Business in Nebraska

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Prepared by the Bureau of Business Research College of Business Administration

# GENERAL FUND REVENUE FORECASTS 1980-1981

There can be little doubt in anyone's mind that the nation is experiencing a period of economic uncertainty. For more than a year, economists have been predicting a recession which has so far failed to materialize. The beginning of the long-expected economic downturn has now been moved forward into 1980, although forecasters are hesitant to indicate which quarter. Galloping inflation continues at a double-digit pace, eroding the purchasing power of the consumer's dollar and prompting the increasingly voiced complaint that wages and salaries are not keeping up with rising prices.

In addition to our domestic woes, recent events of an alarming nature have occurred on the international scene. The invasion of Afghanistan by the U.S.S.R. heralds the probable onset of another cold-war period, while the embassy takeover in Iran has set a dangerous precedent for future violations of international law.

Although the present difficulties may appear to be overwhelming, we can derive comfort from the fact that our predecessors have experienced similar fears and uncertainties. Accepting this, we realize that life and business must go on as usual. People will continue to face the inevitability of death, and taxes must be collected to finance the institutions and operations of government. With this somewhat gloomy preamble stated, we now turn to a description of the revenue forecasting component of the taxation process.

To establish realistic budget constraints, state planners must have an accurate estimate of future tax receipts. These forecasts are necessary for setting tax rates and planning appropriations. In Nebraska, forecasting general fund tax receipts is an official duty of the Department of Revenue.

During times of stability, preparing revenue forecasts is a relatively simple task that can usually be carried out with trend analysis. However, during economically uncertain times, trend analysis does not perform well. Disruptive events, such as tax cuts, recessions, double-digit inflation, declining real income, fluctuating farm prices, and the like, must be given due consideration in the forecasting process. Quantitative methods must be used that will capture the effects of these events on future tax collections. A forecasting methodology that is currently being used by many states is the econometric model with linkages between regional variables and national variables. This methodology has proved to be successful, as it models the behavior of the regional economy while considering the effects of events occurring at the national level.

To provide tax receipts forecasts independent of the Nebraska

Department of Revenue, the Bureau of Business Research has constructed a small-scale econometric model designed specifically to provide revenue forecasts for Nebraska. The model was developed last year, and the basic structure was described in the March 1979 issue of *Business in Nebraska*. The model has been revised and updated in order to prepare the forecasts that follow.

The principal objectives of this article are to review previous revenue forecasts and to present tax receipts forecasts for fiscal year 1980-1981. The track records of the Nebraska Department of Revenue and the Bureau of Business Research will be reviewed for calendar year 1979. Forecasted and actual receipts will be compared and attention will be focused on the accuracy of the forecasts. Gross general fund tax receipts forecasts for the upcoming fiscal year will be presented for the following tax categories: (1) individual income tax, (2) sales and use tax, (3) corporation income tax, and (4) miscellaneous taxes. Additional revenue sources and projected refunds will be used to forecast net tax receipts.

The following narrative should provide the layperson with an overview of the revenue forecasting process. The results and conclusions that follow are not intended to reflect negatively on forecasts prepared by the Nebraska Department of Revenue. They are presented only as an independent and separate viewpoint.

### ACCURACY OF FORECASTS

Almost all forecasts are subject to error, as it is practically impossible to predict the future with complete accuracy. Consequently, forecasters must be prepared to encounter criticism when their forecasts are presented to the public. If the error remains small, little comment is usually forthcoming. However, if the error is consistently large, immediate attention is focused on the credibility of the forecasts. Since there is practically nothing that can be done to eliminate the error in forecasting, the model used to generate the forecasts should be continually revised and updated, as this will tend to minimize the error over time. Different assumptions and new data are used to alter the model's structure and provide subsequent forecasts that more accurately reflect current and future economic conditions.

Forecasting error is mathematically defined to be the difference between actual tax receipts and forecasted tax receipts for a single time period or group of time periods. This is expressed by the following formula:

error = actual receipts - forecasted receipts.

