dun & bradstreet
GROWING RELATIONSHIPS THROUGH DATA

Frequently Asked Questions

(1) What is Paydex?

The Paydex is a unique dollar-weighted numerical indicator of how a firm paid its bills based on trade experiences reported to D&B through its trade exchange program. A Paydex of 80 denotes that payments reported to D&B have generally been made within terms. A Paydex over 80 indicates that payments reported to D&B have been made earlier than terms. The chart below outlines the specific 1-100 Paydex and what it means.

Paydex	Indicates the following payment practices:
100	Anticipates
90	Discounts
80	Prompt
70	15 days beyond terms
60	22 days beyond terms
50	30 days beyond terms
40	60 days beyond terms
30	90 days beyond terms
20	120 days beyond terms
0 – 19	Over 120 days beyond terms
UN	Unavailable

The Paydex is calculated by an algorithm/calculator which examines individual "account" level experiences reported to D&B by its trade participants, summarized those "*account*" level details into an overall "*company*" level experience, weights the "*company*" level experiences according to the dollar amount and then multiplies by the individual index weight to compute the Paydex.

(2) Where does the D&B Trade Data come from?

D&B Trade Data is acquired from over 12,000 trade exchange participants globally in 35 markets, of which approximately 4,200 (as of Dec. 2010) are located in the US. Participation is free, confidential and voluntary.

Participants provide their accounts receivable data to D&B on a monthly or quarterly basis which describes how their customers pay their bills by terms of sale, dollar amount of extended credit, amounts owing that are current and past due, and date of last sale. For a trade reference to be to be eligible for the D&B Trade Data (and for use in the Paydex

calculation), the *reported date of the trade experience* must be within the last 24-month period and the *date of last sale* must be within the last 36 months (1-12 months from the reported date).

For example, a trade provider has had 4 sales to company ABC – the first sale was in Jan 2009 and the last sale was in Apr 2009. As of Apr 2009, none of the open balance had been paid.

	PURCHASES	PAYMENT	OWES	*PPT* CURRENT	*SLOW 30* 1 TO 30	*SLOW 60* 31 TO 60	*SLOW 90* 61 TO 90	*SLOW 120* OVER 90
JAN *2009*	1,000	0	1,000	1,000	0	0	0	0
FEB "	2,000	0	3,000	2,000	1,000	0	0	0
MAR "	3,000	0	6,000	3,000	2,000	1,000	0	0
APR "	4,000	0	10,000	4,000	3,000	2,000	1,000	0

These 4 *"account"* level experiences are summarized into a *"company"* level experience using 50/5 Best/Worse logic: 50%+ of the open dollars ($7,000) are slow 30 and <5% ($1,000) are slow 90. Therefore, the "*company*" level experience is:

BEST/WORST	DATE OF EXP	04/2009
50/5	MANNER OF PAY	SLOW 30-90
	HIGH CREDIT	10,000
	AMOUNT OWING	10,000
	PAST DUE	6,000
	LAST SALE	WITHIN 1 MONTH

If the $10,000 is paid off in May 2009, the "*company*" level experience now becomes:

BEST/WORST	DATE OF EXP	04/2009
50/5	MANNER OF PAY	SLOW 30-90
	HIGH CREDIT	10,000
	AMOUNT OWING	0
	PAST DUE	0
	LAST SALE	WITHIN 1 MONTH

This reference will remain in the D&B Trade Database until April 2011 for use in the Paydex calculation (see question/answer #5 below).

Trade data is a key component in helping our customers approve and/or automate their credit decisions and is a key ingredient to our Paydex and predictive scores such as the Commercial Credit Score (CCS) and Financial Stress Score (FSS). D&B has the largest 'pool' of this type of information - over 1 billion trade lines updated annually.

D&B is continually building its trade exchange program to deliver improved data quality and coverage. Over the last five years (2005-2010):

- ✓ The number of trade experiences on US businesses as increase from 63M to 114M (82% increase)
- ✓ The number of US businesses with 1+ trade has increased from 13M to 22M (69% increase)
- ✓ The number of US businesses with 3+ trade (traditional Paydex) has increases from 7M to 11M (57% increase)
- ✓ The number of small business records (<20 employees) with 1+ trade has increased from 11M to 19M (72% increase)

✓ The number of small business records (<20 employees) with 3+ trade (traditional Paydex) has increases from 5M to 9M (80% increase)

(3) What are the Paydex Rules?

