

## CHART 4.1 THE SEVEN BASIC FUNCTIONS FOR EXTENDING CREDIT

### What are the seven essential functions in the extension of credit that all lenders must perform or cause to have performed?

The configuration of these functions for any program or portfolio will define the cost of the credit instrument as well as its effectiveness in achieving its purpose.

#### 1. Marketing

- Message What it is. Why you need it. Why us?
- Medium The full range of communications: signage, billboards, media, personal networks, social networks
- Location International, national, state, local, community

#### 2. Origination

- Advisory Interface with the client that ends in a "go" or "no-go" decision
- Application The commitment of time in assisting the borrower and ensuring the information is complete

#### 3. Underwriting

- Due diligence Vetting the data submitted by the applicant, obtaining data from relevant sources
- Credit review Evaluating the borrower data, assessing feasibility and the capacity to pay, structuring the transaction
- Approval Approving the transaction in line with the standards, authorities, and procedures of the institution

#### 4. Closing

- Documentation Assembling complete and consistent documents of the agreement, obtaining signatures
- Funding Funding the loan or the grant; committing the credit of the institution

#### 5. Servicing

- Billing and collections Calculating the proper amounts of principal and interest due, invoicing and collection payments
- Customer service Questions about the transaction, institutional policies and procedures, the client relationship
- Modifications Changing the terms and conditions of the transaction in response to client needs

#### 6. Monitoring

- Loan payments Tracking how much of what is being paid and when, relative to the agreement is the first and most important indicator
- Borrower Performing routine due diligence, through contact and available data on the client is key to anticipating risk
- Lender Performing portfolio reviews, and where pertinent, field audits of lending partners, implementing remedial steps
- Service provider Performing work and contract reviews, implementing remedial steps

#### 7. Exit

- Maturity The loan pays off before, after or on time as agreed, and the borrower obligations are released
- Termination Payment and/or payment capacity is sufficiently impaired to warrant termination of the agreement
- Asset Sale/Liquidation The loan and/or assets securing the loan are sold



## CHART 4.2 CALCULATING OPERATING COSTS BY FUNCTION

### CHART 4.2a Breakdown of Expenses (using the numbers from the most recent year)

	Total Expenses	Administrative Allocation	Indirect Staff and Resources	Direct Staff Expenses	Total Direct and Indirect
Marketing	\$1,300,000	\$300,000	\$750,000	\$250,000	\$1,000,000
Origination	\$5,135,000	\$1,185,000	\$750,000	\$3,200,000	\$3,950,000
Underwriting	\$3,770,000	\$870,000	\$500,000	\$2,400,000	\$2,900,000
Closing	\$1,716,000	\$396,000	\$1,000,000	\$320,000	\$1,320,000
Servicing	\$12,480,000	\$2,880,000	\$6,000,000	\$3,600,000	\$9,600,000
Monitoring	\$2,535,000	\$585,000	\$1,200,000	\$750,000	\$1,950,000
Exit	\$2,145,000	\$495,000	\$900,000	\$750,000	\$1,650,000
<b>Totals</b>	<b>\$29,081,000</b>	<b>\$6,711,000</b>	<b>\$11,100,000</b>	<b>\$11,270,000</b>	<b>\$22,370,000</b>

### CHART 4.2b Staff Productivity

	Total # of Staff	Number of Loans Handled	Loans per FTE	National Benchmarks*	Benchmark Performance	Avg. Annual Pay per FTE
Loans per Marketing FTE	2	2,000	1,000	10,000	(9,000)	\$125,000
Loans per Originating FTE	32	1,000	31	240	(209)	\$100,000
Loans per Underwriting FTE	24	600	25	300	(275)	\$100,000
Loans per Closing FTE	4	500	125	400	(275)	\$80,000
Loans per Servicing FTE	40	3,000	75	500	(425)	\$90,000
Loans per Monitoring FTE	10	3,000	300	1,500	(1,200)	\$75,000
Loans per Loan Exit FTE **	8	300	38	100	(63)	\$93,750
	<b>120</b>	<b>10,400</b>				<b>\$9,375.00</b>

The Exit# in the middle adjusts the Avg Pay for the # of loans in "Exit"

\* National Benchmarks. There is no one source for benchmarks at this level of specificity. However, general indicators are available from trade associations such as the Mortgage Bankers Association or the Consumer Bankers Association. These can be used to help determine whether a function can be or should be outsourced.