The error is positive or negative depending on the relative magnitude of the actual and forecasted (Continued on page 2)

(Continued from page 1) receipts. In other words, if actual receipts exceed forecasted receipts, the error is positive. The opposite situation would yield a negative error. If the forecasting model is theoretically sound, the magnitude and numerical sign of the error terms will usually fluctuate in a random fashion. Extremely large error terms or consecutive strings of error terms with the same numerical sign indicate a weakness in the model. The long-run error is a measure of the error over an extended number of time periods, and should approach zero as the number of time periods increases.

The error can also be expressed as a percentage of actual receipts by the following formula:

percentage error =  $100 \times (error \div actual receipts)$ .

The percentage error is also a measure of the magnitude and direction of the forecasting errors. In the following two tables, error terms are computed using the preceding formulas.

When the errors and percentage errors are compiled over an extended period of time, the result is often referred to as a "track record." The errors for the individual time periods, as well as the error for the extended time period, indicate the degree of accuracy in the forecasts. If the track record indicates a high degree of inaccuracy, the forecasting model should be revised or replaced. Even if the track record is considered to be good, the model should be periodically updated as new data become available and prior assumptions are discarded.

For the calendar year 1979, the track records of the Bureau of Business Research and the Nebraska Department of Revenue are presented in Table 1 and in Table 2, respectively. Comparative monthly errors are considerably different, since forecasting models were developed independently by each organization. Although several of the monthly errors are sizable in both sets of forecasts, the majority of the monthly errors are quite small. The total error is 1.6 percent for the Bureau of Business Reserach and 3.2 percent

Table 1
COMPARISON OF ACTUAL GENERAL FUND TAX RECEIPTS
WITH PROJECTED TAX RECEIPTS
BUREAU OF BUSINESS RESEARCH
(thousands of dollars)

| 1979      | Actual<br>Receipts | BBR<br>Projections* | Difference | Percent<br>Difference |
|-----------|--------------------|---------------------|------------|-----------------------|
| January   | 57,231             | 54,823              | 2,408      | 4.2                   |
| February  | 55,649             | 56,264              | -615       | -1.1                  |
| March     | 56,168             | 60,533              | -4,365     | -7.8                  |
| April     | 74,737             | 72,929              | 1,808      | 2.4                   |
| May       | 60,006             | 57,867              | 2,139      | 3.6                   |
| June      | 55,225             | 54,740              | 485        | 0.9                   |
| July      | 55,723             | 46,794              | 8,929      | 16.0                  |
| August    | 53,206             | 53,564              | -358       | -0.7                  |
| September | 53,978             | 55,914              | -1,936     | -3.6                  |
| October   | 53,507             | 47,560              | 5,947      | 11.1                  |
| November  | 50,566             | 49,709              | 857        | 1.7                   |
| December  | 50,364             | 54,841              | -4,477     | -8.9                  |
| Total:    | 676,360            | 665,538             | 10,822     | 1.6                   |

<sup>\*</sup>The projections of the Bureau of Business Research were prepared in December 1978, and published in quarterly format in the March 1979 issue of *Business in Nebraska*.

for the Nebraska Department of Revenue. In both forecasts, consideration of the individual errors and the total error indicate an acceptable degree of accuracy.

A few additional comments are appropriate concerning the accuracy of the monthly forecasts. The forecasting model used by the Bureau of Business Research is a quarterly model. The reasons for this are that (1) monthly data series at the state level are scarce; (2) Nebraska personal income, an important variable in the state model, is reported quarterly; and (3) the Chase national macroeconomic model, to which the Nebraska tax model is linked, is a quarterly model.

Quarterly tax receipts forecasts are generated and then converted to monthly forecasts using seasonal factors obtained from the original monthly tax data. Because of this additional step, monthly forecasts should be accepted with reservations since optimal reporting of tax receipts forecasts would be on a quarterly basis, the same as the tax model.

#### FORECASTS FOR FISCAL YEAR 1980-1981

The Nebraska economy is interrelated with the national economy, and events that occur at the national level have an effect on the state economy. Sometimes the effects are felt immediately, while at other times there is a lagged effect. The national model that provides exogenous inputs to the Nebraska model is important in generating state tax receipts forecasts.

