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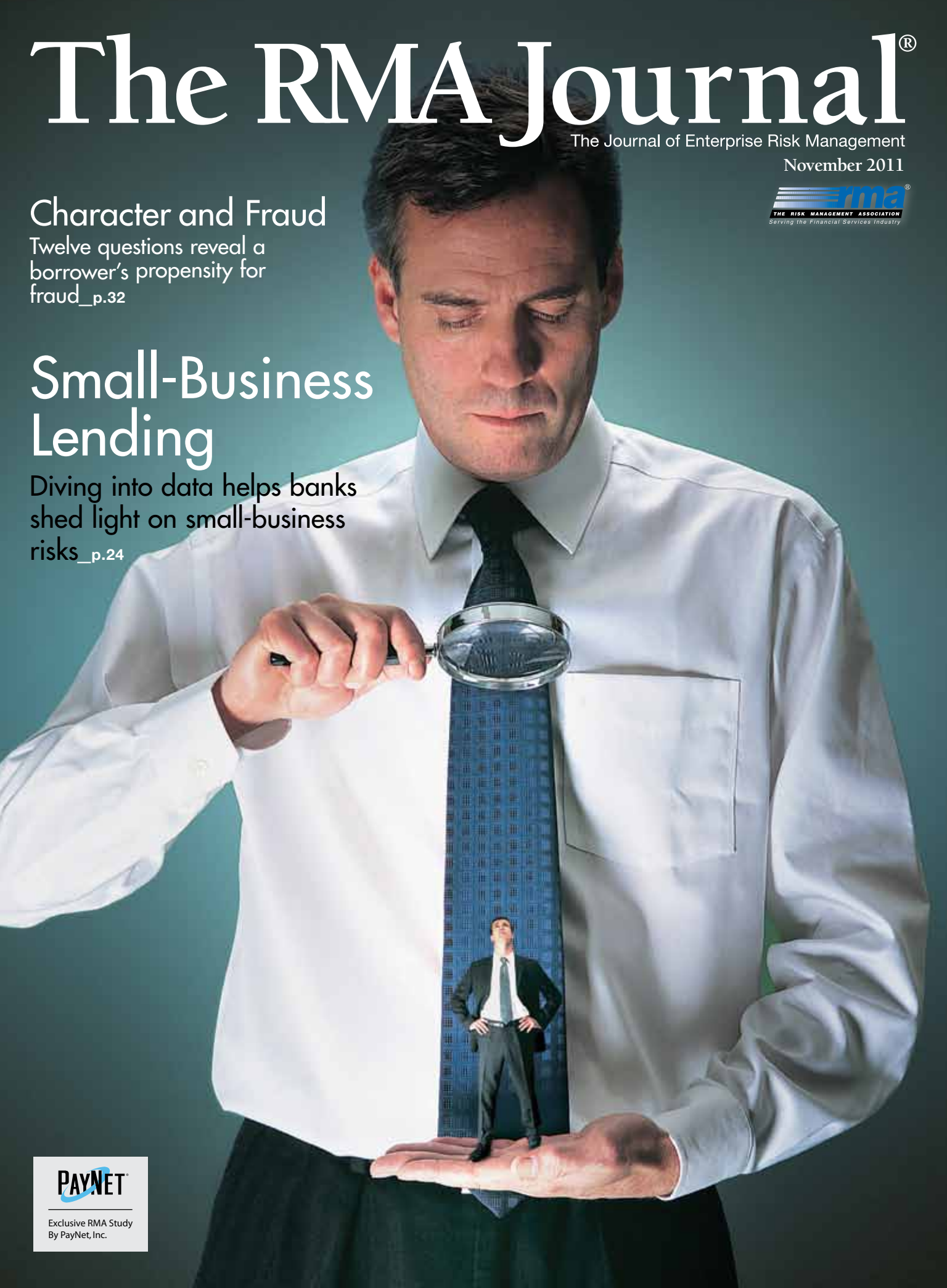


PAYNET

Exclusive RMA Study
By PayNet, Inc.

Fueling Economic Growth

Where's the impediment to returning to the good old days of small-business expansion and more start-ups?