\*\* Loans per loan exit are loans that are delinquent and/or have defaulted, and which require elevated levels of due diligence and management. They are generally under 10% of the portfolio

**CHARTS 4.3 THE UNIT COST ANALYSIS**

CHART 4.3a Agency Cost Per Unit of providing a loan

Average Size of the Loans Originated	\$350,000	Annual Loans Closed \$	\$175,000,000	Annual Loans Closed #	500
	Total Costs	Total Number of Loans	\$ Cost per Loan by Function	% Cost per Loan by Function	% Cost per Loan Closed to Annual Loan Volume
Marketing	\$1,000,000	2,000	\$500	0.14%	0.57%
Origination	\$3,950,000	1,000	\$3,950	1.13%	2.26%
Underwriting	\$2,900,000	600	\$4,833	1.38%	1.66%
Closing	\$1,320,000	500	\$2,640	0.75%	0.75%
<b>Subtotal: Providing the Loan</b>	<b>\$9,170,000</b>		<b>\$11,923</b>	<b>3.41%</b>	<b>5.24%</b>

The Cost per Loan by Function is the amount the agency pays on average for any individual loan. The Cost per Loan Closed is derived from the total expense for each function divided by the actual number of loans closed. The differences in the amounts reflects: (i) all loans that are originated do not generate a complete application; and (ii) all loans that generate a complete application do not go to closing. If all loans originated generated applications, all applications were approved and all went to closing the numbers would be the same. The difference indicates the cost of all of the activities that are performed that do not produce a loan.

CHART 4.3b Agency Cost Per Unit of keeping and managing the loan

Average Size of the Loans Serviced	\$350,000	Annual Loans Serviced	\$1,050,000,000	3,000	
	Total Costs	Total Number of Loans	Cost per Loan by Function	Cost per Loan by Function	Cost per Loan Serviced to Total Loans Serviced
Servicing	\$9,600,000	3,000	\$3,200	0.91%	0.91%
Monitoring	\$1,950,000	3,000	\$650	0.19%	0.19%
Exit	\$1,650,000	300	\$5,500	1.57%	0.16%
<b>Subtotal: Managing the Loan</b>	<b>\$13,200,000</b>		<b>\$9,350</b>	<b>2.67%</b>	<b>1.26%</b>
<b>Total Operating Cost</b>	<b>\$22,370,000</b>				

Allocation of General Agency Costs to the Loan

Agency allocation 30% The Agency allocation covers all of the institutional costs, including management, rent, communications, etc.

<b>Total Operating Cost</b>	<b>\$29,081,000</b>	<b>Per loan</b>	<b>\$9,693.67</b>	<b>To Total Loans</b>	<b>2.77%</b>
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**CHART 4.4 DELEGATING, OUTSOURCING, AND SHARING**

CHART 4.4a Different configurations of the seven lending functions

	Marketing	Origination	Underwriting	Closing	Servicing	Monitoring	Exit/Termination
SBA 7a	Partner	Partner	Eligibility only	Partner	Partner	Automated	Partner
SBA Disaster Loans	Agency	Agency	Agency	Agency	Agency	Agency	Agency
Ex-Im Working Capital	Partner	Partner	Full if > \$10mm	Partner	Partner	Manual	Ex-Im
Ex-Im Global Credit Express	Partner	Agency	Agency	Agency	Agency	Agency	Agency
FHA Single Family	Partner	Partner	Partner	Partner	Partner	Agency	
Education FSA Student Loan	University	Agency	Agency	Agency/Vendors	Agency/Vendors	Agency	Agency

CHART 4.4b Shared Services

There is no need to wait months or years to award a contract for outside services, or to "reinvent the wheel." Among the federal credit agencies, there is a wide range of specialties and capabilities that can be tapped cheaply (and without a profit margin) and quickly (without a formal bidding process). This is allowed by the Economy Act of 1932.

