

## ANALYSIS OF TRANSACTIONAL DATABASES

The Appraiser uses three databases to obtain transactional data: Bizcomps, Pratt's Stats, and the Institute of Business Appraisers (IBA) Database.<sup>1</sup> Each database assembles transactional data somewhat differently than the others. Therefore, it is necessary to make various adjustments to the data points in each to make them reasonably comparable to each other. The appropriate adjustments were developed from information presented in: ValuSource's and IBA's on-line help screens for the IBA database; the Business Valuation Resources on-line help screens and procedural manuals for the Pratt's Stats and Bizcomps databases; Nancy Fannon's book on how to use the databases<sup>2</sup> or, more importantly, from direct observations by the Appraiser.

## 1.0 SELLING PRICE (ASSET SALE)

The sales of most small businesses are structured in a manner whereby the buyer acquires the inventory, Fixtures and Equipment (FF&E), and intangibles and the seller keeps the cash and receivables and pays off the company debt. This structure is commonly referred to an Asset Sale. Since an Asset Sale is the most common form of transaction in the sale of a small business, it is desirable to reconstruct all the transactions that we will use in our analysis to reflect the selling price for just those three assets. As a result, the selling prices of all the selected transactions will be directly comparable to each other.

As we shall see below, all three databases generally report sufficient transactional data in which a selling price can be reconciled for the total value of the inventory, FF&E, and intangibles that were transferred. *In order to calculate a selling price for each database that will align with each other, we will make appropriate adjustments in the reported selling prices to equal the total value of those three assets.* It is fairly common to find insufficient data to make an accurate reconciliation in which case, some guesswork may be necessary. However, appraisers must use their best judgment to determine if the lack of data precludes obtaining a good estimate of an Asset Sale selling price. If so, they must reject that comparable.

Pratt's Stats

As noted in Nancy Fannon's book,<sup>3</sup> Pratt's Stats indicates that, "Price is generally considered to be the dollar value consideration [note: consideration can be in the form of cash, notes, and/or securities<sup>4</sup>] paid for the business sold including interest-bearing debt. Therefore, the only price reported by the Pratt's Stats database is an invested capital price (which the database refers to as MVIC or Market Value of Invested Capital)." Ms. Fannon also notes that Pratt's Stats FAQs (Frequently Asked Questions) indicated that an Asset Sale typically does not include assumed interest-bearing liabilities and generally, but not always, does not include cash, receivables,

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<sup>1</sup> Bizcomps® and Pratt's Stats® data are obtained from Business Valuation Resources website - [www.bvmarketdata.com](http://www.bvmarketdata.com), and IBA data is obtained from ValuSource website - [www.vswebapp.com](http://www.vswebapp.com), or the Institute of Business Appraisers (IBA) website - [www.go-iba.org](http://www.go-iba.org).

<sup>2</sup> Nancy Fannon & Heidi Walker, "The Comprehensive Guide to the Use and Application of the Transaction Databases," 2009 Edition, Business Valuation Resources, LLC

<sup>3</sup> Ibid., p.2-3

<sup>4</sup> Pratt's Stats FAQs, "Definitions: What is the Legend for Pratt's Stats Income Data," from the Business Valuation Resources website, <http://www.bvmarketdata.com>. p.3

prepaid expenses, or real estate.<sup>5</sup> In most cases when an Asset Sale also included cash or receivables, it was noted in the Additional Transaction Information in the transaction report. However, if the submitting broker neglected to mention it, the reported selling price may not be correct. The Appraiser has found instances of this error, but they are fairly uncommon.

Thus with the data available, a typical Asset Sale reported in Pratt's Stats can usually be reconstructed to produce the total value allocated to inventory, FF&E, and intangibles. However, appraisers must read the notes appended to each transaction to confirm what other assets may have been transferred. It is not uncommon that accurate information was not provided by the submitting brokers; thus appraisers must use their judgment as to whether the comparable should or should not be used.

The selling price allocation reported in each transaction may indicate that a portion of the price included covenant-not-to-compete value, consulting agreement value, or earn-out value.<sup>6</sup> Pratt's Stats deducts the portion of the selling price allocated to consulting agreements and earn-outs in its MVIC calculation.<sup>7</sup> As we shall see later Bizcomps and IBA only exclude earn-out value from their reported selling prices.

