fiscal forum

April 2001

A Legislative Briefing

HOUSE FISCAL AGENCY

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Consensus Revenue Estimating: The Process

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The Constitution of the State of Michigan requires that the state maintain a balanced budget. The primary question to consider in creating any balanced budget or spending plan is: How much is available to spend? Michigan uses a consensus process created by 1991 Public Act (PA) 72 to generate official revenue estimates for its budget.

Consensus conference principals (voting participants) are the State Budget Director or the State Treasurer, the Director of the House Fiscal Agency (HFA), and the Director of the Senate Fiscal Agency (SFA) or their respective designees. In recent years, the State Treasurer has served as the Governor's representative at the conference. To determine available revenue resources for the state's budget, Michigan's House, Senate, and Executive branch participate in the consensus revenue estimating conference.

The Management and Budget Act stipulates that consensus revenue estimating conferences be held each year in the second week of January and in the last week of May. The May revenue estimating conference has occasionally been advanced by a week or two at the request of House and Senate leadership to help expedite legislative processing of the appropriations bills. In addition, the statute provides that if any of the principals of the conference determines that there is sufficient cause to revise the consensus estimate, he/she can call a conference at any time during the year.

Each conference establishes the official economic forecast of major variables of the national and state economies and estimates anticipated state revenues for General Fund/General Purpose (GF/GP) and the School Aid Fund (SAF) for the current and next fiscal years.

At the conference, which is open to the public, economists from the HFA, SFA, and Department of Treasury present their independent forecasts of the national and state economies and estimated state revenues for the current and upcoming fiscal years. Because a conference goal is to bring together the best information and insight available on the fundamentals of the economy, experts from academia and the private sector are invited to present and discuss their economic forecasts. Participants often include faculty from state universities, analysts from automotive companies, and economists from various consulting firms and the Federal Reserve. Members of the Legislature who attend the conference may question any conference participant.

After reviewing agency forecasts and evaluating input from academia and private sector experts, the conference principals confer in an effort to come to agreement on consensus estimates of GF/GP and SAF revenues. Statute requires that the consensus reached must be unanimous. Since the start of the consensus conference process (May 1992), agreement has been reached at all meetings except the very first.