BY WILLIAM PHELAN

MANY ECONOMISTS ARE saying this economy is recovering at half-speed. Clearly, publicly held corporations, one half of the economy, have recovered. Their balance sheets carry cash at levels not seen since the 1960s. Stock prices indicate strong valuations and earnings are at healthy levels. The other half of the economy, the small-business sector, remains a mystery. Monthly surveys such as that of the National Federation of Independent Business seem to indicate recession territory, but the lack of financial statements or stock market trading in small business makes it hard to be sure.

The purpose of this article is to shed light on the small-business economy by learning from small businesses' habits and tendencies as illustrated by quantifiable data. Data-driven analysis helps those making loan decisions better understand the risks and the opportunities involved in granting credit to small businesses. This improved understanding can lower the cost of doing business for credit grantors and may enable additional credit to flow more freely to small businesses, thus helping American commerce grow faster.

Another aim here is to assist those who hold portfolios of small-business credits to safely manage their exposures. Long-term defaults move within a range for asset classes, and the small-business asset class is no exception.

LOUDOUBRARY/THINKSTOCK

Lastly, small, privately held businesses represent a large and diverse mass of credit, which currently sits on the balance sheets of banks, finance companies, and trade financing companies. Increasing the transparency of risk and reward can unlock capital markets and help lenders become an intermediary of small-business credit. The captive finance company that is overly concentrated in farm equipment loans may someday find ways to diversify this over-concentration. In doing so, the sources of credit for small business will expand, and the safety and soundness of the financial system will improve.

The small business owner has encountered challenges during the last recession in the form of weak sales as the U.S. consumer deleverages personal balance sheets and consumer tastes change.

An American Hero

The small business owner has encountered challenges during the last recession in the form of weak sales as the U.S. consumer deleverages personal balance sheets and consumer tastes change. While the recent crisis dampened financial activity across the entire globe, the data reveals

that small businesses reacted by right-sizing costs and putting their financial houses in order.

Small-business sizing is notoriously difficult. Ask three bankers for a definition of small business and you will get three different answers. This confusion owes to the lack of transparency regarding the financial picture of a small business. Publicly available information on small businesses, such as annual revenues or number of employees, relies on estimates rather than hard data. In an ideal world, the financial statements of small businesses would be readily available, just like the financial statements of public corporations.

In the absence of financial statements, for purposes of this study, PayNet defines a small business to be one with $1 million or less in total loans outstanding. Loans outstanding represent one of the best measures of business size, as they are objectively reported by a third party, the lender, as opposed to being self-reported or estimated.

With investments in property, plant, and equipment increasing at the fastest rate since before this last recession, small businesses are signaling optimism about their future.

A cross section of U.S. small businesses serves as the sample for this study. This sample, extracted from PayNet's proprietary database, reflects the geographic and industry makeup of the small-business economy in the United States. PayNet's database encompasses information on more than $800 billion of financial activity by millions of U.S. small businesses and is updated with real-time information each month. Through state-of-the-art analytics, this real-time data is converted into market intelligence and predictive tools that can be used to lower the cost of credit granting and loan management.

Summary statistics on this sample show the average loan amount to be just under $60,000. The average high credit per business is roughly $350,000, and the average term of all financial obligations is 48 months. Loan types are long-term obligations such as term loans, commercial leases, and credit lines used for long-term investment in expansion of property, plant, or equipment. The companies studied represent a cross section of U.S. small business, as will be shown in the charts featuring distributions by SIC code.

