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Research Article

Capital Structure Management of Rice Farmers

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ABSTRACT

Capital structure management is a set of decisions related to the mix of financing sources that is utilized in the entity's operation and development. Financing is a significant obstacle for smallholder farmers in accessing additional inputs required to boost agricultural yields and income. This study identified and measured the capital structure management of rice farmers, focusing on internal funding and external funding. This study is anchored to SDG 1, 2, 8, 12, 15 and 17. Quantitative-descriptive research design was used in this study and employed the convenience sampling method, wherein questionnaires were used to investigate the capital structure management of rice farmers in selected Barangays in Asingan, Pangasinan, Philippines specifically Barangay Bantog, Cabalitian, and Domanpot. The results indicated that most rice farmers are late middle-aged, married males who are classified as smallholder farmers, and have an average number of dependent family members. They sometimes practice capital structure management, which shows inconsistency in its implementation. The findings further revealed that rice farmers are risk-averse yet have stable financial conditions. Based on the data, this study recommended conducting a seminar about enhancing the capital structure management of rice farmers that highlights the significance of optimizing the rice farmers' financial resources.

Keywords: *Capital Structure, Internal Funding, External Funding*

Background

Financial performance of a business is the result of its financial management. Financial Management is a decision-making process concerned with planning, acquiring, and utilizing funds to achieve the entity's desired goal. Thus, financial decisions are concerned with formulating and designing capital structure and leverage (M.E.B. Cabrera, G.A.B. Cabrera, & B.A.A. Cabrera, 2021-2022). Capital structure management is the process undertaken by an entity

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to decide how to fund its operations and investment, as mentioned by Bajaj Finserv (2023). It is a set of decisions related to the mix of financing sources that will be utilized in the entity's operation and development. Sources of financing include internal funds like retained earnings and external funds like debt.

Furthermore, based on the study entitled "Philippine Agriculture: Current State Challenges, and Ways Forward" by Briones (2021), as the population of rural areas increases, the farm sizes shrink, and productivity declines, which leads to lower income. In the same study, it was found that one of the reasons farmers' numbers are declining was due to the limited access to financing. Financing is a significant obstacle for smallholder farmers in accessing the additional inputs required to boost agricultural yields and income. These make the farmers choose to exit agriculture as this is a practical and beneficial option; this conforms with the study "Adaptation and Development Pathways for Different Types of Farmers" by Stringer et al. (2020).

Meanwhile, there is a significant problem with the financing activities of rice farmers. Specifically, they face challenges in achieving an optimal mix of debt and equity due to limited access to formal credit institutions, leaving them with unfavorable terms. Understanding the management of their capital structure provides researchers with a view of the root cause of a problem, which can be a gateway for rice farmers to have better financial sustainability and growth in their operations. Moreover, the capital structure management of rice farmers provides hindrances that need to be addressed, specifically to the chosen local of this study. Hence, this study aimed to address this gap by analyzing rice farmers' current capital structure management, which is crucial in achieving excellent financial stability.

As a result, the findings of this study specifically benefited the rice farmers by highlighting their capital structure management status. Thus, this study created new knowledge that helped farmers adopt the activities suggested to improve their financial health. Additionally, it aimed to help them make informed decisions about financing their farm. In line with this, the agricultural industry can gain knowledge that will help them develop activities to improve the farm standing in our country and reduce reliance on importation. This study created an avenue for the government and other institutions to implement or enhance existing activities to maximize the potential of the agriculture industry.

On the other hand, accountancy students and other readers benefited from this study, as it helped them understand how capital structure management applies to the agricultural industry, specifically to rice farmers. Future researchers benefited from this study, as it further opened opportunities to expand the study, specifically in relation to this agenda. This study served as a source for future studies.

Therefore, this study was justified by the urgent need to address the capital structure management of rice farmers, as this affected their lives, as they are trapped in a prison of impoverishment. Capital structure management impacted the entire rice farm operations, from efficiency to profitability to long-term sustainability. Hence, a greater emphasis on rice farmers' capital structure was necessary to increase their farms' value by improving their overall financial health and helping them move out of poverty.

Thus, the purpose of this study was to identify and measure the capital structure management of the rice farmers in Bantog, Cabalitian, and Domanpot in Asingan, Pangasinan, focusing on areas of internal and external funding. This aimed to identify the financial status of rice farmers through related financial ratios. These efforts led the researchers to formulate the proposed activities that would improve how the farmers managed their financing activities.

Finally, the researchers' interest was to seek an in-depth understanding of how capital structure management affected rice farmers. A few of the researchers came from farming families with first-hand experience with farmers' actual capital structure management. By personally witnessing the challenges faced by farmers, they were inspired by the hardships and sacrifices of the farmers to survive in their daily lives. Hence, the researchers' objective was to provide fresh insights into the field.

Methods

The researchers used a quantitative-descriptive research design to investigate the capital structure management of rice farmers. Descriptive research is a quantitative method for systematically collecting quantifiable information for statistical analysis of a population sample. This design allows the researchers to collect the target population's demographic, socioeconomic, and capital structure management practices. (Adi Bhat 2020)

The quantitative approach provides a formal, objective, and systematic process for defining and testing relationships and examining cause-and-effect interactions among variables. Statistical analysis was used to determine patterns, trends, and relationships in the data obtained, allowing a deeper understanding of rice farmers' capital structure management techniques.

Result and Discussion

Table 1. Capital Structure Management of Rice Farmers in terms of Internal Funding

Indicators	Weighted Mean	Descriptive Equivalent (DE)	Rank
1. Sell personal assets to increase personal farm capital.	1.28	Rarely Practiced	9
2. Generate additional capital through renting out land to other farmers.	1.05	Rarely Practiced	10
3. Reserve some of the profit from the previous harvest for the upcoming planting season.	3.24	Practiced	2
4. Utilize non-farming income, such as working on other farms, tricycle drivers, and construction workers, as an additional personal farm capital.	1.86	Sometimes Practiced	5
5. Avail crop insurance to avoid losses, securing capital for the next planting season.	1.68	Sometimes Practiced	6
6. Record total own capital (e.g., reserved profits and cash investments) allocated in rice farming.	2.17	Sometimes Practiced	4
7. Reserve some of the profits to acquire better tools and equipment to enhance rice farm production.	2.9	Practiced	3
8. Lease instead of buying tractors and other heavy machinery in plowing, planting, and harvesting to increase funds allocated to farm input like fertilizer.	3.86	Always Practiced	1
9. Increase personal farm capital by buying, raising, and then selling livestock such as cows.	1.63	Sometimes Practiced	7
10. 1Attend seminars like Techno Demo Farm and Support Services Training to learn how to manage the internal funds better.	1.44	Rarely Practiced	8
Average Weighted Mean	**2.11**	**Sometimes Practiced**	

For internal funding, Table 1 shows the capital structure management of rice farmers in terms of internal funding. The highest among all indicators is "Lease instead of buying tractors and other heavy machinery in plowing, planting, and harvesting to increase funds allocated to farm input like fertilizer", with a weighted average mean of 3.86 with the descriptive equivalent of "Always Practiced." Meanwhile, the indicator "Generate additional

capital through renting out land to other farmers" got the lowest average weighted mean of 1.05, described as "Rarely Practiced."