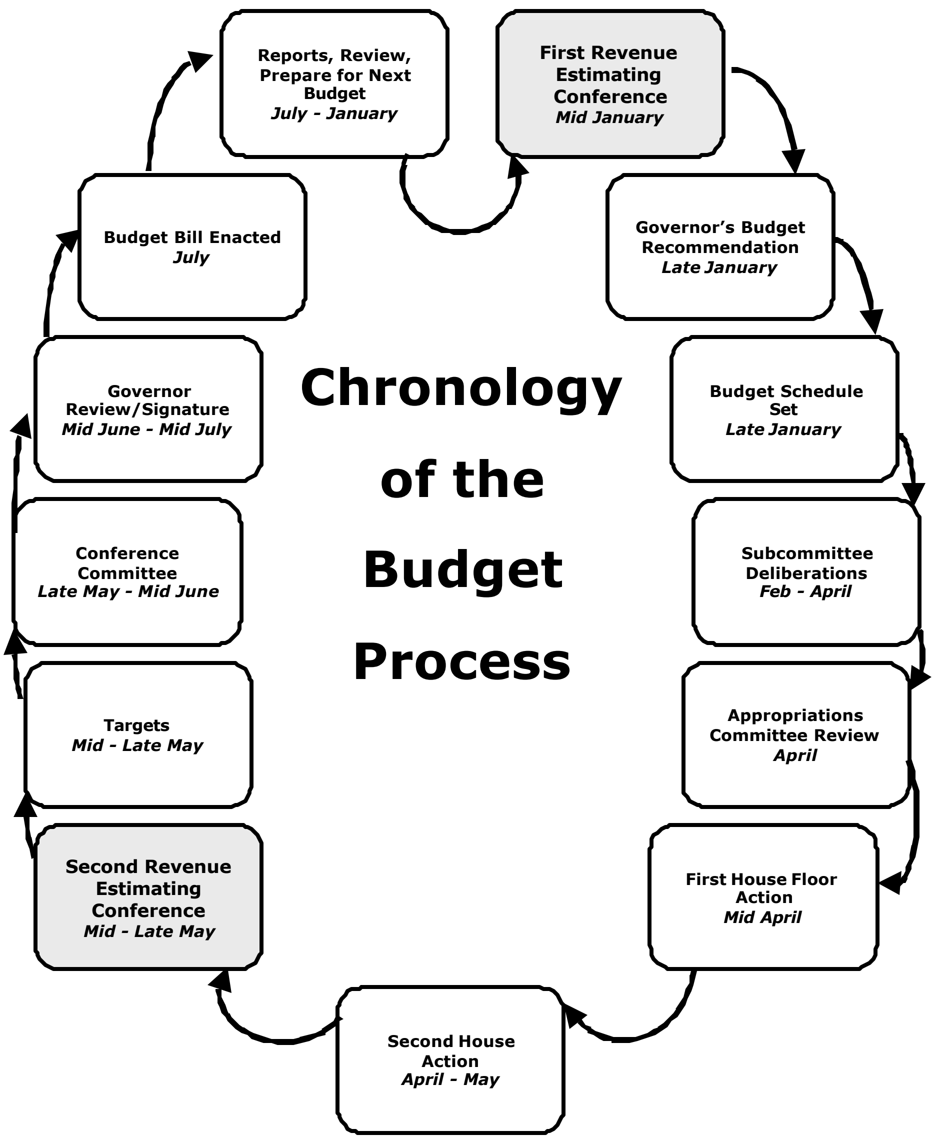
Once consensus is reached, the January

estimates become the revenue basis for the executive budget proposal that the governor presents to the Legislature in February. The May consensus estimates become the revenue basis for the appropriations bills that the Legislature presents to the governor in June or July.

Each year's GF/GP and SAF revenue is forecast four times over a two-year period. The initial forecast is estimated at a January conference. This forecast is reviewed (and potentially revised) three times in the following May, January, and May conferences. In addition, preliminary final and actual final revenue figures are presented in the following year in the January and May conference documents.

The legislative and executive branches are constantly kept informed of revenues available for the budget through a variety of methods. For example, an HFA quarterly report titled *Revenue Review* is distributed to all legislators and the executive branch.

The following figure shows the chronology of the budget process and highlights how the consensus revenue conference fits into the process. For a more detailed explanation of the budget process, see *A Guide to the Legislative Appropriations Process*, issued December 2000 by the House Fiscal Agency.



Consensus Guidelines/ Key Components

The Management and Budget Act, 1984 PA 431 as amended, is the primary statue governing the budget process in Michigan. It includes guidelines for a variety of budget areas as well as for the consensus revenue estimating conference. Indexed copies of the Management and Budget Act are available from the HFA. Key consensus revenue estimating conference requirements are as follows:

- The conference establishes an official economic forecast of major variables of the national and state economies.

- The conference also establishes a forecast of anticipated state revenues, including the following: collections from the state income tax, sales tax, single business tax, the lottery transfer to the SAF, and total GF/GP and SAF revenues.

In addition, consensus estimates of compliance with the state revenue limit, pay-ins or pay-outs required to the Countercyclical Budget and Economic Stabilization Fund (BSF), and the annual percentage growth in the basic foundation allowance are required by 1984 PA 431. Forecasts are based on the assumption that current law will remain in effect for the forecast period.

Five major components determined at the consensus conference are:

- Ú National and state economic forecasts
- Ú Major state revenues and total GF/GP and SAF revenues
- Ú Compliance with the revenue limit
- Ú Budget Stabilization Fund pay-outs or pay-ins required
- Ú Annual percentage growth in the basic foundation allowance

National Economic Forecasts

Major national economic indicators reviewed and forecast at the consensus conference include real gross domestic product (GDP), interest rates, consumer price index (CPI), unemployment rate, and light motor vehicle sales.

Ú *Real GDP*, the broadest measure of economic activity for the United States (U.S.), is the value of final goods and service, adjusted for inflation, produced by the economy.

Ú Both *short- and long-term interest rates* are key indicators that are gauges of the cost of borrowing money to finance purchases of homes, motor vehicles, and other durable goods, such as furniture and appliances.

Ú In addition, the *CPI*, which is an inflation measure, the *unemployment rate,* and *light motor vehicle sales* are determined.

Michigan Economic Forecasts

Michigan is manufacturing intensive. The level of production in Michigan depends, to a large degree, on the expected volume of sales at the national level for light motor vehicles and other durable and non-durable goods.

