

## Developing Financial Literacy and Investment Awareness to Promote Healthy Financial Behavior among High School Students

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### ABSTRACT

This activity was carried out at SMA Muhammadiyah Mlati on May 14, 2025, aiming to improve students' financial literacy through a participatory and interactive approach in each class. The materials presented include basic financial management, investment concepts, types of investment instruments, and investment strategies that are tailored to the student's context. Each session in this activity is designed comprehensively, consisting of material presentation by a team of speakers, a question and answer discussion session that allows students to clarify their understanding directly, and an educational game 'Guess the Word' as an interactive media to strengthen and re-test the understanding of the concepts that have been presented. The evaluation results showed an increase in student understanding with an active level of participation. The gamification approach and contextual learning have proven effective. This program is recommended to be replicated and developed in order to foster healthy financial habits from school age.

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## **INTRODUCTION**

In the rapidly evolving era of globalization and digitalization, the ability to manage finances wisely has become one of the most essential life skills (Li, 2022). This competency is not only necessary for adults but also crucial for adolescents who are beginning to engage in everyday economic activities. Unfortunately, financial literacy levels in Indonesia remain relatively low, especially among students who are in the critical phase of forming their financial habits (Tarso et al., 2025). Data from the Financial Services Authority (OJK) indicate that the financial literacy rate among Indonesians has yet to reach an ideal threshold. This situation is particularly concerning when viewed from the perspective of adolescents, who represent the future generation (Siswanto, 2024). A fundamental understanding of managing pocket money, saving, and an introduction to investments is vital for securing their financial futures.

SMA Muhammadiyah Mlati, as an educational institution, holds a strategic role in addressing this challenge. The school's focus extends beyond academic achievement to include character building and life skills development for its students. Eleventh-grade students are at a transitional stage toward adulthood, where financial management responsibilities start to become more tangible. They begin to receive regular allowances, become familiar with digital wallets, and face various tempting consumption choices (Caesaria et al., 2024; Hanama et al., 2024). Without appropriate guidance, they are vulnerable to consumptive behaviors and financial mistakes (Sulistiyowati et al., 2024). Therefore, financial literacy training is highly relevant to be introduced early during school years (Saputra et al., 2025).

Beyond simply managing money, today's students need to comprehend long-term financial planning concepts. One critical topic that must be introduced early is investment, as a part of the strategy toward financial independence (Astutik et al., 2025; Suryani et al., 2025). Investment is no longer an exclusive domain of adults but has become a necessity for young generations amid the growth of the digital economy. This understanding fosters visionary thinking, where students learn to delay gratification in pursuit of future financial goals (Alison et al., 2020). Consequently, they can develop good habits that endure into adulthood. Introducing investment literacy in high school acts as a preventive measure against financial risks they may face later.

This training program is systematically designed to provide comprehensive knowledge about personal finance (Zein et al., 2025). The material covers daily money management, saving methods, and an introduction to various investment instruments appropriate for their age group (Kumar et al., 2023). The approach is practical and interactive, ensuring students learn actively rather than passively (Aprilia et al., 2025; Tarso et al., 2025). For example, they are tasked with creating personal budgets, setting financial goals, and conducting simple investment simulations. Investment options such as time deposits, mutual funds, and gold are introduced as realistic and safe alternatives. The content is delivered in clear language that is relevant to students' everyday lives.

The primary objective of this training is to cultivate sustainable financial awareness among students (Mala et al., 2025). They are taught to understand that

every financial decision has long-term consequences. They are also introduced to investment risks to prevent susceptibility to get-rich-quick schemes (Javaid et al., 2023). This awareness is crucial in protecting them from fraudulent investment schemes and other illegal financial practices (Sari et al., 2023). Moreover, Islamic values such as honesty, justice, and avoidance of usury are integrated into the training, ensuring that financial management is not only smart but also ethical and aligned with Islamic principles (Hanama & Siswanto, 2025).

Through this program, the school contributes to supporting the national movement to improve financial literacy initiated by the OJK and the government. By equipping students with financial knowledge and skills, the school has fostered agents of change within their social environments (Janah et al., 2025; Pisriwati et al., 2025). Students are expected to disseminate accurate financial information to their peers, families, and communities. The impact extends beyond individual benefits to collective improvements in creating financially literate societies. This program can also serve as a model for other schools aiming to develop character education based on financial literacy (Hirawati et al., 2021; Syah et al., 2025). The wider adoption of this model by schools will expand its positive effects.