- A Paydex will not be calculated for Businesses with less than three experiences. There must also be two suppliers reporting trade on that Business for a Paydex to be calculated. If there is trade, but insufficient trade to calculate a Paydex, the Trade update module will put "998" (unavailable) in the monthly Paydex. If there is no trades reported, the Trade updated "module will put "999" (unavailable) in the monthly Paydex.
- All the historical Paydex for a business will be changed to "999" (unavailable) if the business is updated by a successor report. The most recent month is counted as new.
- A Paydex cannot be calculated for businesses with **zero** experiences. When there are no experiences, the Trade update module will put "999" in the field.
- Any in-date trade experience counts toward the total; for example, 2 "cash" and one "prompt" = Paydex of 80 (assuming 2 different trade exchange participants)

A. Slow – No Days Reported

Experiences which indicate slow payment but do not specify the number of days will be interpreted the same as "Slow to 30" and will be assigned the same payment class and index weight in the computation of the Paydex.

B. First Sale

Experiences, which contain only "First Sale" without any other payment record entry, are not to be used to compute Paydex.

Experiences, which contain "First Sale" and also contain another payment class, will be computed. The "First Sale" entry is to be ignored and the experience is to be treated as regular experiences for computation of the Paydex.

C. Compound Experiences (aka: Dual Payment Manners)

When a compound payment experience occurs (Disc-Ppt, Ppt-Slow to 30, Slow 30-120), two new experiences are created.

- If the experience contains an amount (High Credit, Owes, or Past Due), each of the new experiences will reflect one-half of the original amount.
- If the experience does not contain an amount, the new experiences will contain no amount. Rule D IV. and E V. will be used in this case (see below).
- This rule applies only to the Paydex algorithm process. The experiences will be printed in the credit report exactly as they occur and will not be split.

Examples of dual payment manners and how they are split for use in Paydex calculation:

Pay-Manner	High Credit Dollars	Split Manner Count				
Paying Record		Prompt	Slow 30	Slow 60	Slow 90	Negative
Ppt-Slow 60	$1,000	$500		$500		
Ppt	$1,000	$1000				
Ppt-Slow 30	$1,000	$500	$500			
Ppt-Slow 90	$1,000	$500			$500	
Slow 60	$1,000			$1000		
Slow 30-90	$1,000		$500		$500	
Slow 90	$1,000				$1000	
Slow 25	$1,000		$1000			
Bad debt	$1,000					$1000

D. Obtaining Credit (Dollar) Amount to Be Used

The Trade algorithm process is based on the percentage of credits represented by each payment class. The term "credit" is defined at the dollar amount reported on an experience. Sources of the dollar amount, in order of preference are: High Credit, Owes,

or Past Due. Dollar amounts are then used to compute percentages of credits by totaling the credits for each payment class and dividing by the sum of credits for all classes.

I. Use the High Credit as the credit amount when computing percentages of credit.
II. If an experience does not contain a High Credit amount but does contain an Owes amount, use the Owes amount as the credit when computing percentages of credits.
III. If an experience does not contain a High Credit or Owes amount but does contain a Past Due amount, use the Past Due amount as the credit when computing percentage of credits.
IV. If an experience does not contain a High Credit, Owes, or Past Due Amount, an average of the credits for all experiences in the same payment class is used as the credit amount when computing percentages of credits.
V. If an experience does not contain a High Credit, Owes, or Past Due Amount and there are no experiences with credits in the same payment class, an average of the credits for all experiences in all classes is used as the credit amount when computing percentages of credits.

E. Amount Only with No Payment Manner Reported

When there is an amount showing in any of the High Credit, Owes or Past Due fields, and no manner of payment or comment, the experience is discarded for use in the Paydex calculation but does count towards the minimum requirements to qualify for a Paydex.

F. New Businesses

When initializing new businesses for a Paydex, previous month Paydexes are set to "999" (unavailable).

G. Paydex Updates

If the trade content changes, Paydex recalculates every night. All Paydexes for current month are frozen at month end on last day of the month for uses in batch and archive files and to updated the monthly Paydex graphs that appears in some products (i.e. dnbi)

(5) How is Paydex calculated?

The Paydex is calculated using up to 874 trade experiences on a business. It compares payments to terms of sale, is dollar-weighted and is calculated based on the overall manner of payments reported to D&B.

Following are the three basic steps taken to calculate a Paydex:

1. Take the sum of all high credits for each payments classification (i.e., discount, prompt, slow 30, slow 60, etc.) and calculate the percentage of total dollars (sum of all high credit amounts).

Example 1:

PAYMENT CLASS	HIGH CREDIT	PERCENTAGE OF TOTAL DOLLARS
Discount	$10,000	50%
Prompt	$5,000	25%
Slow 30	$5,000	25%

2. Multiply each percentage of total dollars for each payment class by the corresponding Index weight for that payment class (see ***Paydex Weighting Key*** below). This determines the class.

