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Effect of NPA (non performing assets) on bank profitability

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I. INTRODUCTION

After the first phase of economic liberalization in 1991, the Indian sector underwent radical changes, accompanied by credit management. While the primary function of banks is to lend funds as loans to different sectors such as farming, industry, personal loans, housing loans etc. in recent times the banks have become very cautious in extending loans. Post reform era has changed the whole structure of banking sector of India.

The rising competition has resulted in new challenges for the Indian banks. Therefore, parameters for evaluating the performance of banks have also changed. Non-performing assets are unnecessary burden for each banking industry.

The success of banks depends upon methods of managing NPAs and keeping them within acceptance level. Hence, to change the curve of NPAs, there is only one technique that an effective monitoring and control policy should be planned and executed which is aided by proper legal reforms.

Reasons being non-performing assets (NPAs) An NPA are defined as a loan asset, which has ceased to generate any income for a bank whether in the form of interest or principal repayment. As per the prudential norms suggested by the Reserve Bank of India (RBI), a bank cannot book interest on an NPA on accrual basis.

In other words, such interests can be booked only when it has been actually expected. Therefore, this has become what is called as important performance is of the banking sector as the level of NPAs affects the profitability of a bank.

Non-performing assets are almost always an certain liability in the banking industry. The methods used to handle non-performing assets (NPAs) and hold them within the necessary amount are vital to the bank achievement.

As a result, the only way to regulate the amount of NPAs in banks is to prepare and implement an efficient monitoring and control policy that is backed up by proper legal reforms NPA (non-performing assets Banking business is mainly that of borrow from the public and lending it to the needy persons and business at a premium.

Lending of money involves a credit risk. When the loans and advances made by banks or financial institutions turn out as non - productive, non- rewarding and non – remunerative, they become Non-Performing Assets (NPA).

According to SARFAESI 2002, NPA is an asset or account of a borrower, which is classified by a bank or financial institution as sub-standard asset, doubtful asset and loss asset. The definition of an NPA as given by RBI and its various categories is as under: An asset, including a leased asset, becomes non-performing when it ceases to generate income for the bank.

1.1History of banks

HDFC Bank Limited:

HDFC Bank Limited is an Indian banking and financial services company headquartered in Mumbai, Maharashtra. It employs 90,421 people and has offices in Bahrain, Hong Kong and Dubai.
HDFC Bank is India's second largest private lender in assets. As of December 31, 2016, the bank's distribution network consists of 4,555 branches and 12,087 ATMs in 2,597 cities.

ICICI Bank:

ICICI Bank (Industrial Credit and Investment Corporation of India) is an Indian multinational banking and financial services company headquartered in Mumbai, Maharashtra, India, with a registered office in Baddara. It is India's largest bank in terms of assets and the third largest bank by market capitalization.

We provide a wide range of banking products and financial services to our corporate and individual clients through a variety of distribution channels and specialized subsidiaries in investment banking, life and property insurance, venture capital and wealth management. The bank has

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4,450 branches and a network of 14,404 ATMs in India and is based in 19 countries including India.

ICICI was founded in 1955 under the leadership of the World Bank, the Government of India, and representatives of the Indian industry.

The principal objective was to create a development financial institution for providing medium-term and long-term project financing to Indian businesses.

By the late 1980s, ICICI had long-term funding for various industrial projects, with a focus primarily on project finance.

With the liberalization of India's financial sector in the 1990s, ICICI transformed its business from a developmental financial institution that provides only project finance to a diverse financial institution services provider that, along with its subsidiaries and other group companies, offered a wide variety of products and services.

As India's economy became more market-oriented and integrated with the global economy, ICICI took advantage of new opportunities to offer a wider range of financial products and services to a wider range of customers. ICICI Bank was established in 1994 as part of the ICICI Group.
In 1999, ICICI became the first Indian company listed on the New York Stock Exchange and the first bank or financial institution from Asia other than Japan.

State Bank of India:

State Bank of India (SBI) is a multinational public sector banking and financial services company in India. A state-owned enterprise headquartered in Mumbai, Maharashtra. Banktraces its ancestry to British India via the Imperial Bank of India, which was founded in 1806 and became the oldest commercial bank in the Indian subcontinent.