In conclusion, the financial literacy and investment training for eleventh-grade students at SMA Muhammadiyah Mlati represents a highly strategic and timely initiative. This program not only addresses current challenges but also constitutes a long-term investment in cultivating financially independent generations. Through collaboration among schools, educators, and financial practitioners, the learning process is effective and enjoyable. This activity goes beyond mere knowledge transfer; it serves as a means to shape character and foster positive mindsets (Hoque et al., 2023; Suwajirah et al., 2025). Students are trained to think critically, make informed decisions, and take responsibility for their financial choices. Equipped with these skills, they are better prepared to face the dynamic economic realities of the future.

## **IMPLEMENTATION AND METHODS**

This community service activity was conducted in collaboration with SMA Muhammadiyah Mlati. Through this partnership, the community service team aims to provide a positive impact on students by enhancing their understanding of the importance of financial management and investment from an early age. The school was selected as a partner because its high school students are deemed mature enough to comprehend financial management materials. The activity took place on May 14, 2025, at SMA Muhammadiyah Mlati, located at Jl. Magelang km 7, Sinduadi, Mlati, Sleman, Yogyakarta Special Region. The event ran from 07:00 AM to 04:00 PM WIB, employing a participatory approach to actively engage students in each session. The training materials were developed in module form by the community service team and covered topics such as basic financial management, fundamentals of investment, various types of investments along with their benefits and risks, and investment strategies. The materials were delivered by the team in three stages: theory preparation (April

9), presentation and mentoring (April 20), and material delivery to students (May 14).

Preparation for the event involved online meetings discussing program introduction, timeline development, and task allocation. The high school was chosen as the target participant group due to its cognitive and administrative readiness, such as possession of identity cards (KTP) required for certain types of investments. The training modules were developed and presented directly to the students. To ensure smooth implementation, each of the 10 team members held specific roles. The team leader was responsible for overall coordination, the education team prepared the materials, the creative design team developed engaging presentation aids, the games team organized interactive games as evaluation media, the accommodation team handled logistics, and the communication team-maintained coordination with the school.

## **RESULTS AND DISCUSSION**

### ***Results***

The main activity was conducted on May 14, 2025, in person at SMA Muhammadiyah Mlati. The activity employed a classroom visitation method and ran from 07:00 to 16:00 WIB. Participants included all grade XI students, consisting of two classes. Each session lasted approximately 60 minutes and was divided into three main segments: a 35-minute presentation, a 10-minute question-and-answer session, and a 15-minute game session. This structure aimed to deliver the material systematically, facilitate direct interaction, and reinforce student understanding through an engaging method.

The first topic covered was basic financial management, serving as an introduction to the activity. This topic included the importance of financial management, fundamental definitions, benefits, and tips for managing daily finances. Common mistakes often made in money management were also discussed. This material was selected to provide students with a strong foundation before progressing to more advanced topics. The presentation used simple language and examples relevant to students' everyday lives. Observations showed that most students paid close attention, indicating their interest in the material.

The second topic addressed the basic concepts of investment, building on the understanding of financial management. In this session, students were introduced to the definition, objectives, benefits, and urgency of investing. Emphasis was placed on the importance of long-term financial planning from an early age. Students were also encouraged to analyze how investment can be utilized to achieve future financial goals. The material was linked to real-life situations they experience daily. This approach proved effective, as many students began showing interest in investment concepts.

The third topic explained various types of investments individuals can choose based on their needs and capabilities. This included discussions on deposits, gold, bonds, mutual funds, stocks, and derivative assets such as cryptocurrency. The material was tailored to the high school context for easier comprehension. The advantages and disadvantages of each investment instrument were explained in a balanced manner. The primary focus was on

understanding the risks and potential returns associated with each investment type. Thus, students not only became familiar with terms but were also able to evaluate investment options based on their personal circumstances.

The fourth topic focused on strategies for prudent and measured investing. Students were guided to understand the importance of having clear and realistic investment goals. They also learned to identify their personal risk profiles as a basis for decision-making. This session covered income allocation for investment and methods to avoid fraud, such as Ponzi schemes. The approach aimed to encourage students not to follow trends blindly but to think critically when assessing investment opportunities (Southworth et al., 2023; Zhan, 2021). With appropriate strategies, they could make knowledge-based, analytical decisions.