PAYMENT CLASS	HIGH CREDIT	PERCENTAGE OF TOTAL DOLLARS		INDEX WEIGHT (See Paydex Key)		ACCUMULATED PAYDEX POINTS
Discount	$10,000	50%	X	90	=	45
Prompt	$5,000	25%	X	80	=	20
Slow 30	$5,000	25%	X	50	=	12

3. Add the points and you have the Paydex:

45 + 20 + 12 = **Paydex of 77**

Example 2:

PAYMENT CLASS	HIGH CREDIT	PERCENTAGE OF TOTAL DOLLARS
Bad Debt	$500	50%
Prompt	$0	50%
Cash Own Option	$50	0%

Applying Paydex rule D V. and D VI. Above:

When a trade experience has no amount associated with it, the Paydex formula takes an average of the amounts of all other trade used in the Paydex and substitutes it into the trade experiences w/o amounts, so it can be used in the formula. In this example, the $500 bad debt amount is duplicated as $500 for the Prompt trade line. This creates an equal weight where the Bad Debt Trade and the Prompt Trade - each carry 50%; resulting in the 40 Paydex.

PAYMENT CLASS	HIGH CREDIT	PERCENTAGE OF TOTAL DOLLARS		INDEX WEIGHT (See Paydex Key)		ACCUMULATED PAYDEX POINTS
Bad Debt	$500	50%	X	0	=	0
Prompt	$500	50%	X	80	=	40

0 + 40 = **Paydex of 40**

Example 3:

PAYMENT CLASS	HIGH CREDIT	PERCENTAGE OF TOTAL DOLLARS		INDEX WEIGHT (See Paydex Key)		CLASS
Bad Debt	$500	77%	X	0	=	0
Prompt	$100	15%	X	80	=	12
Prompt	$50	8%	X	80		6

0 + 12 + 6 = **Paydex of 18**

Paydex Weighting Key

PAYMENT CLASS	INDEX WEIGHT
Anticipates	100
Discount	90

Prompt	80
Satisfactory	80
Slow to 15 days	70
Slow to 30 days*	50
Slow (no days reported)	50
Slow to 60 days	40
Slow to 90 days	30
Slow to 180 days & over	20
Unsatisfactory Bad Debt Placed for Collection	0

* *SLOW trades with no days equal SLOW 30*

(5) How does the Paydex calculation based on the D&B Trade Data differ from the trade-related variables used in the Commercial Credit Score (predicts 90+ days delinquency) and Financial Stress Score (predicts failure) calculation?

There are 12+ different trade-related variables used in the CCS and FSS models. For example, total number of trades, total number of prompt trades, % of prompt trade, % of slow trade, % of trade 31-60, 61-90, 91+, total dollars paid prompt, total dollars paid slow, % of dollars past due 31-60, 61-90 and 91+.

There are 2 main trade-related variables used in the Paydex calculation: payment class/manner and one of the following dollar amounts: high credit, amount owing or past due amount.

(6) Is it possible for a company to have a higher risk Paydex (<60) and a lower risk CCS or FSS (Class 1-3) or vise versa?

Yes. The CCS and FSS statistical models use a combination of more granular D&B Trade Data, Public Records, Demographics, and Financial Statements and the Paydex uses summarized D&B Trade Data only. It is possible for a company to be, on average, 22+ days beyond terms, but have 25+ years in business, be operating in a low risk industry/low risk geographical area, have no suits, liens or judgments filed and therefore have a CCS and/or FSS in a lower risk class.

When evaluating a companies payment performance, many D&B customers find it useful to use the Paydex and the CCS in combination to understand (1) what the average days to pay have been in the past and (2) what the future probability is of getting paid 90+ days late.

(7) How do "cash" trades impact the Paydex?
"Cash" trades do no impact the Paydex directly. However, they do count towards the minimum requirements of 3+ trades to qualify the DUNS for a Paydex (see question #5 - example 2 above)

(8) Does a branch have a different Paydex than the headquarters?
Yes, branches have their own trade & Paydex, however, their trade is also included in headquarters report and Paydex too. In some products both the branch and the headquarters' Paydex display in the branch report; in others the headquarters Paydex does not display.

(9) How reliable is the Paydex if the trade on file is old (i.e. greater than 12 months old)?
D&B is continually improving the quality of our trade coverage. Payment experiences are one of the most important and requested data elements for D&B customers. In 2007, D&B expanded the trade repository in response to this demand. That expansion included increasing the length of storage from 16 to 24 months from the date the trade was reported and from 28 to 36 months from the date of last sale.