Key Michigan data forecast at the consensus conference include personal income, wages and salaries, the Detroit consumer price index (DCPI), and the unemployment rate.

Ú Michigan *personal income* is the broadest indicator of economic activity for the state. It includes total income from all sources—including wages and salaries, proprietors' income, workers' compensation, interest, rent and dividend income, and transfer payments.

Ú *Wages and salaries* are the main component of personal income; the *DCPI* is an inflation measure. The *unemployment rate* is also forecast.

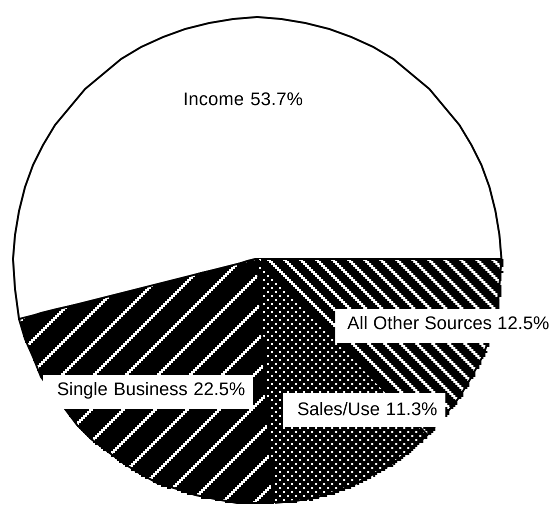
Major State Revenues

Major state revenues and all GF/GP and SAF revenues are forecast at the consensus conference. The following is a brief description of these revenues.

Ú *Income tax* revenue includes withholding, annual, and quarterly payments. Almost 80% of total income tax revenue is from withholding, which is based on workers' earnings. Annual and quarterly payments are based on self-employment earnings and other income sources such as capital gains.

Ú *Sales and use tax* revenues are the major consumption taxes. Sales tax is

GF/GP Revenue By Source

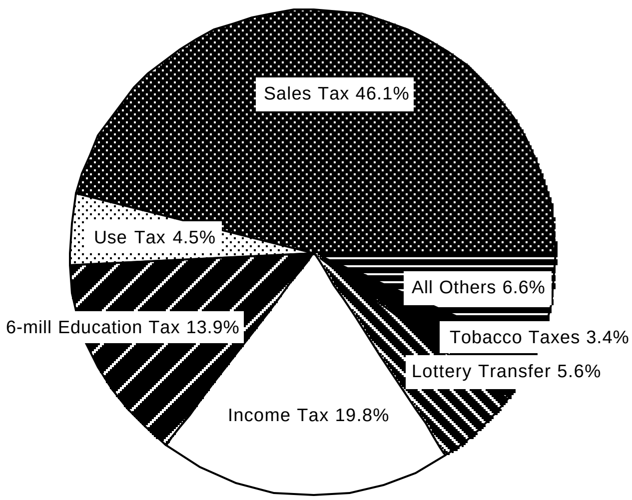


applied to the sale of motor vehicles, furniture, apparel, and other general merchandise, while use tax is applied to leased motor vehicles, telephone services, and hotels and motels.

Ú *Single business tax* revenue is applied to the value added of a firm's business activities.

Ú All net revenue from the Lottery is transferred to the SAF. Net Lottery revenue is equal to total lottery sales less prizes and expenses.

School Aid Fund Revenue by Source



Ú The three most important revenue sources for GF/GP revenue are the income tax, the single business tax and the sales tax. Combined, these taxes account for over 86% of total GF/GP revenue.

Ú Together, six revenue sources account for over 93% of all revenues dedicated to the SAF (see figure on next page). These sources are sales tax, income tax, 6-mill state education tax, Lottery transfer, use tax, and tobacco taxes.

Additional information on the source and distribution of total state revenues is available in the HFA publication titled *State of Michigan Revenue: Source and Distribution.*

Revenue Limit

Article IX, Section 26 of the Michigan Constitution, limits the amount of revenue the state can collect in any fiscal year. Consensus personal income and tax revenue estimates are used to calculate the revenue limit for the current and upcoming fiscal year.

Total state revenue less federal funds and adjusted for inter-fund transfers cannot exceed 9.49% of total state personal income. The final revenue limit calculation is determined by the Office of Financial Management after final book closings.