The results revealed that rice farmers consistently lease instead of buying tractors and harvester. This keeps the farmer's cost manageable, as more money is spent on fertilizers or labor. The farmers are very pragmatic with capital use and focus on cash flows rather than holding high-cost assets.

According to the study by Ullah et al. (2020), another finding is that farmers' adoption of better technology is relatively low, resulting in a significant gap between potential and actual crop productivity. This is mainly because the essential resources like land and capital are not available to farmers, and they do not have any capability of investing in advanced agricultural technologies.

Moreover, rice farmers rarely rent their land to increase their internal capital. This indicates a strong attachment to this asset or limited options for such practice. The low weighted mean is because most rice farmers in the selected area are tenants, not landowners. This is consistent with the Philippine Rice Research Institute (PhilRice) statistics, which show that only 8% of the 42% of farm owners in Pangasinan are renting their land. Rice farmer's strong attachment to their land is because it is their most valuable asset, as fully-owned land has a more significant impact on productivity than rented land (Mdoda & Gidi, 2023). However, as stated by Dr David Spies of the School of Economics; Agricultural Economics, North-West University, in an article published in 2023, not renting unused agricultural land is a missed income opportunity, as this extra income could help rice farmers cover expenses in cultivating rice. This implies a need for these rice farmers to find alternative sources of raising capital from their existing resources.

Overall, rice farmers inconsistently managed their internal funding. While reserving profits and leasing machinery are more commonly adopted, there are significant areas for improvement, like selling personal assets, recording capital, and attending training seminars.

Table 2. Capital Structure Management of Rice Farmers in terms of External Funding

Indicators	Weighted Mean	Descriptive Equivalent (DE)	Rank
1. Create plan in borrowing loans for rice farming.	2.69	Practiced	4
2. Borrow money from formal lenders like LANDBANK rather than relying on loans from family, friends, and 5-6.	1.16	Rarely Practiced	10
3. Borrow necessary farming inputs such as fertilizer, herbicide, pesticide, seeds, etc., to increase productivity.	2.42	Sometimes Practiced	5
4. Look for low-interest loans from LANDBANK or Development Bank of the Philippines for rice farming.	1.75	Sometimes Practiced	8
5. Negotiate terms and conditions with lenders before borrowing, such as asking how much interest to pay.	2.3	Sometimes Practiced	6
6. Record the borrowed money for farming rice.	2.06	Sometimes Practiced	7
7. Pay the borrowed money for rice farming on time.	2.83	Practiced	2
8. Prioritize paying borrowed money for rice farming after selling the harvested rice.	2.93	Practiced	1
9. Use the borrowed money for rice farming purposes only.	2.74	Practiced	3
10. Attend seminars to learn more about managing loans for rice farming.	1.32	Rarely Practiced	9
Average Weighted Mean	**2.22**	**Sometimes Practiced**	

For external funding, the practices of rice farmers regarding borrowing or using external funds for their operations are shown in Table 2. The result shows that "prioritize paying borrowed money for rice farming after selling the harvested rice," with a descriptive equivalent of practiced (P), had the highest weighted mean of 2.93. The statement that received the lowest weighted mean, 1.16, with the descriptive equivalent of rarely practiced (RP), was "Borrow money from formal lenders like Land Bank of the Philippines rather than relying on loans from family, friends, and 5-6." The results suggest that rice farmers know the importance of paying off loans after harvest revenue. By setting priorities, individuals may ensure they maintain good credit with lenders and can get future loans if necessary. In the study of Sanglay et al. (2021), Financial Literacy and Income Distribution of Rice Farmers, farmers have demonstrated positive behavior toward repaying their debt. However, the majority of them are low-income earners.

Given the possible legal repercussions of loan default, farmers may view borrowing from formal lenders as riskier. Therefore, rice farmers opted to go to informal lenders to finance their capital. Informal lenders, such as friends, family, or neighborhood moneylenders (5–6), could be more appealing since they provide more flexibility regarding repayment terms (Bayudan-Dacuycuy et al., 2020).

Overall, rice farmers inconsistently managed their external funding. Interest rates are the most likely factor preventing them from choosing external funding. Due to the high interest rates, farmers fear they will be unable to repay the loans.

Table 3. Average Financial Ratios of Rice Farmers

	Financial Ratios
Return on Total Assets	55%
Current Ratio	55%
Cash Turnover	2.58
Payable Turnover	0.44
Debt-to-Equity Ratio	0.35%
Debt-to-Asset Ratio	58.15%

Table 3 shows the financial status of rice farmers through financial ratios, which include return on total assets, current ratios, cash turnover, payable turnover, debt-to-equity ratio, and debt-to-asset ratio. Appendix A of this paper presents detailed results of these financial ratios.

Return on total assets is the amount generated from every peso of rice farmers' assets. The rice farmers' return on total assets per cropping was calculated at 14.68%, indicating that 0.15 pesos is generated for every peso of resources the rice farmers employed in operating their business. The lower ratio is also due to the significant amount of assets, with land being the major contributor to the high asset value. It shows that rice farmers generally efficiently turn their assets into earnings regardless of whether those assets were acquired with debt or equity.

Compared to the industry, as shown by the rice profitability indicator from the report conducted by the PSA titled 2022 Production Costs and Returns of Palay and Corn Report, this ratio is lower than the average returns of the Ilocos region of 17%. According to Kazuo's (2019) study, farmers who significantly reduced the land they used for rice farming increased their productivity, thus boosting their yield. Therefore, the high assets of the rice farmers in this study do not guarantee profitability but instead highlight inefficient utilization of their assets.

