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Bank Strategies for Aligning with CARES Act Guidelines

Key Impacts to Banks and How to Address them with Oracle Financial Services

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Purpose statement

This document provides an overview of CARES Act guidelines, its impacts on Banks and Oracle Financial Services recommended approach for addressing them.

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About CARES Act

The Coronavirus Aid, Relief, and Economic Security (CARES) Act is a $2.2 trillion economic stimulus bill passed by the US Congress and signed into law on March 2020 in response to the US economic fallout of the pandemic. The spending for this bill mainly includes $300 billion in one-time cash payments to individual Americans, $260 billion in increased unemployment benefits, forgivable loans to small businesses with $669 billion in funding under the Paycheck Protection Program, $500 billion in aid for large corporations, and $339.8 billion to state and local governments.

Key Aspects of CARES Act for Banks

1. **Paycheck Protection Program (PPP)**

   a. The Small Business Administration (SBA) guaranteed loans for small business of up to $10 million, with a maximum interest rate of 4%, towards employee salaries, medical leave, insurance premiums, mortgage, rent, and utility payments.

   b. Deferral of payments of principal, interest, and fees for up to one year.

   c. Limited loan forgiveness on loans for amounts spent on payroll costs, rent and utilities payments, and interest payments on mortgages for borrowers that apply.

2. **Other financial measures for depository institutions to promote lending activities**

   a. SBA to pay principal, interest, and any associated fees that are owed on existing section 7(a) loans, section 504 loans, microloan products or loans on deferment, for a six-month period.

   b. Paycheck Protection Program liquidity facility (PPPLF) to provide liquidity through non-recourse loans to fund PPP loans pledged to the PPPLF.

   c. Money Market Mutual Fund Liquidity Facility (MMLF) to provide liquidity against eligible money market mutual fund assets pledged as collateral.

   d. Increased access to Central Liquidity Facility for Credit Unions until the end of the year.

   e. FDIC to guarantee debt of solvent insured depository institutions and depository institution holding companies until end of year.

3. Regulatory relief for depository institutions:

   a. 0% regulatory capital risk weight for SBA guaranteed loans under Paycheck Protection Program (PPP).

   b. Exclusion of PPP loans pledged to PPPLF and, exposures to MMLF from regulatory capital requirements and leverage ratio.

   c. Exclusion of PPP loans extended to Executive Officers, Directors, And Principal Shareholders from limitations of Regulation-O.

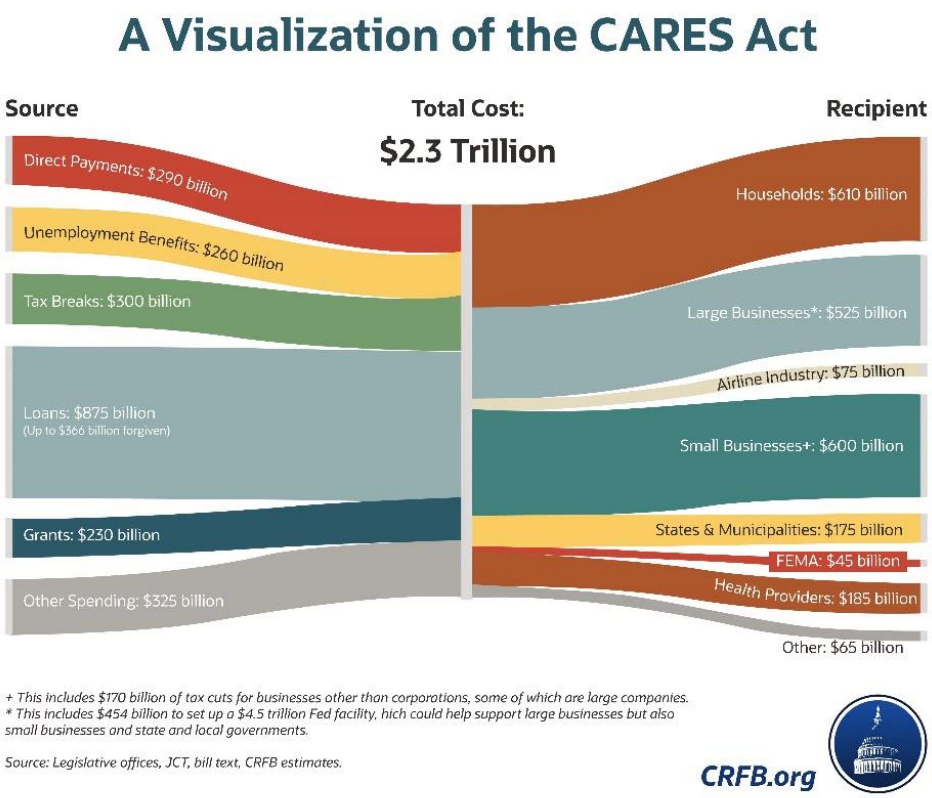
   d. Temporary relief from reporting of modified loans from Troubled Debt Restructuring (TDR) disclosures.