The Constitution provides that if the revenue limit is exceeded by 1% or more, the excess revenue must be refunded to income tax and single business taxpayers on a pro rata basis. If the revenue limit is exceeded by under 1%, the excess may be transferred to the BSF (the state's rainy day fund).

Countercyclical Budget and Economic Stabilization Fund (BSF)

Consensus estimates of Michigan personal income and inflation combined with GF/GP revenue produce the potential pay-in or pay-out amount for the BSF. The BSF, established by 1977 PA 76, is a reserve of cash the state contributes to or withdraws from during economic and budget cycles.

Transfers *to* the BSF may occur through an appropriation if Michigan personal income less transfer payments and adjusted for inflation grows by over 2%. The transfer would equal the excess over 2% multiplied by the GF/GP revenue. In recent years, the GF/GP year-end balance has been transferred to the BSF.

Transfers *from* the BSF may occur if adjusted Michigan personal income declines. The transfer amount would equal the percentage decline in adjusted Michigan personal income multiplied by the GF/GP revenue. In addition, BSF withdrawals may be made to create job opportunities if the unemployment rate for the state exceeds 8.0% during a calendar quarter.

Basic Foundation Allowance

Under the School Aid Act, the basic foundation allowance provides for the increase in the per pupil funding and is, at a minimum, equal to the revenue adjustment factor multiplied by the pupil membership adjustment factor. The pupil adjustment factor is calculated from the number of pupil memberships (agreed to at the consensus conference) and the SAF consensus revenue. The revenue adjustment factor is determined by the change in SAF revenue.

Preparing a Forecast

The state economy is inextricably linked to the U.S. economy and to the world economy.

CONSUMER CONFIDENCE OR CONSUMER SENTIMENT

The Conference Board ***index of consumer confidence*** is a monthly series that depicts the consumers' view of current economic conditions. The ***index of consumer sentiment***, which is released by the University of Michigan, measures consumers' outlook about current economic conditions and economic conditions in the coming year.

As a general rule, higher or increasing values correspond to greater consumer optimism and growth in consumer spending; lower or declining values signal less consumer optimism or pessimism and declines in consumer spending.

Therefore, producing a forecast of state revenues involves an ongoing analysis of not only the state's economy, but also national and global economic conditions.

Explanations and descriptions of key U.S. economic variables which are monitored (but not estimated by the HFA, SFA, and Department of Treasury) throughout the year are shown below. Key areas or entities to monitor include the Federal Reserve and monetary policy; changes in federal fiscal policy; national and state employment and production trends, especially those that affect Michigan's major industries (such as the auto industry); and the monthly flow of state tax revenues.

Economic Forecast

To complete an economic forecast, three key steps are involved: 1) review recent economic history and the economic forecasts of outside forecasting entities, 2) determine changes to key economic variables for agency forecasts, and 3) modify economic model to produce agency forecasts for the U.S. and Michigan economies.

1) On a monthly basis, the HFA, SFA, and Department of Treasury review forecasts from academia and economic forecasting companies. In addition, economists participate in various meetings held throughout the year to discuss economic conditions.

In late November, the University of Michigan hosts a conference on the state of the U.S. and Michigan economies, bringing together nationally-renowned economists to discuss the international economic conditions, the U.S. economy, and how national and international economic conditions are likely to impact the state economy.

Shortly thereafter, the State Treasurer hosts a meeting (Governor's Economic Luncheon) of experts from the major sectors of the state economy—such as retail trade, manufacturing, services, the banking sector, and the communications sector. These experts share their insight into how well the state economy might be expected to perform in their particular area of expertise.

Because the auto industry is so important to the state, annual meetings are held

NATIONAL ASSOCIATION OF PURCHASING MANAGERS' INDEX

The National Association of Purchasing Management releases a monthly series called the ***National Association of Purchasing Managers' (NAPM) Index***. The NAPM's Purchasing Managers' Index is a measure of manufacturing production which includes variables specific to the manufacturing sector such as production levels, new orders, inventories, and manufacturing employment.

Typically, if the index is above 50% it indicates that the manufacturing sector is expanding; a figure below 50% indicates that the manufacturing sector is contracting.

LEADING AND COINCIDENT INDICATORS

The Conference Board issues a monthly series of leading and coincident indicators. The ***leading*** index contains ten economic indicators that move in advance of the business cycle. In other words, these indicators (such as average weekly hours for manufacturing, manufacturers' new orders, stock prices, the money supply, interest rate spread, and consumer expectations) tend to advance or decline prior to the economy as a whole.

