

**UNITED STATES BANKRUPTCY COURT
EASTERN DISTRICT OF MICHIGAN
SOUTHERN DIVISION**

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In re	:	Chapter 9
	:	
CITY OF DETROIT, MICHIGAN,	:	Case No. 13-53846
	:	
Debtor.	:	Hon. Steven W. Rhodes
	:	
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REPORT OF ROBERT CLINE

Pursuant to Federal Rule of Civil Procedure 26(a)(2)(B), made applicable to this proceeding by Federal Rule of Bankruptcy Procedure 7026, debtor the City of Detroit submits this report with respect to the expected expert testimony of Robert Cline.

INTRODUCTION

Robert Cline is the Director of State-Local Tax Policy Economics and a member of the Quantitative Economics & Statistics practice (“QUEST”) of the firm Ernst & Young LLP (“EY”). It is the City’s intention to call Mr. Cline to testify about the forecasted revenues the City may expect in future years from the individual and corporate income taxes, wagering taxes, and utility users’ taxes it imposes. The information in this report is presented as of the date of this report and is based upon projections contained within the Fourth Amended Disclosure

Statement With Respect to Fourth Amended Plan for the Adjustment of Debts of the City of Detroit [Docket no. 4391] dated May 5, 2014 (the “Disclosure Statement”), as such projections were updated as of July 2, 2014. *See* Ten-Year Financial Projections [POA00706519 – POA00706600] (“10-Year Forecast”); Plan of Adjustment – 40 year projections [POA00706603 – POA00706611] (“40-Year Forecast”).

OPINIONS

Mr. Cline will offer the following opinions:

I. Income Tax Revenues

A. For the period ending with the City’s 2023 fiscal year, the projected revenues the City can expect from the individual and corporate income taxes it levies are set forth in the 10-Year Forecast, in particular at Exhibits 2, 3, 4, and Appendices B.2a and B.2b. These amounts are reasonable projections of the revenues the City will receive from income taxes during this period.

B. For each of the four ten-year periods ending with the City’s 2053 fiscal year, the projected revenues the City can expect from the individual and corporate income taxes it levies are set forth in the 40-Year Forecast, in particular at Exhibit 3a. These amounts are reasonable projections of the revenues the City will receive from income taxes during this period.

II. Wagering Tax Revenues

A. For the period ending with the City's 2023 fiscal year, the projected revenues the City can expect from the wagering taxes it levies are set forth in the 10-Year Forecast, in particular at Exhibits 2, 3, 4, and Appendix B.3. These amounts are reasonable projections of the revenues the City will receive from wagering taxes during this period.

B. For each of the four ten-year periods ending with the City's 2053 fiscal year, the projected revenues the City can expect from the wagering taxes it levies are set forth in the 40-Year Forecast, in particular at Exhibit 3a. These amounts are reasonable projections of the revenues the City will receive from wagering taxes during this period.

III. Utility Users' Tax Revenues

A. For the period ending with the City's 2023 fiscal year, the projected revenues the City can expect from the utility users' taxes it levies are set forth in Exhibit A. These amounts are reasonable projections of the revenues the City will receive from utility users' taxes during this period.

B. For each of the four ten-year periods ending with the City's 2053 fiscal year, the projected revenues the City can expect from the utility users' taxes it levies are set forth in Exhibit A. These amounts are reasonable projections of the revenues the City will receive from utility users' taxes during this period.

BASIS AND REASONS FOR OPINIONS

Mr. Cline developed forecasts for the revenues the City can expect from the individual income taxes, corporate income taxes, wagering taxes, and utility users' taxes it levies in three different scenarios: (A) from FY2013 to FY2023 assuming no restructuring or reinvestment spending ("Baseline Scenario"); (B) from FY2013 to FY2023 assuming a restructuring and reinvestment spending ("Restructuring Scenario"); and (C) from FY2023 to 2053 assuming a restructuring and reinvestment spending ("40-Year Forecasts"). In reaching his opinions, Mr. Cline followed standard forecasting procedures used by revenue forecasters and, where available, existing economic forecasts of the Michigan economy prepared by the State of Michigan Consensus Revenue Estimating Conference and national economic forecasts prepared by U.S. federal agencies such as the Congressional Budget Office ("CBO"). Mr. Cline employed the following methodologies and assumptions:

Individual Income Taxes

I. Methodology

A. Develop a Baseline Scenario Forecast for Individual Income Tax Revenues

To develop the Baseline Scenario for the City's individual income tax revenues, Mr. Cline classified all individual income taxpayers into three income

tax base categories: (i) residents of Detroit working in Detroit (“Income Tax Base A”); (ii) non-residents of Detroit working in Detroit (“Income Tax Base B”); and (iii) residents of Detroit working outside of Detroit (“Income Tax Base C”). The classification was based on individual income tax data through 2011 provided by the City of Detroit for resident and non-resident taxpayers. Mr. Cline determined the proportions of resident taxpayers working in Detroit versus those working outside of Detroit based on U.S. Census worker-flow data.