The current ratio measures the ability of the respondent's abilities to meet their short-term liabilities when they become due. The result demonstrates the current ratio of rice farmers, which amounts to 55.26%. This means that rice farmers can pay their current liabilities with their current assets in almost two croppings. This suggests that rice farmers have difficulty paying their current liabilities with

their liquid resources. Using the recommended measures from the Farm Financial Standards Council (2022), a current ratio of less than 130% indicates vulnerability, while 200% and above indicates strong liquidity.

Cash turnover is an efficiency ratio that shows the number of times cash is turned over in an accounting period. Computation shows a 2.58 turnover, indicating that rice farmers can restore their cash balance twice and a half during the period. The high cash turnover in this computation is due to the below-average cash balance of rice farmers, indicating that rice farmers are running low cash reserves that can impose risks on unexpected expenses or emergencies. This is supported by the study of Eryatna et al. (2021), wherein it was found that cash turnover does not significantly affect profitability. It indicates that the high cash turnover does not secure profits -wherein too little might hide certain opportunities and lead to undesirable liquidity problems, forcing rice farmers to sell their assets.

Payable turnover, a liquidity ratio, measures how often a company can pay its creditors over time. In the context of rice farming, it reflects how quickly farmers pay their suppliers for inputs such as seeds, fertilizers, and equipment. The results show that rice farmers have a 0.44 turnover, meaning they pay creditors about 0.44 times per cropping. This is due to favorable credit terms, cash flow problems, or the farmers' reliance on credit purchases.

A study by Y Lumoindong et al. (2021) found that most rice farmers depend on informal financial institutions. These institutions, due to their accessibility and the trust they inspire, provide favorable credit terms to farmers despite the potential warning they pose to creditors about the risk of default. The farmers continue to receive the credit due to their relationships with the creditors, such as relatives, neighbors, and co-workers. Furthermore, the data also points to a potential cash flow issue, as the lower payable turnover could result from inadequate cash flow management (Universal Funding Corporation, 2024). This implies that their credit purchases might not be settled due to insufficient cash reserves. Therefore, the 0.44 ratio could be interpreted as a red flag, indicating potential financial strains that could cause concern.

Debt-to-equity compares the owners' and creditors' ownership percentages in the operation. This ratio identifies the capital structure of the rice farmers. The result of the study shows that only 0.35% of the capital of rice farmers is financed by creditors. Indicating that rice farmers rely on their funds rather than sorting external sources. This indicates that the overall solvency of rice farmers is outstanding, as they do not have to rely on debts to fund operations. While this may imply less financial risk, it could also mean they need to take advantage of potential growth opportunities funded by external financing, significantly if borrowing could help them scale up or improve their farming operations.

As to the Farm Financial Standards Council (2022), a debt-to-equity ratio of 1.5 is considered vulnerable, and 0.43 and above indicates a strong solvency. Moreover, in Ejiogu & Ejiogu & Adikaibe (2019) study, they suggest that employing more debt can help increasing yield. The book "Assessing and Improving Your Farm Solvency" by the University of Maryland states that farmers borrow money because the returns generated exceed the interest expense of that debt; hence, the idea of leverage suggests that farmers can use their borrowed money to earn greater returns. This debt-to-equity ratio confirms the pecking order theory, a well-established financial principle where rice farmers utilize their internal funds before relying on debts, providing a solid foundation for their financial decisions.

Debt-to-assets measured the assets funded by outside sources. The computations demonstrated a 58.15% debt-to-assets, revealing that the creditors funded 58.15% of total assets. The moderately high ratio is due to the variety of results, as shown in Appendix R, where some respondents got more than 100%, indicating financial insolvency. In comparison, most got 0%, indicating no financial leverage. This indicates that some farmers are under financial insolvency - wherein they cannot meet their financial obligations, such as paying their costs. Those with 0% debt-to-assets have their assets fully financed by them. In conclusion, the

overall debt-to-asset is the result of a wide disparity of rice farmers' total assets.

The book "Assesing and Improving Your Farm Solvency" by the University of Maryland states that less than 40% of debt-to-asset is considered safe, 70% is considered risky, while 40% to 70% calls for some caution. Thus, it is important to balance the benefits of leverage against the risk involved.

Conclusion

The availability of cash influences how rice farmers utilize internal and external sources of capital. Moreover, rice farmers with higher incomes and current assets are more likely to continue growing their wealth and owning capital. Those with own land, higher total assets, and lower liabilities have the ability to secure funding from external sources.

The ratios thus indicate a risk-averse yet stable financial condition. Rice farmers have underperforming assets, resulting in inefficiencies in operations or lower-than-expected sales. Moreover, they have difficulty paying their short-term liabilities and total accounts payable with their resources. It was also found that they can restore their cash balance twice and a half during the period, but this indicates a below-average cash balance of rice farmers showing low cash reserves. Hence, they are more prone to unexpected risks. Lastly, rice farmers rely on their funds rather than seeking external sources, confirming the pecking order theory.

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References

Ababio-Twi, F. S. (n.d.). Funding strategies for smallholder rice farmers in Afadzato South District, Ghana. Retrieved October 19, 2024, from https://scholarworks.waldenu.edu/dissertations/8180

Adjognon, S., Liverpool-Tasie, L. S., & Reardon, T. (2017). Agricultural input credit in Sub-Saharan Africa. ScienceDirect. Retrieved October 20, 2024, from https://www.sciencedirect.com/science/article/pii/S0306919216303815

Afolabi, J. A. (2018). Analysis of loan acquisition and repayment among smallholder farmers in Southwestern Nigeria. Retrieved October 20, 2024, from https://d1wqtxts1xzle7.cloudfront.net/71721246/5db73d6ddb88df765285d22da28ce11c7527-libre.pdf

Agatama, F. (2021). Management services. GIC Enterprises & Co., Inc.