To generate the Nebraska revenue forecasts, an econometric model was developed utilizing exogenous inputs from the Chase macroeconomic model. National exogenous variables used in the model are Personal Income, Disposable Personal Income, Personal Consumption Expenditures for Nondurables and Services, Cash Farm Marketings, and Transfer Payments. Forecasts of these variables were taken from the standard Chase macroeconomic

Table 2
COMPARISON OF ACTUAL GENERAL FUND TAX RECEIPTS
WITH PROJECTED TAX RECEIPTS
NEBRASKA DEPARTMENT OF REVENUE
(thousands of dollars)

| 1979      | Actual<br>Receipts* | DOR<br>Projections** | Difference | Percent<br>Difference |
|-----------|---------------------|----------------------|------------|-----------------------|
| January   | 57,231              | 52,210               | 5,021      | 8.8                   |
| February  | 55,649              | 54,971               | 678        | 1.2                   |
| March     | 56,168              | 57,515               | -1,347     | -2.4                  |
| April     | 74,737              | 69,639               | 5,098      | 6.8                   |
| May       | 60,006              | 59,211               | 795        | 1.3                   |
| June      | 55,225              | 54,274               | 951        | 1.7                   |
| July      | 55,723              | 48,711               | 7,012      | 12.6                  |
| August    | 53,206              | 52,412               | 794        | 1.5                   |
| September | 53,978              | 52,633               | 1,345      | 2.5                   |
| October   | 53,507              | 52,114               | 1,393      | 2.6                   |
| November  | 50,566              | 47,164               | 3,402      | 6.7                   |
| December  | 50,364              | 53,880               | -3,516     | -7.0                  |
| Total:    | 676,360             | 654,734              | 21,626     | 3.2                   |

<sup>\*</sup>Actual general fund tax receipts data were obtained from the Nebraska Department of Revenue.

<sup>\*\*</sup>The DOR (Department of Revenue) projections are from *Nebraska Department of Revenue Report to the State Board of Equalization and Assessment, June 4, 1979 and November 15, 1979.* 

forecast of January 22, 1980.

The standard forecast prepared by Chase assumes the following conditions will prevail during the forecast period:

- Real GNP will decline by 1.2 percent for 1980, with a very modest recovery of 2.2 percent in 1981.
- Inflation will subside later in 1980, but prices will still increase by about 10 percent from year-end 1979 to year-end 1980.
- Unemployment will increase during 1980 to a near 8 percent rate by year end.
- Corporate profits will decline 8.4 percent in 1980 as the economy weakens.
- Real disposable personal income will decline through the third quarter of 1980, and then begin to recover.
- Short-term interest rates will decline through most of 1980.
   The above assumptions are not unshakable and any changes would obviously affect the values of the exogenous inputs.

The standard forecast of an economic slowdown during 1980 is assigned the greatest probability of occurrence. The Nebraska economy usually lags the national economy by one or two quarters. Hence, the occurrence of a national recession during 1980 would probably not have full effect on the state economy until the second half of the upcoming fiscal year.

The Nebraska tax model generates seasonally adjusted forecasts on a quarterly basis. State tax receipts are recorded as a monthly series and are seasonally adjusted as such. Using the resulting seasonal factors, the original quarterly forecasts are converted to a seasonally unadjusted monthly cash flow.

Monthly forecasts of gross general fund tax receipts for fiscal year 1980-1981 are presented in Table 3. Tax rates are assumed to be 3 percent for the sales tax and 17 percent for the income tax. These forecasts do not include the June 30, 1980 ending balance in the general fund, revenue sharing funds, or sales and income tax refunds.