**Suggested Adjustment:** Thus in order to reconcile Pratt's Stats' MVIC to obtain the value of inventory, FF&E, and intangibles that will generally align with Bizcomps and IBA values, we must deduct from MVIC any cash, receivables, or non-operating assets that may have been included in the selling price and add back any value allocated to consulting agreements.

Actual observations by the Appraiser find this reconciliation is usually comparable to the other databases' adjusted values. However, one must carefully review that data. If the available information is insufficient to produce a reasonable estimate of the selling price for the three target assets, the comparable should be rejected.

### Bizcomps

"The Bizcomps transactions are all Asset Sales or have been converted to Asset Sales. As such the price includes FF&E and goodwill or the intangible value. ... Bizcomps maintains that their sales prices exclude inventory ... [and] non-compete and consulting agreements are included."<sup>8</sup>

**Suggested Adjustment:** Thus in order to reconcile Bizcomps' selling price that will generally align with Pratt's Stats and IBA's adjusted selling price for inventory, FF&E, and intangibles, we must add inventory to Bizcomps' reported selling price.

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<sup>5</sup> Pratt's Stats FAQs, "Definitions: What is the Legend for Pratt's Stats Income Data," from the Business Valuation Resources website, <http://www.bvmarketdata.com>. p.2-5.

<sup>6</sup> Earn-outs are that portion of the selling price of a business that are conditional payments. These are payments that a seller will only receive if the buyer achieves certain sales or profitability goals in the future. Since they are amounts that cannot be determined as of the sale date, they are generally excluded from the reported selling price of the business.

<sup>7</sup> Ibid., p.2-3f.

<sup>8</sup> Ibid., p.3-3f.

## IBA

Raymond Miles reports that the IBA database generally excludes cash, accounts receivable, real estate, and “other assets” (such as deposits and prepaids) from the selling price, and generally includes inventory, FF&E, intangibles and covenant-not-to-compete.<sup>9</sup> The Market Analysis Tutorial screen on the IBA website also indicates that the selling price includes consulting agreement value.<sup>10</sup>

Although IBA claims that it excludes real estate value from the selling price, the analysis below found that of the 42 transactions in which real estate was also transferred, 27 transactions had the real estate value added to the selling price. In most cases the inclusion of real estate caused the selling price to appear extraordinarily high with respect to the company’s revenue, in which case subtracting the real estate value produced a much more reasonable result. Therefore in transactions involving real estate, appraisers must look at the data and adjust the selling price if it appears necessary. If unsure, the transaction should be excluded from the analysis. However, as shown in Paragraph 4.1 below, over 95% of the time IBA’s adjusted selling price and Bizcomp’s adjusted selling price were the same.

**Suggested Adjustment:** Therefore, other than a possible adjustment for real estate, there are no additional adjustments necessary to reconcile IBA’s selling price to align with Pratt’s Stats and Bizcomps adjusted values for inventory, FF&E, and intangibles.

## 2.0 REVENUE

**Suggested Adjustment:** As will be demonstrated below, all three databases appear to report revenues in the same manner, so no additional adjustments are needed.

## 3.0 SELLER’S DISCRETIONARY EARNINGS (SDE)

### Pratt’s Stats

“Pratt’s Stats calculations of EBIT (Earnings before Interest and Taxes), and EBITDA (Earnings before Interest, Taxes, Depreciation, and Amortization) also exclude other income and expenses and interest income or tax benefits. Discretionary Earnings (SDE), then, is equal to adjusted EBITDA plus Owner’s Compensation.”<sup>11</sup> Owner’s Compensation is the wage paid to one owner.<sup>12</sup> Three data fields from the Pratt’s Stats transaction report typically will add up to Discretionary Earnings (SDE). Those data fields are Owner’s Compensation, Operating Profit (EBIT), and Noncash Charges (Operating Profit plus Noncash Charges equals EBITDA). In nearly 75% of the transactions in the research discussed below, this calculation matched the SDE

<sup>9</sup> Raymond C. Miles, “How to Use the IBA Market Data Base”, Part XXVIII, 1999 p.2. (Excerpt obtained by request from Dave Miles of ValuSource)

<sup>10</sup> Market Analysis Tutorial #3 on IBA website, “IBA Transactional Database Fundamentals,” <http://go-iba.org/market-data/tutorials/index.html>, 2009, p.1