Subsequent activities emphasized direct interaction between the team and the students. Each class received the prepared materials in module form, guided by a supervising lecturer. A participatory approach was employed to ensure active student engagement in the learning process. During the Q&A session, students had the opportunity to ask questions directly to the presenters. Most questions related to the practical application of investment concepts and financial management tips for students. This interaction fostered a two-way dialogue that deepened students' comprehension.

To reinforce understanding, an educational game called "Guess the Word" was conducted after the Q&A. Each class was divided into four groups of approximately ten students each. Groups took turns describing and guessing financial terms such as stocks, dividends, bonds, or risks. The game was designed to encourage genuine understanding rather than rote memorization. Additionally, it enhanced communication skills and teamwork among members. This made the learning environment more enjoyable and dynamic.

"Guess the Word" was also used to evaluate student understanding through group work. Groups earned points based on the number of correctly guessed answers. Final scores were announced to provide an overview of comprehension in each class. Low-scoring groups indicated areas for material review by the team. Evaluation results showed that most groups achieved an average accuracy rate of 80 percent, demonstrating the effectiveness of the teaching methods used.

Student participation in the Q&A and game sessions yielded positive results. Approximately 16 to 20 percent of students in each class actively asked questions and engaged in discussions. The game successfully created an interactive and enjoyable atmosphere, boosting student enthusiasm. Besides delivering content, the activity provided students with a reflective space to relate the material to real-life experiences. The community service team also received valuable feedback regarding the teaching strategies' effectiveness (DeJaeghere et al., 2023). These findings can serve as a basis for evaluating and improving similar methods in the future.

As a token of appreciation for student enthusiasm, the winning groups in each class received merchandise prizes. Although symbolic, these prizes significantly increased student motivation. Besides recognizing achievement, this fostered a positive and memorable conclusion for participants (Novantoro et

al., 2025; Rambe et al., 2025). Overall, student responses to the activity were very favorable, particularly due to the varied methods and active involvement.

### ***Discussion***

The implementation of financial literacy activities at SMA Muhammadiyah Mlati demonstrated that a direct classroom approach using a structured method can effectively enhance students' understanding of important topics such as financial management and investment. This aligns with the findings of Efendi et al. (2025), Kintoko et al. (2025) and Rochmat et al. (2025), who stated that contextual learning linked to students' everyday lives has a significant impact on increasing their financial knowledge and awareness. In this activity, the material was not only delivered theoretically but also through interactive question-and-answer sessions and educational games, which proved to increase student attention and active participation.

Moreover, the use of relevant and participatory learning media was shown to support the effectiveness of the activity. Research by Daraojimba et al. (2023), Maharani et al. (2024), and Sutrisno et al. (2024) indicates that students tend to grasp financial concepts more easily when the delivery is practical and tailored to their cognitive level. This approach was also successful in this activity, where students were not merely passive listeners but actively engaged in discussions and game simulations (Wibowo et al., 2025). The high level of student participation in the Q&A sessions and the "Guess the Word" game demonstrates that an active learning model can create a meaningful and enjoyable learning experience.

From an evaluation perspective, the use of games as an assessment tool was highly effective in identifying topics that students had mastered and those that required further clarification. Findings from Böhm et al. (2023), Cekiso (2024) and Kunwar & Adhikari (2023) in their research on financial literacy among students also support this, showing that gamification not only increases student engagement but also strengthens material retention. In this activity, game results indicated an average accuracy rate of 80%, signifying that most students were able to understand and reflect on the material well.

Overall, this activity illustrates that financial literacy outreach designed to be participatory, enjoyable, and practice-based has a positive impact on students' readiness to manage finances from an early age. This initiative can serve as a replicable model for other schools, especially considering the importance of establishing healthy financial habits early in life. Consistent with Cossu et al., (2024) and Gunawan et al. (2023), such literacy activities represent a preventive measure to avoid future financial mistakes and support the development of a financially wise younger generation.