Agliam, J. Q., Areola, J. C., Vicencio, H. G., & Domingo, A. V. (2022). The role of farmers' tenure in securing loans: The case of the Philippines' 'Hiraman' agreement among farmers. International Journal of Advanced Engineering, Management, and Science, 8(6), 1-6. https://doi.org/10.22161/ijaems.86.1

Agricultural Credit Policy Council (ACPC). (n.d.). Kapital access for young agripreneurs (KAYA). Retrieved October 20, 2024, from https://acpc.gov.ph/kapital-access-for-young-agripreneurs-kaya/

Agricultural Credit Policy Council. (2024, February 28). Special Research Huddle: ACPC Small Farmer and Fisherfolk Indebtedness Survey (SFFIS) [Video]. Retrieved June 12, 2024, from https://rb.gy/u22x38

Agricultural Credit Policy Council (ACPC). (n.d.). Survival and recovery program. Retrieved October 20, 2024, from https://acpc.gov.ph/survival-and-recovery-program/

Akerlof, G. A. (1970). The market for “lemons”: Quality uncertainty and the market mechanism. Quarterly Journal of Economics, 84(3), 488-500. https://doi.org/10.2307/1879431

Ameh, M., & Lee, S. H. (2022). Determinants of loan acquisition and utilization among smallholder rice producers in Lagos State, Nigeria. Sustainability, 14(7), 3900. https://doi.org/10.3390/su14073900

Andersson, E., & Larsson, E. (2019). Capital investments in the presence of tenancy relations: A case study on farmers that lease land from institutional landowners. Retrieved October 18, 2024, from https://stud.epsilon.slu.se/14823/1/andersson_e_larsson_e_190816.pdf

Aulova, R., & Hlavsa, T. (n.d.). Capital structure of agricultural business and its determinants. Agricultural Economics, 152688. https://doi.org/10.22004/ag.eon.152688

Balita, C. (2024, March 26). Agriculture in the Philippines - Statistics & facts. Retrieved June 6, 2024, from https://ln.run/SdzRp

Bayudan-Dacuycuy, C., Magno-Ballesteros, M., Baje, L. K., & Ancheta, J. (2020). Towards a more sustainable financing of small farmers and fisherfolk's agricultural production. Retrieved June 22, 2024, from https://rb.gy/571nsw

Beltran, M., & Win, T. L. (2023, July 27). Filipino farmers' profits disappear, and hunger looms. Retrieved June 25, 2024, from https://rb.gy/b6dmao

Blackwell Global. (2019, February 21). Internal financing definition. Retrieved June 20, 2024, from https://ln.run/imR6Z

Brand, D., et al. (2022). Farm financial scoreboard. Retrieved November 15, 2024, from https://z.umn.edu/scorecards

Brigham, E. F., & Ehrhardt, M. C. (2019). Financial management: Theory and practice (16th ed.). Mason: South-Western Cengage Learning.

Briones, R. M. (2021, December 27). Philippine agriculture: Current state, challenges, and ways forward. Retrieved June 7, 2024, from https://ln.run/QqD1O

Cabrera, M. E. B., Cabrera, G. A. B., & Cabrera, B. A. B. (2021-2022). Financial management principles and application. GIC Enterprises & Co., Inc.

Chanco, B. (2023, February 19). Focus on farmer income. Retrieved June 12, 2024, from https://ln.run/KJtuP

Chandio, A., Jiang, Y., Gessesse, A., & Dunya, R. (2019). The nexus of agricultural credit, farm size, and technical efficiency in Sindh, Pakistan: A stochastic production frontier approach. Journal of Southern Social Sciences and Agricultural Studies, 7(3), 114-123. https://doi.org/10.1016/j.jssas.2017.11.001

Chi, C. (2023). 4 years since rice tariffication: Farmers' income per hectare shrank by 40%. Retrieved October 23, 2024, from https://www.philstar.com

Coase, R. H. (1937). The nature of the firm. Economica, 4(16), 386-405. https://doi.org/10.1111/j.1468-0335.1937.tb00002.x

Community Involved in Sustaining Agriculture. (n.d.). Financial management 101: Raising capital. Retrieved June 10, 2024, from https://ln.run/sVWqa

Cruz, B. B. D. (2023). Covid-19 hits the unsung heroes: The encountered hardships of farmers in times of pandemic. Retrieved June 22, 2024, from https://doi.org/10.29322/ijsrp.13.01.2023.p13328

Dawadi, S., Shrestha, S., & Giri, R. (2021). Mixed-methods research: A discussion on its types, challenges, and criticisms. Journal of Practical Social Economics, 2(2), 78-89. https://doi.org/10.46809/jpse.v2i2.20

Del Prado, D. (2024, July 11). Rice and corn stocks inventory, June 2024. Retrieved June 22, 2024, from https://rb.gy/gwlzxj

Delina, L. L., Fuerzas, I., Dharmiasih, W., Dulay, M. J., & Salamanca, A. (2024). Are capital assets under pressure? The state of and challenges to Indigenous rice farming in the cultural ricescapes of Indonesia and the Philippines. Journal of Rural Studies, 89, 103235. https://doi.org/10.1016/j.jrurstud.2024.103235

Department of Agriculture. (2022, April 21). Agricultural credit and financing programs. Retrieved June 12, 2024, from https://www.da.gov.ph/services/agricultural-credit-and-financing-programs/

Department of Agriculture – Agriculture Credit Policy Council & BSP Research Academy. (2024, May 3). Countryside bank survey 2022 reports higher agri loans and services. Retrieved June 12, 2024, from https://rb.gy/is26pv

Department of Agriculture – Agriculture and Fisheries Information Services. (2024, February 2). Philippines farm sector rose at faster clip in 2023 on poultry, livestock gains, record rice output. Retrieved June 30, 2024, from https://ln.run/ZDGSL

Development Bank of the Philippines (DBP). (n.d.). Expanded rice credit assistance under rice competitiveness enhancement fund (ERCA-RCEF). Retrieved October 20, 2024, from https://tinyurl.com/yc6kxu63

De Castro, N. A., et al. (2019). Responses of Filipino farmers to harsh weather phenomena: A risk perception and attitude study. Koblenz University Research Repository. https://doi.org/10.17170/kobra-20191212866

Ejogu, A., & Adikaibe, P. (2019). Socioeconomic analysis of the relationship between the socioeconomic characteristics and the leverage ratio of the rice farmers in Anambra State, Nigeria. Journal of Agricultural Economics and Development, 9(3), 34-45. Retrieved October 20, 2024, from https://tinyurl.com/34r7a227

Enjolras, G., Sanfilippo, G., & Soliwoda, M. (2021). What determines the capital structure of farms? Empirical evidence from Poland. Agricultural Finance Review, 81(3), 387-406. https://doi.org/10.1080/1406099X.2021.1972587

Eryatna, E. N., Eltivia, N., & Handayawati, K. U. (2021). The effect of cash turnover, receivable turnover, and inventory turnover towards profitability of consumer goods companies in Indonesia. Asian Economic and Financial Review, 11(8), 1140-1155. Retrieved October 20, 2024, from https://tinyurl.com/y295mkub