<sup>11</sup> Nancy Fannon & Heidi Walker, “The Comprehensive Guide to the Use and Application of the Transaction Databases,” 2009 Edition, Business Valuation Resources, LLC, p.2-8

<sup>12</sup> Pratt’s Stats FAQs, “Definitions: What is the Legend for Pratt’s Stats Income Data,” from the Business Valuation Resources website, <http://www.bvmarketdata.com>. p.2

calculations of IBA and Bizcomps. Of the remaining 25% where the SDE's differed, over half were due to errors in processing the data by one or the other databases. Less than 10% of all the transactions had discrepancies that were due to either minor calculation errors or procedural differences, but it could not be determined from the data which type of discrepancy it was. In other words, the number of differences in SDE found among the databases that were procedural in nature were fairly small. Regardless, in our research below, the discrepancies resulted in the Pratt's Stats SDE value averaging 98.2% of the IBA and Bizcomps value. In other words, the discrepancies do not appear significant enough or frequent enough to adversely skew the results of our analysis.

A portion of the discrepancies among the databases in SDE calculations probably can be attributed to the fact that Pratt's Stats requires significantly more data input from the reporting brokers than IBA or Bizcomps. As a result, the Pratt's Stats analysts can sometimes spot calculation errors that were made in the submitted data. Thus many of the discrepancies are not from procedural differences, but rather computational errors by the other databases. Since all three databases are exposed to poor data reporting by submitting brokers, it is important that appraisers carefully review each transaction to determine if it is reasonable. However, in the event that a selected sample of comparables has duplicate transactions with different values for selling price, revenues, or SDE, the data from Pratt's Stats will be used in the analysis. If in the appraiser's judgment the transactional data does not appear reliable, it should be excluded from the sample of comparables selected.

**Suggested Adjustment:** Thus to reconcile Seller's Discretionary Earnings from Pratt's Stats data in a manner that will generally align with IBA and Bizcomps values, we must combine owner's compensation, operating profits, and noncash charges.

### Bizcomps

Bizcomps defines SDE as net Earnings before Interest, Taxes, Depreciation, and Amortization (EBITDA) plus owner's compensation and any non-business or non-recurring expenses. If there is more than one owner, a hypothetical salary for the lowest paid partner will be deducted from cash flow.<sup>13</sup> Bizcomps points out that this is the convention used by Certified Business Intermediaries (CBI) with the International Business Brokers Association (IBBA). The Bizcomps data is submitted almost exclusively by this group.<sup>14</sup> The description is fairly similar to the Pratt's Stats construction with the exception that Pratt's Stats cited that other income is also deducted from earnings when calculating SDE. Bizcomps does not have a data field for other income so no adjustment is possible. As pointed out in the research below, the procedural differences occur infrequently and are generally small.

**Suggested Adjustment:** No adjustments to Bizcomps' SDE are needed to make it align with Pratt's Stats' adjusted SDE.

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<sup>13</sup> Jack Sanders, "Bizcomps 2011 User Guide," Business Valuation Resources, 2011. P.16

<sup>14</sup> Ibid., p.7

IBA

If one excludes discrepancies caused by obvious computation errors, Bizcomps and IBA presented the same value for SDE 98% of the time.

**Suggested Adjustment:** No further adjustments to SDE are needed to make IBA and Bizcomps values align with Pratt's Stats value.

## 4.0 STOCK SALES

IBA

Although all transactions reported in the IBA database are supposed to be assets sales,<sup>15</sup> there are a few transactions that are listed as Stock Sales. Of the 880 IBA transactions in the research below, only three were listed as Stock Sales. None of those were duplicates of transactions in the other databases so it is not known how IBA presents transactional data on Stock Sales. None of the help screen information on the ValuSource or IBA websites or conversations on the subject with Dave Miles of ValuSource offered any clarification.

**Suggested Adjustment:** Any transaction that is listed as a Stock Sale in the IBA database should usually be excluded from the transactional analysis.

Bizcomps

As noted above, all Bizcomps transactions that were Stock Sales have been converted to an equivalent Asset Sale value. We are not told which transactions were Stock Sales. However, as noted above, the selling price listed by Bizcomps is always the total value for FF&E and intangibles only. Thus it is presumed that all Stock Sale prices have been converted to this value.