The Economy Act of 1932, as amended, 31 U.S.C. § 1535, permits Federal Government agencies to purchase goods or services from other Federal Government agencies or other major organizational units within the same agency. An Economy Act purchase is permitted only if: (1) amounts for the purchase are actually available, (2) the purchase is in the best interest of the Government, (3) the ordered goods or services cannot be provided by contract from a commercial enterprise, i.e., the private sector, as conveniently or cheaply as could be by the Government, and (4) the agency or unit to fill the order is able to provide or get by contract the ordered goods or services.

**CHART 4.5 LOWERING COSTS THROUGH TECHNOLOGY UPGRADES**

**WAY HOME BANK**

Loan Volume \$175,000,000  
 Loans Outstanding \$1,050,000,000

	Before Credit Scoring	After Credit Scoring	Before Automated Application	After Automated Application	Before Outsourcing Servicing	After Outsourcing Servicing
Revenues to Total Assets	4.47%	4.47%	4.47%	4.47%	4.47%	4.47%
Interest Expense to Total Assets	0.28%	0.28%	0.28%	0.28%	0.28%	0.28%
Operating Expense to Total Assets	2.77%	2.50%	2.77%	2.30%	2.77%	1.60%
Credit Losses to Total Assets	0.27%	0.27%	0.27%	0.27%	0.27%	0.27%
Total Expenses to Total Assets	3.32%	3.05%	3.32%	2.85%	3.32%	2.15%
Profit/Surplus to Total Assets	1.15%	1.42%	1.15%	1.62%	1.15%	2.32%
Capital (same % as Small Bank in Chart 1.6)	14.00%		14.00%		14.00%	
Capital	\$147,000,000		\$147,000,000		\$147,000,000	
ROE	8.22%	10.14%	8.22%	11.57%	8.22%	16.57%

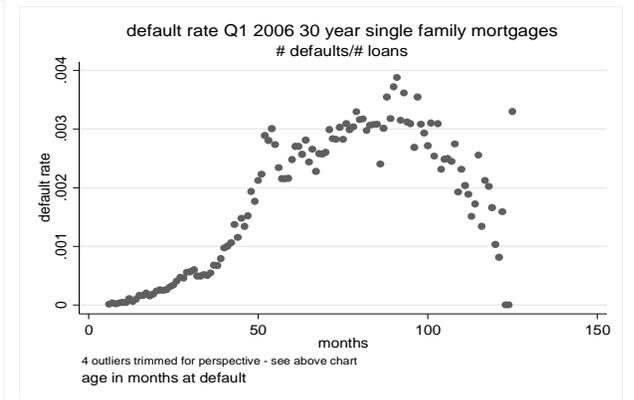
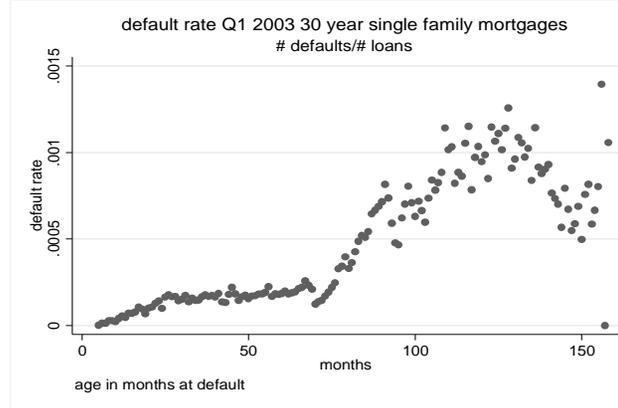
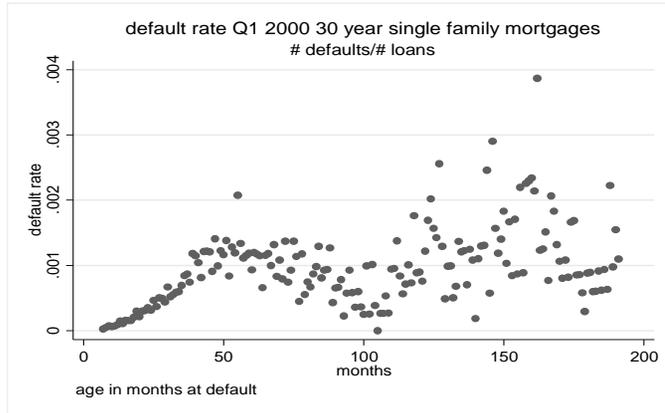
CHART 4.6 WHAT KIND OF RISK ARE WE SUPPOSED TO BE PREPARING FOR?