Fazzari, S. M., Petersen, B. C., & Hubbard, R. G. (1987). Financing constraints and corporate investment. Brookings Papers on Economic Activity, 1987(1), 141-195. https://ssrn.com/abstract=228014

Frank, M. Z., Goyal, V. K., & Shen, T. (2020). The pecking order theory of capital structure: Where do we stand? Journal of Financial Management, 49(3), 639-681. https://doi.org/10.2139/ssrn.3540610

Ghose, B., & Kabra, K. C. (2019). Firm profitability and adjustment of capital structure: Indian evidence. Global Business Review, 21(5), 1269-1283. https://doi.org/10.1177/0972262919855804

Giroud, X., Matvos, G., Seru, A., & Silva, R. (2022). Managing resource (mis)allocation. Management Science, 68(5), 3845-3873. Retrieved June 11, 2024, from https://tinyurl.com/yjtahrcz

Grubinger, V. (2024). Funding sources for farmers. Agriculture Finance, 72(4), 53-67. Retrieved June 22, 2024, from https://rb.gy/u1w23u

Havemann, T., Negra, C., & Werneck, F. (2020). Blended finance for agriculture: Exploring the constraints and possibilities of combining financial instruments for sustainable transitions. Agricultural Systems, 178, 102763. https://doi.org/10.1007/s10460-020-10131-8

Hofstrand, D., & Johanns, A. (2022, February). Building equity in your farm. Retrieved June 6, 2024, from https://ln.run/dGIoq

Jakhar, B., & Kumar, V. (2022). Lives in debt and distress: A case study on indebtedness of farmers in the dry zone of Haryana State, India. Agricultural Economics Research Review, 35(3), 98-112. https://doi.org/10.21776/ub.agrise.2022.022.3.4

Hou, B., et al. (2019). Sustainable rice farming systems: Farmer attribute and land ecosystem perspectives. International Food and Agricultural Management Review, 22(1), 20-31. https://doi.org/10.22434/IFAMR2018.0220

Jollibee. (2023, September 29). JGF, BanKo partnership provides farmers access to micro-financing. Retrieved June 12, 2024, from https://rb.gy/vpny99

Kahinga, E. (2023, May 4). Improving financial access for smallholder farmers. Retrieved June 15, 2024, from https://rb.gy/0y693t

Khanal, A., & Omobitan, O. (2020). Rural finance, capital constrained small farms, and financial performance: Findings from

a primary survey. African Journal of Agricultural Economics, 47(2), 203-215. https://doi.org/10.1017/aae.2019.45

Lagasca, G. et al. (2024). Empowering rice farmers in Nueva Ecija, Philippines: A strategic approach to boosting income through special purpose rice production. Open Journal of Economics, 14(3), 231-243. https://doi.org/10.4236/oje.2024.143012

Lam, B. T., et al. (2019). Impacts of credit access on agricultural production and rural household's welfare in northern mountains of Vietnam. Journal of Rural Development, 38(3), 189-203. Retrieved June 7, 2024, from http://journal.251news.co.in/id/eprint/1893/

Local Line. (2024). Farm record keeping tips. Retrieved October 20, 2024, from https://tinyurl.com/48e9d8xt

Lumoindong, Y., et al. (2019). Inefficiency in rice production and land use: A panel study of Japanese rice farmers. Environmental Science & Technology, 681(1), 012119. Retrieved October 23, 2024, from https://iopscience.iop.org/article/10.1088/1755-1315/681/1/012119/pdf

LAWPHiL. (n.d.). Republic Act No. 1199 – Agricultural Tenancy Act of the Philippines. Retrieved October 9, 2024, from https://lawphil.net/statutes/repacts/ra1954/ra_1199_1954.html

Lubang, S. A. A. (2020, July 16). Towards liberation from debts of Filipino farmers. Retrieved October 15, 2024, from https://ap.fftc.org.tw/article/643

Mapa, C. (2023, March 24). Fisherfolks and farmers remain to have the highest poverty incidences among the basic sectors in 2021. Philippine Statistics Authority. Retrieved June 6, 2024, from https://ln.run/erG5r

Mdoda, & Lelethu. (2023). Impact of land ownership in enhancing agricultural productivity in rural areas of Eastern Cape Province. South African Journal of Agricultural Economics, 51(2), 1553-1564. https://doi.org/10.17159/2413-3221/2023/v51n2a11553

Melendres, J. (2024). Proposed financial education program for selected rice farmers in the municipality of Bongabong. Asian International Journal of Business Studies, 4(1), 838-845. https://doi.org/10.54099/aijbs.v4i1.838

Moahid, M., & Maharjan, K. L. (2020). Factors affecting farmers' access to formal and informal credit: Evidence from rural Afghanistan. Sustainability, 12(3), 1268-1281. https://doi.org/10.3390/su12031268

Munch, D. (2022). 2022 farm profitability outlook: Production expenses up, net farm income down. Farm Financial Insights. Retrieved October 19, 2024, from https://rb.gy/7nmj8y

Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information the investors do not have. Journal of Financial Economics, 13(2), 187-221. https://ssrn.com/abstract=274547

Nassim, I., & Benraïss, B. (2024). Capital structure and financial performance of Moroccan agricultural small- and medium-sized enterprises: Moderating effects of government subsidies. Journal of Risk and Financial Management, 17(7), 256-270. https://doi.org/10.3390/jrfm17070256

National Privacy Commission. (n.d.). Republic Act No. 10173 – Data Privacy Act of 2012. Retrieved October 20, 2024, from https://privacy.gov.ph/data-privacy-act/

Ogawa, K. (2019). Inefficiency in rice production and land use: A panel study of Japanese rice farmers. Springer Link. Retrieved October 23, 2024, from https://link.springer.com/article/10.1007/s42973-019-00015-w

Palis, F. (2020). Aging Filipino rice farmers and their aspirations for their children. Asian Journal of Agriculture and Rural Development, 12(2), 22-30. https://doi.org/10.56899/149.02.10

Pedersen, M. (2022, September 23). Towards market transparency in smallholder finance. Retrieved June 6, 2024, from https://ln.run/QZ_sI

Philippine Statistics Authority. (2015). Special report – Highlights of the 2012 Census of

Agriculture (2012 CA). Retrieved October 19, 2024, from https://psa.gov.ph/content/special-report-highlights-2012

Philippine Statistics Authority. (2023). 2022 costs and returns of palay production. Retrieved October 12, 2024, from http://surl.li/semdbi