Madras Bank merged with two other "Presidential Banks" of British India, Calcutta Bank and Bombay Bank, to form the State Bank of India in 1955.

As of 2016-17, it had assets of 30.72 trillion (US$460 billion) and more than 14,000 branches, including 191 foreign offices spread across 36 countries, making it the largest banking and financial services company in India by assets.

SBI History:

State Bank of India (SBI) is a multinational public sector banking and financial services company in India. Mandated by law, the headquarters is in Mumbai. With SBI's rich history and over 200 years of heritage, SBI has become the most trusted Indian bank for generations to come.

SBI is the largest bank in India, serving more than 44 million customers in our country. This article describes the history, facts, and recent updates of SBI.

History of State Bank of India

i) The origin of the State Bank of India goes back to the establishment of the Bank of Calcutta in Calcutta on 2 June 1806.
ii) Three years later the bank received its charter and was re-designed as the Bank of Bengal (2 January 1809).
iii) It was the first joint-stock bank of British India sponsored by the Government of Bengal. Bank of Bombay (April 15, 1840) and Madras Bank (July 1, 1843) were the successors to Bengal Bank.
iv) These three banks remained at the apex of modern banking in India till their amalgamation as the Imperial Bank of India on 27 January 1921.
v) When India gained freedom, the Imperial Bank had a capital base of Rs.11.85 (including reserves), a deposit of Rs.275.14 and a down payment, respectively.
vi) The All India Regional Credit Investigation Commission recommended the establishment of a state-sponsored and state-sponsored bank through the acquisition of the Imperial Bank of India. Therefore, the law was passed by Parliament in May 1955 and the State Bank of India was established on July 1, 1955.
vii) The State Bank of India (Subsidiary Bank) Act was subsequently passed in 1959, allowing the State Bank of India to acquire eight former state-owned banks as subsidiaries (later referred to as affiliates).

1.2Gross NPA:

The total NPA is the outstanding amount of the borrower's account on the bank's books, excluding interest, is recorded and is not charged to the borrower's account.
The total NPA is the outstanding amount of the borrower's account on the bank's books, excluding interest, is recorded and is not charged to the borrower's account.

1.3 NET NPA:

The Net NPA is the total amount of Gross NPA less (1) the interest change to borrower and uncovered and not recognized as income and kept

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in interest suspense (2) amount of provisions held in respect of NPA and (3) amount of maintain received and not appropriated.

What is Net Worth?

Every Company has its own personal assets such as office buildings, factory equipment, etc., and other investments. Apart from the property they even have some long-term debts such as loans to be repaid.
Therefore the difference between the assets held by the company and the Debt owed is known as the company's Net WorthRepresents the total amount of the company.

Where do I get Net Worth?

As the total amount is the value of the company obtained after deducting the company's assets and the debt we owe.
So in the Balance Sheet, you can find Shareholders Equally under the Equity and Liability category as we represent the Company's Net Worth.

Why Net Worth is Important?

Net Worth represents the Company's total value. It helps to create an investment plan for the future and it helps to set a company's financial goal.
As it provides an overview of the company's financial strength and indicates whether the company is in a position to make CAPEX or not.
How much the company total is basically indicating the suitability of the company?
Investors and shareholders calculate the amount of Refunds on the Net to get an idea of the Company's value.

1.4 What is Return on Net Worth?

Return of total value reflects the company's profitability by providing an indication of how much return it receives on its capital. It shows whether the company is efficient enough to grow its network every year so that it can grow the company in the future.

The high rate indicates that the company is using the shareholders' money effectively.
On the other hand, the low rate indicates that the company is not spending money well. It is not a matter of investing in a good opportunity.

Net Worth Formula:

The net worth formula is the division of Net income by Net Worth. This is calculated at the year-end when annual reports are available.

Return on Net Worth:-Net Income \Net Worth

II. REVIEW OF LITERATURE

2.1Introduction

NPA is a serious problem for the banking sector, and many authors have sought to investigate the reasons for NPA, the problems caused by NPA, and the impact of NPA on the banking sector. He also came up with solutions and solutions to the growing NPA problems.

