Nepal Journal of Multidisciplinary Research (NJMR)
Vol. 5, No.3 , Special Issue 2022. Pages: 119-126
ISSN: 2645-8470 (Print), ISSN: 2705-4691 (Online)
(Conference Proceedings of ICMDS-2022)
DOI: https://doi.org/10.3126/njmr.v5i3.48827

Fund Transfer Pricing: An Empirical Evidence from Nepalese Commercial Banks

Raju Bhai Manandhar
raju.pyc@gmail.com
Ph.D. Scholar, Tribhuvan University, Faculty of Management

Abstract

Funds Transfer Pricing (FTP) is considered the most potent and valuable component of any profitability measurement system for financial institutions. It is a process that assigns funding costs to asset originators (loans) and funding credits to liability providers (deposits). The study's objective was to measure the awareness and collect opinions regarding FTP practice in Nepal based on a survey of the opinions of branch managers of Nepalese Commercial Banks. The study followed a descriptive research design. All branch managers of Nepalese commercial banks were considered population, of which 40 branch managers were sampled using the purposive sampling technique. The branch managers were interviewed through personal meetings and telephone using structured open-ended questions to have information regarding the attitude of practitioners on the FTP system. Data has been analyzed based on one-to-one interviews. The study reveals that only 25 branch managers were found to have enough awareness of the FTP system. Thus, further study was focused on 25 branch managers. Negative responses were found regarding the possibility of an independent negotiated FTP system among branches. In conclusion, the practice of advanced FTP systems results in higher productivity among branches, so Nepalese managers should reasonably know about the FTP system.

Keywords: Commercial Banks, Funds Transfer Pricing (FTP), Operational Variables, Performance Measures

Introduction

Funds transfer pricing (FTP) has been a hot topic in branch performance measurement for the last two decades. Dimitriu and Oaca (2010) have explored that FTP as an analysis tool that can help a bank measure its profitability in various ways. FTP is relevant for measuring the

ISSN: 2645-8470 (Print), ISSN: 2705-4691 (Online)
(Conference Proceedings of ICMDS-2022)
DOI: https://doi.org/10.3126/njmr.v5i3.48827

financial performance of business units as the literature regarding financial services often investigates the link between operational variables and performance measures with a discussion of which business units are efficient (Elliot, 2018; Krishnan et al., 1999). FTP systems are a new research issue; however, many researchers and practicing managers have published some research to address the problems and prospects of FTP. FTP is an essential managerial tool used within the banking industry (Convery, 2003). FTP will help increase a bank's ability to monitor and improve its net interest margin when implemented and used effectively (Tumasyan, 2000). This distortion happens because the business unit short of funds will record a higher financial performance. In contrast, the business unit with excess funds will record a lower financial performance (Bicudo de Castro, 2014).

The FTP system assists management in comparing the profitability of various product lines and business units within the company. It can be further drilled to compare individual employee performance. It is beneficial for comparing branches (Shih, Crandon & Wofford, 2000). The matching contribution was from Burucs (2008), Bowers (2006), Kocakulah (2004), etc. Kugiel (2009) has highlighted the significance of the FTP system in managing bank liquidity and interest rate risk. Research by Burucs (2008), Kocakulah (2004), Bowers (2006), Mudurapperuma (2008), Acharya and Merrouche (2008), etc., has argued that advanced pooling with matched maturity method is the most appropriate method of FTP to neutralize interest rate and liquidity risk.

Grant (2011) found that the average cost approach to Liquidity Transfer Price (LTP) is simple but has two major defects. First, it neglects the varying maturity of assets and liabilities by applying a single charge for the use and benefit of funds. Second, it lags changes in banks' actual market cost of funding. It is more complicated than the pooled average cost of funds method, but it has several significant advantages. First, it recognizes that the costs and benefits of liquidity are related to asset and liability maturities. Second, it recognizes the significance of market conditions changing quickly and efficiently. Kocakulah (2004) and Burucs (2008) argue that transfer pricing can help to measure and compare branch profitability. Banks' branches are rarely the same in terms of loans and deposits, and some branches are rich on the loan side, while others are rich on the deposit side or are pretty balanced.