Mr. Cline then estimated growth rates in the number of taxpayers in each category over the forecast period, using forecasts for Detroit employment and population changes developed by Mr. Cline and his team. To translate the number of taxpayers into dollars of taxable income, Mr. Cline forecasted the growth of average taxable income in Detroit and applied this forecast to the growth in number of taxpayers in each group. Current income tax rates for residents and non-residents were applied to the taxable income bases to determine estimated future tax collections, as follows:

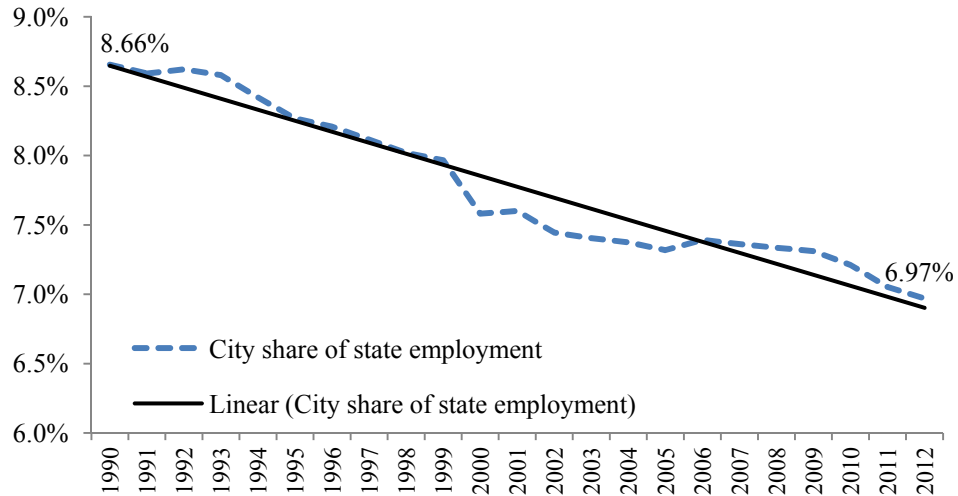
(1) *Forecast the employment growth rate for the State of Michigan from 2013 to 2023:* Mr. Cline began by relying upon the employment growth rate for FY2013 to FY2015 produced by the State’s Consensus Revenue Estimating Conference on May 15, 2013. *See Consensus Revenue Estimating Conference, Economic and Revenue Forecasts: FY2013, FY2014, FY2015 (May 15, 2013)*

[POA00275856 – POA00275895]; Michigan Department of Treasury, Office of Revenue and Tax Analysis, *Administration Estimates: Michigan Economic and Revenue Outlook* (May 15, 2013) [POA00275929 – POA00275978]. Mr. Cline then estimated an employment growth rate for the State of Michigan for FY2016 to FY2023 based on historical trends.

(2) *Forecast the employment growth rate for the City of Detroit from 2013 to 2023*: To estimate the City's employment growth rate, Mr. Cline first determined the average historical ratio of Detroit employment as a share of total Michigan employment. See United States Bureau of Labor Statistics, *Local Area Unemployment Statistics, 1990-2013* [POA00276113]. The comparison indicates that the ratio of Detroit employment as a share of Michigan employment has been declining at an average rate of -0.85% over the last 20 years. This relationship is illustrated in Figure 1:

Figure 1. City of Detroit's share of total State of Michigan employment, 1990 – 2012