If the individual trades used in the calculation of the Paydex are greater than 12 months old, a customer may rendered the Paydex less relevant or less correlated with current risk. These customers can be directed toward the Detailed Trade DBT – days beyond terms (3 and 12 month), which has a smaller "age of trade" window on payment data being used in the calculations (see question 15 below).

It is important to note that 88% of the trade in the legacy D&B Trade Database has been updated within the last 16 months and over 50% of the payment experiences in the database are from within the last 3 months.

(10) What is the 3-Month Paydex?

Several D&B products including DNBi, Business Information Report (BIR) and the Comprehensive Report (eComp) contain a 3-month Paydex. The 3-month Paydex is calculated using the trades reported in the last 3 months with dates of last sale up to 15 months ago. If there are no trades reported in the last 3 months, no 3-Month Paydex is delivered.

(11) How are the Paydex Norms determined?

The norms are calculated quarterly and determined for segments of the D&B file by 4 digit SIC, sales volume and/or number of employees as outlined in the chart below. If sales are unavailable, employee size is used for comparison. If both sales and employees are unavailable, then the total number of firms in that primary SIC is used.

Sales Ranges	Employee Ranges
$1,000 - 49,000	1-4
$50,000 – 99,999	5-9
$100,000-249,999	10-19
$250,000-499,999	20-49
$500,000-999,999	50-99
$1,000,000-4,999,999	99 and up
$5,000,000 – and up	

If less than 30 records are in any particular sample size, "step-down" logic is used and the norms are derived at the 3 digit SIC level. For example, if only 29 records are present with SIC 5213 and sales between $250,000-499,999 and employee range of 10-19 employees, select records at SIC 521X, and use the same sales and employee criteria. If there are an insufficient number of records in the sample size, use the total number of records in SIC521X.
Industry quartiles will be calculated using the following procedures:

The value at the midpoint of the ranking list is selected as the **Median**. The value from the midpoint that falls halfway to the top of the list is selected as the **Upper Quartile**, and the value that is halfway between the median and the bottom of the list is selected as the **Lower Quartile**.

(12) How is the Paydex trend determined?

At the end of each month, a snap shot of the Paydex for each duns number is taken and stored for use in the archive files and in the Paydex trend graphs.

(13) How are the *Percentage of Prompt* and *Percentage of Slow* values displayed in DNBi related to the Paydex?

These percentages are not related to the Paydex. The Percentage Prompt and Percentage Slow values are fabricated by the product - like DNBi or DNB.com. There are some limitations to how the product pulls in the details for the D&B Trade Database. Using Example 2 in question #5 above, the Percentage Prompt in DNBi is 100% - that is determined by using only the trades that have a "prompt" or "slow" paying

record reported. The Percentage Slow in DNBi is 33.33% - that is determined by using all three trades. *As of Sept 2010, the DNBi technical development team is aware of this limitation and is working on a solution for future releases.*

(14) Is the Paydex available globally?

Paydex is available in the following countries: China, Hong Kong, Taiwan, Austria, Belgium/Luxembourg, Czech Republic/Slovak Republic, Denmark, Finland, France, Germany, Hungary, Ireland, Italy, Netherlands, Poland, Portland, Slovenia, Spain, Sweden, Switzerland, UK, Mexico, Canada, US The basic rules as outlined in question #3 above are the same; however, the methods of summarizing trade vary country to country.

(15) What are the key differences between the DBT (days beyond terms) derived from D&B Detailed Trade and the Paydex (average days to pay) derived from the summarized D&B Legacy Trade?

D&B Detailed Trade Database stores the "*account*" level detail and does not apply the "*company*" level summarization process outlined in question #2 above. Therefore:

- Detailed Trade has shorted in-date rules for trade: *trade reported* dates up to 13 months VS *trade reported dates* up to 24 months; and *date of last sale* up to 24 months VS *date of last sale* up to 36 months.
- DBT uses the implied paid dollars in the aging buckets; there are no "dual" or "split manner" trades; Bad Debt is weighted as Slow 90; the 3-Month DBT uses trades reported in the last 4 months with a transaction up to 7 months ago.

(16) What Paydex is shown for duns that are OOB (out of business)?

Paydex is calculated and stored in trade case database if there is enough trade prior to OOB. Product fabrication rules suppress it so it appears as "blank" in products.

(17) How are the maximum 874 trades selected when D&B receives more than 874 trades on a given duns number?

The trades displayed in the reports and used in the Paydex and CCS/FSS Score calculations are selected based on:

- Highest open balances
- Representative samples within each payment manner category (i.e. prompt, slow 30, slow 60)
- Representative samples within each dollars amount category (i.e. <$5,000, $5K-$100,000 and over $100,000)

- Representative samples within each SIC category of the trade contributor (i.e. certain % from whol, certain % of mfg, certain % from business services)