Management must be cautious when looking at the spread of economic factors in different areas beyond the branch manager's control. FTP allows for easier comparisons between branches, but other factors must be considered, as with all management tools (Mudurapperuma, 2008). Practitioners have discussed FTP from financial institutions (Kawano, 2005; Kocakulah & Egler, 2006), organizations such as SAP (Levey, 2008), PwC (Tumasyan, 2012), Deloitte (Peters et al., 2015), and government bodies (Grant, 2011; Rime, Schrimpf, & Syrstad, 2017). Given the increasing relevance of liquidity analysis, FTP is discussed in the finance literature

Nepal Journal of Multidisciplinary Research (NJMR)
Vol. 5, No.3 , Special Issue 2022. Pages: 119-126
ISSN: 2645-8470 (Print), ISSN: 2705-4691 (Online)
(Conference Proceedings of ICMDS-2022)
DOI: https://doi.org/10.3126/njmr.v5i3.48827

(Grant, 2011; La Ganga & Trevisan, 2010; Rime et al., 2017), and the viewpoint of FTP for management accountants is briefly discussed in practitioners' publications such as Rice and Kocakulah (2004) and Bicudo de Castro (2014).

However, determining the true profitability of a branch is difficult. Using the FTP system will charge a cost of funds to all the loans each branch has and will give a funding credit to all deposits each branch has (Deventer, 2002). Nepal's context has not given much more attention to addressing and applying the FTP approach. The Nepalese banking industry has suffered a credit crunch for the last five years. Bajracharya et al. (2012) indicated that the sample commercial banks did not significantly implement the advance FTP method, i.e., advance pooling with matched maturity. It has shaken the banking world, forcing the whole industry to concentrate more on potential losses than forgone income. The present study carries the following objectives:

- To analyze the branch managers' awareness of the FTP system in Nepalese commercial banks.
- To examine branch managers' attitudes towards the available transfer pricing mechanism method.
- To analyze the possibility of using independent inter-branch negotiated transfer price and its consequences.

Research Method

This study was carried out using a descriptive research design with an opinion survey among branch managers having enough knowledge of the FTP system. All branch managers of Nepalese commercial banks were considered population, of which 40 branch managers within Kathmandu valley were sampled using the purposive sampling technique. The branch managers were interviewed through personal meetings and telephone using structured open-ended questions to have information regarding the attitude of practitioners on the FTP system. Finally, data has been analyzed based on the outputs of one-to-one interviews.

Result and Discussions of the Study

Out of the 40 respondents surveyed, only 25, i.e., 62.5 %, were aware of the FTP system implemented in their bank. While evaluating the branches, various criteria can be applied, and the six alternative criteria were identified. Among six alternatives, most respondents considered branch profitability a significant criterion for measuring branch performance. The second and third ranked criteria were 'target achievement' and 'non-performing assets,' respectively. FTP is an essential managerial tool used within the banking industry (Convery, 2003). FTP provides a quantitative means to measure customer profitability and should be used in the performance evaluations of branches and business units. When implemented and used effectively, FTP will help increase a bank's ability to monitor and improve its net interest margin (Tumasyan, 2000).