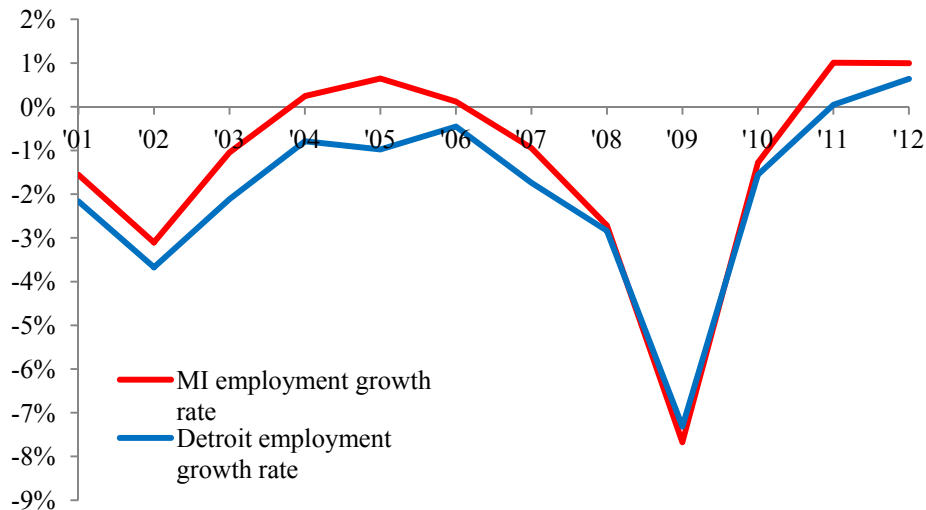
Note that y-axis starts at 6.0%; Source: BLS Local Area Unemployment Statistics.



This longer-run structural decline is assumed to continue over the 10-year forecast period. In addition, a comparison of more recent changes in employment in Detroit and Michigan indicates that Detroit employment has not recovered at the same rate as Michigan employment coming out of the last two recessions. As shown in Figure 2, Detroit's employment recovery from the last two recessions has lagged behind Michigan's employment recovery. Mr. Cline included this additional negative impact in the Baseline Scenario.

Figure 2. Growth rates of City of Detroit and Michigan employment, 2001 – 2012

Source: BLS Local Area Unemployment Statistics.



(3) *Forecast the Growth in the Number of Taxpayers in Each of the*

Three Income Tax Bases:

(a) *Determine Population Growth Rate:* Mr. Cline first determined the forecasted population growth rate for the City over the next ten years. To do so, Mr. Cline relied upon the population forecasts prepared by the Southeast Michigan Council of Governments (“SEMCOG”). *See* Southeast Michigan Council of Governments, *Southeast Michigan 2040 Forecast Summary* (Revised, April 2012) [POA00275979 – POA00276041]. To develop the 10-year forecasts, Mr. Cline and his team used SEMCOG’s population scenario 1a (middle scenario) as a basis.

(b) *Estimate Growth in the Number of Taxpayers in Income Tax Bases A (Residents Working in the City) and B (Non-Residents Working in the City)*: Mr. Cline relied upon the United States Census Bureau data on worker flows to determine the share of Detroit employment attributable to residents versus non-residents as of 2010. See U.S. Census Bureau, *On the Map* (LEHD Origin-Destination Employment Statistics (beginning of quarter employment, 2nd Quarter of 2002 – 2010)) [POA00275851 – POA00275851]. To estimate the growth in the share of Detroit employment held by residents over the forecast period, Mr. Cline combined the projected Detroit employment growth rate with an estimated population decline for residents working in the City. The forecast assumes that this group of taxpayers will decline at a slower rate than that of the total Detroit population (SEMCOG's 1a forecast). Mr. Cline forecasted that the number of residents employed in Detroit will decline at -1.0% per year. The growth rate increases to -0.5% in FY2020 – FY2021, and 0.0% in the last two forecast years. The amount of the Detroit employment forecasted in each year that was not attributable to residents was attributable to non-residents.

(c) *Estimate Growth in the Number of Taxpayers in Income Tax Base C (Detroit Residents Working Outside of the City)*: To estimate the growth in residents employed outside of the City, Mr. Cline combined the projected statewide employment growth rate with an estimated population decline for

residents working outside of the City. The forecast assumes that this group of taxpayers will decline at a faster rate than that of the total Detroit population (SEMCOG's 1a forecast).

(4) *Forecast Income Tax Base Growth*: Mr. Cline next developed estimates of the rate of growth in wages and salaries in order to determine the expected growth in the tax base (i.e., the amount of taxable income in Detroit) over the forecast period. To do so, Mr. Cline began with the Michigan wage and salary growth forecasts in the State's Consensus Revenue Estimating Conference on May 15, 2013. *See* Consensus Revenue Estimating Conference, *Economic and Revenue Forecasts: FY2013, FY2014, FY2015* (May 15, 2013) [POA00275856 – POA00275895]. The State forecasts that wages will grow at an average rate of 2.5% above employment growth for FY2012 to FY2015. Based on these forecasts, Mr. Cline assumed an average wage growth rate of 1.0% for Detroit to reflect the lagging economic conditions in the City compared with the State and the presence of higher unemployment holding down wages in the labor market within Detroit.