Emerging from Recovery

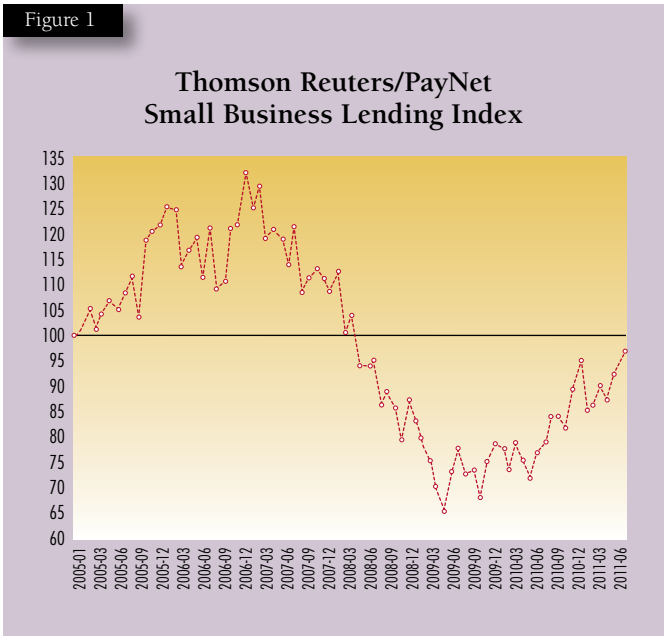
The Bureau of Economic Analysis reported that U.S. GDP expanded at an annualized, seasonally adjusted rate of 1.3% from April through June. First-quarter growth was revised down sharply to 0.4% from the earlier estimate of 1.9%. The Thomson Reuters/PayNet Small Business Lending Index (SBLI) confirms that economic activity was not as strong as initially reported (Figure 1), falling from 94.9 in December 2010 to 85.4 in January 2011, a 10% decrease. The SBLI has proven to be a leading economic indicator, signaling GDP changes two to five months in advance, because small businesses generally respond to changes in economic conditions more rapidly than do larger businesses.

The recent performance of the SBLI signals resiliency in the U.S. economy. The SBLI started a rapid expansion in the spring, rising 28% in May and 25% in June from the same months a year earlier. With investments in property, plant, and equipment increasing at the fastest rate since before this last recession, small businesses are signaling optimism about their future. Absent a shock like the 2008 financial crisis, the SBLI reflects underlying strength in the U.S. economy. The composition of the small-business economy is constantly changing, so the real question is which sectors are seeking growth capital. Figure 2 reveals industry segments with credit growth in 2010.

The question for bankers is whether or not these industries are engaged in safe growth or in the formation of a new bubble. The global expansion of agricultural products and high prices for commodities and farmland form a solid foundation for farms that are in a good position to service additional debt. Several surprises appear in the growth industries list, such as heavy construction, excluding building, which reflects infrastructure and road building. Also, the revival of automotive dealers mirrors recovery in the domestic auto sector.

Conversely, Figure 2 also shows sectors still in contraction mode. Health services, insurance agents and brokers, and eating and drinking places represent sectors with shrinking business investment. Given the capital-

Figure 1



intensive nature of the health services field, perhaps the uncertainty of recent health care legislation is dampening investment in this sector until new rules and their impact on business operations become clearer.

Insurance agents and brokers represent a low capital-intensive business. All that's needed is basic office and computer equipment, indicating the low barriers to entry and the "mom and pop" nature of this sector. Eating and drinking places are no doubt impacted by rising food prices and continued slower-than-average economic growth, which limits discretionary funds for dining out.

Jobs, Jobs, Jobs

Small business accounts for 80% of job creation, according to various government sources. One clear source of this job creation is start-up companies. No one knows for sure the percentage of jobs created by start-ups, but PayNet data sheds light on the amount of start-ups and the industries creating jobs. This data shows that the rate of start-ups decreased approximately 2% from 2009 to 2010. A real problem for the economy, however, is that there were 51% fewer start-up businesses in 2010 compared with 2007.

Diving deeper into the data in Figure 3 uncovers the highest rate of start-ups among amusement and recreation services sectors. Real estate services represent the second highest start-up business sector by count of companies. Agriculture services accounted for the third highest number of start-up businesses in 2010. Industry sectors with the largest decrease in start-ups in 2010 are furniture and home furnishings stores, insurance agents and brokers, and retail food stores.

Combining start-up data with change in industry originations offers a view into consolidating sectors. As we saw earlier, automotive dealers are one of the growth industries, having borrowed and invested at a rate of 12% over 2009 levels. We also see 4% fewer automotive dealer start-ups, as shown in Figure 3. As we know, many small automotive dealers closed during the recession. Recent activity shows fewer small businesses in the automotive dealer sector and expansion by the larger ones (most likely to enjoy economies of scale).