Nepal Journal of Multidisciplinary Research (NJMR)
Vol. 5, No.3 , Special Issue 2022. Pages: 119-126
ISSN: 2645-8470 (Print), ISSN: 2705-4691 (Online)
(Conference Proceedings of ICMDS-2022)
DOI: https://doi.org/10.3126/njmr.v5i3.48827

The study revealed that of 25 respondents who were aware of the FTP system, 90% gave their opinion on the need for the FTP system in the bank. In their interviews, they claimed that a fund transfer pricing system was necessary to manage any significant financial institution successfully. All commercial banks should implement one of the FTP methodologies to improve their performance management abilities to achieve sustainable profits. FTP was the best tool for allocating and analyzing net interest income, the most significant component of a bank's profits. They added that the FTP system was fundamental for financial institutions, and no bank could be well-managed without possessing some transfer pricing system. 95.45% of respondents gave an opinion on the net interest income sharing to both net fund generator and user. It showed the importance of the FTP system in a commercial bank and how respondents took it. 3.41% of respondents gave an opinion on fund generators. They argued that funding is the main factor of operating a bank, and branches are not allowed to make decisions on loans and advances; head office decides on it. Therefore, the head office should bear credit risk. The remaining respondent said not ideal.

As has been analyzed on the opinions of respondents, 1st, 2nd, 3rd, 4th, 5th, and 6th ranked benefits observed were: allowing calculating a cost of funds and applying them as a price to all internal sources and uses of funds, allows planning, motivation, and evaluation of management performance based on a fair appraisal of results, branches will be effective and efficient, allows the transfer of interest rate and liquidity risk to a central unit responsible for its management. The 6th ranked benefit was ‘it prices marginal cost of funds to improve business decision making.

However, respondents added some more benefits to the FTP system. During telephone interviews, some respondents thought various FTP methodologies provided different advantages. Overall the survey and discussion conclude that fund transfer pricing provides the following benefits:

- Enhance deep analysis of interest income by product, branch, business line, transaction, etc.
- Helps management of market risk through assets and liabilities management
- Interest income decomposition improves product pricing and tailoring the product offer to various needs
- Facilitates minimizing interest margin fluctuations due to market rate changes.
- Permits removing interest rate risk from sales divisions by setting a fixed margin on transactions, leaving only customer's credit risk

Nepal Journal of Multidisciplinary Research (NJMR)
Vol. 5, No.3 , Special Issue 2022. Pages: 119-126
ISSN: 2645-8470 (Print), ISSN: 2705-4691 (Online)
(Conference Proceedings of ICMDS-2022)
DOI: https://doi.org/10.3126/njmr.v5i3.48827

Regarding the opinion on the authority/responsibility of setting the FTP rate, most respondents, i.e., 77.31%, gave the opinion that ALCO should determine the FTP rate. 19.69% of respondents gave an opinion on setting the FTP rate through the bargaining between the fund provider and receiver branch. Similarly, 4.54% of respondents gave opinions on the Fund provider branch, and the remaining 3% of respondents gave voted for the treasury department.

At times, business units can agree to carry out specific deals between two units at negotiated transfer prices. Both deposit collecting and lending branches will make a strategic decision to maximize their profit, ultimately resulting in a positive effect on the bank's overall profitability. Therefore, a possibility was searched from the opinion of respondents. Respondents were asked to give their opinion on the possibility of practicing independent inter-branch interest rates (IBR). 61.36% of the respondents gave an opinion on no possibility of practicing an independent inter-branch interest rate. They argued that giving authority to decide IBR to branch would result in excessive competition among branches; branches would not be able to utilize funds effectively.

Further, planning and controlling overall banking would be complex, and complexity would exist in the Any Branch Banking (ABB) system of the bank. The 30.09% of respondents provided their views on the possibility of practicing an independent inter-branch interest rate. They believed that giving authority to the branches makes them competent and able to maximize profit. Branches were motivated to maximize their profit by efficiently collecting deposits and lending along with non-funded business activities. The 4.55% of respondents did not have an idea and gave no opinion.