(5) *Forecast Total Tax Revenues*:

(a) *Calculate Total Tax Revenues from Detroit Residents (Income Tax Bases A and C)*: To forecast the total tax collections from City residents, Mr. Cline first combined the estimated employment (number of taxpayers) for Income Tax Bases A and C to calculate the overall rate of growth in

the number of resident taxpayers. Mr. Cline then added the estimated growth in average taxable income to estimate the overall growth rate in the resident income tax base (i.e., growth in resident income tax base = employment growth for combined Income Tax Bases A & C + taxable income growth). This growth rate was applied to the starting value of actual resident taxable income. The forecasted tax base was multiplied by the resident tax rate (2.4%) to estimate City tax collections.

(b) Calculate Total Tax Revenues from Non-Residents (Income Tax Base B): To forecast the total tax collections from non-residents working in Detroit, Mr. Cline first forecasted the annual values of Income Tax Base B over the forecast period by adding the estimated employment growth rate for Income Tax Base B to the estimated growth in average taxable income. Because non-residents working in Detroit pay a 1.2% income tax rate, Mr. Cline determined the annual tax collections from this income base by multiplying Income Tax Base B by 1.2%.

B. Analyze the Impact of Restructuring

To determine the impact on Detroit employment under the Restructuring Scenario, Mr. Cline assumed that while the long-run structural decline in Detroit relative to Michigan, as shown in Figure 1, would continue over the 10-year forecast period, the additional negative impact of the slower recovery in Detroit from the latest recession would not apply. In addition, Mr. Cline

assumed that improved economic conditions within the City would lead to a lower rate of decline for both populations of residents working in Detroit and outside the City, relative to the baseline forecast. Finally, Mr. Cline assumed that the average taxable income base in Detroit would increase at approximately two-thirds the rate of growth in Michigan average taxable income. These adjustments resulted in higher growth rates in projected individual income tax collections compared to the Baseline Scenario.

C. Extrapolate 10-Year Forecasts to Create 40-Year Forecasts

The tax collection estimates for the 40-year forecast begin with the level of collections estimated for 2023 in the 10-year restructuring forecast. Each tax series is then extrapolated over another 30 years based on assumed growth rates. The 40-year tax forecast should be considered a simulation of what would happen under the assumed growth rates, not a forecast of what is expected to happen.

(1) *Employment Growth Rate*: Mr. Cline adjusted the longer-run historical ratio of Detroit employment as a share of Michigan employment from -0.85% to -0.50% to account for an improvement in Detroit's economic condition relative to Michigan.

(2) *Average Taxable Income Growth Rate*: Mr. Cline determined that 2.0% was an appropriate long-run average wage inflation rate. Mr. Cline relied partly upon the facts that the inflation rate for U.S. Gross Domestic Product

(“GDP”) averaged nearly 2.0% (1.9%) annually over the past 20 years (1993-2012) and that the CBO forecast uses a GDP annual inflation rate of 2.2% annually from 2013 through 2088. *See* BEA Data – GDP Inflation 1992 to 2012 [POA00275850 – POA00275850]; CBO, 2013 Long-term Budget Outlook [POA00275848 – POA00275849]. In other words, the tax base would grow roughly 2.0% annually if wages and salaries grow in line with inflation (i.e., tax bases remain constant in real terms).

(3) *Population Growth*: Mr. Cline and EY reviewed population trends in other metropolitan areas that experienced a decade or more of declining population. The Detroit metropolitan area grew an average of 0.5% annually between 1990 and 2000 after experiencing declining population in the previous decade. *See* U.S. Census Bureau, *Statistical Abstract of the United States: 2012*, Table 20: Large Metropolitan Statistical Areas—Population: 1990 to 2010, *available at* <http://www.census.gov/prod/2011pubs/12statab/pop.pdf>. Mr. Cline and his team then examined historical employment and wage information to conclude that Detroit will under-perform relative to the surrounding metropolitan area, which includes the Detroit suburbs. Mr. Cline and his team thus selected Detroit population growth rates that average half of the metropolitan areas’ average annual growth rate.