Bureau of Business Research estimates set actual and projected receipts for the current fiscal year at \$699.6 million. This takes

| Table 3                                    |
|--|
| FORECASTED GROSS GENERAL FUND TAX RECEIPTS |
| FOR NEBRASKA, FISCAL YEAR 1980-1981        |
| BUREAU OF BUSINESS RESEARCH                |
| (thousands of dollars)                     |

|           | Income<br>Tax | Sales/Use | Corpo-<br>ration<br>Tax | Miscel-<br>laneous<br>Tax | Total<br>Tax |
|-----------|---------------|-----------|-------------------------|---------------------------|--------------|
| July      | 16,270        | 23,520    | 2,459                   | 11,822                    | 54,071       |
| August    | 21,028        | 28,165    | 2,117                   | 5,221                     | 56,531       |
| September | 20,647        | 23,371    | 10,108                  | 4,008                     | 58,134       |
| October   | 16,252        | 28,431    | 3,517                   | 5,292                     | 53,492       |
| November  | 20,291        | 24,707    | 1,991                   | 4,294                     | 51,283       |
| December  | 16,712        | 25,771    | 10,220                  | 5,058                     | 57,761       |
| January   | 28,583        | 30,521    | 3,222                   | 4,085                     | 66,411       |
| February  | 33,823        | 26,240    | 2,696                   | 3,203                     | 65,962       |
| March     | 28,884        | 23,603    | 12,271                  | 3,932                     | 68,690       |
| April     | 50,063        | 22,392    | 10,004                  | 4,140                     | 86,639       |
| May       | 22,726        | 26,721    | 2,624                   | 17,725                    | 69,796       |
| June      | 23,267        | 25,625    | 11,299                  | 4,726                     | 64,917       |
| Total:    | 298,546       | 309,067   | 72,568                  | 73,506                    | 753,687      |

into account the withholding tax moratorium of last December and the 1 percent reduction in the individual income tax rate, effective January 1, 1980. Gross receipts for the upcoming fiscal year are forecasted to be \$753.7 million, a 7.7 percent increase.

If the economic slowdown intensifies and double-digit inflation continues unabated, consumers will eventually deplete their savings and be forced to retrench, and this would have an adverse effect on future tax receipts.

#### **NET RECEIPTS**

Forecasting gross tax receipts is relatively easy when compared to the problem of projecting net receipts. Factors influencing the net outcome are subject to extreme variability. Net receipts are defined to be the difference between total general fund revenues and refunds. General fund revenues include gross tax receipts, the ending general fund balance as of June 30, 1980, and revenue sharing funds. Refunds are generated from the individual income tax, sales tax, city sales tax, food sales tax credit, and corporation tax.

The Nebraska withholding tax is currently 17 percent of federal withholding. Hence, state income tax refunds are dependent upon the withholding rates of the federal government. During 1979, overwithholding apparently occurred, and this was the primary reason for the Nebraska withholding tax moratorium of December 1979. For the upcoming fiscal year, income tax refunds are forecasted to be \$59.4 million.

City sales tax refunds go to Nebraska cities that have approved a sales tax rate greater than the 3 percent rate mandated for the state. Participating cities and their rates are Omaha (4.5 percent), Lincoln (4 percent), Bellevue (4 percent), and North Platte (4 percent). Several other Nebraska communities are now considering an increase in their sales tax rates as one means of reducing the property tax burden. Projected city sales tax refunds for fiscal year 1980-1981 are \$49.9 million.

The food sales tax credit is currently \$20 per person, which generates approximately \$30 million in refunds. However, the state legislature is considering an increase in the food tax credit to \$28 per person, which would provide an additional \$12 million in tax relief.

Other refunds are from the sales tax and corporation tax. Together, these refunds will be about \$9.1 million. Deficiency appropriations for the current fiscal year are expected to be approximately \$9.0 million. All refunds and deficiency appropriations will total approximately \$157.6 million with a \$20 food tax credit. If the food tax credit is increased to \$28, refunds are forecasted to be \$169.5 million.

Total general fund revenues are projected to be \$753.7 million in gross tax receipts, \$15.0 million in revenue sharing funds, and a general fund balance of \$38.8 million as of June 30, 1980. Together, these equal \$807.5 million. When refunds and deficiency appropriations are subtracted, projected net receipts are \$649.8 million if the food tax credit is \$20. A food tax credit of \$28 would yield net receipts of \$638.0 million. The derivation of net general fund tax receipts forecasts is presented in more detail in Table 4 (page 6).