**Suggested Adjustment:** By adding inventory to the listed selling price we will be converting any Stock Sale price to the value of the inventory, FF&E, and intangibles which will generally align with adjusted selling prices from the Pratt's Stats and IBA databases discussed above.

Pratt's Stats

Pratt's Stats reports both Asset Sales and Stock Sales and generally provides a significant amount of data describing each transaction. Pratt's Stats assumes that what is typically transferred in a Stock Sale is the "entire legal entity of the company, [including] all assets and liabilities unless otherwise specified in the purchase agreement [with the exception of] excess or non-operating assets that have been liquidated and/or transferred prior to the sale or at the point of sale."<sup>16</sup> However, unless a specific allocation of the selling price is noted in the Additional

<sup>15</sup> Raymond C. Miles, "How to Use the IBA Market Data Base," Part XXVIII, 1999 p.2. (Excerpt obtained by request from Dave Miles of ValuSource.)

<sup>16</sup> Pratt's Stats FAQs, "Definitions: What is Typically Assumed to Be Transferred in a Stock Sale," from the Business Valuation Resources website, <http://www.bvmarketdata.com>. p.9

Information section of the Transaction Report, or the Asset Data field is marked “Data is a Purchase Price Allocation,” it is generally difficult to determine what assets and liabilities were actually transferred. As such an accurate Asset Sale reconciliation may not be possible. Thus if specific allocation information is not available or the critical data fields for assets and liabilities contain N/A entries, that comparable should probably be rejected.

As noted above, the selling price listed by Pratt’s Stats (MVIC) is equal to total consideration paid (cash, notes, and/or securities) plus any interest-bearing debt assumed, less amounts for earn-outs and employment/consulting agreements. To make the Pratt’s Stats selling price align with those of IBA and Bizcomps, we added back the consulting agreement value. However, since the entire corporate balance sheet may have been transferred in a sale, a number of adjustments must be made to reconcile MVIC to an equivalent Asset Sale price that we defined in Paragraph 1.0 above.

The first step in the reconciliation process is to determine what, if any, liabilities were assumed in the transaction. If the Debt Assumed field in the Transaction Report is labeled N/A, Pratt’s Stats was not able to definitively determine if any interest-bearing debt was assumed. If no other information is available, it may be necessary to reject this comparable. However, if the Debt Assumed field has either a zero or a dollar amount, the information describing the business sale clearly identified the level of interest-bearing debt assumed.<sup>17</sup> It is also necessary to identify all the non-interest bearing debt that was also assumed. This information is generally only made available when a specific allocation of the purchase agreement is itemized in the Additional Information section. However, if zeros are found in the data fields for Liabilities Assumed, Long-Term Liabilities, and Total Liabilities, then Pratt’s Stats determined that no liabilities were assumed in the transaction. In other words, if specific allocation information is not available in the Additional Information section or the Asset Data field is not marked “Data is a Purchase Price Allocation”, it will be difficult to make an accurate Asset Sale reconciliation and the comparable should be rejected.

It is necessary to identify all liabilities assumed (both interest bearing and non-interest bearing debt) because total consideration plus total debt assumed equals the total debt and equity used to make the purchase. From basic accounting we know that total debt and equity also equals total assets. Once we have established what the total asset value of the transferred business is, it is a simple task to subtract the value of all the assets acquired except for inventory, FF&E, and intangibles. The resulting value will be an equivalent Asset Sale value (inventory, FF&E, and intangibles) that will generally align with the selling prices in IBA and Bizcomps.

**Suggested Adjustments:** The following is the formula that will be used to reconcile a Stock Sale value to an equivalent Asset Sale value. An actual sample transaction from Pratt’s Stats follows the formula. Again, this reconciliation generally can only be done accurately when the Transaction Report includes a selling price allocation in the Additional Information section or the Asset Date field is marked “Data is a Purchase Price Allocation.”

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<sup>17</sup> Nancy Fannon & Heidi Walker, “The Comprehensive Guide to the Use and Application of the Transaction Databases,” 2009 Edition, Business Valuation Resources, LLC, p.2-3



MVIC ( Cash, Stock, Notes, IB debt Assumed)	*14,021,000
Plus Additional Non-Interest Bearing Debt	625,000
Plus Employment/consulting Agreement	-0-
Less Cash	(0)
Less Accounts Receivable	(856,000)
Less Other Assets (prepaids & for-sale assets)	(1,572,000)
Asset Sale Value Equivalent	\$12,218,000

\*Note: Pratt's Stats incorrectly added up Total Consideration. It should have been \$13,994,000. That would have made the Asset Sale Value equal to \$12,191,000 which is the actual total for inventory, FF&E, and goodwill.