Out of the 25 respondents, 60% disagree that an independent FTP system would positively affect branch efficiency. Of the remaining respondents, 25% agreed with it, 12% strongly agreed, and 3% did not agree. Still, opinion on independent FTP systems, i.e., allowing branches to make decisions on the FTP system they like to practice, was obtained. The respondents were asked to give an opinion on the positive effect of an independent FTP system on branch efficiency on the Likert scale. As discussed in the conceptual review Section, it may be prudent to credit the funding center for the benefits the assets provided. Using this adjustment depends upon the mix of assets and liabilities. So, the appropriate FTP method will give the right branches credit for the net interest income. There are various methods developed for fund transfer pricing. The literature review assessed a straightforward concept and the pros and cons of each method. However, an opinion survey was done on the fund's transfer pricing methods. Respondents were asked which method was appropriate for practice in the sampled industry.

Nepal Journal of Multidisciplinary Research (NJMR)
Vol. 5, No.3 , Special Issue 2022. Pages: 119-126
ISSN: 2645-8470 (Print), ISSN: 2705-4691 (Online)
(Conference Proceedings of ICMDS-2022)
DOI: https://doi.org/10.3126/njmr.v5i3.48827

Out of the 25 respondents, 68.88% gave an opinion on pooling funds with variable rates as an appropriate method to be implemented. The second most popular approach was the Pay-on-the-net method with a variable rate with a vote of 18.12 % of respondents. Similarly, 8.5% of respondents gave an opinion on advance pooling with matched maturity. Only 4.5% of respondents each gave an opinion on pooling funds with a dual-rate and the Pay-on-the-net method with a dual-rate as a suitable method of FTP. Bajracharya et al. (2012) indicated that the sample commercial banks did not significantly implement the advance FTP method, i.e., advance pooling with matched maturity. In the observation of 16 commercial banks, no banks were found implementing advance pooling with a matched maturity FTP system. But what could be why not implementing advanced pooling with matched maturity? Opinions were surveyed to know the reasons for not using the advanced method of FTD. Respondents listed ‘unaware of FTP system’ as the most significant reason for not implementing advance pooling with matched maturity. The second significant reason was ‘unwillingness to use FTP.’ The other 3rd, 4th, 5th, and 6th reasons are requiring a skilled workforce, which is currently lacking in Nepal, Incurs higher costs to use sophisticated FTP, other miscellaneous reasons, and FTP is not taken to be an appropriate measure of branch profitability, respectively according to their mean values.

Conclusion

Effective separation of any components related to interest and liquidity risk from those related to bank customers can be facilitated through implementing FTP. This separation allows profit centers to access and manage their risks and income more effectively. With the knowledge of the FTP system, a branch manager understands how its branch profitability is measured and what factor contributes to its profitability. The lack of awareness and adequate knowledge of the branch manager is due to the lack of broader application of the FTP system in the branches. Regarding the independent inter-branch FTP practices, the result of the opinion survey could not accept the minority of respondents who believed in the positive effect of practicing an independent FTP system. Overall, banks need to employ one of the FTP methods to analyze contributions to overall interest profit and to control and evaluate business results. The lack of a proper FTP system negatively influences a bank's overall profits and deteriorates the quality of risk control. But, the practice of the FTP system will be more effective if the head knows of business units. Hence, further research on the FTP system and enhancing knowledge of the FTP system among the branch managers are suggested.

Nepal Journal of Multidisciplinary Research (NJMR)
Vol. 5, No.3 , Special Issue 2022. Pages: 119-126
ISSN: 2645-8470 (Print), ISSN: 2705-4691 (Online)
(Conference Proceedings of ICMDS-2022)
DOI: https://doi.org/10.3126/njmr.v5i3.48827

References

Acharya, V. V., & Merrouche, O. (2008). Precautionary Hoarding of Liquidity and Inter-Bank Markets: Evidence from the Sub-prime Crisis. Retrieved from Emeraldinsight.com.

Bajracharya, P., Ojha, K. P., Goet, J., Sharma, S. & Gautam, C. M. (2010). *Managerial Accounting*: Nepalese Perspective. (2nd ed.) Kathmandu: Asmita Books Publishers and Distributors.

Bicudo de Castro, V., (2014), "Using Fund Transfer Pricing for Comparing Financial Performance among Business Units*", Journal of Performance Management, 25* (3), 11-21.