A look at this data in a time series reveals fewer start-ups over the past several years. Studying first-time borrowers for 2007, 2008, 2009, and 2010, we found that start-ups represent 7% less of the population of borrowers over this time frame. Start-ups could be seeking credit from friends and family to fund their businesses or even relying on personal savings. However, given the large sample size in this study, a trend toward fewer start-ups is clearly evident. Additionally, the decrease across all industry segments also suggests fewer start-ups, meaning fewer jobs and less innovation in the U.S. economy.

Figure 2

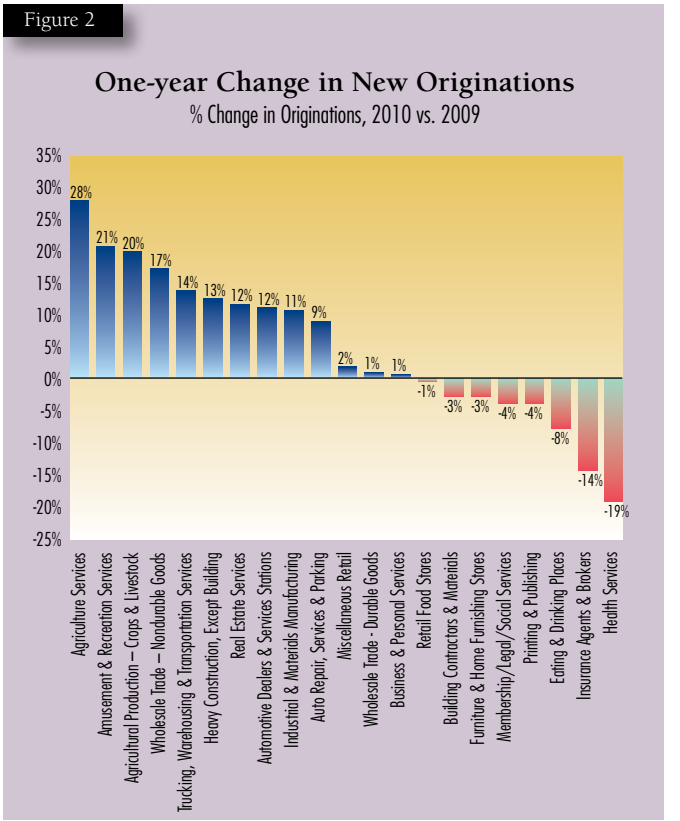


Figure 3

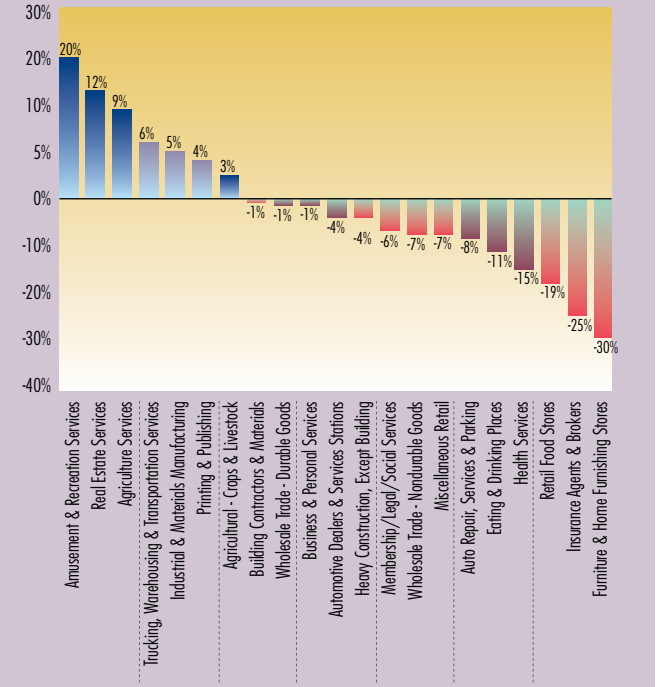
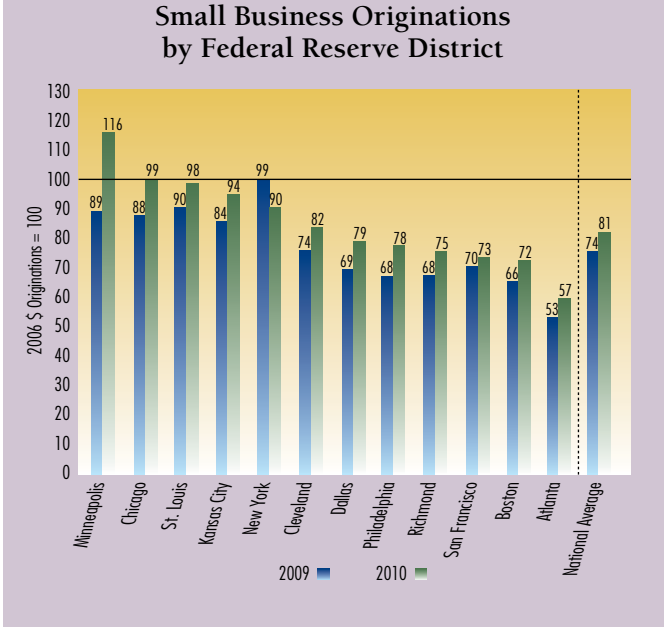