Pratt's Stats® Transaction Report			
<b>Seller Details</b> Target Name: Accurel Systems International Corporation Business Description: Commercial Laboratory the Provides Advanced Technology Services to Users and Manufacturers of Semiconductors SIC: 8734 Testing Laboratories NAICS: 541380 Testing Laboratories Sale Location: Sunnyvale, CA, United States Years in Business: 16      Number Employees: N/A		<b>Source Data</b> Public Buyer Name: IMPLANT SCIENCES CORP 8-K Date: 3/11/2005 8-K/A Date: 4/13/2005 Other Filing Type: N/A Other Filing Date: N/A CIK Code: 0001068874	
<b>Income Data</b> Data is "Latest Full Year" Reported: Yes Data is Restated (see Notes for any explanation): No Income Statement Date: 12/31/2004 Net Sales: \$8,151,567 COGS: \$5,870,011 Gross Profit: \$2,281,556 Yearly Rent: N/A Owner's Compensation: N/A Other Operating Expenses: N/A Noncash Charges: \$1,427,287 Total Operating Expenses: \$1,677,951 Operating Profit: \$603,605 Interest Expenses: \$253,015 EBT: \$502,634 Taxes: \$11,218 Net Income: \$491,416		<b>Asset Data</b> Data is Latest Reported: Yes Data is "Purchase Price Allocation agreed upon by Buyer and Seller": No Balance Sheet Date: 12/31/2004 Cash Equivalents: \$373,697 Trade Receivables: \$856,637 Inventory: \$0 Other Current Assets: \$88,639 Total Current Assets: \$1,318,973 Fixed Assets: \$4,163,861 Real Estate: \$0 Intangibles: \$190,898 Other Noncurrent Assets: \$87,678 Total Assets: \$5,761,410 Long-term Liabilities: \$2,062,908 Total Liabilities: \$3,402,658 Stockholder's Equity: \$2,358,752	
		<b>Transaction Data</b> Date Sale Initiated: N/A Date of Sale: 3/9/2005 Days to Sell: N/A Asking Price: N/A Market Value of Invested Capital*: \$14,021,000 Debt Assumed: \$2,694,000 Employment Agreement Value: N/A Noncompete Value: N/A Amount of Down Payment: \$9,650,000 Stock or Asset Sale: Stock Company Type: S Corporation Was there an Employment/Consulting Agreement?: No Was there an Assumed Lease in the sale?: Yes Was there a Renewal Option with the Lease?: No *Includes noncompete value and interest-bearing debt; excludes real estate, employment/consulting agreement values, and all contingent payments.	
<b>Additional Transaction Information</b> Was there a Note in the consideration paid? Yes Terms: Consideration: 418,194 shares of the Buyer's common stock with a fair value of \$3,650,000 based upon a fair value per share of \$8.728, \$6,000,000 in cash, and \$1,650,000 in shareholder notes. In addition, the Buyer assumed debt and capital leases of \$2,694,000. The Buyer incurred direct acquisition costs in the amount of \$1,100,000; these costs are not included in the Selling Price. Assumed Lease (Months): N/A Noncompete Length (Months): N/A Employment/Consulting Agreement Description: N/A Additional Notes: EBT includes Gain on sale of fixed assets of \$125,907 and Miscellaneous Income of \$26,137. Purchase Price Allocation: Accounts receivable \$856,000, Prepaid expenses and other assets \$172,000, Property, plant and equipment \$4,719,000, Goodwill and other intangibles \$8,572,000, Assets held for sale \$1,400,000, Other liabilities (\$625,000), Debt and capital leases (\$2,694,000), Total \$12,400,000. Accurel is a commercial laboratory specializing in Failure Analysis Microscopy, Transmission Electron Microscopy and Focused Ion Beam Circuit Repair Services.			