II. Assumptions

Documents and other materials supporting Mr. Cline's opinions have been or will be produced by the City. In addition, certain of the assumptions underlying Mr. Cline's analysis and opinions are set forth in the 10-Year Forecast, in particular at Exhibit 1 and Appendices B.2a and B.2b.

Mr. Cline also made the following assumptions:

A. Baseline Scenario

(1) *Michigan Employment Growth*: The State consensus forecast for Michigan employment growth is 1.33% in FY2013, 1.17% in FY2014, and 1.07% in FY2015. From 2016 forward, the projections assume an annual employment growth rate of 1.0%, which is in line with the State forecast.

(2) *Detroit Employment Growth*: In the Baseline Scenario, the projections assume a structural decline of -1.0% per year in FY2014, coupled with an initial cyclical (economic) adjustment of -0.7%. This cyclical adjustment begins to drop off in later years, falling in magnitude to -0.5% from FY2016 – FY2020, -0.3% in FY2021, and finally to zero in FY2022 – FY2023. Over this period, the assumed structural decline in Detroit employment also wanes, falling in magnitude from -1.0% from FY2014 through FY2020 to -0.7% in FY2021 and -0.5% in the last two years.

(3) *Share of Detroit Employment Attributable to Income Tax Base A (Residents Working in the City)*: The forecasts assume a decline at -1.0% per year due to continued population decline until FY2020. The rate increases to -0.5% in FY2020 – FY2021 and to 0.0% in FY2022 – FY2023.

(4) *Share of Detroit Employment Attributable to Income Tax Base B (Non-Residents Working in the City)*: The forecasts assume that Detroit employment growth not attributable to residents is attributable to non-residents.

(5) *Share of Michigan Employment Attributable to Income Tax Base C (Detroit Residents Working Outside of the City)*: In FY2013 and FY2014, the growth rate is estimated as statewide employment growth, less population decline, resulting in an average -0.4% annual growth rate. From FY2015 – FY2021, the growth rate is held constant at -0.25%. As for Income Tax Base A, this rate increases to 0.0% in FY2022 – FY2023.

(6) *Wage Growth*: The Baseline Scenario assumes an average wage growth rate of 1.0%, indicating lagging growth of wages at the local level, compared to the State (which projects a 2.5% average wage growth from FY2013 through FY2015).

(7) *Tax Rates*: The forecasts assume that the current income tax rates of 2.4% of gross income for Detroit residents and 1.2% of income earned in Detroit will remain constant throughout the forecast period.

B. Restructuring Scenario

(1) *Detroit Employment Growth*: The Restructuring Scenario assumes that improved economic conditions within the City will result in a return to the longer-run ratio of Detroit employment as a share of total Michigan employment. The Restructuring Scenario thus assumes a -0.85% annual decline relative to the State throughout the forecast period. This results in annual growth rates for Detroit employment of 0.3% in FY2014, 0.2% in FY2015, and 0.1% in FY2016 through FY2023.

(2) *Share of Detroit Employment Attributable to Income Tax Base A (Residents Working in the City)*: After FY2013, the Restructuring Scenario assumes that the number of residents working in Detroit will grow at 50% of the rate of total job growth due to the continued fall in Detroit population.

(3) *Share of Detroit Employment Attributable to Income Tax Base B (Non-Residents Working in the City)*: The forecasts assume that Detroit employment growth not attributable to residents is attributable to non-residents.

(4) *Share of Michigan Employment Attributable to Income Tax Base C (Residents Working Outside of the City)*: The Restructuring Scenario assumes that the number of residents employed outside of Detroit will grow at the state employment growth rate, minus the estimated decline in Detroit's population. The forecast assumes a slower rate of decline in the population of this group than under

the Baseline Scenario. After some initial decline in FY2013 and FY2014, the estimates show some modest growth in employment of Detroit residents working outside of the City over the next ten years.

(5) *Wage Growth*: The Restructuring Scenario assumes an average wage growth rate of 2.0%, which is closer to the State projections.

C. 40-Year Forecasts

(1) *Detroit Employment*: The 40-year projections assume that a modest recovery in Detroit will result in a slowing of the longer-run historical ratio of Detroit employment as a share of Michigan employment from -0.85% to -0.50% per year from FY2024 to FY2053.