Figure 4



One unfavorable trend is the dramatic decrease in industrial and materials manufacturing start-ups, which were down 8.8% from 2007 to 2010. Manufacturing start-ups are increasing at a rate almost 50% less than the pace of all start-ups. Sectors with low barriers to entry, such as retail food stores, eating and drinking places, and home furnishings and furniture stores, remain the typical start-up. Sectors producing higher paying jobs—such as heavy construction and manufacturing, which pay 33% higher wages than the average, according to the Bureau of Labor Statistics—are at the bottom of the start-up list.

One unfavorable trend is the dramatic decrease in industrial and materials manufacturing start-ups, which were down 8.8% from 2007 to 2010.

Geographic Impact

The relative health of small-business credit varies widely by geographic region. PayNet divided the data according to the 12 Federal Reserve Districts. Figure 4 reveals higher investment in the central regions and less on the coasts. Growth has occurred in all regions with the exception of New York. Minneapolis, Chicago, St. Louis, Kansas City, Cleveland, and New York exceed the national average in investment and business credit expansion.

An analysis of delinquency rates by Federal Reserve District in Figure 5 shows that the South offered the lowest-quality assets. Atlanta topped all regions with 2.4% moderate loan delinquency. Minneapolis exhibited the highest credit quality with a 0.8% delinquency rate, while the entire Central Region's delinquency was 37 basis points below the national average. This data highlights the differences in regional economies and the impacts on local businesses.

Loan Default Rates by Industry

To date, actual historical default rates by small-business industry sector have been lacking. This fact probably limited decision making by bankers, policy makers, and regulators—and likely held back extension of credit to small businesses. But with the extensive loan data on small businesses available in the PayNet database, we can measure historical default rates by industry, portfolio, or borrower.

In this study, loan default is triggered by the following: 1) 90+ days past due on a dollar-weighted basis for all contracts within the "relationship"; 2) a major "bad" status such as bankruptcy, repossession, or legal action; and 3) loss/write-off greater than $5,000 and at least 5% of the outstanding obligations. This "relationship" definition of default is used to calculate historical default rates using the PayNet database of loan payment performance.

Table 1 summarizes the historical default rates for the top 21 SIC codes for small businesses with total loan exposures of under $1 million.