PhilSEED. (2023, September 27). Top 5 challenges faced by Filipino farmers today. Retrieved June 6, 2024, from https://ln.run/6OBWo

Prajapati, M. R., Vahoniya, D., & Lad, Y. (2020). A study on the status of farm record keeping practices among the farmers in Anand Taluka. Indian Journal of Extension Education, 56(3), 99-112. Retrieved June 16, 2024, from https://rb.gy/ko5ijr

Ra, Y. (2024). Climate resilience and sustainable agriculture: A case study in Southeast Asia. ScienceDirect. Retrieved October 20, 2024, from https://www.sciencedirect.com/science/article/pii/S2405844024089874

Raza, A., Tong, G., Sikandar, F., Erokhin, V., & Tong, Z. (2023). Financial literacy and credit accessibility of rice farmers in Pakistan: Analysis for Central Punjab and Khyber Pakhtunkhwa regions. Sustainability, 15(4), 2963-2975. https://doi.org/10.3390/su15042963

Rebojo, H., Casinillo, L., & Dargantes Jr, V. (2023). Assessing the rice production and its determinants: Empirical evidence from Albuera, Leyte, Philippines. Main Journal of Agriculture and Rural Development, 6(1), 644-654. https://doi.org/10.52006/main.v6i1.644

Roa, P. R., et al. (2022). Socio-demographic and economic status of smallholder farmers in the unbanked municipality of Sugpon, Ilocos Sur: Its implication to financial literacy training program. International Journal of Agricultural and Management Research, 9(2), 75-86. http://dx.doi.org/10.22192/ijamr.2022.09.02.002

Robinson, A. (2021). Credit purchase of farmers when purchasing farm inputs. Retrieved October 20, 2024, from https://docs.lib.purdue.edu/dissertations/AAI30641951/

Rogers, H., & Conaway, S. (2023, October 31). What is farmland equity capital?. Retrieved June 7, 2024, from https://ln.run/1Wxn5

Saliem, H. P., et al. (2024). Increasing rice farmers' income through added value and implementing a circular economy. BioConferences, 11(1), 2011-2025. https://doi.org/10.1051/bioconf/202411902011

Sanglay, P. D., et al. (2021). Financial literacy and income distribution of rice farmers. Journal of Agricultural Finance, 34(3), 732-748. https://doi.org/10.53378/348732

Savoy, C. M. (2023, February 7). Access to finance for smallholder farmers. Retrieved June 14, 2024, from https://www.csis.org/analysis/access-finance-smallholder-farmers

Shroff, J. (2022, September 28). Why smallholder farmers are central to new food security interventions. Retrieved June 6, 2024, from https://ln.run/d38bR

Skalon, T., & Plevin, J. (2024, April 16). Transforming agricultural insurance in the Philippines to help farmers cope with disasters: Three essential reform areas. Philippine Agricultural Insurance Journal, 56(4), 124-135. Retrieved June 12, 2024, from https://ln.run/qO1DG

Sothorn, Kem. (2020). The use of credit by rice farmers in Takeo. In Handbook of Rice Production, 15(2), 101-115. https://doi.org/10.1007/978-981-15-0998-8_15

Stiglitz, J., & Weiss, A. (1981). Credit rationing in markets with imperfect information. American Economic Review, 71(3), 393-410. Retrieved July 13, 2024, from https://tinyurl.com/yc5ptvv5

Stringer, L., et al. (2020). Adaptation and development pathways for different types of farmers. https://doi.org/10.1016/j.envsi.2019.10.10.007

Appendix A

SUMMARY TABLE -Financial Ratio						
RESPONDENT NO.	**RETURN ON ASSETS**	**CURRENT RATIO**	**CASH TURNOVER**	**PAYABLE TURNOVER**	**DEBT TO EQUITY**	**DEBT TO ASSETS**
1	47.00%	160.00%	1.25	0.00	85.47%	46.08%
2	40.00%	60.00%	1.67	0.43	-350.00%	140.00%
3	86.93%	0.00%	0.00	0.00	150.00%	60.00%
4	0.31%	0.00%	0.00	0.00	0.00%	0.00%
5	-0.83%	0.00%	0.00	0.00	0.00%	0.00%
6	-2.53%	0.00%	0.00	0.14	6.28%	5.91%
7	0.00%	0.00%	0.00	0.00	0.00%	0.00%
8	0.00%	0.00%	0.00	1.00	0.39%	0.39%
9	66.67%	0.00%	0.00	1.00	50.00%	33.33%
10	22.22%	0.00%	0.00	0.00	0.00%	0.00%
11	1.88%	0.00%	0.67	0.00	0.00%	0.00%
12	200.00%	0.00%	0.00	0.00	0.00%	100.00%
13	28.57%	0.00%	2.00	0.00	0.00%	0.00%
14	66.67%	100.00%	2.00	0.00	50.00%	33.33%
15	400.00%	0.00%	0.00	0.00	-150.00%	300.00%
16	0.00%	0.00%	0.00	0.00	25.00%	20.00%
17	0.00%	0.00%	0.00	0.00	0.00%	100.00%
18	0.21%	0.00%	0.00	0.00	2.48%	2.42%
19	80.00%	33.33%	4.00	0.00	150.00%	60.00%
20	33.33%	0.00%	0.00	0.00	0.00%	0.00%
21	40.00%	0.00%	0.00	0.33	150.00%	60.00%
22	0.00%	0.00%	0.00	0.00	0.00%	0.00%
23	-2.05%	0.00%	0.00	0.00	0.00%	0.00%
24	0.00%	0.00%	0.00	0.00	0.00%	0.00%
25	1.41%	60.00%	0.00	1.00	0.50%	0.50%
26	13.33%	0.00%	0.00	0.00	0.00%	0.00%
27	26.67%	0.00%	0.00	0.00	0.00%	0.00%
28	0.00%	0.00%	0.00	0.00	0.00%	0.00%
29	2.14%	0.00%	0.00	0.00	0.00%	0.00%
30	1.18%	0.00%	0.00	0.00	0.00%	0.00%
31	-66.67%	100.00%	0.00	0.00	0.00%	100.00%
32	200.00%	0.00%	0.00	0.00	0.00%	0.00%
33	0.00%	300.00%	0.00	1.00	7.14%	6.67%
34	0.00%	0.00%	0.00	0.00	-175.00%	233.33%
35	0.00%	100.00%	0.00	1.00	10.00%	9.09%
36	22.22%	0.00%	2.33	0.00	0.00%	0.00%
37	54.55%	0.00%	2.20	0.00	0.00%	0.00%
38	0.00%	100.00%	0.00	0.00	0.00%	100.00%
39	0.00%	300.00%	0.00	0.00	16.67%	14.29%