General fund spending financed by state revenues has been set at \$608.3 million for fiscal year 1980-1981. The overlevy is the amount by which projected net receipts exceed spending, expressed as a percentage of spending. State guidelines indicate that the overlevy should fall between (Continued on page 6)

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### Review and Outlook

The level of economic activity in Nebraska dropped in November 1979, with four of the five sectors recording losses when compared to October. The physical volume index for the state fell 0.9 percent from its October level and was 3.0 percent below its value of last year. Nationally, the index rose 0.1 percent from October, but was down 0.4 percent from November 1978.

The October-to-November decrease for Nebraska was broadly based, with decreases in both the agricultural and nonagricultural sectors. The index for the agricultural sector fell 0.5 percent, and the composite index for the nonagricultural sectors fell 1.0 percent. Government, with an increase of 1.5 percent, was the only sector registering a gain. The month-to-month losses for the

remaining sectors were: construction, -2.3 percent; distributive, -1.4 percent; and manufacturing, -0.9 percent.

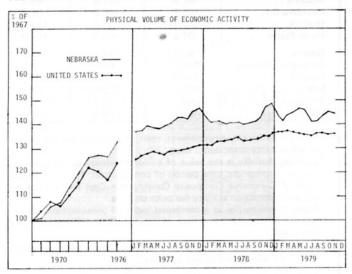
В

The year-to-year changes presented in Table 1 should be interpreted with a degree of caution. Even though the indexes were considerably lower than last November, it must be remembered that November 1978 was an unusually good month for the state (see chart at bottom of page). Despite November's loss, the Nebraska economy has exhibited a slight increase, on a year-to-date basis, and should finish the year about 1 percent above 1978.

The manufacturing sector has expanded steadily throughout the year, as output has fallen only four times. The index for the manufacturing sector was 2.9 percent above its November 1978 level and was the only sector increasing. (Continued on page 5)

Notes for Tables 1 and 2: (1) The "distributive" indicator represents a composite of wholesale and retail trade; transportation, communication and utilities; finance, insurance, and real estate; and selected services. (2) The "physical volume" indicator and its components represent the dollar volume indicator and its components adjusted for price changes using appropriate price indexes—see Table 5, page 5.

| 1. CHANGE F  | ROM PREV  | IOUS YE   | AR  |  |
|--|---|---|---|--|
| November 1979  | Current Month as<br>Percent of Same<br>Month Previous Year  |   | 1979 Year to Date<br>as Percent of<br>1978 Year to Date   |  |
| Indicator  | Nebraska  | U.S.  | Nebraska  | U.S.   |
| Dollar Volume Agricultural Nonagricultural Construction Manufacturing Distributive Government Physical Volume Agricultural Nonagricultural Construction Manufacturing Distributive | 108.5<br>105.6<br>109.1<br>90.4<br>116.7<br>109.3<br>103.4<br>97.0<br>93.1<br>97.8<br>81.3<br>102.9<br>97.0 | 111.6<br>113.1<br>111.5<br>107.0<br>115.3<br>111.0<br>106.9<br>99.6<br>102.5<br>99.5<br>96.2<br>101.1<br>98.6 | 113.7<br>126.7<br>111.8<br>98.5<br>117.9<br>111.8<br>107.4<br>101.4<br>105.1<br>100.9<br>86.8<br>105.7<br>100.7 | 112.9<br>121.8<br>112.6<br>111.3<br>116.6<br>111.8<br>107.3<br>101.7<br>105.4<br>101.6<br>98.1<br>104.3<br>100.7 |
| Government   | 98.8<br>NGE FROM  | 101.3   | 99,3  | 100.8  |
| 2. CITA  |   |   | 967 Average   | -  |
| Indicator  | Nebraska U.S  |   |   |  |
| Dollar Volume Agricultural Nonagricultural Construction Manufacturing Distributive Government Physical Volume Agricultural Nonagricultural Construction Manufacturing Distributive | 108<br>163<br>142   | 3.5<br>.2<br>.4<br>.5<br>.8<br>.3<br>.7<br>.1<br>.4<br>.0   | 129<br>141  | .6<br>.3<br>.5<br>.5<br>.9<br>.5<br>.0<br>.2<br>.4<br>.5<br>.3   |
| Construction Manufacturing   | 145.7<br>144.1<br>108.4<br>163.0<br>142.2<br>138.5  |   | 136<br>105<br>129<br>141<br>141   |  |



