BASEL NORMS COMPLIANCE: INITIATIVES BY INDIAN COMMERCIAL BANKS

Dr. Mandeep Kaur[1] & Samriti Kapoor[2]

Basel Accord for capital adequacy provide a sound framework for addressing increasingly complex risks faced by banks with an objective to foster a secure and reliable banking sector. Basel norms have been adopted by Indian commercial banks as per RBI guidelines to build up a more transparent and risk free financial base. The present study attempts to examine the Indian commercial banks' response to implement BASEL II framework as per Reserve bank guidelines. For this purpose, annual reports of public and private sector banks operating in India have been analyzed in detail for the year ended 2010-11. The study has indicated that Indian commercial banks have taken significant and structural initiatives with regard to risk management to implement the Basel II norms in their organization structure. The study also highlighted that almost all the banks under the study have entered in Memorandum of Understanding (MOU) with credit rating agencies for the purpose of rating their domestic and overseas exposures.

Key Words: *Basel Norms, Indian Commercial Banks*

INTRODUCTION

Financial innovation, globalization, and technology are transforming banking with each passing day. So, banking industry is now exposed to diversified structure of risk. Increase in competition has led to decline in primary and traditional form of banking in which banks took deposits and made loans that stayed on their books to maturity. Banks are now moving rapidly into the new areas of business activities (Chami et. al., 2004). In this complex banking scenario, Bank of International Settlements (BIS) devoted considerable time and resources to establish a comprehensive and appropriate regulatory framework which is well equipped to help and protect the international banking system from various categories of risks and problems like series of bank collapse.

[1] Associate Professor, Department of Commerce and Business Management, Guru Nanak Dev University, Amritsar, PIN:143005,email id: mkaur02@yahoo.co.in, contact no: 09781125081

[2] Senior Research Fellow, Department of Commerce and Business Management, Guru Nanak Dev University, Amritsar, PIN: 143005, email id: kapoor.samriti@yahoo.in, contact no: 07837378459

On 26 June 2004, the central bank governors and heads of the banking supervisory authorities of G10 countries endorsed the revised framework for the "International Convergence of Capital Measurement and Capital Standards", commonly known as the New Basel Capital Accord or Basel II which is widely recognized as major breakthrough in world of banking (Bank of International Settlements, 2006). It introduces more sophisticated approaches for calculating capital requirements; in line with current best practices among banks thus replacing Basel I. Basel II has been identified as a dynamic framework having ability to adapt innovation and change. Although, Basel accord regulations are primarily intended for banks in G-10 countries yet the guiding principles embodied in three pillars are generally suitable for any bank in the jurisdiction. The Basel Committee believes that the safety of banks around the globe is achieved at its best by national supervisors by fully implementing the three pillars of the accord and by adoption of Core Principles of Effective Banking Supervision in their respective jurisdictions. This in turn will enhance countries prospective for successfully integrating with world economy and gaining the benefits of international capital flows (RBI, 2000). It has been implemented in more than 100 nations around the globe.

RESEARCH METHODOLOGY

Basel norms have been drawing lot of attention in India too as Indian banks have to adopt these norms as a capital adequacy measure, being a requirement by Reserve Bank of India. These norms pose a formidable challenge for regulators and banks to understand and implement. Yet, banks in India are on the way to implement this sophisticated regulatory framework and are taking several steps and initiatives to adopt these international practices. Commercial banks in India have migrated to Basel II Accord in the year 2009 with basic approaches and presently moving towards advanced approaches. The present study is such an attempt which aims to examine the response i.e. various initiatives by Indian commercial banks to implement Basel II Accord as per directions and guidelines of Reserve Bank India. For the purpose of study, annual reports of public and private sector banks in India for the year end 2010-11 have analyzed in detail with special focus on Basel II Pillar III Disclosures in their annual reports. So, the study covered 46 banks (public and private sector) operating in India. In August 2010, the Indian banking industry witnessed two big mergers, one in private sector i.e. of Bank of Rajasthan with ICICI Bank and one in public sector i.e. of State Bank of Indore with country's largest lender State Bank of India and in the year 2011 SBI Commercial and International Bank was merged with State Bank of India so, these

banks are not included in the list. Initiatives taken by sampled banks with respect to some of the related dimensions i.e. risk management framework and credit rating have been discussed in the subsequent paragraphs:

RISK MANAGEMENT FRAMEWORK

Risk Management is a discipline at the core of every financial institution and encompasses all the activities that affect its risk profile. It involves identification, measurement, monitoring and controlling risks to ensure that the individuals who take or manage risks clearly understand it and to ensure that risk taking decisions are in line with the business strategy and objectives set by Board of Directors. Risk management as commonly perceived, does not mean minimizing risk; rather the goal of risk management is to optimize risk-reward trade –off (www.sbp.org.pk/riskmgm.pdf). Commercial banks are in the business of mobilizing deposits, lending money and investing funds. In this process, they encounter risks in the forms of Credit risk, Market risk and Operational risk (Srivarahan, 2011). Therefore, in the present volatile and rapidly changing financial scenario it has become very challenging for the banks to manage complex and variable risks in a disciplined manner, so there is need to have good risk management practice not only to manage risk inherent in the business but also risk emanating from financial market as a whole. Risk management in commercial banks in India as it is practiced now is mainly an offshoot of recommendations of Basel Committee on banking Supervision (BCBS) modified suitably Reserve bank of India (Srivarahan, 2011). The commercial banks have been working on several initiatives to streamline and upgrade the existing risk management system to bring them in tune with prevailing international best practices in risk management and also cover the entire spectrum of various risks to which banks are exposed to. Commercial banks in India are acting proactively in identifying, managing and controlling risk by building a sound risk management architecture keeping in mind guidelines issued by RBI and BASEL II guidelines. Several measures and initiatives taken by nationalized and private sector banks in India to identify and manage risks as per Basel II are shown in Table 1.

Table 1: Risk Management Initiatives taken by Commercial Banks in India

Name of Bank Private Sector Banks	CRMC	MRMC	ORMC	RMC/RMS/I RMD	Stress Testing	RBIA	ALCO, ALM Policy	RCSA	ICAAP	OTHERS
South Indian Bank Ltd.	√	√	√	√	√	√	√	√		Risk Based Pricing Model, Disaster Recovery Management
Jammu & Kashmir Bank Ltd.	√	√	√	√	√		√	√	√	CRM,ORM, MRM Structure
Karur Vysya Bank Ltd.				√			√			Bank is in the process of validating ICAAP
Development Credit Bank Ltd	√		√	√	√	√	√	√	√	Credit Risk Analytics Monitoring Unit(CRAM)
Dhanalakshmi Bank Ltd	√		√	√	√	√	√		√	"OpRisk SCORE" Software For Loss Data ,RBS
Catholic Syrian Bank Ltd	√		√	√	√	√	√		√	
Federal Bank Ltd	√		√	√	√	√	√		√	
City Union Bank Limited	√		√	√	√	√	√		√	
HDFC Bank Ltd.	√			√	√		√		√	Risk Monitoring Committee, CRM Framework
ICICI Bank Ltd.	√		√	√	√		√		√	GRMG,ORM Framework Disaster Recovery Management
ING Vysya Bank	√	√	√	√	√	√	√		√	Risk Management Review Committee

Name of Bank	CRMC	MRMC	ORMC	RMC/RMS/I RMD	Stress Testing	RBIA	ALCO, ALM Policy	RCSA	ICAAP	OTHERS
Karnataka Bank Ltd	√		√	√	√	√	√		√	
Kotak Mahindra Bank Ltd.			√	√	√	√	√	√	√	CRM Policy
Lakshmi Vilas Bank Ltd				√	√	√	√		√	ORM Policy, CRM Policy
TamilnadMercantile Bank Ltd				√		√	√		√	ORM Policy, CRM Policy, RBS
Nainital Bank Ltd									√	Credit Policy Committee,Credit Risk Taking
Ratnakar Bank Ltd.	√		√	√	√	√	√		√	ICMC
Yes Bank Ltd.	√		√	√	√	√	√		√	Risk Monitoring Committee
Axis Bank Limited	√		√	√	√	√	√		√	
Indusind Bank Ltd.	√	√	√	√	√	√	√	√	√	Disaster Recovery Plan
Public Sector Banks										
Allahabad Bank	√		√	√		√	√		√	
Andhra Bank	√		√	√	√		√		√	CRM,ORM,MRM Policy
Bank of Baoda	√		√	√	√	√	√		√	Setting Various Risk Limits
Bank of India Ltd.	√	√	√	√	√	√	√		√	Credit Monitoring Department