SUMMARY TABLE -Financial Ratio						
RESPONDENT NO.	**RETURN ON ASSETS**	**CURRENT RATIO**	**CASH TURNOVER**	**PAYABLE TURNOVER**	**DEBT TO EQUITY**	**DEBT TO ASSETS**
40	25.87%	0.00%	3.00	0.00	0.00%	0.00%
41	72.73%	0.00%	3.00	0.00	0.00%	0.00%
42	44.44%	0.00%	0.00	0.00	0.00%	0.00%
43	57.14%	0.00%	0.00	0.00	250.00%	71.43%
44	-40.00%	33.33%	1.00	0.00	150.00%	60.00%
45	0.00%	0.00%	0.00	0.00	0.00%	0.00%
46	-1.03%	166.67%	0.60	1.00	1.57%	1.55%
47	1.47%	0.00%	1.86	0.00	0.00%	0.00%
48	1.78%	33.33%	0.00	1.00	1.35%	1.33%
49	28.57%	0.00%	0.00	1.00	75.00%	42.86%
50	2.48%	100.00%	0.00	1.00	0.63%	0.62%
51	28.57%	100.00%	5.00	1.00	16.67%	14.29%
52	18.18%	300.00%	0.00	1.00	10.00%	9.09%
53	-200.00%	0.00%	0.00	0.00	150.00%	60.00%
54	200.00%	0.00%	0.00	1.00	0.00%	100.00%
55	28.57%	0.00%	2.33	0.00	0.00%	0.00%
56	133.33%	0.00%	0.00	0.60	-250.00%	166.67%
57	200.00%	33.33%	7.00	1.67	-150.00%	300.00%
58	0.00%	0.00%	0.00	0.60	-125.00%	500.00%
59	-0.59%	0.00%	0.00	1.00	0.60%	0.59%
60	0.00%	100.00%	0.00	0.33	-150.00%	300.00%
61	2.50%	0.00%	0.00	1.00	0.63%	0.63%
62	40.00%	0.00%	0.00	0.00	0.00%	0.00%
63	-40.00%	100.00%	0.00	1.00	25.00%	20.00%
64	0.00%	300.00%	0.00	0.33	30.00%	23.08%
65	0.00%	0.00%	0.00	0.00	0.00%	0.00%
66	0.00%	100.00%	0.00	1.00	1.17%	1.16%
67	0.62%	0.00%	0.00	0.00	0.00%	0.00%
68	-0.31%	0.00%	0.00	0.00	0.46%	0.46%
69	400.00%	0.00%	0.00	0.60	-125.00%	500.00%
70	200.00%	0.00%	0.00	0.00	0.00%	0.00%
71	0.00%	0.00%	0.00	1.00	62.50%	38.46%
72	54.55%	0.00%	0.00	0.00	10.00%	9.09%
73	51.94%	0.00%	0.00	1.00	24.96%	19.98%
74	-80.00%	0.00%	0.00	0.00	0.00%	0.00%
75	-66.67%	0.00%	0.00	1.00	50.00%	33.33%
76	-166.67%	0.00%	0.00	0.33	0.00%	100.00%
77	0.00%	0.00%	0.00	1.00	-150.00%	300.00%
78	400.00%	33.33%	7.00	1.00	-150.00%	300.00%
79	-300.00%	0.00%	0.00	0.60	-125.00%	500.00%
80	-600.00%	0.00%	0.00	1.00	-112.50%	900.00%

SUMMARY TABLE -Financial Ratio						
RESPONDENT NO.	**RETURN ON ASSETS**	**CURRENT RATIO**	**CASH TURNOVER**	**PAYABLE TURNOVER**	**DEBT TO EQUITY**	**DEBT TO ASSETS**
81	66.67%	0.00%	0.00	1.00	50.00%	33.33%
82	-900.00%	0.00%	0.00	1.00	0.00%	100.00%
83	400.00%	0.00%	0.00	1.00	0.00%	100.00%
84	4.73%	0.00%	0.00	1.00	5.63%	5.33%
85	44.44%	0.00%	0.00	1.00	50.00%	33.33%
86	70.00%	100.00%	240.00	0.20	100.00%	50.00%
87	0.00%	166.67%	0.00	0.00	150.00%	60.00%
88	0.00%	100.00%	0.00	1.00	25.00%	20.00%
89	-36.36%	0.00%	7.00	0.00	0.00%	0.00%
90	100.00%	180.00%	26.00	0.00	83.33%	45.45%
91	-57.14%	60.00%	0.00	0.20	250.00%	71.43%
92	69.23%	700.00%	0.00	0.00	8.33%	7.69%
93	1.14%	300.00%	0.00	1.00	0.15%	0.15%
94	0.00%	0.00%	0.00	0.00	0.00%	0.00%
95	-200.00%	0.00%	0.00	0.00	0.00%	0.00%
96	1.25%	0.00%	0.00	0.00	0.00%	0.00%
97	266.67%	100.00%	11.00	1.00	0.00%	100.00%
98	-1.17%	0.00%	0.00	1.00	1.79%	1.76%
99	-4.73%	60.00%	0.00	0.33	5.63%	5.33%
100	-0.78%	0.00%	0.00	0.60	1.99%	1.95%
101	-1.56%	0.00%	0.00	0.00	0.00%	0.00%
102	-2.49%	0.00%	0.00	0.00	0.00%	0.00%
103	3.68%	0.00%	0.00	1.00	1.87%	1.84%
104	-33.33%	0.00%	0.00	0.00	50.00%	33.33%
105	366.67%	33.33%	0.00	1.00	0.00%	100.00%
106	200.00%	0.00%	0.00	1.00	-150.00%	300.00%
107	77.78%	0.00%	0.00	0.00	0.00%	0.00%
108	0.00%	100.00%	0.00	1.00	0.00%	100.00%
109	36.36%	0.00%	11.00	0.00	0.00%	0.00%
110	13.33%	300.00%	0.00	0.00	3.45%	3.33%
111	0.00%	100.00%	0.00	1.00	4.19%	4.03%
112	-6.67%	0.00%	1.18	0.00	0.00%	0.00%
113	350.07%	0.00%	0.00	0.83	-600.00%	120.00%
114	-36.36%	0.00%	0.00	0.00	0.00%	0.00%
115	-22.22%	0.00%	0.00	1.00	50.00%	33.33%
116	-22.22%	100.00%	1.00	1.00	50.00%	33.33%
117	-180.00%	0.00%	0.00	1.00	150.00%	60.00%
118	0.00%	0.00%	0.00	1.00	50.00%	33.33%
119	-15.38%	0.00%	0.00	1.00	30.00%	23.08%
120	-45.45%	0.00%	0.00	1.00	37.50%	27.27%
121	-100.00%	0.00%	0.00	1.00	250.00%	71.43%