   e. Exclusion of U.S. Treasury Securities (Treasuries) and deposits at Federal Reserve Banks from total leverage exposure for supplementary leverage ratio computation through March 31, 2021.

   f. Revised criteria for computation of Eligible Retained Income to indirectly promote lending activities.

   g. Option to elect for five-year Current Expected Credit Loss (CECL) transition under new rule in place of three-year transition as per 2019 rule.

   h. Community Bank Leverage Ratio reduction from 9 percent to 8 percent, for qualifying community banks.



Impact to Bank's Functions & Operations

Various provisions of CARES act directly or indirectly have the below impact on Banks:

- **Asset Modifications** - Payment Deferrals, Fee waivers, Term extensions, Effective rates reduction and Interest waivers - these aspects of the CARES Act will have short term adverse impact on net profit margin and liquidity.
- **Regulation/Reporting Changes** – Additional items in the existing reports or revised reports capturing the impact of the Act to be submitted.
- **Income Tax Reporting** - Revised assessment of reserves, interest accruals and impairments will impact the related tax accounting for financial institutions.
- **On-boarding, Know Your Customer (KYC) and Customer Due Diligence (CDD)** – Increased volume in new customers and existing customer loan applications.
- **Transaction Monitoring** - Adapting programs for changes to customer and transaction profiles.
- **Investigations** – Increased volume of investigations and SAR filing.

IMPACT - AREAS

FUNCTIONS	Asset Modifications	Regulation / Reporting Changes	Income Tax Reporting	Fraud and Compliance	Customer Growth
Liquidity Management	✓	✓			
Capital Computation	✓	✓	✓		
Allowance & Provisions Computation	✓	✓			
Regulatory Reporting	✓	✓	✓	✓	
Data Provisioning	✓	✓	✓	✓	
On-boarding, KYC & CDD				✓	✓
Transaction Monitoring				✓	✓
Investigations & SAR				✓	

See below evaluation of above changes on various banking functions:

Liquidity Management

Banking institutions will face a direct impact on their liquidity from the deferment of payments on principal, interest, and fees with the introduction of the CARES Act. Banks will have to make provisions as cash flows will not be in line with the contractual terms. There will be an increase in number of delinquent payments and hence a need to model such delays to get the right estimate on liquidity position. Acquiring the contractual estimates is critical from the perspective of regulatory reports, such as the FR2052a report which uses the cashflows as an input to measure the overall liquidity profile of an institution.

Capital Computation

Capital requirements of banks under the Basel regulations will change. On the credit side, banks should expect a jump in the total capital required as there will be an increase in the delinquency of retail customers. Probability of Default (PD) estimates will have to be done quickly as the default rates will be changing drastically, increasing the Risk Weighted Assets (RWA) numbers. With the introduction of the CARES Act, capital requirements have changed for some portfolios to 0%, such as SBA Guaranteed loans; on an overall basis, both the trading and banking book will negatively impact capital requirements.

Allowance and Provisioning Computation

Past due reports are of great significance for banks to set aside appropriate provisions for all future credit losses. Banks will have to look at newer indicators that help them correctly estimate performance of accounts in the COVID-19 scenario.

Banks must rethink how to classify their existing portfolios to a Stage 2 category and modify the existing trigger conditions under IFRS9 and CECL requirements. When considering both the CARES Act and delay in payment patterns, banking organizations need to re-evaluate their current IFRS 9 Stage Migration logics.

In addition, Expected Credit Loss (ECL) calculations will be impacted from the newly modeled PD estimates that incorporate new market scenarios, specific to the conditions of the pandemic. However, the CARES Act has given some amount of positive relief to banks by delaying the adoption of CECL from January 2020 to December 2020, or until the national declaration for COVID-19 is lifted, whichever comes first.

Regulatory Reporting

Call Reports (FFIEC 031, FFIEC 041, and FFIEC 051), Consolidated Financial Statements (FR Y-9C), FFIEC 002/002S, FFIEC 101 have been revised to meet updated reporting requirements. E.g. New items in Schedules RC-C/HC-C for reporting Section 4013 loans, and Schedules RC-M/HC-M for reporting of PPP, PPPLF and MMLF exposures.