## 5.0 APPLYING THE ADJUSTMENTS TO ACTUAL DATA

To test the accuracy of the above-suggested adjustments, the Appraiser downloaded all the transactions from SIC classifications 7501 through 7599 from all three databases. There were a total of 489 transactions from the Pratt's Stats database, 668 from Bizcomps, and 881 from IBA. The data from each source was then adjusted using the suggested methods above. From the total 2,020 transactions there were 148 duplications between IBA and Bizcomps, 43 between IBA and

Pratt's Stats, and 71 between Bizcomps and Pratt's Stats. It is from these duplications that we can see readily see if the suggested adjustments accounted for all differences between their respective presentations of data.

As the Appraiser noted in the Market Approach discussion, business brokers generally submit the same transactional data to all three databases and generally do not change any of the submitted data to conform to any database's procedural differences. Thus even though the manuals or on-line help screens of the respective databases indicate that there are a number of differences in the manner in which they calculate revenues, selling price, and SDE, in actual practice those differences are minimal.

## 5.1 IBA vs. BIZCOMPS

### Selling Price

Of the 148 duplications, both IBA and Bizcomps reported the same selling price in all but 16 transactions. Of those 16, four IBA transactions had real estate included in the selling price. It was not obvious from the IBA data that it was. If it were not for the duplication in Bizcomps, we never would have known that real estate was included in those four IBA selling prices.

Four IBA transactions listed the selling price significantly less than SDE which was probably the result of data processing errors. Those four duplicates found in Bizcomps had selling prices considerably higher than SDE. The IBA selling prices, however, were so unrealistically low that we would have rejected those comparables even if we did not have Bizcomps for comparison.

After rejecting eight of the 16 transactions due to obvious errors, the remaining eight differences in reported selling prices were from either minor processing errors or perhaps procedural differences in the way each database calculated revenue. There was no way one could determine from the data which of the two types of discrepancies occurred. Thus after rejecting obvious data collection errors, at least 95% of the time IBA and Bizcomps calculated the selling price exactly the same way.

As was noted above, the IBA database claims that it deducts real estate value from the selling price. The Appraiser found 42 transactions out of the 148 where real estate was involved. In 27 of those transactions the real estate price was included in the total transaction price. Only 15 transactions deducted the real estate value as suggested in IBA's procedural manual. In almost every situation (except the four described above) the selling prices of those comparables including real estate were so high with respect to their revenues that one could reasonably conclude that the real estate value should be deducted from the selling price. Again appraisers should use their judgment in reviewing the data and reject any comparable that is subject to doubt.

### Revenue

All 148 revenue calculations were the same between the two databases; therefore, no adjustment is required for revenue.



## SDE

Of 148 duplications there were only eight discrepancies in reported SDE. In three of those transactions IBA had the same value in the revenue and SDE data fields. Two transactions had real estate included which often leads to data processing errors. Thus after rejecting the obvious errors, the remaining three differences in reported selling prices were from either minor data processing errors or possibly procedural differences in the way each database calculated SDE. Regardless, 98% of the time IBA and Bizcomps reported the same value for SDE.

Even though IBA does not mention adding back depreciation to SDE<sup>18</sup> whereas Bizcomps does, in practice IBA clearly appears to calculate SDE in the same way Bizcomps does.

### 5.2 IBA VS. PRATT'S STATS

#### Selling Price

After making the suggested adjustments, all 43 duplications calculated selling prices the same way. Thus there were no other procedural differences in the way each calculated selling price.

#### Revenue

There were just three discrepancies in the listed revenue amounts out of 43 duplications between the two databases. All three discrepancies arose because IBA used the most current P&L data available, whereas Pratt's Stats used the P&Ls that were available when the sale began. Thus there were no other procedural differences in the way each calculated revenue.

## SDE

After making the suggested adjustments for SDE noted in Paragraph 3.0, 21 discrepancies were found in the calculations for SDE out of the 43 duplications. Four differences were due to Pratt's Stats adding owner's compensation to operating profits of a sole proprietorship, which consequently double counted SDE (in a sole proprietorship operating profits are the owner's compensation; there is no separate owner's salary). Three errors arose because IBA used the most current P&L data available, whereas Pratt's Stats used the P&Ls that were available when the sale began. Seven other discrepancies were very obvious data processing errors. Only three of the discrepancies occurred because of procedural differences. Those were the result of IBA's stated policy of not adding back depreciation to SDE. Even though IBA states that it calculates SDE without adding back depreciation, only three instances in a combined 191 duplications between Pratt's Stats and Bizcomps proved that to be true. Thus IBA appears to calculate SDE the same way as the other two databases in over 98% of the time.