Name of Bank	CRMC	MRMC	ORMC	RMC/RMS/IRMD	Stress Testing	RBIA	ALCO, ALM Policy	RCSA	ICAAP	OTHERS
Bank ofMaharashtra	√			√	√	√	√		√	ORM Policy, Risk Based Supervision, RBS
Canara Bank	√	√	√	√	√	√	√		√	SCDRM, "CORDEX" Software for Loss data
Central Bank of India	√		√	√	√		√		√	"CORDEX" Software for Loss data, CRM, ORM,ORM Policy
Corporaton Bank				√	√	√	√		√	CRM,ORM, MRM Structure, Disaster Recovery Management
Union Bank of India	√		√	√	√	√	√	√	√	Risk Based Pricing Framework, "CORDEX" Software
UCO Bank	√		√	√	√	√	√		√	CRM Policy
IDBI Bank Limited				√	√	√	√	√	√	"ORBIT"(Operational Risk Business Management Tool)Software
Dena Bank	√		√	√	√	√	√		√	CRM,ORM, MRM Structure
Indian Bank	√		√	√	√	√	√		√	
Indian Overseas Bank	√		√		√	√	√		√	
United Bank of India					√		√		√	CRM,ORM Policy
Oriental Bank of Commerce	√		√				√			"CORDRX" Software for Loss data

Name of Bank	CRMC	MRMC	ORMC	RMC/RMS/IRMD	Stress Testing	RBIA	ALCO, ALM Policy	RCSA	ICAAP	OTHERS
Punjab and Sind Bank	√		√	√			√			MRM Cell, Risk Monitoring Committee
Punjab National Bank	√		√	√	√	√	√		√	
Syndicate Bank	√			√	√	√	√	√	√	Risk Assessment Model
Vijaya Bank	√	√	√	√	√	√	√	√	√	
SBI And Its Associates										
State Bank of India	√	√	√	√		√	√	√	√	CRM Policy, ORM Policy, MRM Department
State Bank of Travancore	√	√	√	√	√	√	√	√		CRM,MRM Policy, RBS
State Bank of Mysore	√	√	√	√	√		√	√	√	CRM Policy
State Bank of Hydrabad	√	√	√	√		√	√	√	√	
State Bank of Bikaner And Jaipur	√	√	√	√	√	√	√	√	√	Disaster Recovery Policy
State Bank of Patiala	√	√	√	√			√		√	

Source: Annual Reports of Banks, 2010-11

***RMC: Risk Management Committee, CRMC: Credit Risk Management Committee, MRMC: Market Risk Management Committee, ORMC: Operational Risk Management Committee ,ALCO: Asset Liability Committee , RCSA: Risk Control Self Assessment, RBIA: Risk Based Internal Audit, RBS: Risk Based Supervision, CRM: Credit Risk Management, ORM: Operational Risk Management, MRM: Market Risk Management, GRMG: Global Credit Risk Management Group, RMS: Risk Management Structure, ICAAP: Internal Capital Adequacy Assessment Programme, IRMD: Integrated Risk Management Department, ICMC: Investment Credit Risk Management Committee*

From the Table 1 it is clear that almost all the banks have put in place adequate risk management architecture in response to BASEL II guidelines. In compliance with RBI guidelines for appropriate risk management structure, most of the banks have taken several initiatives to manage the risks. Risks must not be viewed and assessed in isolation, not only because a single transaction might have a number of risks but also one type of risk can trigger other risks. While assessing and managing risk, the management should have an overall view of risks the institution is exposed to. This requires having a structure in place to look at risk interrelationships across the organization (www.sbp.org.pk/riskmgm.pdf). For measuring and managing of various categories of risk, approximately 91 percent of banks (as shown in table) have set up separate Risk Management Committee (RMC) or Integrated risk management Department (IRMD) as shown in table, with primary responsibility of laying down risk parameters and establishing an integrated risk management framework and control system.