### **CONCLUSIONS AND RECOMMENDATIONS**

The financial literacy activity held on May 14, 2025, at SMA Muhammadiyah Mlati successfully enhanced students' understanding of basic financial management and investment through a structured and interactive class-by-class approach. By dividing the sessions into material presentation, Q&A, and the educational game "Guess the Word," the activity created an enjoyable and

effective learning environment, as reflected by active student participation and an average accuracy rate of 80%. This participatory method aligns with previous research emphasizing the importance of contextual learning and gamification in improving financial literacy. Therefore, similar activities are recommended to be replicated in other schools, systematically integrated into the curriculum, supplemented with interactive learning modules, and regularly evaluated to ensure long-term effectiveness and foster healthy financial habits among students.

## REFERENCES

- Alison, C. W., Robutti, O., & Thomas, M. (2020). Teaching with Digital Technology. *ZDM - Mathematics Education*, 52(7), 1223–1242. <https://doi.org/10.1007/s11858-020-01196-0>
- Aprilia, D., Kintoko, & Siswanto, D. H. (2025). Effectiveness of the scramble learning model on students' ability to understand mathematical concepts. *Contemporary Education and Community Engagement*, 1(2), 64–73.
- Astutik, W. D., Sadiyah, V. K., & Siswanto, D. H. (2025). Counseling on clean and healthy living behavior in improving public health levels. *Journal of Social and Community Development*, 2(01), 38–50. <https://doi.org/10.56741/jscd.v2i01.889>
- Böhm, P., Böhmová, G., Gazdíková, J., & Šimková, V. (2023). Determinants of Financial Literacy: Analysis of the Impact of Family and Socioeconomic Variables on Undergraduate Students in the Slovak Republic. *Journal of Risk and Financial Management*, 16(4), 1–20. <https://doi.org/10.3390/jrfm16040252>
- Caesaria, N. Z., Saputra, Y. D., & Siswanto, D. H. (2024). Implementasi pembelajaran matematika berdiferensiasi di sekolah dasar pada kurikulum merdeka. *MURABBI*, 3(2), 92–100.
- Cekiso, M. P. (2024). Students' reading self-concepts at an institution of higher learning in South Africa. *Reading and Writing (South Africa)*, 15(1), 1–10.
- Cossu, R., Awidi, I., & Nagy, J. (2024). Critical thinking activities in fluid mechanics-A case study for enhanced student learning and performance. *Education for Chemical Engineers*, 46(August 2023), 35–42. <https://doi.org/10.1016/j.ece.2023.10.004>
- Daraojimba, C., Abioye, Kehinde Mobolaji Bakare, A. D., Mhlongo, N. Z., Onunka, O., & Daraojimba, D. O. (2023). Technology and Innovation To Growth of Entrepreneurship and Financial Boost: a Decade in Review (2013-2023). *International Journal of Management & Entrepreneurship Research*, 5(10), 769–792.
- DeJaeghere, J., Duong, B. H., & Dao, V. (2023). Quality of teaching and learning: the role of metacognitive teaching strategies in higher-performing classrooms in Vietnam. *Educational Research for Policy and Practice*, 22(2), 239–258. <https://doi.org/10.1007/s10671-023-09330-x>
- Efendi, R., Siswanto, D. H., & Saputra, S. A. (2025). Deep Learning approach to teaching multiplication concepts using coin media: Classroom ction research in Elementary School. *Jurnal Padamu Negeri*, 2(2), 87–97.