The data shows 4.1% of small businesses as a group

Figure 5

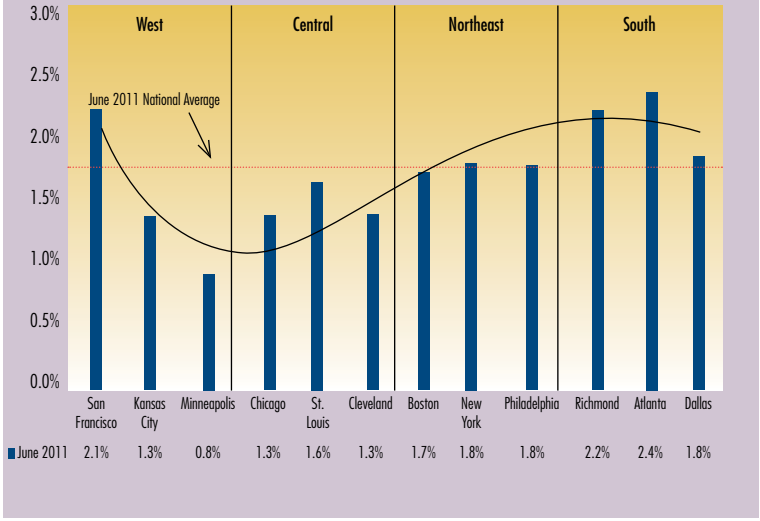


Table 1
Actual Default Rates by Industry Segment

Industry Segment	Actual Historical Default Rates				
	2006	2007	2008	2009	2010
Printing & Publishing	4.0%	3.7%	6.9%	11.5%	8.2%
Trucking, Warehousing & Transportation Services	4.5%	6.5%	10.4%	12.3%	6.9%
Furniture & Home Furnishing Stores	5.0%	4.7%	6.6%	8.3%	6.4%
Building Contractors & Materials	2.5%	3.5%	6.5%	10.1%	5.9%
Heavy Construction, Except Building	1.9%	2.9%	5.2%	9.0%	5.5%
Business & Personal Services	3.7%	3.7%	5.9%	8.2%	4.7%
Eating & Drinking Places	3.8%	4.1%	6.0%	6.1%	4.6%
Real Estate Services	3.4%	5.5%	8.2%	9.2%	4.4%
Retail Food Stores	2.8%	2.9%	4.2%	6.9%	3.8%
Agriculture Services	2.4%	2.7%	4.0%	5.4%	3.6%
Miscellaneous Retail	3.6%	3.3%	5.2%	5.4%	3.6%
Wholesale Trade - Durable Goods	2.1%	2.6%	4.0%	5.2%	3.4%
Automotive Dealers & Service Stations	2.9%	2.4%	6.0%	8.1%	3.2%
Industrial & Materials Manufacturing	2.0%	1.8%	2.8%	6.1%	3.2%
Auto Repair, Services & Parking	3.7%	3.7%	4.5%	6.4%	3.2%
Health Services	2.5%	2.8%	3.5%	4.5%	3.0%
Amusement & Recreation Services	3.0%	3.4%	3.4%	4.3%	2.5%
Insurance Agents & Brokers	3.1%	2.4%	3.2%	4.1%	2.4%
Membership/Legal/Social Services	2.1%	2.6%	3.5%	3.6%	2.2%
Wholesale Trade - Nondurable Goods	2.0%	2.0%	2.5%	3.5%	2.1%
Agricultural Production - Crops & Livestock	2.0%	1.2%	1.1%	2.3%	1.9%
All Industries	**2.9%**	**3.5%**	**5.3%**	**7.1%**	**4.1%**

Table 2
Industry Segment Risk-ranking Migration, 2006–10

Industry Segment	Actual Historical Default Rates				
	2006	2006 Rank	2010	2010 Rank	Ranking Change
Printing & Publishing	4.0%	19	8.2%	21	2
Trucking, Warehousing & Transportation Services	4.5%	20	6.9%	20	0
Furniture & Home Furnishing Stores	5.0%	21	6.4%	19	-2
Building Contractors & Materials	2.5%	9	5.9%	18	9
Heavy Construction, Except Building	1.9%	1	5.5%	17	16
Business & Personal Services	3.7%	16	4.7%	16	0
Eating & Drinking Places	3.8%	18	4.6%	15	-3
Real Estate Services	3.4%	14	4.4%	14	0
Retail Food Stores	2.8%	10	3.8%	13	3
Agriculture Services	2.4%	7	3.6%	12	5
Miscellaneous Retail	3.6%	15	3.6%	11	-4
Wholesale Trade - Durable Goods	2.1%	6	3.4%	10	4
Automotive Dealers & Service Stations	2.9%	11	3.2%	9	-2
Industrial & Materials Manufacturing	2.0%	4	3.2%	8	4
Auto Repair, Services & Parking	3.7%	17	3.2%	7	-10
Health Services	2.5%	8	3.0%	6	-2
Amusement & Recreation Services	3.0%	12	2.5%	5	-7
Insurance Agents & Brokers	3.1%	13	2.4%	4	-9
Membership/Legal/Social Services	2.1%	5	2.2%	3	-2
Wholesale Trade - Nondurable Goods	2.0%	3	2.1%	2	-1
Agricultural Production - Crops & Livestock	2.0%	2	1.9%	1	-1
All Industries	**2.9%**		**4.1%**		