3. NET TAXABLE RETAIL SALES OF NEBRASKA REGIONS
AND CITIES (Adjusted for Price Changes)

| an tumberijar maji e       | City Sales <sup>2</sup> | Sales in      | Region <sup>2</sup> |
|----------------------------|-------------------------|---------------|---------------------|
| Region Number <sup>1</sup> | Nov. 1979               | Nov. 1979     | Year to date'79     |
| and City                   | as percent of           | as percent of | as percent of       |
|                            | Nov. 1978               | Nov. 1978     | Year to date'78     |
| The State                  | 98.4                    | 97.2          | 100.4               |
| 1 Omaha                    | 100.9                   | 98.7          | 96.4                |
| Bellevue                   | 87.2                    |               |                     |
| 2 Lincoln                  | 97.7                    | 97.5          | 100.5               |
| 3 So. Sioux City           | 83.6                    | 87.1          | 92.9                |
| 4 Nebraska City            | 89.5                    | 92.0          | 100.4               |
| 5 Fremont                  | 97.4                    | 97.0          | 101.1               |
| Blair                      | 102.5                   |               |                     |
| 6 West Point               | 117.4                   | 93.3          | 105.3               |
| 7 Falls City               | 93.2                    | 90.8          | 99.5                |
| 8 Seward                   | 84.1                    | 88.6          | 102.6               |
| 9 York                     | 102.8                   | 97.5          | 105.7               |
| 10 Columbus                | 98.6                    | 93.3          | 104.7               |
| 11 Norfolk                 | 100.9                   | 97.3          | 103.8               |
| Wayne                      | 102.0                   |               |                     |
| 12 Grand Island            | 100.4                   | 98.8          | 103.7               |
| 13 Hastings                | 94.3                    | 92.7          | 100.6               |
| 14 Beatrice                | 94.8                    | 94.0          | 102.3               |
| Fairbury                   | 94.5                    |               |                     |
| 15 Kearney                 | 97.1                    | 91.5          | 103.7               |
| 16 Lexington               | 106.0                   | 94.5          | 105.6               |
| 17 Holdrege                | 83.6                    | 89.1          | 101.7               |
| 18 North Platte            | 94.6                    | 95.8          | 102.7               |
| 19 Ogallala                | 102.7                   | 101.5         | 105.1               |
| 20 McCook                  | 107.0                   | 106.3         | 104.3               |
| 21 Sidney                  | 98.2                    | 101.5         | 99.6                |
| Kimball                    | 126.7                   |               |                     |
| 22 Scottsbluff/Gering      | 102.8                   | 100.0         | 102.9               |
| 23 Alliance                | 102.2                   | 102.2         | 103.7               |
| Chadron                    | 110.8                   |               |                     |
| 24 O'Neill                 | 96.9                    | 97.4          | 110.8               |
| 25 Hartington              | 110.2                   | 101.5         | 104.2               |

See region map below.

26 Broken Bow

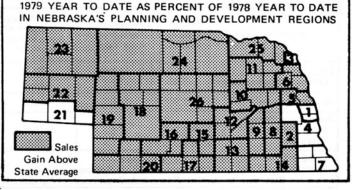
<sup>2</sup>Sales on which sales taxes are collected by retailers located in the state. Region totals include motor vehicle sales; city totals exclude motor vehicle sales.

95.6

108.1

102.1

Compiled from data provided by Nebraska Department of Revenue.



#### (Continued from page 4)

decreases.