A large number of papers have been written and reviewed, and this part of this paper outlines all papers available in the same area of distressed assets of public sector banks, private sector banks, and other banks. I'm trying to explain. This survey conducted a survey of existing papers, articles, journals, and reports from time to time by various authors, groups, and committees.

Kumar ashish (2021) impact on non-profit assets: a study of private and public sector banks in india. According to the paper, the State Bank of India (SBI) and HDFC bank have been compared. The result clarifies that the Results indicate that NPA provisions have an impact on the overall profitability of banks and if the provision of bad credit is added to the overall profitability of public sector banks, they could be of great benefit.

WadhwaRitu (2020): The NPA's Impact on Bank Profitability, this study seeks to analyze the impact of key financial heads on the NPA of banks and to advise on the effective management of NPAs. According to this RBI data sheet, 5 banks with the highest NPAs were taken to conduct research from 2014-2015 to 2018-2019. In this paper read the correlation analysis to calculate the relationship between profit balance with NPAs and multiple retrospective analyses to determine the impact of key financial heads on NPAs.

Ramaswamy altogether (2020): This paper attempts to analyze the impact of a few key financial heads on NPA banks and to suggest effective management of NPAs. According to RBI data, five banks (public and private) with the highest NPAs were taken from the study from 2014-2015 to 2018-2019. The research paper used correlation analysis to quantify the relationship between net profit and NPAs and multiple retrospective analysis to determine the impact of key financial heads on NPAs.

Arora, N., and Ostwal, N. (2014): The present paper analyzes the classification and comparability of borrowed assets of public and private sector banks. The study concluded that NPAs are a threat to banks and financial institutions and state-owned enterprises have a higher NPA rate compared to private corporate banks.

Tripathi, L. K., Parashar, A., Mishra, S. (2014): Current research, with the help of many retrospective model efforts to investigate the impact of critical sector development, insecure development and development in critical sectors by banks such as SBI Group and other banks landed in the Gross NPAs of banks.

Dutta A (2014): This paper studied the growth of NPA in the public and private sector banks in India, andanalysed sector wise non-performing assets of the commercial banks. For research purposes, data was collected from secondary sources such as India's Banking Trends and Progress Report, RBI, Currency and Finance Report, and India's RBI Economic Survey.

Ahmad, Z., Jegadeeshwaran, M. (2013): The current paper is written in the NPA, and the causes of the NPA. The second data was collected over a five-year period and analyzed using a measure, CAGR, ANOVA and standard banks. Banks are ranked according to their performance in managing NPAs. Effectiveness in managing the NPA through state-owned banks was assessed.

Ranjan, R., Dhal, S.C. (2013): This paper examines the method used to analyze the indebtedness of Indian commercial banks by regression analysis. The dynamic analysis examines how NPLs are influenced by the three major sets of economic and financial factors, namely, credit terms, bank size preferences and risk for major economic shocks.

Kumar, M., Singh, G. (2012): The paper focuses on the most important factors, contributing to the problem of intangible assets from the perspective of the top banks of the public sector and, other foreign banks in India and the necessary measures to manage NPAs.

Patidar, S., Kataria, A. (2012): A study analyzed part of the NPA as part of key sector loans, a comparative study was conducted between SBI and Associates, Old Private Banks and New Private Banks and and National Banks the standing phase, to detect significant NPA differences and to determine the significant impact of the NPA Industrial Borrowing on the NPA Total Banking using mathematical tools such as derecognition and rate analysis.

Rajput, N., Arora, A.P., Kaur, B. (2011): This study attempts to track the movement of NPAs in Indian public sector banks, by analyzing the financial performance of NPA management.

Chaudhary, K., Sharma, M. (2011): This paper attempted to analyze how well the Public and Private sector banks managed the NPA. A statistical estimate tool was used for analysis.

III. RESEARCH METHODOLOGY

3.1 Introduction:

In the research methodology chapter discuss about the objective of study, scope of study, design and size of study etc.

3.2 Objective of study:

1. To find the impact of NPA On the return on net worth
2. To calculate the RONW (return on net worth).

3.3 Hypothesis:

H_{01}: NPA has a significant impact on return on net worth.