The ***coincident*** indicators tend to move with the economy as a whole. Four economic indicators are included in the coincident series—nonagricultural payroll employment, personal income less transfer payments, industrial production index, and manufacturing and trade sales.

Typically, an increase in the leading or coincident index that is of a significant size, duration, and scope would signal an economy that is expanding. Similarly, a significant decline over a six-month period and a decline in a majority of the component series typically predict an economy that is contracting or heading for a recession.

each fall with the chief economists from General Motors, Ford, and DaimlerChrysler.

2) After reviewing the forecasts of multiple economic forecasting groups, each agency independently decides on key assumptions that seem to produce the most likely forecast scenario. The actual forecast may modify variables relating to monetary policy, the level of light motor vehicle sales, the price of oil, or economic growth in the rest of the world.

3) All three agencies participating in the consensus conference have access to a large-scale econometric model of the economy that is maintained by the University of Michigan. Each agency modifies the model, based on its view of various economic assumptions, to generate a forecast for the U.S. and Michigan economies.

An econometric model is simply a system of equations—over 200 in this model—that represent the relationships between various sectors of the national and state economy and state revenue collections. Using historical data, statistical relationships generated by the model, and certain assumptions about the future, the model produces estimates of future economic growth, employment, inflation, interest rates, income, and state revenue collections.

The econometric model is updated and re-calibrated quarterly. This process includes incorporating revised data on federal budget expenditures, revised personal income data, revised state and federal revenue data, net export data, interest rates, and other key data into the model.

The most difficult aspect of any economic forecast is anticipating sudden changes in the direction of the economy. It is almost impossible to estimate the starting point of a recession because a recession is usually related to international events or shocks that are very difficult to predict. Typically, the economy is slowly expanding, and then an event occurs (like the Gulf War in the early 1990s) which triggers a recession.

Revenue Forecast

Three steps are involved in preparing a revenue forecast: 1) review the quarterly trend of key state revenues and fiscal year-to-date revenues relative to target estimates and the previous consensus estimates, 2) develop baseline revenue estimates based on the future path of economic growth, and 3) determine and make any necessary adjustments to baseline revenues (due to tax changes, lawsuits, and one-time adjustments) to arrive at actual revenues.

1) The first step in estimating revenues is to determine how close actual revenues are to the previous consensus estimates. Growth of revenue from major taxes (income tax, sales tax, and single business tax) is compared with the previous year's growth and with target estimates.

Target estimates are the monthly collections anticipated—given the economic growth path for the state. Targets are based on historical monthly and quarterly collections of the tax, and the consensus revenue estimate for the tax. Comparing actual collection data with target estimates indicates whether the consensus estimate is too high, too low, or essentially on target.

2) The second step in estimating revenues involves using the information gained from comparing actual collections with target estimates and comparing revenue estimates generated from the economic forecast to estimated baseline revenues.

Baseline revenues are comparable between fiscal years and reflect revenue growth due to underlying economic fundamentals. If the pace of economic activity is expected to slow (or accelerate) over the next six months, then the pace of growth for tax revenues will also slow (or accelerate).

3) Actual revenues include the impact of recent tax law changes, such as rate or base changes, and other one-time adjustments, such as lawsuits.

To estimate actual revenues or the revenues that are available to spend, total adjustments must be determined and subtracted from (or added to, if adjustments are due to tax increases) the baseline revenues.

The HFA, SFA, and Department of Treasury all go through a similar process, each making adjustments according to its view of the relative strengths and weaknesses of the underlying economy. Each agency's forecast is made public a few days prior to each consensus conference. The forecasts are often presented at appropriations committee meetings just prior to the conference.

Summary

The Consensus Revenue Estimating Conference is held twice each year. Additional conferences may be convened during the year by the conference chairperson at the written request of a conference principal.

The conference principals confer on an ongoing basis regarding the current status and future of economic activity and state revenues. At the consensus conference, the conference principals consider the information provided by conference presenters and work to reach unanimous agreement on the consensus estimates that will be used as the basis for the budget for the State of Michigan.

Economic and revenue data are reviewed on an ongoing basis by the HFA, SFA, and Department of Treasury. Reports, such as the bi-monthly *Key Economic Indicators Update* and the quarterly *Revenue Review*, are provided to the Legislature in order to keep members informed.