Data Provisioning

Banks will have to internally work on their data strategy so that they can capture additional data attributes for identification of affected loans by the CARES Act.

Clear identification of impacted accounts under different provisions of act will be critical for appropriate downstream capital and regulatory reporting.

On-boarding, KYC and CDD

Increased demand for disaster relief loans through the PPP program, standard SBA 7(a) and Express loans put additional pressure towards on-boarding and KYC functions. Those looking to profit through fraud schemes will look to take advantage of any vulnerabilities in these functions. Per FinCen guidance compliance with BSA regulation is still critical to prevent illegal activity and banks should continue to take a risk-based approach for meeting their obligations.

(https://www.fincen.gov/news/news-releases/financial-crimes-enforcement-network-provides-further-information-financial)

Transaction Monitoring

FinCen has released several advisories alerting financial institutions to trends of increased fraud and money laundering (For example: Imposter Scams, Money Mule Schemes). In addition, the economic impact of the pandemic has caused changes to customer behaviour and transaction volume profiles. Banks play a critical role in helping identify suspicious activity and will need to review their current transaction monitoring processes against red flags being highlighted by FinCen and their current thresholds for monitoring behavior.

Investigations and Suspicious Activity Reporting

Historically, whenever a disaster caused disruptions to the economy, support systems, and processes, criminals have taken advantage of those situations for illicit purposes. Identifying and reporting suspicious transactions will play a critical role in protecting financial institutions and their customers. In a recent press release (see below) regarding

CARES Act and PPP related fraud, the Department of Justice highlighted the importance of partnership with financial institutions in the detection and investigation process and eventual recovery of defrauded funds.

(https://www.justice.gov/usao-edtx/pr/department-justiceeastern-district-texas-criminally-charging-individuals-cares-act-ppp)

Recommendations from Oracle Financial Services

Below outlines the steps and solutions Oracle Financial Services customers can use to address the guidelines prescribed in the CARES Act.

<table>
<tr><th>CARES ACT – IMPACT</th><th>ORACLE FINANCIAL SERVICES RECOMMENDED APPROACH</th></tr>
<tr><td>Asset Modifications
Payment deferrals
Fee waivers
Term extensions
Effective rates reduction
Interest waivers</td><td>Asset Liability Management
Account level attributes can be modified to generate revised contractual cash flows based on the provisions of CARES Act
Stressed cash flows can also be generated capturing the fallout of the Act
Liquidity Risk Management
Any payment deferral, waiver etc. can easily be achieved through Business Assumption framework in LRS application
The Business assumptions can be applied on both Principal and Interest cash flows separately
The Business assumptions can be applied based on any data attribute such as Product, 2052a reporting line, etc.
Copies of existing processes can be created to meet the requirement and to save time and effort
Loan Loss Forecasting and Provisioning
Updated logics using Rules Framework can easily be introduced for identification of accounts in different stages of Default (Stage Determination)
New Rules can be introduced to modify the banks Stage Migration logic</td></tr>
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Regulatory Reporting	Liquidity Risk Management • Business assumptions can be leveraged to modify the cashflows to reflect CARES Act provisions, which can be used to report 2052a Basel Regulatory Capital • 0% Risk Weight treatment could be easily configured through Run Rules framework for specific portfolios. • Exclusion of PPP loans pledged to PPPLF and, exposures to MMLF from regulatory capital and supplementary leverage ratio computations, can be applied. • Revised supplementary leverage ratio can be computed through configuration, with ability to switch back to original computation method Market Risk Measurement and Management • Market Risk back testing exceptions can be easily applied through configurations and compliant VaR based capital can be computed Regulatory Reporting for US Federal Reserve • Data model updated to identify, and report loans covered under section 4013 and configurations updated to report same in Call Reports (RC-C), Consolidated Financial Statements FR Y-9C (HC-C) • Data model and configurations updated to identify and report PPP loans, PPP loans pledged to PPPLF and assets purchased under MMLF in Call Reports (RC-M) and FR Y-9C (HC-M) • Revised regulatory capital and supplementary leverage ratio computed in Basel application can be reported in Call Reports (RC-R), FR Y-9C (HC-R) and FFIEC 101 • Updated reporting of Regulation-D revisions in Call Reports (RC-E), FR Y-9C (HC-E), FR 2900, FFIEC 002
On-boarding, KYC and CDD	Know Your Customer (KYC) • Integration features of the application can be leveraged to streamline Bank's on-boarding solutions and enable processing of additional on-boarding and CDD volumes more efficiently without exposing themselves to greater risk • Integrate with customer on-boarding system for real time risk assessment and data collection through questionnaires • Leverage real time and batch interfaces to integrate with third-party data providers for identity verification and negative news • Pre-configured integration to OFS Customer Screening and Enterprise Case Management Customer Screening (CS)