H_{11}: NPA has not a significant impact on return on net worth.

3.4 Research design:

In this study use the empirical and descriptive research design.

3.5 Scope of study:

The study shows the profitability ratio, Gross NPA and Net NPA of commercial banks in India.

3.6 Sample size:

In this study selected three banks (State bank of India, Industrial credit and Investment Corporation of India) and reviewed the 2017-2021 data.

Research tools:

Mean, Standard Derivation &C.V Regression, ANOVA

MEAN= Sum of variable/N

Standard Derivation=$\sqrt{\sum X2/N-(\sum X/N)}$

Coefficient of Variation (COV) = SD/MEAN* 100

- **Regression equation Impact of Non-performing assets on Net worth ratio**

Return on Net worth =a+β1 NPA (Non-performing assets)

- **LIMITATION OF THE STUDY**

1. The study based on only five year (2017-2021).
2. Profitability ratio and NPA have selected for the study.

IV. DATA ANALYSIS

4.1 Introduction:

In this chapter we discuss about the gross non- performing assets and net non-performing assets and calculating the return on net worth, and find out the regression of the data.

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TABLE 1: GROSS NPA: MEAN, SD & COV

YEAR	SBI	%	ICICI	%	HDFC	%
2021	126,389.02	4.98	41,373.42	4.96	15,086.00	1.32
2020	149,091.85	6.15	41,409.16	5.53	12,649.97	1.26
2019	172,750.36	7.53	46,291.63	6.7	11,224.16	1.36
2018	223,427.46	10.91	54,062.51	8.84	8,606.97	1.3
2017	112,342.99	6.9	42,551.54	7.89	5,885.66	1.05
TOTAL	**156,800.34**		**45,137.65**		**10,690.55**	
S.D	**43744.4323**		**5379.21523**		**3566.242**	
C.V	**0.278981751**		**0.119173572**		**0.333588**	

Sources: www.moneycontrol.com

The above table determines the analysis of bank wise mean standard deviation and coefficient of variation of gross NPA' s of three selected banks .SBI has the highest mean value while HDFC has lowest Mean value in comparison to other banks.

Standard deviation of gross **NPA** of SBI is **43744.4323** while that of **HDFC** is **3566.242.** From above analysis ICICI Bank reported the highest coefficient of variation **0.278981751** while HDFC Bank reported the lowest COV **(0.333588)**