The agricultural sector has been another area of strength in the Nebraska economy during 1979. This month's fall in the index (as measured by the volume of seasonally adjusted cash farm marketings) was only the fourth decline this year. Prices received by Nebraska farmers in November were up 13.5 percent when compared to last year, but prices paid increased 13.7 percent over the same period.

Construction continues to be the weakest sector in the Nebraska economy. The index for this sector has fallen steadily throughout 1979 and lies 18.7 percent below the level of 1978.

The distributive and government sectors have been the most erratic sectors in the Nebraska economy. In November, the indexes for both sectors were less than last year, but definite trends have not been established.

Employment continued its record of growth in 1979, as the number of employed persons increased 1.5 percent in November 1979, compared to November 1978. This gain represented more than 11,000 persons, but was insufficient to offset the increase in the labor force and resulted in a slight increase of the number of unemployed. Despite this fact, November's unemployment rate was only 3.2 percent of the labor force and compares favorably to the national rate of 5.6 percent. Compared to November 1978, nineteen of the twenty-six reporting cities registered gains in employment. The four cities in metropolitan areas all experienced

After adjustment for price changes, Nebraska's net taxable sales in November were 2.8 percent below last year's level. Retail sales for the nation were 3.9 percent below those of last November. The November decrease was spread throughout Nebraska, as twenty of the state's twenty-six planning regions had total sales below those of November 1978. Non-motor vehicles sales, however, were less affected, as only sixteen of the thirty-two principal trading centers had sales lower than those of last November. Kimball, West Point, Chadron, and Hartington recorded increases exceeding 10 percent.

Relative to November 1978, the city business indexes rose slightly, with an average increase of 0.1 percent, as fifteen of twenty-six cities registered gains. The strength in employment was responsible for most of the gain, but could not fully offset the weakness in retail sales and building activity.

Based on the city business indicators, it appears that the strength of Nebraska's economy continues to lie in the western portion of the state. The city posting the largest gain in activity, with an increase of 7.2 percent, was McCook. Other cities with November-to-November gains exceeding 3 percent were Alliance, Sidney, Lexington, Scottsbluff/Gering, and Norfolk. J. A. D.

| 5. PRICE INDEXES                    |                          |                                       |  |
|-------------------------------------|--------------------------|---------------------------------------|--|
| November 1979                       | Index<br>(1967<br>= 100) | Percent of<br>Same Month<br>Last Year | Year to Date<br>as Percent of<br>Same Period<br>Last Year* |
| Consumer Prices Commodity component | 227.5<br>217.4           | 112.6<br>112.7                        | 111.1<br>111.3   |
| Wholesale Prices                    | 246.9                    | 114.5                                 | 112.2  |
| Agricultural Prices United States   | 246.0<br>253.0           | 11 <b>0</b> .3<br>113.5               | 115.4<br>120.6   |

\*Using arithmetic average of monthly indexes.
Sources: Consumer and Wholesale Prices: U.S. Bureau of Labor
Statistics; Agricultural Prices: U.S. Department of Agriculture

|   | CITY BUSINESS INDEXES  Percent Change Nov. 1978 to Nov. 1979  -10 -5 0 5 10 |
|---|---|
| Sidney Lexington Scottsbluff/Gering Norfolk Kearney Columbus Falls City Grand Island Chadron York North Platte Broken Bow Fairbury STATE Omaha Fremont Beatrice Nebraska City Holdrege Lincoln Seward Blair Hastings Bellevue |   |

Source: Table 3 (page 4) and Table 4 below.