Bowers, T. (2006). Transfer Pricing Indeterminate-Maturity Deposits. *Journal of Performance Management 19*, (1) 26-44.

Dermine, Jean (2012). Fund Transfer Pricing, Beyond the Global Banking Crisis, in Asset and Liability Management for Financial Institutions: *Balancing Financial Stability with Strategic Objectives.* London: Bloomsbury.

Deventer, D. (2002). Transfe Pricing Systems Design: *Building clarity in the responsibility for and measurement of risk.* Kamakura Corporation.

Dimitriu, M. C., & Oaca, S. C. (2010). Funds Transfer Pricing in Banking. *Economia*. Seria Management , 13 (1), 119-127.

Elliot, V., (2018), Funds Transfer Pricing in Swedish Savings Banks: *An Exploratory Survey Scandinavian Journal of Management, 34*(3), 289-302.

Grant, J., (2011), "Liquidity Transfer Pricing: A Guide to Better Practice", *Financial Stability Institute* (FSI) Occasional 10, 1-58,

Kawano, R. (2005). Funds Tansfer Pricing. *Journal of Performance Measurement 18* (2), 35-43.

Kocakulah, M. (2004). Funds Transfer Pricing: A Management Accounting Approach within the Banking Industry. *Journal of Performance Management*, *17* (2), 22- 29.

Kocakulah, M.. & Egler, M. (2006). Funds Tranfer Pricing: How to Measure Branch Profitabiltiy. *Journal of Perfomance Measurement 19* (1) 45-56.

Krishnan, M. S., Ramaswamy, V., Meyer, M. C. and Damien, P., (1999), "Customer Satisfaction for Financial Services: The Role of Products, Services, and Information Technology", *Management Science, 45*(9), 1194-1209.

Kugiel, L. (2009), Fund Tranfer Pricing in a Commercial Bank. *A thesis submitted for the partial fulfillment of MSC in Finance and International Business*, Aarhus School of Business.

La Ganga, P. and Trevisan, G., (2010), "Towards a new framework for liquidity risk", *CAREFIN Research Paper No.* 08/10,

Levey, K., (2008), "Beyond Funds Transfer Pricing to Actionable Decision-Making", *Journal of Performance Management*, *21* (1), 10-21.

Nepal Journal of Multidisciplinary Research (NJMR)
Vol. 5, No.3 , Special Issue 2022. Pages: 119-126
ISSN: 2645-8470 (Print), ISSN: 2705-4691 (Online)
(Conference Proceedings of ICMDS-2022)
DOI: https://doi.org/10.3126/njmr.v5i3.48827

Madurapperuma, A. (2008), Internal Transfer Pricing: *A means of Rational Resource Allocation in Banks.* 20th Anniversary Convention. Columbo: Seylan Bank .

Peters, J. P., Duchesne, A. and Slabari, O., (2015), "Funds Transfer Pricing: A Gateway to Enhanced Business Performance", *Inside* 7, 48-55,

Rime, D., Schrimpf, A. and Syrstad, O., (2017), "Segmented Money Markets and Covered Interest Parity Arbitrage", *Bank for International Settlements (BIS) Working Paper No. 651*, 1-76.

Shih, A.; Crandon, D. & Wofford, S. (2000). Transfer pricing: Pitfalls in using multiple benchmark yields curves. *Journal of Bank Cost & Management* .

Shih, Andre; Crandon, D., & Wofford, S. (2004). Tranfer Pricing: Pitfalls in using multiple benchmark yield curves. *Journal of Performance Managment*, *17*(2), 45- 52.

Tumasyan, Hovik. (2000). RAPM, Funds Transfer Pricing and Risk Capital. *Journal Services* .

Tumasyan, H., (2012), "Revisiting Funds Transfer Pricing", available at: https://ssrn.com/abstract=2257081 [Accessed 18 December 2019].