Column chart financial year 2021-22

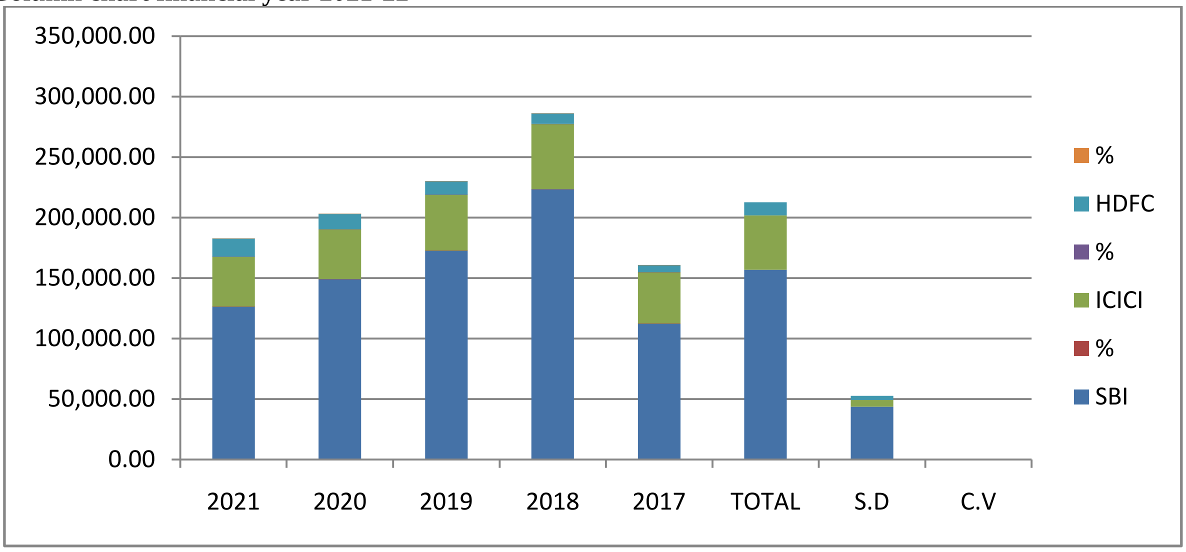

Chart 1

TABLE 2: NET NPA: MEAN, SD& COV

YEAR	SBI	%	ICICI	%	HDFC	%
2021	36,809.72	1.5	9180.2	1.14	4554.82	0.4
2020	51,871.30	2.23	10113.86	14.1	3542.36	0.36
2019	65894.74	3.01	13577.43	2.06	3214.52	0.39
2018	110,85.70	5.73	27886.27	4.77	2601.02	0.4
2017	58,277.38	3.71	25,451.03	4.89	1,843.99	0.33
TOTAL	**53,213.29**		**17241.758**		**3151.342**	
S.D	**12346.95951**		**8802.282793**		**1017.18491**	
C.V	**0.232027764**		**0.510521189**		**0.32277833**	

Sources: www.moneycontrol.com

The above analysis of bank wise mean standard deviation and coefficient of variation of NET NPA's of three selected banks.

SBI has the highest Mean value while **HDFC** has lowest mean value in comparison to otherbanks.Standard deviation of Net NPA of SBI is **12346.95951** while that of HDFC is **1017.18491.**Frome above analysis ICICI bank reported the highercoefficient of variation **0.510521189** whileSBI reported the lowest COV (**0.232027764**)

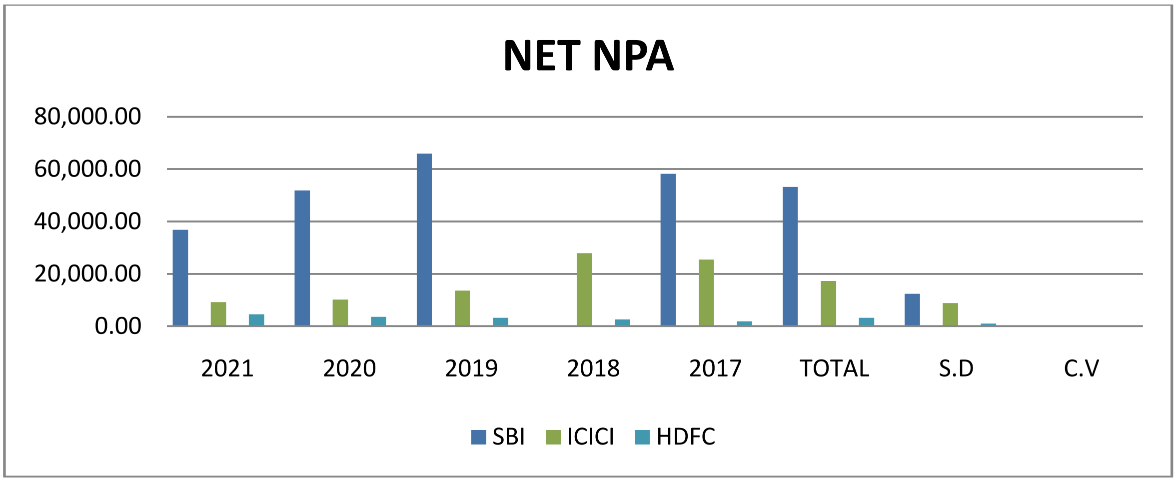

Chart. 2 financial year

TABLE 3;RETURNSONNET WORTH %

YEAR	SBI	ICICI	HDFC
2021	8.86	11.21	15.287
2020	6.95	6.99	15.35
2019	0.43	3.19	14.12
2018	-3.37	6.63	16.45
2017	6.69	10.11	16.25
MEAN	3.912	7.626	15.4914
S.D	5.16191	3.16583	0.926944
C.V	1.319507	0.415136	0.059836

Sources: www.moneycontrol.com

The above table shows the Mean, Standard Deviation & Coefficient of variable of return on assets of selected bank.

