JSI Consumer Default Probability Index – FAQ & User Guide

60% of material defaults are precipitated by the loss of employment. JSI Analytics provides a program, the Consumer Default Probability Index (JSI Index), that analyzes over 900 occupations to determine the probability of employment loss. This Index estimates the likelihood of future default influenced by occupational job loss risk. The JSI Index informs the lender of a persons' future capacity to pay, which is based on the retention of their income stream. This Index is separable from other repayment risk prediction scores in that it forecasts income disruption quantitatively to accurately portray total risk quality.

Incorporated into our models is the fact that the labor market is in the earliest stages of change due to AI and robotics. Simply put, there are jobs today that will not exist tomorrow. We do not ascribe to the dire predictions of mass unemployment due to AI that are commonly put forth. We do believe there is a lot of truth to the adage that you won't lose your job to AI, you may lose your job to the person who understands how to use AI. Prudent lending practices would incorporate a forward looking view of employment risk.

FAQ

What is a JSI Index score?

The JSI Index score is a value on a scale ranging from -10 to 0. The score is based on employment information and current economic conditions, to reflect the probability of a person in a specified occupation maintaining employment. Financial obligations are paid with income, and the vast majority of people derive their income from employment. In cases where significant savings or assets are involved, the trajectory of income may attach to a higher starting value, but the financial pressure in most cases is the same - default risk is elevated while income is suspended. For situations with little or no financial back stop, the default trajectory can appear suddenly and unexpectedly - meaning observable past repayment behavior is less applicable to the shock of job loss.

How does a FICO score differ from the JSI Index score?

They represent entirely different sets of information. A FICO score primarily represents an individuals' credit history and willingness to service their obligations. A JSI Index score represents an individuals' future capacity to pay their obligations.

Should I use a JSI Index score instead of a FICO score?

As each score represents different and unique characteristics of the borrower, we recommend that both scores be used in order to provide the most comprehensive perspective of a borrowers' creditworthiness. The FICO score represents the borrowers' payment history. The JSI Index score represents the borrowers' future capacity to pay on their obligations. From a practical perspective, envision a scenario where the credit applicant has an acceptable FICO score (e.g. 760), but the economy is entering a period uncertainty or a slowdown. That 760 score indicates to the credit provider that this individual has been a responsible credit risk, which is great information. It provides nothing however regarding the persons' ability to retain their income stream. The use of JSI Index in combination with credit scores then improves your risk quality scorecard to look at both willingness to pay and ability to pay in a dynamic way which incorporates multiple factors around payment behavior and income stability.

Do banks require a persons' employment history when making a lending decision?

Yes, when a bank is lending a significant sum of money (i.e., a $400,000 mortgage) they require pay stubs to verify current employment and income, along with tax returns to verify the durability of income, and employment history.

Why doesn't a bank perform the same level of income scrutiny for credit card and auto loans?

They can't justify the cost of that level of due diligence for a $40,000 auto loan.

What would retention of employment tell me about a borrowers' ability to pay their loans?

60% of all defaults are the consequence of loss of employment. The residual 40% are health and familial related. The JSI Index system is based on traditional financial analysis methods--- 'How much cash is this entity going to generate going forward, and is it sufficient to pay its bills'.

What does a persons' job tell me about their ability to pay their loans?

Occupational information is incredibly rich in predictive insights. It reflects earnings data, durability of employment, and educational attainment which is another deep and insightful value.

To what extent does the JSI Index incorporate future estimates of change in the labor market that may result from AI and robotics?

We are of the mindset that it is difficult to predict significant change, and also a rate of change. However, we have over a decade of experience in actuarial work for student lenders; informing them of probable occupational outcomes for college students. We know the characteristics of students who've not only entered the fields of AI and robotics, and also those people who are successfully working with AI and robotics. We incorporate adoption rates of various technologies by industry sector, and apply this information to our default probability models.

Does the JSI Index score apply to self-employed and 1099 workers?

No.

The output values include a 'Credit Score'. Is this a FICO score?

No. It is a modeled estimate of what a FICO score might be if corrected to reflect the deterioration of credit quality of most borrowers, since credit score inflation began rising in 2022. Furthermore, FICO scores can be somewhat 'lenient' when the credit bureaus have little information with which to rate a person.

Is there a circumstance where a borrower would have a perfect JSI score of 0?

No. There is no 'zero risk' scenario when lending. Furthermore, persons with excellent credit ratings are commonly extended large credit lines. Therefore, the loan value at risk is significant.

Does the JSI Index score correlate to a FICO score?

Only coincidentally. The JSI Index score is primarily based on the probability of retaining employment. For informational purposes, we provide associated default rates on various loan products. See the table below for general insights regarding the various data points provided by our program. Note- these are national rates. The JSI Index provides state level values.

Layoff Probability, next 12 mos.	JSI Score	CC Default	Auto Loan Default	Mortgage Default	FICO Score Ranges
	0				
3.9%	-1	3.1	1.8	0.4	820 - 850
4.6%	-2	3.8	2.2	0.7	760 - 820
5.9%	-3	5.2	2.6	1.2	720 - 780
6.6%	-4	6.7	3.1	1.9	660 - 740
7.0%	-6	8.2	5.7	-	490 - 680
13.7%	-7	9.6	7.3	-	410 - 520
17.9%	-8	13.8	9.8	-	< 450

What is the cost of an analysis from the JSI Index score?

$3 per analysis??? Volume discounts for subscribers are available at the following rates:

500 analyses - $1000

1000 analyses - $1500

5000 analyses - $5000

What other uses are there for the JSI Index and related data?