Over-arching issues

Points of view that often guide or govern the level of credit risk

- The banks aren't lending in my District
- The government ought not to be in the lending business: if borrowers aren't bankable they shouldn't borrow
- The government should keep credit losses under 2 %
- The program should be budget neutral
- The government should never lend to make a profit
- The government is here to help me: concessionary rates, modifications, waivers, less paperwork burden
- The government will (or should) never foreclose on me
- I have a right to participate in this credit program
- The government should never take a subordinate position
- Usury begins at 9%
- All Other

CHART 4.7 KEY PROBLEM: THE LOSS CURVE



## CHART 4.8 CREDIT SCORING

### Summary

Credit scoring has become the primary form of underwriting small ticket (under \$750,000) high volume credit programs. In addition to personal credit scores of the business owners, there are highly accurate systems for scoring the business. The focus is not on evaluation of the company financials; business tax and financial data typically account for less than 15% weight of the business score. The business scores are largely reflective of the personal scores of the principal owners and the focus is on how they pay creditors over time. Recently business scoring systems have added tracking and analysis of business deposit balances. Systems can cost as little as \$10 or \$15 per business borrower -- a steep reduction in operating cost from the traditional range of \$1,500 to \$5,000 per loan. The credit scores have also proven more accurate than manual underwriting for loans of \$750,000 or less. The accuracy diminishes as size of the loan and the business increases, however, and most small business loans still require some level of manual underwriting.

### Example of a Credit Scoring Chart

Credit Score	Loan Volume	Charged-off	Loss Rate	Number of Loans
180-189	\$665,787,329	\$29,315,563	4.40%	2,124
190-199	\$641,832,238	\$20,946,992	3.26%	2,045
200-209	\$581,054,849	\$10,019,915	1.72%	1,805
210-219	\$428,922,655	\$6,197,609	1.44%	1,303
220-229	\$213,636,108	\$2,321,998	1.09%	647
230-300	\$58,352,984	\$194,577	0.33%	149
TOTAL	\$25,895,876,163	\$68,996,654	2.66%	8,073

### Reading this Chart

This is an actual chart produced some years ago by a major lender with its own scoring system for businesses. The chart shows the riskiest business loans at the top with scores between 180 and 189 and a 4.40% loss rate, descending to the least risky with scores in the 230-300 range and an average loss rate of .33%. The balance among the different credit scores enables the lender to achieve an overall 2.66% loss rate -- not bad for a small business lender -- by using low risk loans to subsidize high risk loans. This lender developed the scores over a 15 year period using volume in the billions of dollars and thousands of loans. The lender has found the scores highly predictable, and uses them to ensure a proper portfolio balance going forward.

### Loan Loss Reserves

The lender can use this data to establish a loss reserve of at least 2.66%. A prudent approach would be to incorporate uncertainty into the Loss Reserve by making a Provision for Losses that brings the Loss Reserve to something more in the range of 3.5 -4.0%. The reason: the balance of credit scores in the portfolio is likely to change, particularly if there is a change in economic conditions. This particular lender also routinely updates the scores of existing borrowers at least quarterly so that the financial standing of *all* of its loans are current. The Loan Loss Reserve is adjusted accordingly.