Every bank is exposed to credit risk in its lending operations. It is the risk of loss that may occur from the failure or unwillingness of any counterparty to meet commitments in relation to lending, trading, settlement and other financial transactions as per terms and conditions of the contract (http://www.riskglossary.com). To maintain bank's overall credit risk exposure within the parameters set by the board of directors, the importance of a sound risk management structure is second to none. While the banks may choose different structures, it is important that such structure should be in accordance with institution's size, complexity and diversification of its activities. So, to manage the credit risk in an appropriate manner, banks have framed comprehensive Credit risk management structure. Credit Risk Management involves proper appraisal of loan applications, monitoring of borrowal accounts and appropriate recovery measures. Weakness in any of these areas will diminish the effectiveness of credit risk management. Table 1 showed that out of 46 banks covered under the study, approximately 82 percent banks have constituted a separate Credit Risk Management Committee (CRMC) to monitor credit risk on a bank-wide basis and ensure compliance with limits approved by the Board.

Another major risk faced by a bank apart from credit risk is the Market risk. Market risk is potential for loss resulting from adverse movement in market risk factors such as interest rates, forex rates, currency valuations, equity prices and commodity prices. (Bhattcharya, 2008). For envisaged market risk management nearly 26 percent of banks have set up Market Risk Management Committee (MRMC) responsible for setting policies guidelines for market risk measurement, management, reporting and

responsible for reviewing and approving market risk limits, including stop losses for traded and accrual portfolios, Another essential element for management of market risk is the Asset liability Management (ALM) in which banks endeavors to match their assets and liabilities in various time buckets. Whenever, mismatches are noticed, remedial actions are taken (Srivarahan, 2011). Nearly 97 percent banks have framed Asset Liability Committee (ALCO), a senior management level committee responsible for management of Market Risk, that keep an eye on the structure of bank's assets and liabilities and decide about product pricing for deposits and advances and monitors and controls the strategic position, interest rate risk position and is endowed with the responsibility of management of balance sheet of bank with a view to manage the market risk exposure assumed by banks.

The third major risk covered by Basel II is the Operational risk which did not find its place in Basel I but is explicitly covered under new framework. BCBS has defined operational risk as risk of loss resulting from failed or inadequate internal processes. It is the risk of loss arising from the potential that inadequate information system; technology failures, breaches in internal controls, fraud, unforeseen catastrophes, or other operational problems may result in unexpected losses or reputation problems (BIS, 2006). Operational risk is inherent in the banks' business activities. The objective of operational risk management is to find out the extent of the financial institution's operational risk exposure; to understand what drives it, to allocate capital against it and identify trends internally and externally that would help predicting it.

For the purpose of robust quality of Operational Risk Management, separate Operational Risk Management Committee (ORMC) has been put in place by nearly 36 out of 46 banks as an integral part of risk management framework. One of the important tools for assessing the Operational Risk i.e. Risk Control and Self Assessment (RCSA) has been undertaken by nearly 30 percent banks to counter the risks faced by these banks. For effective operational risk management IDBI bank has also used software like "ORBIT"(Operational Risk Business Management Tool).

Nature and intensity of risks may vary from bank to bank. Therefore, RBI requires all the banks in India to prepare a self-analytical framework called "Internal Capital Adequacy Assessment Process" (ICAAP) document duly approved by the Board of Directors (Srivarahan, 2011). The Internal Capital Adequacy Assessment Process (ICAAP) is a self-revelatory exercise that augments quality of management and covers identification and measurement of risks other than Pillar 1 risks (i.e. Credit Risk, Market Risk &

Operational Risk), to meet the requirements of Pillar 2 of Basel II norms (Annual Report, Bank of Maharashtra, 2011). Nearly 89 percent of banks have evolved and put in place a Board approved Internal Capital Adequacy Assessment Process (ICAAP) framework.

With a view to enhance risk assessment, banks are using stress testing which provide a better understanding of the likely impact in extreme circumstances. Stress testing defines a scenario and uses a specific algorithm to determine the expected impact on a portfolio's return when such a scenario occurs (http://en.wikipedia.org /wiki/Stress_testing). The process of Stress Testing involves identifying the potential movements, including which market variables to stress, how much to stress them and by what time frame to run the stress analysis over. It enables the banks to evaluate their financial position under scenario of varying severity and to control business risks (Bhattacharya, 2008). This exercise is expected to render an objective basis for decision making both to the control function and to the entire institution and also for assessing the performance of the independent control function (Annual Report, Bank of India, 2011). Nearly 80 percent banks have adopted Stress Testing policy or set up comprehensive Stress Testing framework as a multi-dimensional risk management tool. Periodical stress tests are being carried out by banks for credit risk, market risk, liquidity risk and interest rate risk.