- Gunawan, A., Jufrizen, & Pulungan, D. R. (2023). Improving MSME performance through financial literacy, financial technology, and financial inclusion. *International Journal of Applied Economics, Finance and Accounting*, 15(1), 39–52. <https://doi.org/10.33094/ijaefa.v15i1.761>
- Hanama, A., Kristiawan, Y., Siswanto, D. H., & Syah, A. B. P. D. A. F. (2024). Program market day sebagai stimulus untuk mengembangkan karakter kewirausahaan murid sekolah dasar. *MURABBI*, 3(2), 62–70. <https://doi.org/10.69630/jm.v3i2.39>
- Hanama, A., & Siswanto, D. H. (2025). Art in the Muhammadiyah Islamic View: A Balance of Aesthetics and Ethics. *Asian Journal of Philosophy and Religion (AJPR)*, 4(1), 47–60. <https://doi.org/10.55927/ajpr.v4i1.13114>
- Hirawati, H., Sijabat, Y. P., & Giovanni, A. (2021). Financial Literacy, Risk Tolerance, and Financial Management of Micro-enterprise Actors. *Society*, 9(1), 174–186. <https://doi.org/10.33019/society.v9i1.277>
- Hoque, K. E., Wang, X., Qi, Y., & Norzan, N. (2023). The factors associated with teachers' job satisfaction and their impacts on students' achievement: a review (2010-2021). *Humanities and Social Sciences Communications*, 10(1), 1–7. <https://doi.org/10.1057/s41599-023-01645-7>
- Janah, N., Setiawan, A., Putri, H. A., & Siswanto, D. H. (2025). Assistance of digital information systems to improve learning quality in vocational students. *Dedicated: Journal of Community Services (Pengabdian Kepada Masyarakat)*, 3(1), 251–262. <https://doi.org/10.17509/dedicated.v3i1.82125>
- Javaid, M., Haleem, A., Singh, R. P., & Suman, R. (2023). 5G technology for healthcare: Features, serviceable pillars, and applications. *Intelligent Pharmacy*, 1(1), 2–10. <https://doi.org/10.1016/j.ipha.2023.04.001>
- Kintoko, Siswanto, D. H., Pamungkas, M. D., & Aisyah, A. K. (2025). Analysis of students' mathematical literacy skills on the Pythagorean Theorem in Junior High School. *JOELI: Journal of Educational and Learning Innovation*, 1(3), 180–190. <https://doi.org/10.72204/j6t4a573>
- Kumar, P., Pillai, R., Kumar, N., & Tabash, M. I. (2023). The interplay of skills, digital financial literacy, capability, and autonomy in financial decision making and well-being. *Borsa Istanbul Review*, 23(1), 169–183. <https://doi.org/10.1016/j.bir.2022.09.012>
- Kunwar, R., & Adhikari, S. (2023). An exploration of the conceptualization, guiding principles, and theoretical perspectives of inclusive curriculum. *Journal of Contemporary Research in Social Sciences*, 5(1), 1–13. <https://doi.org/10.55214/26410249.v5i1.217>
- Li, L. (2022). Reskilling and Upskilling the Future-ready Workforce for Industry 4.0 and Beyond. *Information Systems Frontiers*, 1–16. <https://doi.org/10.1007/s10796-022-10308-y>
- Maharani, N. A., Hidayah, F., Darmawan, D., & Trihantoyo, S. (2024). Analisis Sumber dan Jenis Pembiayaan Pendidikan di Indonesia. *Jurnal Bintang Pendidikan Indonesia*, 2(3), 25–39. <https://doi.org/10.55606/jubpi.v2i3.3004>
- Mala, R., Tarso, Pisriwati, S. A., & Siswanto, D. H. (2025). Baitul arqam as a strategic character education model in developing al-islam and muhammadiyah values among students. *Jurnal Ilmiah Multidisiplin Ilmu*,