### 5.3 BIZCOMPS VS. PRATT'S STATS

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<sup>18</sup> Market Analysis Tutorial #3 on IBA website, "IBA Transactional Database Fundamentals," <http://go-iba.org/market-data/tutorials/index.html>, 2009, p.1

### SELLING PRICE

There were a total of 71 duplications between the Bizcomps and Pratt's Stats samples. Of that total only seven discrepancies appeared between their respective selling prices. Three of those transactions indicated that real estate was also sold. The selling prices reported by Bizcomps were so high with respect to revenues that one could conclude that real estate value was inadvertently added to the selling price. The cause for the remaining four discrepancies could not be determined by the data. However, those four discrepancies represent only 5% of the total duplicate transactions with Pratt's Stats' selling prices averaging just 7% higher than Bizcomps'. Thus the selling prices reported in these two databases appear to be reasonably similar after making the adjustments suggested in Paragraph 1.0.

### Revenue

There were only a total of four discrepancies in the reported revenue of the 71 duplications between Bizcomps and Pratt's Stats. There was insufficient data to determine the cause of the discrepancies, but Pratt's Stats reported revenue averaged only 1% higher than Bizcomps' revenue. Thus revenues reported in these two databases appear to be reasonably similar after making the suggested adjustments.

### SDE

As was the case in the duplications between IBA and Pratt's Stats above, the greatest number of discrepancies appeared in the SDE calculations. It is believed that most of the discrepancies occur as a result of the different reporting forms used by the databases. Since the wording for the various data points on each form is different, it is easy for brokers to be confused and enter incorrect information. Of the 71 duplications between Bizcomps and Pratt's Stats, there were 33 discrepancies. Of that total 16 were obvious data entry errors, not procedural differences. Typical errors were: 1) double counting owner's income when determining SDE of a sole proprietorship; 2) operating losses were not included in SDE calculations; 3) owner's salary was not added back to SDE; 4) depreciation was not added back to SDE; 5) different P&L years were used by the different databases; and 6) real estate was also involved.

Of the remaining 17 discrepancies, one was found to be a procedural difference where Pratt's Stats deducted other income from SDE and Bizcomps did not. Sixteen discrepancies had insufficient data to determine whether the difference was due to simple data processing errors or procedural differences. Regardless, where discrepancies were not explainable Pratt's Stats SDE averaged only 1.4% less than the SDE reported by Bizcomps.

### Summary

As we have seen above, transactions with real estate have a high percentage of selling price calculation errors. SDE calculations are also frequently done incorrectly. Many brokers do not understand how to properly calculate SDE when an owner of the business also owns the real estate. Brokers often add back the interest expense from the real estate mortgage to arrive at

SDE for the business. Thus the calculated SDE will not have any occupancy costs making the company appear far more profitable than a company that pays rent. As a result, appraisers should use their judgment in selecting a transaction from any database that involves real estate. When there is any doubt, the comparable should be rejected.

Appraisers should also consider rejecting any comparable where the selling price or SDE appears to be extraordinarily high or low with respect to its revenue, or where data points are missing. Transactions with missing SDE or inventory (for companies that obviously should have inventory) give appraisers fewer critical data points to evaluate overall credibility of the transactional data. Liquor store sales, for example, are frequently reported with no inventory. Buyers and sellers typically enter into side agreements to pay for the inventory outside of escrow. As a result, even though a moderate level of inventory passed to the buyer, the transaction does not reflect it. The actual selling price of that business will appear very low compared to a similar store that sold with inventory included in the sale price.

Stock transactions are also highly prone to calculation errors by the submitting brokers. For example, corporations are frequently sold with receivables or other assets or liabilities included. The broker may report the selling price with receivables, but neglect to indicate that they were included in the selling price. The selling price may also have been reduced by the amount of liabilities assumed by the buyer. The broker may report the reduced price but neglect to mention that there were assumed liabilities in the transaction. As a result, the selling price of transactions sold as Stock Sales are often misinterpreted by brokers. Thus as mentioned in Paragraph 4.0, unless a specific selling price allocation is provided with the transactional data, appraisers probably should not attempt to reconcile the value to an equivalent Asset Sale price.