RBI had issued broad guidelines to banks in December 2002 on (RBIA) Risk Based Internal Audit to undertake an evaluation of the risk management systems and control procedures prevailing in branches as well as in other functional areas (Sharma, 2004). Risk-based auditing extends and improves the risk assessment model by shifting the audit vision. Instead of looking at the business process in a framework of internal control, the internal auditor views the business process in an environment of risk. It is that part of internal audit that focuses on risk thus, adds more value to the organization than an audit focusing only on controls. Task Force for Risk Based Internal Audit (RBIA) has been developed by approximately 73 percent banks for the purpose of identification, measurement, monitoring and management of risks to mitigate their adverse impact on their financials.

The regulators have introduced a Risk Based Supervision (RBS) model for supervision and regulation of the banking and financial sector. Risk Based Supervision (RBS) is a system based inspection by regulator/supervisor. The RBS process involves continuous monitoring and evaluation of the risk profiles of banks' in relation to their business

strategy and exposures based on a risk matrix for each institution (http://bankingindiaupdate.com). Some banks have put in place an effective institutional mechanism for Risk Based Supervision (RBS). For the purpose of loss data collection, software like "CORDEX" is being used by Canara Bank and Central Bank of India, Union Bank of India and Oriental Bank of Commerce and "OpRisk SCORE" being used Dhanlakshmi bank. In order to monitor various categories of risk in an efficient and effective way separate Risk Monitoring Committees have been framed by few banks.

From the above discussion, it can be interpreted that public and private sector banks in India have taken significant and structural initiatives to develop risk management infrastructure in their organization structure. As almost all the banks have formed desired committees, most of the banks conduct stress tests and gap analysis periodically and many of them have incorporated risk feature in their internal audit. Some of the banks have also subscribed sophisticated software like "CORDEX" for collection of loss data. Most of the banks have put in place Internal Capital Adequacy Assessment Process (ICAAP) to deal with exceptional risks peculiar to bank while others are developing their capabilities to improve risk management process. So, overall commercial banks in India have developed requisite risk management framework to tackle the risk issues with a view to adopt Basel II in line with RBI guidelines.

CREDIT RATING

At the heart of the revised Accord there is an explicit emphasis on ratings. Risk differentiation between counterparties, be they sovereign, banks, corporates, state owned enterprises or securities firms, is to be on the basis of either external or internal ratings. In fact, two options have been proposed for measuring credit risk i.e. Standardized Approach and Internal Rating Based Approach of which risk weights under Standardized Approach have been enlarged to encompass exposures to a broad category of borrowers with reference to rating provided by External Credit Assessment Institutions (ECAIs) (Nachane and Ghosh, 2004). Credit rating agencies play an important role in assessing risk by facilitating investment decisions thus, they can help investors in achieving a balance in the risk return profile and at the same time assist firms in accessing capital at low cost. CRARs can thus potentially help to allocate capital efficiently across all sectors of the economy by pricing risk appropriately. As observed from Third Consultative Document of New Accord by BIS (2003) national supervisors

are responsible for determining whether the rating agencies meet the eligibility criteria. The six fold criteria specified for this are:

- Objectivity in assessment methodology
- Independence from pressures
- Transparency
- Adequate disclosures
- Sufficient resources
- Credibility in discharging rating process

As shown in Table 2, India has five SEBI (Securities Exchange Board of India) approved credit rating agencies namely ICRA (Investment Information and Credit Rating Agency of India Ltd.), CARE (Credit Analysis and research Ltd.), CRISIL (Credit Rating and Information Services of India Ltd.), FITCH India and new born Brickworks registered in 2008. In India, revenues of the three big rating agencies, CRISIL, ICRA and CARE have shown an upward trend given the increase in the usage of ratings over time.