- 2(3), 1-9. <https://doi.org/10.69714/bya76r31>
- Novantoro, A., Janah, N., & Siswanto, D. H. (2025). Peningkatkan kemampuan penalaran induktif matematika dengan model group investigation. *Papanda Journal of Mathematics and Science Research*, 4(1), 67-76.
- Pisriwati, S. A., Siswanto, D. H., & Yogyanto, N. (2025). Innovating aromatherapy candles from used cooking oil for student entrepreneurship. *Dedicated: Journal of Community Services (Pengabdian Kepada Masyarakat)*, 3(1), 1-14. <https://doi.org/10.17509/dedicated.v3i1.81400>
- Rambe, M. Y., Siswanto, D. H., Putri, H. A., & Kintoko. (2025). Fostering pancasila awareness: Youth dialogue to counter the threat of global radicalism. *Jurnal Ilmiah Multidisiplin Ilmu*, 2(2), 113-120. <https://doi.org/10.69714/773zb791>
- Rochmat, S., Andriyani, & Siswanto, D. H. (2025). Developing an RME-based 3D storybook with AR technology to enhance spatial ability. *Bulletin of Applied Mathematics and Mathematics Education*, 5(1), 9-22. <https://doi.org/10.12928/bamme.v5i1.10880>
- Sari, Y. W., Nugroho, M., & Rahmiyati, N. (2023). The effect of financial knowledge, financial behavior and digital financial capabilities on financial inclusion, financial concern and performance in MSMEs in East Java. *Uncertain Supply Chain Management*, 11(4), 1745-1758.
- Siswanto, D. H. (2024). Kinerja UMKM Kecamatan Kesambi terkait Pengaruh Literasi dan Inklusi Keuangan. *PELITA: Jurnal Penelitian Dan Karya Ilmiah*, 24(2), 60-70. <https://doi.org/10.33592/pelita.v24i2.5125>
- Siswanto, D. H., Putri, H. A., Kintoko, K., & Suwajirah, S. (2025). Chemistry laboratory management: Reviewing planning, organization, and evaluation for effectiveness. *Curricula: Journal of Curriculum Development*, 4(1), 229-242. <https://doi.org/10.17509/curricula.v4i1.80139>
- Southworth, J., Migliaccio, K., Glover, J., Glover, J. N., Reed, D., McCarty, C., Brendemuhl, J., & Thomas, A. (2023). Developing a model for AI across the curriculum: Transforming the higher education landscape via innovation in AI literacy. *Computers and Education: Artificial Intelligence*, 4(October 2022), 100127.
- Sulistyowati, P., Sudarmiati, S., & Atok, R. Al. (2024). Analysis of money management skills as a character building of responsibility and creativity in elementary school students. *JPPi (Jurnal Penelitian Pendidikan Indonesia)*, 10(2), 108. <https://doi.org/10.29210/020243787>
- Suryani, E. A., Alghiffari, E. K., & Siswanto, D. H. (2025). Waste management training through composting: A creative solution for the community of Sinduadi Village, Sleman. *Journal of Social and Community Development*, 2(01), 27-37. <https://doi.org/10.56741/jscd.v2i01.796>
- Sutrisno, Mustafa, F., & Suparwata, D. O. (2024). The Role of Business Incubators in Enhancing Human Resource Competence and Encouraging Entrepreneurship among Young People. *Jurnal Terobosan Peduli Masyarakat (TIRAKAT)*, 1(2), 147-160. <https://doi.org/10.61100/j.tirakat.v1i2.184>
- Syah, A. B. P. D. A. F., Siswanto, D. H., & Purwanti. (2025). Pandangan guru SD dalam mengatasi kesulitan belajar matematika beserta solusinya. *Papanda Journal of Mathematics and Sciences Research (PJMSR)*, 4(2024), 58-65.

- Tarso, Efendi, R., Mala, R., & Siswanto, D. H. (2025). Influence of Work Motivation, Job Satisfaction, and Organizational Commitment on Muhammadiyah High School Teacher Performance. *JOELI: Journal of Educational and Learning Innovation*, 1(3), 203–212. <https://doi.org/10.72204/1afzj289>
- Tarso, Saputra, Y. D., & Siswanto, D. H. (2025). The impact of instagram social media utilization on sales revenue of MSMEs products in the digital era. *Journal of Management Studies and Development*, 4(01), 63–74. <https://doi.org/10.56741/jmsd.v4i01.797>
- Tarso, Siswanto, D. H., & Setiawan, A. (2025). Teacher qualifications in the implementation of the Kurikulum Merdeka and ISMUBA. *Curricula: Journal of Curriculum Development*, 4(1), 13–28. <https://doi.org/10.17509/curricula.v5i1.76836>
- Wibowo, W. A., Suryatama, H., & Siswanto, D. H. (2025). Exploring the impact of the Merdeka Curriculum on mathematics education in Elementary Schools. *International Journal of Learning Reformation in Elementary Education*, 4(01), 27–38. <https://doi.org/10.56741/ijlree.v4i01.793>
- Zein, S. D., Dumono, Wibowo, A. W., Widyastuti, R., Siswanto, D. H., & Pisriwati, S. A. (2025). Assistance in developing integrated teaching modules on Al-Islam and Muhammadiyah values in the independent curriculum era as strengthening islamic education. *Jurnal Pengabdian Masyarakat Bestari (JPMB)*, 4(1), 39–50. <https://doi.org/10.55927/jpmb.v4i1.11838>
- Zhan, J. X. (2021). GVC transformation and a new investment landscape in the 2020s: Driving forces, directions, and a forward-looking research and policy agenda. *Journal of International Business Policy*, 4(2), 206–220.