## CHART 4.9 STANDARD DEFINITIONS

### Definitions

Delinquency	A delinquent loan is a loan that has missed at least one scheduled payment. Therefore, a "30-day" delinquent loan is past due by one payment as of the report date; a "60-day" is past due by two payments, etc. When a loan is delinquent, the full principal is accounted as delinquent, not just the missed monthly payment. There are no hard rules on when foreclosure should begin and practice can differ from one asset class to the next. But generally foreclosure proceedings aren't started before a loan is 90 days past due, and many don't start until a loan is 120 days. Agencies are directed to send loans that are delinquent 180 days to Treasury for collection. The term delinquency is used by agencies for programs involving direct lending. <i>All lenders have discretion in remedying delinquency.</i>
Default	In the context of mortgage pools, a defaulted loan is one that "no longer pays principal and interest, and then remains delinquent until liquidated. Federal agency programs that guarantee loans made by private sector lenders use the term "default" to indicate a loan has been purchased from the lending partner or on which a claim has been paid. <i>There can be a time lapse between the time a loan goes delinquent at the lending partner and the time the loan is purchased or a claim is paid.</i>
Charge-off	This is the amount of principal that the lender estimates will be written off on a delinquent loan. It is a non-cash item that is a debit to the Loss Reserve and a Credit to the Loan balance.
Recovery	This is the amount of principal that is recovered after all or a portion of a loan has been charged-off. It is often, but not always, the product of liquidating or foreclosing on the loan. Standard practice is to (i) credit the loss reserve and debit the Loan balance; and then (ii) credit the loan balance and debit cash. The ratio of recoveries to charge-offs is a critical indicator of (i) the type of loans; (ii) the level of risk being taken; and (iii) management discipline.

## 4.10 EXAMPLES OF RATING A LOAN AND ALLOCATING LOSSES

### 4.10a Rating a Loan

Loss	Loan is in workout or should be in workout but there is no likelihood of a return of principal through liquidation of the assets, or honoring the guarantee
Doubtful	Loan is in workout but has some sources of repayment intact i.e., extended loan maturity, liquidation of collateral, honoring the guarantee
Substandard	One or more 30 day delinquencies, partial payments, drop in credit scores, financial trends, modifications due to payment stress, material change in business or personal status or condition, plus evidence that one or more sources of repayment are impaired.
Other Loans Especially Mentioned	One or more 30 day delinquencies, partial payments, drop in credit scores, financial trends, modifications due to payment stress, material change in business or personal status or condition, plus potential impairment of primary source of repayment
Watch List	Current, but Non SBA Compliance, drop in credit scores, no updated UCC and/or questions about collateral coverage,

Add the following to Each of the Above if conditions warrant. Example: Substandard plus Remedial = 20% + 2%

Remedial	Lacks complete documentation, signed documentation, and/or financial information, current UCC filing, credit scores, site visits, other documentation.
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### 4.10b Establishing an appropriate Loss Reserve

	% to Portfolio	Projected Default per Delinquency status	Projected Default % to Portfolio	Expected Loss %	Expected Loss as % of the Portfolio
Current	83.00%	11.00%	9.13%	35.00%	3.20%
30 Days Delinquent	4.00%	37.00%	1.48%	35.00%	0.52%
60 Days Delinquent	2.40%	54.00%	1.30%	35.00%	0.45%
90 Days Delinquent	2.50%	68.00%	1.70%	35.00%	0.60%
Bankruptcy	1.70%	54.00%	0.92%	35.00%	0.32%
Foreclosure	3.80%	76.00%	2.89%	35.00%	1.01%
Real Estate Owned	2.60%	100.00%	2.60%	35.00%	0.91%
<b>Total</b>	<b>100.00%</b>		<b>20.01%</b>	<b>35.00%</b>	<b>7.00%</b>

