



MONTANA LEGISLATIVE BRANCH

Legislative Fiscal Division

Room 110 Capitol Building * P.O. Box 201711 * Helena, MT 59620-1711 * (406) 444-2986 * FAX (406) 444-3036

Director
AMY CARLSON

DATE: September 7, 2016

TO: Revenue and Transportation Interim Committee

FROM: Sam Schaefer, Fiscal Analyst

RE: Corporation Income Tax Model Update and Refunds by Sector

Corporation income tax is a highly volatile revenue source and as a result is difficult to forecast accurately. Montana's reliance on a limited number of large corporate taxpayers coupled with Montana's carryback and carryforward provisions contribute to the volatility associated with this source.

CORPORATION INCOME TAX MODEL

The LFD forecasts corporation income tax using a sector-by-sector approach. Using calendar year tax data from the Department of Revenue, the total tax liability is grouped into industry sectors. These sectors include, but are not limited to mining, manufacturing, retail trade, transportation, and financial services. Calendar tax liability data is available for each sector dating back to 1995.

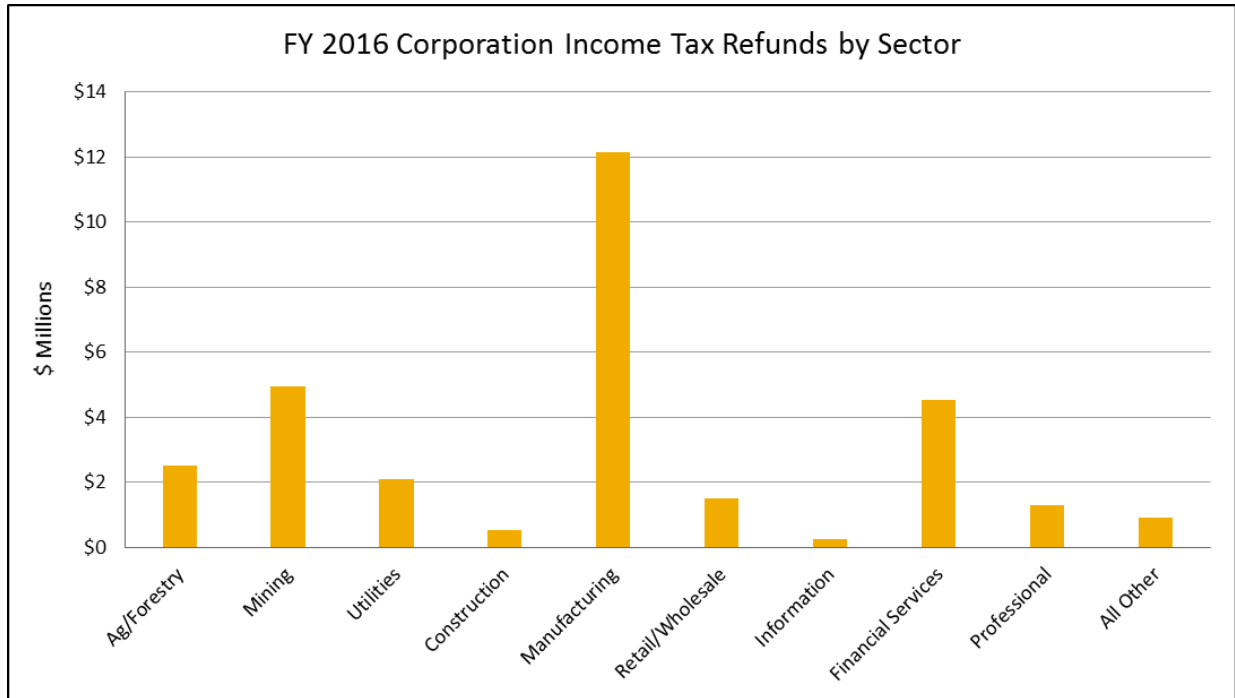
Using the historical sector data, each sector's tax liability is modeled using a variety of economic variables. The primary variables used to model these sectors are West Texas Intermediate (WTI) prices, retail sales, Montana population, and Montana median home price. Using IHS forecasts for these variables, each sector's liability is then forecast for the coming calendar years. The individual sector tax liabilities are then summed to produce a final calendar year tax liability. The calendar year tax liability is then converted to a fiscal year tax liability using historical patterns. Finally, refunds and audits are forecast using historical trends.

By studying historical IHS forecast errors for those variables used to model the corporate sectors, confidence intervals for multiple models were calculated and compared. Ultimately, the model with the smallest error interval was chosen. The estimates produced by this model for the current biennium during March of 2015 are shown in the table below alongside actual collections.

March 2015 Corporate Tax Sector Model Compared to Actuals (\$Millions)			
	FY 2015	FY 2016	FY 2017
Sector Model Estimate	179.3	140.7	157.1
Actual Collections	172.7	118.4	

REFUNDS BY SECTOR

Corporation income tax refunds were \$31.4 million in FY 2016. This was an increase of \$13.4 million from FY 2015 levels and \$6.4 million more than was anticipated in HJ 2. The month of April saw a record number of refunds totaling \$16.0 million. The following chart shows the breakdown of these refunds by industry sector.



Over the last ten years corporate refund have averaged \$26.2 million, with a record level of refunds reaching \$38.8 million in FY 2012. Moving into FY 2017 it is possible that there will be another larger-than-average refund year. Continued low commodity prices have likely resulted in quarterly losses for multiple corporations, increasing the chances of higher-than-average refunds.