- Landlords want to know if a person has an acceptable credit score, and if they'll have consistent employment with which to pay their bills.
- A 'soft pull' credit report tends to be light on actionable information. The JSI Index provides rich and detailed credit risk information.

- The insights provided by our Index enable a lender to ascertain the credit worthiness of a 'cohort of similarly situated persons' to the prospective borrower. This can mitigate liability in potentially sensitive lending situations.
- Lenders who want to avoid scenarios where they can be put at risk for basing lending decisions on personalized information.
- Consumers who rely on free credit reports can obtain vastly more detailed credit information from the JSI Index, without exposing themselves to the endless spamming that results from obtaining a free credit report.
- Marketing departments can filter by occupation, age and region to determine who and where to target with their advertising spend.

User Instructions

How to use the information provided by the JSI Index

Each occupation has a distinct layoff probability, which is expressed as a percentage value, within the next 12 months. Given that most material defaults (not easily cured, small balance delinquencies) are a consequence of involuntary separation from employment, the use of layoff probabilities data enables the development of a reliable loss estimate model.

A simple, yet reliable loss estimate model can be developed from the following attributes:

- Probability of Default (PD), which gives the average percentage of accounts, or borrowers, that experience a default event. *Provided by JSI Analytics Consumer Scoring Program.*

- Loss Given Default (LGD), which gives the percentage of exposure the lender might lose if the borrower defaults. *Value At Risk*

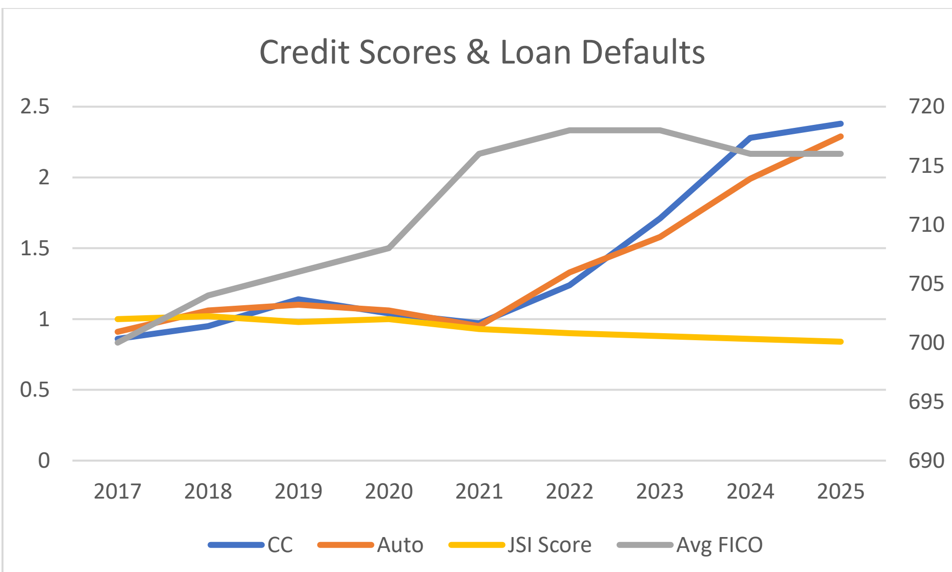
- Exposure At Default (EAD), which gives an estimate of the outstanding amount (drawn amounts) in case the borrower defaults. *PD x LGD = EAD*

JSI Analytics offers a spreadsheet with macros to perform these calculations.

FICO Dislocations & Rising Credit Losses

We have analyzed the phenomenon of credit scores rising immediately following the pandemic period, Covid, while most consumers were experiencing financial challenges from a multitude of factors including rising inflation. During this same period, institutional financial accommodations and regulatory forbearance initiatives changed the nature of transactional enforcement for loans of all sorts. Average FICO scores rose, while consumer credit card debt, and delinquency rates on those debts rose to levels in line with 2010 - a similar financially destabilized time.

Economists now agree, as we have concluded, that FICO scores were/are not accurately reflecting rising credit risk, and therefore, lenders have extended, and are extending, credit in an environment where more restrictive policies would have been, should be more, prudent.



Summary

As stated above, a FICO score represents an individuals' historical willingness to pay their debts. The JSI Index represents a persons' expected capacity to pay their debts. With the knowledge that 60% of material defaults are the consequence of a job loss, the addition of our Index to the evaluation of creditworthiness and risk mitigation can be highly beneficial, both for active decisioning and for all the decisions in force across portfolios of loans.

Our related products provide deep, empirical insights as to the decisions people make when under financial duress, and how they manage diminishing resources. Our research relating to the rise in FICO scores while consumers actual creditworthiness was deteriorating is further evidence of our ability to provide data and information for credit risk management.

Additional information

Methodology: JSI Analytics, founded in 2008 uses patented and other IP protected methods to generate financial and economic data sets. Input data are public and non-public sources, derived from government and academic institutions. Restricted access data https://www.bls.gov/rda/home.htm

Patent #**8,001,057** relates to the methodology for generating an Index, which is the creation of a scale, whereby a series of statistical techniques are employed to quantitatively determine value of an entity, in relation to other similarly situated entities, on that scale.

In 2013, we formed EducateToCareer.org (ETC) which is a non-profit and has served over 1 million families annually. The mission of ETC has been to enable families to make practical, fact based college to career planning decisions. With ETC, families typically save $thousands in tuitions costs each year, while putting their kids on educational tracks that lead to real careers with durable earnings. Recognized for our work, Google has provided ETC with financial and technical support since 2015.