SUMMARY TABLE -Financial Ratio						
RESPONDENT NO.	**RETURN ON ASSETS**	**CURRENT RATIO**	**CASH TURNOVER**	**PAYABLE TURNOVER**	**DEBT TO EQUITY**	**DEBT TO ASSETS**
122	0.32%	0.00%	1.86	0.00	0.00%	0.00%
123	-27.27%	0.00%	0.00	1.00	37.50%	27.27%
124	0.00%	0.00%	0.00	1.00	-100.00%	0.00%
125	0.00%	0.00%	0.00	1.67	-150.00%	300.00%
126	46.15%	0.00%	17.00	0.00	0.00%	0.00%
127	0.20%	0.00%	4.33	0.00	0.00%	0.00%
128	333.33%	9.09%	0.00	0.50	-200.00%	200.00%
129	0.20%	0.00%	3.00	0.00	0.00%	0.00%
130	0.66%	0.00%	1.50	0.00	0.00%	0.00%
131	0.19%	0.00%	3.00	0.00	0.00%	0.00%
132	-0.20%	14.29%	9.00	0.71	0.70%	0.70%
133	-700.00%	0.00%	0.00	1.00	-116.67%	700.00%
134	69.77%	0.00%	2.00	0.00	0.00%	0.00%
135	-500.00%	0.00%	0.00	1.00	0.00%	100.00%
136	-53.85%	0.00%	0.00	0.00	0.00%	0.00%
137	0.00%	0.00%	0.00	1.00	125.00%	55.56%
138	0.00%	100.00%	0.00	1.00	4.19%	4.03%
139	70.32%	237.50%	4.30	0.00	39.14%	28.13%
140	43.92%	500.00%	0.00	1.00	3.50%	3.38%
141	0.00%	33.33%	0.00	1.00	-150.00%	300.00%
142	0.00%	366.67%	0.00	2.33	25.00%	20.00%
143	0.00%	33.33%	0.00	0.33	-150.00%	300.00%
144	9.90%	366.67%	15.00	1.00	8.02%	7.43%
145	0.00%	100.00%	0.00	0.33	0.75%	0.74%
146	0.20%	100.00%	1.00	1.00	0.70%	0.70%
147	36.36%	0.00%	0.00	0.60	83.33%	45.45%
148	260.00%	71.43%	4.00	0.43	-350.00%	140.00%
149	-66.67%	100.00%	0.33	1.00	0.00%	100.00%
150	0.00%	0.00%	0.00	1.00	-100.00%	0.00%
151	233.33%	0.00%	0.00	0.00	0.00%	0.00%
152	15.38%	0.00%	0.00	0.00	0.00%	0.00%
153	30.77%	0.00%	0.00	0.00	0.00%	0.00%
154	63.64%	185.71%	1.54	1.00	175.00%	63.64%
155	0.00%	100.00%	0.00	0.00	50.00%	33.33%
156	-30.67%	0.00%	0.00	0.14	75.27%	42.94%
157	0.00%	71.43%	0.00	0.56	37.48%	27.26%
158	0.94%	0.00%	0.00	1.00	0.71%	0.70%
159	0.00%	60.00%	0.00	0.20	1.43%	1.41%
160	0.00%	0.00%	0.00	0.00	0.00%	100.00%
161	-21.28%	122.22%	0.00	0.33	23.68%	19.15%
162	66.67%	100.00%	5.00	1.00	50.00%	33.33%

SUMMARY TABLE -Financial Ratio						
RESPONDENT NO.	**RETURN ON ASSETS**	**CURRENT RATIO**	**CASH TURNOVER**	**PAYABLE TURNOVER**	**DEBT TO EQUITY**	**DEBT TO ASSETS**
163	5.17%	0.00%	3.67	0.00	0.00%	0.00%
164	2.19%	300.00%	3.67	0.00	0.27%	0.27%
165	0.00%	0.00%	0.00	0.00	0.00%	0.00%
166	2.07%	0.00%	0.00	0.00	0.00%	0.00%
167	15.38%	0.00%	1.22	0.00	0.00%	0.00%
168	-45.45%	122.22%	0.00	0.00	450.00%	81.82%
169	-80.00%	500.00%	0.00	0.00	25.00%	20.00%
170	10.53%	71.43%	0.00	0.14	58.33%	36.84%
171	0.00%	100.00%	0.00	1.00	0.00%	100.00%
172	-0.16%	0.00%	0.00	0.00	0.00%	0.00%
173	350.07%	0.00%	0.00	0.83	-600.00%	120.00%
174	-36.36%	0.00%	0.00	0.00	0.00%	0.00%
175	6.67%	100.00%	0.00	0.00	3.45%	3.33%
176	0.00%	100.00%	0.00	1.00	0.00%	100.00%
177	44.44%	100.00%	0.00	0.43	350.00%	77.78%
178	114.29%	500.00%	3.67	1.00	16.67%	14.29%
179	28.57%	100.00%	7.00	0.33	75.00%	42.86%
180	44.44%	60.00%	13.00	0.60	125.00%	55.56%
181	30.77%	100.00%	0.00	0.60	62.50%	38.46%
182	22.22%	0.00%	0.00	0.00	0.00%	0.00%
183	0.00%	0.00%	0.00	1.00	50.00%	33.33%
184	18.18%	100.00%	11.00	0.33	37.50%	27.27%
185	0.00%	0.00%	0.00	0.00	0.00%	0.00%
186	40.00%	71.43%	13.00	0.14	-350.00%	140.00%
187	36.36%	300.00%	0.00	1.00	10.00%	9.09%
188	0.00%	0.00%	0.00	0.00	0.00%	0.00%
189	15.38%	33.33%	15.00	0.43	116.67%	53.85%
AVERAGE	14.68%	55.26%	2.58	0.44	0.35%	58.15%