I. CREDIT AUDIT # _____ BORROWER NAME: _____ DATE _____											
LOAN	D-U-N-S #:	PAYDEX Score:	NAICS	Date			Date			Date	
1. Name		14. Established		20. Promissory Note			26. Term/Settlement Sheet			32. Credit Memo	
2. Address		15. Original Loan Closing Date		21. Loan Agreement			27. Annual Audit			33. Payroll Tax paid	
		16. Original Amount of Loan		22. Lien Perfection			28. Tax Filing			34. Loan Modified	
3. Website		17. Interest Rate		23. Guarantee			29. SBA Eligibility			35. Participation Loan Bought	
4. In Field of Membership		18. Origination Fee		24. Corp Resolutions			30. Last Lien Renewal			36. Participation Loan Sold	
5. Customer Since		19. Other Fees		25. Purpose of the Loan					31. Collateral		

6. Contact 1		37. Date of Financial Statements	12/31/2013	9/30/2013	6/30/2013	3/31/2013	12/31/2012	9/30/2012	6/30/2012	3/31/2012	12/31/2011	9/30/2011	6/30/2011	9/21/2008
7. Email (or Text)		38. Number of Employees												
8. Phone		39. Loan Principal Amount												
9. Home Address		40. Total Deposits - Business												
		41. Total Deposits - Owner(s)												
10. Contact 2		42. Owner Credit Score												
11. Email		43. Business Credit Score												
12. Phone		44. Financial data: Tax or GAAP books												
13. Audit Closing Date		45. Audited (A) or Company Prep (CP)												

46. Audit Rating, Comments	47. Total A/Rs from Top 10 Customers													
	Customer 1													
	Customer 2													
	Customer 3													
	Customer 4													
	Customer 5													
	Customer 6													
	Customer 7													
	Customer 8													
	Customer 9													
	Customer 10													
	48. # of New Customers Year to Date													
	49. Number of Total Customers YTD													
	50. Avg Size of Customer Purchases Pr Yr	#DIV/0!												

51. COMMENTS ON BUSINESS, CUSTOMER RELATIONSHIP.

II. CREDIT AUDIT #		BORROWER NAME:		DATE											
LOAN	D-U-N-S #:	PAYDEX Score:	NAICS	0											
			12/31/2013	YTD 9.30	YTD 6.30	YTD 3.31	12.31.12	YTD 9.30	YTD 6.30	YTD 3.31	12/31/2011	12/31/2010	12/31/2009	Origination	
52. Other Debt 1		Financial Information													
53. Contact for Other Debt		73. Revenues													
54. Lender		74. Cost of Goods Sold													
55. Other Debt 2		75. Salaries and Benefits													
56. Contact for Other Debt		76. All Other Exp excl Interest and Depr													
57. Lender		77. Interest Expense													
58. Other Debt 3		78. Net Profit Before Tax													
59. Contact for Other Debt		79. Cash and Short Term Investments													
60. Lender		80. Accounts Receivable													
61. SBA Contact		81. Inventory													
		82. Accounts Payable and Accruals													
62. Last Visit to Borrower		83. Short Term Debt													
63. Last Communication		84. Long Term Debt													
64. Total Loans to Borrower & Owner at cut-off date		85. Net Worth													
		86. Total Assets													
65. Total Loans to Relations and Related Businesses		87. \$ Cash from Operations													
		88. Years to Repay Debt	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
66. Total Loans to Owners, Businesses and Relations		89. Interest Coverage	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
		90. Inventory Days on Hand	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
67. Date interest is Paid to		91. Receivables Days on Hand	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
68. Days past due Interest		92. Accounts Payable and Accrual DOH	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
69. \$ Past Due Interest		93. Current Ratio	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
70. Days Past Due Principal		94. Leverage Ratio	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
71. \$ Past Due Principal		95. Owners advances or (loans to owner)												\$40,000	
72. Website (Good/Bad)		96. Owners advances to Total Debt	#DIV/0!				#DIV/0!				#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	

97. COMMENTS ON FINANCIAL CONDITION.











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Summer 2016

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