As per the above analysis HDFC bank has higher mean value and SBI has lowest mean value rather than other.

SBI has higher Standard deviation while 5.16191 and SBI has higher coefficient of variation value while 1.319507 Comparison to other.

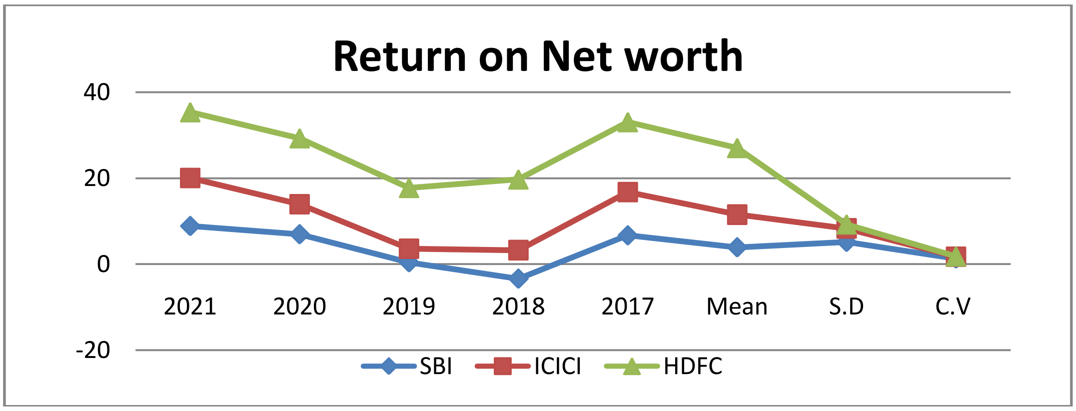

Chart3: financial year

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Table: 4**: Model Summary (Impact of Net non –performing assets on return on net worth).**

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.214759
R Square	0.046122
Adjusted R Square	-0.27184
Standard Error	0.245395
Observations	5

a. Dependent Variable: Return on Net worth
b. Independent Variable: Net Non-performing assets

Table 4: Show that, the total variation in the dependent variable explained by independent variables and has R value is0.214759, R values which range 'between' -1 to +1. The R value is 0.937shows that net non-performing assets has a relationship with return on net worth of companies R square values which range lies 'between' 0 to 1. R square value is 0.046122which means that means 0.4% variation in return on net worth it is explained by net worth variable.

Table 5: ANOVA (Impact Net Non -performing assets on return on net worth).

ANOVA

	df	SS	MS	F	Significance F
Regression	1	0.008735	0.008735	0.145055	0.728677
Residual	3	0.180656	0.060219		
Total	4	0.189391			

a) Dependent Variable: Return on Net Worth
b) Independent Variable: Net Non-performing assets

Table 5: Shows that, F value is 0.145055. Its non-significant value. F value is 0.72867 greater than 0.05 it means that the return on net worth has not a strong relationship between net non-performing assets. It means this is fit for thismodel.

Table 6: Coefficients (Impact of net non-performing assets on return on Net worth)

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	1.008611	0.236863	4.258211	0.023749	0.254808	1.762414	0.254808	1.762414
Net NPA	-0.02664	0.069937	-0.38086	0.728677	-0.24921	0.195935	-0.24921	0.195935

a. Dependent variable: Return on Net Worth
b. Independent variable :net non –performing assets

Table 6: Shows that, impact of NPA on its return on net worth. The table shows that of Coefficient value of non-performing assets is-0.02664it means that the net non-performing assets has Negative non-significant impact on return on net worth;its p value is0.728677. It means, it is non-significant because significant value lies between 0.01 to 0.05. P> 0.0

V. FINDING:

The banking sector in India is largely dominated by public sector banks .Globilazation has encouraged many countries and foreigan banks to set up their business in India.

There have been substandard assets, debatable assets and losses of selected banks.

In this research fid the net non-performing assets has a relationship with return on net worth of companies. Its show the non-significant because significant valuelies between 0.01to 0.05. P>0.0

The impact of the NPA on its return on net worth . In this study we find that the Regression, Anova, Coefficient of non –performing Assets show the negative impact. Its means that the total non-performing assets have a non significant /negative impact on the total return on net worth.

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