Business Review*, *7*(5), e0835-e0835.

Park, K. W., Jeong, S. H., & Oh, J. Y. J. (2019). Foreigners at the gate? Foreign investor trading and the disposition effect of domestic individual investors. *North American Journal of Economics and Finance*, *49*. <https://doi.org/10.1016/j.najef.2019.04.009>

Pelster, M., & Hofmann, A. (2018). About the fear of reputational loss: Social trading and the disposition effect. *Journal of Banking and Finance*, *94*. <https://doi.org/10.1016/j.jbankfin.2018.07.003>

Richards, D. W., Fenton-O'Creevy, M., Rutterford, J., & Kodwani, D. G. (2018). Is the disposition effect related to investors' reliance on System 1 and System 2 processes or their strategy of emotion regulation? *Journal of Economic Psychology*, *66*. <https://doi.org/10.1016/j.joep.2018.01.003>

Richards, D. W., Rutterford, J., Kodwani, D., & Fenton-O'Creevy, M. (2017). Stock market investors' use of stop losses and the disposition effect. *European Journal of Finance*, *23*(2). <https://doi.org/10.1080/1351847X.2015.1048375>

Shakatreh, M., Moh'd Ahmad Mansour, A., & Alatyat, Z. A. (2022). Corporate Tax Features in Jordan Affecting Business Decisions: Strengthening Finance Accountability in Emerging Economies. *International Journal of Professional Business Review*, *7*(4), e0739-e0739.

Talpsepp, T. (2011). Reverse disposition effect of foreign investors. *Journal of Behavioral Finance*, *12*(4). <https://doi.org/10.1080/15427560.2011.606387>

Tang, S., Huang, S., Zhu, J., Huang, R., Tang, Z., & Hu, J. (2019). Financial self-efficacy and disposition effect in investors: The mediating role of versatile cognitive style. *Frontiers in Psychology*, *9*(JAN). <https://doi.org/10.3389/fpsyg.2018.02705>

Trejos, C., van Deemen, A., Rodríguez, Y. E., & Gómez, J. M. (2019). Overconfidence and disposition effect in the stock market: A micro world based setting. *Journal of Behavioral and Experimental Finance*, *21*. <https://doi.org/10.1016/j.jbef.2018.11.001>

Wu, S. W., Dutta, J., & Huang, C. Y. (2018). The systematic biases in decision-making in the mutual-fund markets: Market states and disposition effect. *Cogent Economics and Finance*,

6(1). <https://doi.org/10.1080/23322039.2018.1537538>

Yu, X., Huang, Y., & Xiao, K. (2021). Global economic policy uncertainty and stock volatility: evidence from emerging economies. *Journal of Applied Economics*, 24(1). <https://doi.org/10.1080/15140326.2021.1953913>

Zahera, S. A., & Bansal, R. (2019). A study of prominence for disposition effect: a systematic review. In *Qualitative Research in Financial Markets* (Vol. 11, Issue 1). <https://doi.org/10.1108/QRFM-07-2018-0081>