were unable to meet their principal and interest payments on time in 2010. Compared with 2009, default rates on small business loans fell 42% in 2010. Meanwhile, global speculative-grade corporate bonds experienced a 3.2% default rate, according to recent default studies published by Moody's Investors Service. Last year, we reported that speculative-grade defaults reached 12.97%, whereas small businesses as an asset class defaulted on 7.1% of all obligations outstanding in 2009.

Loan defaults vary by industry sector, as shown in Table 1. Printing and publishing, trucking, furniture stores, building contractors, and heavy construction were still the highest defaulting sectors of the small-business economy. These high defaulters improved over their 2009 rates, but printing and publishing, furniture stores, and heavy construction failed to improve as much as the overall small-business economy.

A look at the lowest risk segments shows which business types were the most attractive lending segments from a risk standpoint in 2010. Agricultural production again was the least risky of all industries. Community banks serving the cash grain farmers enjoy the lowest loan defaults of all borrower types. However, concentration risk remains an issue for community banks whose local market is primarily farmers and agriculture producers.

Industrial and materials manufacturers became 47% less risky in 2010 as their actual default rate fell from 6.1% to 3.2%. This sector appears attractive from a risk standpoint, as its defaults are less than the national average. However, from a growth standpoint, industrial and materials manufacturing represents a shrinking market for bankers, as loan originations to this sector shrank 20% over the past two years and fewer start-ups were created. Although this sector appears attractive from a risk standpoint, there are account acquisition costs and the ongoing search for earning assets makes it a source of intense competition among bankers.

Concentration risk remains an issue for community banks whose local market is primarily farmers and agriculture producers.

Loan volatility is an important consideration for bankers, yet no empirical information is available to measure volatility in small-business industry sectors. For this study, PayNet updates the change in industry riskiness, which first appeared last year, by showing the ranking change since 2006. A positive number indicates a higher ranking (or increased relative risk) than in 2006, whereas a negative number indicates a lower ranking (or decreased relative risk). Double-digit changes in either direction indicate higher volatility

Table 3
Forecast Default Rates by Industry Segments

Industry Segment	Forecast Default Rates	
	2011	2012
Printing & Publishing	4.9%	3.9%
Trucking, Warehousing & Transportation Services	5.4%	4.5%
Furniture & Home Furnishing Stores	3.2%	3.2%
Building Contractors & Materials	3.9%	3.4%
Heavy Construction, Except Building	3.3%	2.9%
Business & Personal Services	3.6%	3.3%
Eating & Drinking Places	3.3%	3.5%
Real Estate Services	2.9%	2.7%
Retail Food Stores	2.8%	3.3%
Agriculture Services	2.5%	2.3%
Miscellaneous Retail	3.1%	3.3%
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Auto Repair, Services & Parking	3.0%	3.0%
Health Services	1.9%	2.3%
Amusement & Recreation Services	2.9%	3.3%
Insurance Agents & Brokers	1.9%	2.1%
Membership/Legal/Social Services	2.1%	2.2%
Wholesale Trade - Nondurable Goods	2.1%	2.6%
Agricultural Production - Crops & Livestock	1.4%	1.5%
All Industries	**3.0%**	**2.8%**

By the time a bank discovers it has a problem, it may have already booked a portfolio of poor-quality loans that will take years to work out.

that should be priced into the loan. Having the empirical data to support volatility is necessary to support loan-pricing decisions.