	• Sophisticated matching algorithms, with over 450 standard match rules can assist in matching existing and potential customers with current public and private sanctions lists Enterprise Case Management (ECM) • ECM's RPA integration capability can be used to automate routine tasks freeing up resources to focus on more complex and critical analysis tasks
Transaction Monitoring	Anti-Money Laundering (AML) • FinCen Advisory FIN-2020-A003 highlights a rise in consumer fraud related to COVID relief programs and key typologies to monitor include imposter scams and money mule schemes. Several of the red flags described can be mapped to existing pattern-based rules available in the behavior detection library. (Change in Behavior, Escalation in Inactive Accounts, Rapid Movement of Funds, etc.) • Revisit thresholds set for existing monitoring rules and align them with changes in customer behaviour and transaction volume changes. The threshold editor can be used to modify and test threshold settings to determine what changes may be required • Scenario Wizard can be used to quickly develop and deploy new rules based on emerging trends in fraud and money laundering behaviour
Investigations and Suspicious Activity Reporting	Enterprise Compliance Management (ECM) • Seamless integration with OFS KYC, CS and AML applications enable a consolidated view of the customer from a risk scoring, sanctions and transaction monitoring perspective • ECM can also absorb events from other systems in order to view events generated by the many different systems a bank may have deployed to get a full view of the customer • Flexible workflow design feature enables customers to deploy new investigation workflows to support COVID specific fraud investigations • A streamlined and robust platform for investigations will enable banks to meet regulatory requirements as well as support law enforcement investigations and fraud recovery efforts Compliance Regulatory Reporting (CRR) - for US SAR • Action taken on a case can submit the case for SAR filing • Data from the case is automatically transferred to the draft SAR report • The batch filing capability enables submitting many SARs at once to FinCen as part of a daily or weekly process

Please refer to page 11 for details on Oracle Financial Services products listed in the above table.

Below are a few additional considerations for banks in the current COVID-19 situation and how Oracle Financial Services can address these challenges.

- Bank can apply their own stress scenarios to determine short term and long-term liquidity due to changes in cashflow patterns of loans, cards, deposits, and borrowings.
- Idiosyncratic and Industry stress can be applied to assess adequacy of Bank's capital to manage stress periods
- Apply updated PD and Loss Given Default (LGD) models that incorporate the impact of COVID-19 for calculating accurate capital requirements.
- Capital adequacy analytics supports variance analysis to study the general impact on COVID-19 on capital requirements.
- Update existing models to capture the impact of PD estimates, provision amounts, and allowances predicted based on the current COVID-19 situation.

Related articles from Oracle Financial Services on COVID-19:

Proactive Risk Management: How stepping up risk management and its integration with finance can help banks navigate the new normal

Minimizing the Impact of COVID-19 on Loan Loss Provisioning: Key Actions for Financial Institutions

Fighting Money Laundering in a Disrupted Global Environment: Considerations for Financial Institutions

Oracle Financial Services suite of applications

Oracle Financial Services suite of analytical applications delivers best-of-breed capabilities to proactively manage Financial Crime, Compliance, Risk, Treasury, Finance, and the Front Office. The applications are built upon a commonly available analytical infrastructure consisting of a unified financial services data model, analytical computations, a Metadata driven "R" modeling platform, and the industry-leading Oracle Business Intelligence platform. A single, unified data model and infrastructure provides one version of the analytical "truth" to business users throughout the entire enterprise. This enables financial services institutions to confidently manage performance, governance, risk and compliance. Shared data, metadata, computations and business rules enable institutions to meet emerging business and regulatory requirements with reduced expenses and the unified platform helps financial institutions to leverage existing investments.

Oracle Financial Services Asset Liability Management (ALM) allows financial institutions to get an accurate view into their profitability, earnings stability, and overall risk exposure of the balance sheet. The application measures and models every loan, deposit, investment, and off-balance sheet instrument individually, using both deterministic and stochastic methods; this helps institutions gain a better understanding of the risks they have assumed and their sensitivity to changes in economic conditions.

Oracle Financial Services Liquidity Risk Solution (LRS) provides a robust and comprehensive solution to ensure enterprise-wide regulatory and managerial compliance by managing large data volumes, addressing computational complexity and providing accurate results while achieving extreme performance.