| _ |   |  |  |   |
|---|---|--|--|---|
|   | 4. NO   | VEMBER CITY                                      | BUSINESS INC                                   | DICATORS  |
|   |   | Percent of                                       | of Same Month a                                | Year Ago  |
|   | The State<br>and Its<br>Trading<br>Centers            | Employment <sup>1</sup>                          | Building<br>Activity <sup>2</sup>              | Power<br>Consumption <sup>3</sup>                 |
|   | The State Alliance Beatrice Bellevue Blair Broken Bow | 101.8<br>114.5<br>101.7<br>97.8<br>97.3<br>101.5 | 89.0<br>59.9<br>97.0<br>42.2<br>48.7<br>80.4   | 105.4<br>113.2<br>99.4<br>105.9<br>106.0<br>103.0 |
|   | Chadron   | 99.3<br>101.0<br>101.6<br>102.4<br>98.5          | 38.9<br>186.9<br>132.4<br>273.3<br>95.3        | 120.2<br>101.9<br>108.7<br>97.7<br>108.9*         |
|   | Grand Island  | 105.6<br>103.7<br>101.5<br>108.5<br>103.3        | 73.8<br>52.8<br>52.2<br>96.5<br>80.1           | 111.2<br>107.2<br>166.1<br>107.4<br>108.7         |
|   | Lincoln   | 99.2<br>101.5<br>103.1<br>102.1<br>107.8         | 65.7<br>271.5<br>146.3<br>111.8<br>100.3       | 106.7<br>94.3<br>96.6<br>113.8<br>102.9           |
|   | Omaha   | 97.8<br>103.7<br>100.9<br>108.9<br>94.4<br>102.3 | 91.9<br>92.5<br>189.2<br>212.6<br>58.7<br>69.0 | 102.1<br>108.5<br>108.2<br>95.7<br>113.7<br>108.7 |

<sup>1</sup> As a proxy for city employment, total employment for the county in which a city is located is used.

<sup>2</sup>Building Activity is the value of building permits issued as spread over an appropriate time period of construction. The U.S. Department of Commerce Composite Construction Cost Index is used to adjust construction activity for price changes.

<sup>3</sup>Power Consumption is a combined index of consumption of electricity and natural gas except in cases marked \* for which only one is used.

Source: Compilation by Bureau of Business Research from reports of private and public agencies.

(Continued from page 3) 3 percent and 7 percent, inclusive. If the overlevy falls outside these ranges, corrective measures could include changes in appropriations or adjustment of the tax rates. For the scenario of the \$20 food sales tax credit, the Bureau of Business Research's projected overlevy is \$41.5 million (6.8 percent). If the \$28 food tax credit is approved, the overlevy is projected to be \$29.7 million (4.9 percent). With an increase in the food tax credit, the Bureau's forecasts indicate that the total revenue sources for the next fiscal year will yield an overlevy in the mid-range category.

#### CONCLUSION

The preceding sections have outlined the basic procedures

involved in forecasting both gross and net general fund tax receipts. Forecasts are based on expectations of future economic events, and these expectations are subject to change as time passes. If these assumptions radically change, actual events will begin to deviate extremely from the forecasts.

It is impossible to consider every factor that has an impact on tax receipts. The forecasts presented in this article must be viewed with this in mind. Factors to pay close attention to in the upcoming months are the severity of the economic slowdown and the behavior of agricultural prices. A combination of consumer retrenchment and a decline in agricultural prices would have a negative impact on Nebraska tax receipts.

C. L. B.

#### Table 4

# FORECASTED NET GENERAL FUND TAX RECEIPTS FOR NEBRASKA FOOD SALES TAX CREDIT OF \$20\* BUREAU OF BUSINESS RESEARCH

| Total Reve         | nues                                    | Refu            | nds           |
|--------------------|---|-----------------|---------------|
| Gross Tax Receipts | \$753,687,000                           | Income Tax      | \$59,400,000  |
| Ending Balance     | 38,800,000                              | City Sales Tax  | 49,855,000    |
| Revenue Sharing    | 15,000,000                              | Food Sales Tax  | 30,305,000    |
| Total:             | \$807,487,000                           | Corporation Tax | 5,433,000     |
|                    | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | Sales Tax       | 3,650,000     |
|                    |   | Total:          | \$148,643,000 |
|                    | Total Revenues                          | \$807,487,000   |               |
|                    | minus Refunds and                       |                 |               |
|                    | Deficiency Appropriation                | s \$157,643,000 |               |
|                    | equals Net Receipts                     | \$649.844.000   |               |

-6-

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