Heavy construction saw its relative risk ranking change the most during the recession. In 2006, this segment was one of the least risky of the small-business economy. By 2010, its fortunes had changed, as the sector experienced an increase in risk ranking of 16 places. Building contractors saw a change in risk ranking of nine places. The issue for bankers is how to track the changing fortunes of industry segments in order to avoid (or at least limit) the damage from the industries with rapidly increasing defaults. Auto repair, eating and drinking establishments, miscellaneous retail, insurance agents, and amusement and recreation services all exhibited substantial improvements relative to other sectors over this same period.

Having the knowledge and ability to diversify portfolios and the agility to shift into less risky segments in the midst of changing economic cycles is critical to the long-term success of business banking. Relative risk rankings help bankers understand the volatility of various industry segments and incorporate it into their loan pricing to maintain profits through the economic cycle.

2011–12 Outlook

PayNet forecasts the probability that those who borrow money do not pay back interest and principal in a timely manner—or at all. Probability of default is the most important measure, but also the most difficult to assess. Prior to default, it is difficult to discriminate between firms that will default and those that will not over the next years.

Future probabilities of default can be forecasted by combining historical loan defaults with macroeconomic factors using a small-business risk rating system pioneered by Professor Darrell Duffie of the Stanford Graduate School of Business. The good news is that risk in the small-business economy appears to be lessening. As Table 3 shows, the overall forecasted default rate for a composite of small businesses across the U.S. is falling from an actual rate of 4.1% in 2010 to an estimated 2.8% by year-end 2012. The forecast for less risky small-business loans, with default levels similar to those in 2006, suggests a more stable economy.

As discussed previously, geographic conditions do vary and can result in differing default performance for different regions of the country. Likewise, PayNet's research indicates that the unique characteristics of a particular bank's portfolio will also cause the forecasted probabilities of default to vary by lender.

Table 4

Change in New Originations 2010 vs. 2009	Forecast 2012 Default Rate: Lower than Industry Average	Within 25 bps of Industry Average	Higher than Industry Average
Higher than Industry Average	Agriculture Services Agriculture Production Wholesale Trade - Nondurable Goods	Heavy Construction, Except Building	Trucking, Warehousing & Transportation Services Amusement & Recreation Services
Within 6% of Industry Average	Industrial & Materials Manufacturing	Automotive Dealers & Service Stations Real Estate Services Auto Repair, Services & Parking Wholesale Trade - Durable Goods	Business & Personal Services Miscellaneous Retail
Lower than Industry Average	Health Services Insurance Agents & Brokers Membership/Legal/ Social Services	N/A	Furniture & Home Furnishing Stores Retail Food Stores Building Contractors & Materials Eating & Drinking Places Printing & Publishing

A risk-versus-reward matrix shown in Table 4 suggests the industry sectors that are more and less attractive in the absence of risk-based pricing. Agriculture and wholesale trade represent the lowest-risk, higher-growth potentials for capital expansion. Meanwhile, trucking, warehousing, and transportation services introduce high growth potential but also higher-than-average risk of defaults.

Conclusion

The need to create jobs is evident. Small businesses are the engine of the U.S. economy, generating 80% of all new jobs. Unfortunately, at the current time, job creation is stalled.

The balance sheets of banks are stocked with excess deposits that these institutions would like to lend in an effort to counteract decreasing revenues from interest-earning assets. With little information available on the small-business economy, the challenges are significant for commercial bankers whose job it is to grant credit during uncertain economic times. Small businesses are opaque, they change over time, they have inter-ownership relationships that are difficult to track, and they exhibit rapid closings and start-ups.

A random approach to commercial lending can produce unintended and disastrous effects on a bank's profitability. Understanding default rates through the economic cycle can help bankers accurately price for risk. With commercial and industrial lending as the strategic growth imperative of their industry, bankers need to show they can make sound lending decisions during a time of continued economic uncertainty. The intractable problem for them is that losses do not become apparent until well into the economic cycle, and by then it is too late.

By the time a bank discovers it has a problem, it may have already booked a portfolio of poor-quality loans that will take years to work out. Bankers can partly solve this problem by developing a better understanding of the risks and growth opportunities of small businesses. And historical analyses such as this one are the first step on that road to knowledge and improved returns. ❖

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