Oracle Financial Services Profitability Management (PFT) enables financial services institutions to calculate profitability by products, channels, segments, and even individual customers. These profitability calculations are adjusted for risk, and they drive Risk-Adjusted Performance Management (RAPM), an imperative for financial services institutions operating in this rapidly evolving and complex industry.

Oracle Financial Services Regulatory Reporting solution (RRS) includes products that automate reporting for various jurisdictions starting from data input and empowers financial services organizations to manage and execute regulatory reporting in a single integrated environment. RRS is a first-to-market solution that automates reporting from data input through regulatory submission. It features core OFSAA elements as well as a reporting portal that integrates Lombard Risk Reporting for final-mile automation.

Oracle Financial Services Basel Regulatory Capital (Basel) helps streamline Basel regulatory capital calculations throughout the enterprise to gain a unified, enterprise-wide view of various risks faced by the organization. It addresses an organization's regulatory requirement to calculate and meet the capital ratios, leverage ratios, and supplementary leverage ratio as required by regulators.

Oracle Financial Services Loan Loss Forecasting and Provisioning (LLFP) application enables compliance to IFRS 9 impairment guidelines through extensive, pre-built and easily configurable business rules and computations. The application facilitates institutions determine significant changes to credit risk, compute allowance & provision and forecast credit losses across portfolio.

Oracle Financial Services Market Risk Measurement and Management (MRMM) ensures effective evaluation of market risk across the enterprise through robust computations. Backed by Numerix, a provider of innovative capital markets technology, the Oracle application comes out-of-the-box ready to address Fundamental Review of the Trading Book (FRTB) compliance. With Numerix CrossAsset Server Solution embedded in the Oracle solution, a unified pricing and risk solution can be deployed to enable multiple pricing policies that can be shared across different units of the bank.

Oracle Financial Services Compliance Regulatory Reporting (CRR) provides a single, global regulatory reporting approach to address suspicious activity reporting requirements across different countries and jurisdictions. As part of this coverage, it supports: Pre-Defined Mapping, Different Report Formats (PDF, XML, MS Excel, etc.), Pre-Configured Controls and Pre-Configured Workflows for supporting maker-checker, quality assurance reviews and other client driven business processes for filing regulatory reports.

Oracle Financial Services Enterprise Case Management (ECM) offers financial institutions a single enterprise-wide case management platform that meets the diverse demands of their business specific investigation functions. When installed with other Financial Service compliance applications, it is preconfigured and integrated out-of-the-box, ready to support a broad set of compliance investigations, such as anti-money laundering, fraud, know your customer, customer screening, and FATCA. As a standalone solution, customers can configure the application to support any of the operational workflows that sit at the boundaries of financial compliance. Oracle Financial Services Enterprise Case Management also supports ingestion of events and entity data from disparate detection systems into a common landing area, thus enabling it to be client's central repository of all financial crime events. Financial institutions can leverage their existing financial crime detection and prevention investments to deploy business specific investigation processes without compromising information integration goals or being subject to increased regulatory review.

Oracle Financial Services Anti Money Laundering (AML) allows financial institutions to efficiently detect, investigate and report suspected money laundering activity to comply with current and future regulations and guidelines. It provides automated, comprehensive, and consistent surveillance of all accounts, customers, correspondents, and third parties in transactions across all business lines. The application allows organizations such as banks, brokerage firms, and insurance companies to monitor customer transactions daily, using customer historical information and account and peer profiles to provide a holistic view of all transactions and activities.

Oracle Financial Services Customer Screening (CS) enables organizations to effectively and efficiently screen their customers to successfully meet anti-bribery, anticorruption, export control, and other legal regulations as well as all current anti-money laundering and counter-terrorist financing legislation. Customer screening solution is built on best-in-class technology to optimize customer data prior to screening, delivering market leading screening accuracy whilst minimizing false positives and the need for unnecessary review activity. This enables organizations to achieve extremely high levels of screening accuracy at lower operational costs.

Oracle Financial Services Know Your Customer (KYC) delivers a comprehensive customer risk-scoring module for both batch and real time with flexible and extensible risk-scoring module helps meet diverse KYC regulatory requirements across global institutions. It has the capability to perform end to end on-boarding process including prospective customers. Oracle Financial Services Know Your Customer offers an efficient and cost-effective way for institutions to conduct enhanced due diligence (also known as customer due diligence) processes using the underlying case management platform's investigation capabilities. Risk assessments that meet specific thresholds are escalated for due diligence. It is delivered with standard information exchange interfaces to facilitate integration with related compliance solutions. The product comes pre-configured with Oracle Financial Services Anti Money Laundering and Oracle Financial Services Fraud applications. This helps institutions to automate an end-to-end compliance process.

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