Table 2: Credit Rating Agencies Registered with SEBI

Credit Rating Agency	Year of Commencement of operations
CRISIL	1988
ICRA	1991
CARE	1993
FITCH India	1996
Brickworks	2008

Source: Report of the Committee on Comprehensive Regulation for Credit Rating Agencies, 2009

The credit rating agencies earlier only evaluated and rated Credit and Market risk for listed companies or companies which raised long term domestic and external debt. But now these agencies have been designated as approved agencies by the RBI for credit rating of all bank borrowers. With this measure, the global practice of "Acceptable third-party evaluation" of assets has been adopted by RBI. Compared to developing countries, the extent of rating penetration in India has been increasing every year and a large number of capital issues of companies have been rated. If a bank chooses to keep some of its loans unrated, it may have to provide a risk weight of 100 per cent for credit risk on such loans. The borrowers are expected to approach these credit rating agencies for getting themselves rated failing which banks would be constrained to assign 100% risk weight at the minimum, for unrated borrowers. However, by getting loans rated, a bank

can save capital on loans in the better rated categories, illustrated in the Table 3.

Table 3: Capital-saving potential by banks on a loan of Rs.1000 million

Rating	Basel I		Basel II (Standardized Approach for Credit Risk)		
	Risk weight	Capital required (Rs. million)	Risk weight	Capital required (Rs million)	Capital saved (Rs.million)
AAA	100%	90	20%	18	72
AA	100%	90	30%	27	63
A	100%	90	50%	45	45
BBB	100%	90	100%	90	0
BB and below	100%	90	150%	135	(45)
Unrated	100%	90	100%	90	0

Capital required is computed as Loan Amount x Risk Weight x 9%

Source: Report of the Committee on Comprehensive Regulation for Credit Rating Agencies, 2009

As it is clear from the Table 3 that under Basel I, there is no differentiation of risk weights, on the basis of credit rating assigned to borrowers hence, a borrower rated as AAA has been assigned same risk weight of 100 percent as an unrated borrower. While, Basel II accepts the rating differentiation and borrower rated under AAA category has been assigned 20 percent risk weight, leading to capital saving of 72 million under Basel II. So, this incentive of capital saving under Basel II, has led the banks' to pressurize their loan customers to obtain credit rating. The Reserve Bank of India, under Basel II guidelines, has stipulated that even though ratings are used by the banks for determining their capital requirements, the ratings should be solicited by the companies themselves, and not by the banks. This activity is denoted as Rating Shopping that involves selection of rating agencies that will assign the highest rating to their particular issues (Report of the Committee on Comprehensive Regulation for Credit Rating Agencies, 2009).

Focusing on Indian banks' preparedness for credit rating, annual reports of banks' have been examined to identify the rating agencies approved by them, for the purpose of rating of their exposures. It was found that all 46 commercial banks' covered under the study (public and private sector banks) have signed Memorandum of Understanding with 4 domestic credit rating agencies approved by RBI i.e. ICRA, CARE, CRISIL and FITCH India for the purposes of risk weighting their claims for capital adequacy as on 31st March 2011. The credit rating from Brickworks has rarely been used by banks probably because it is new entrant in the rating business. Moreover, it was found that more than 50 percent of banks covered under the study accept the rating of international rating agencies namely Moody's, FITCH and Standard&Poor (S&P) for overseas

exposure i.e. claims on non-residential corporates, foreign banks and foreign sovereign in addition to domestic rating agencies. In order to facilitate the process of External rating and enabling the customers to solicit external rating for exposure, banks have entered into a separate MOU with these rating agencies. Rating of borrowers by ECAIs assumes importance in the light of guidelines for implementation of New Accord. So, considering the need and importance of credit rating in Basel II compliance, study showed that almost all banks (public and private sector) have adopted rating from approved credit rating agencies.

CONCLUSION

Basel II Accord forces a transition from traditional regulatory measure to sophisticated risk management systems to ensure a resilient financial base. Reserve Bank of India requires Indian banks to adopt these international capital adequacy norms to enhance the soundness and stability of financial system. In response to guidelines issued by RBI with regard to Basel II compliance, all Indian banks have adopted credit rating for their domestic and overseas exposures from RBI approved credit rating agencies. Moreover, almost all commercial banks in India have taken significant risk management initiatives in the form of various committees, processes and risk management departments to implement the Basel II norms in their organization structure. The Risk management process which is way of life for banks and financial institutions should be completely independent and should be imbibed in such manner that it will lead to enhanced volume and positive impact on profits. The Reserve Bank expects all commercial banks in India to strengthen their existing risk management systems to adopt more advanced approaches of risk management.

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