(2) *Relative Shares of Detroit Employment*: Following the same methodology used in the 10-year restructuring forecast, the 40-year projections assume that the number of residents working in Detroit will grow at 50% of the rate of total job growth, with Detroit employment growth not attributable to residents attributable to non-residents.

(3) *Wage Growth*: Wage growth was held constant at 2.0% per year.

(4) *Population Projections*: The projections follow the SEMCOG population forecast from FY2024 through FY2028. After that point, the projections assume (i) zero population growth from FY2029 until FY2033; (ii) 0.2%

annual population growth from FY2034 until FY2043; and (iii) 0.3% annual population growth from FY2044 until FY2053.

Corporate Income Tax

I. Methodology

A. Develop Baseline Scenario Forecasts of Corporate Income Tax Revenues

(1) *Evaluate Historical Corporate Income Tax Collections and Michigan Statewide Corporate Income Tax Forecasts:* Mr. Cline began by analyzing the recent history of actual corporate income tax collections data provided by the City. Mr. Cline then evaluated the Michigan Consensus Revenue Estimating Conference's forecasted growth rate for state corporate income tax collections for FY2014 and FY2015. See Michigan Department of Treasury, Office of Revenue and Tax Analysis, *Administration Estimates: Michigan Economic and Revenue Outlook* (May 15, 2013) [POA00275929 – POA00275978]. Note that Michigan has just recently returned to using a corporate income tax, so there is limited historical information related to the state tax.

(2) *Estimate Growth Rate in City Corporate Income Tax Revenues:* Mr. Cline applied a structural adjustment to account for slower growth in City corporate profits, relative to the State. The structural adjustment is based upon the

historical relationship between Detroit corporate income tax collections and the business income tax component of the recently replaced Michigan Business Tax. Because net operating losses generated during the recent recession are still working through the corporate income tax system, growth rates are expected to be stronger in the early years of the 10-year forecast period. To account for this, the structural adjustment decreases from -3.2% in FY2015 to a steady-state long-run adjustment of -2.0% by FY2020.

(3) *Forecast Longer-Run Corporate Income Tax Revenues:* Mr. Cline forecasted Detroit corporate income tax revenues in FY2016 and beyond by assuming that State corporate income tax revenues return to a longer-run growth rate of 3.0%.

B. Analyze the Impact of Restructuring

Mr. Cline assumed that improved conditions within the City due to reinvestment spending would cause the City to track the state economics more closely. To account for this, the structural adjustment is held constant at -1.0% throughout the FY2014 to FY2023 forecast period.

C. Extrapolate the 10-Year Forecasts to Create 40-Year Forecasts

(1) *Corporate tax growth rates for the State of Michigan:* Mr. Cline extrapolated the City's corporate income taxes over 40 years based on the relationship between the State of Michigan's corporate income tax projections and

nominal U.S. GDP growth projections from the CBO's September 2013 report *The 2013 Long-Term Budget Outlook* [POA00275848 – POA00275849]. For the projection period, CBO's projected U.S. GDP growth rate is reduced by -1.5% to estimate the State's growth in corporate profits (and, therefore, the corporate income tax base).

(2) *Corporate tax growth rates for the City of Detroit*: Beginning in FY2024, Mr. Cline phased out the structural adjustment on the assumption that the City's structural decline would be resolved by FY2032. This resulted in an equivalent State and City growth rate beginning in year FY2033. From FY2033-2053, the corporate profits tax base in Detroit is projected to grow at the same rate as Michigan overall.

II. Assumptions

A. Baseline Scenario

(1) The structural adjustment in the base case decreases from -3.2% in FY2015 to a steady-state long-run adjustment of -2.0% by FY2020. Applying the structural adjustment to the consensus Michigan forecast of state corporate tax growth rates for FY2014 and FY2015 yields City growth rates of 2.8% and 2.5%, respectively, followed by growth rates of 2.0% from FY2016 – FY2018, 1.5% in FY2019 and 1.0% from FY2020 – FY2023.

(2) The long-run state corporate tax growth rate is 3.0%.

(3) The forecasts assume that the Detroit corporate tax rate will remain constant at 2.0% after FY2013, when it was increased from 1.0% to 2.0% to help offset the individual income tax rate cuts.

B. Restructuring Scenario

The improved conditions within the City due to a general economic recovery and the reinvestment spending will cause the City to track the state economics more closely, resulting in a structural adjustment of -1.0% throughout the forecast period. Applying the one percentage point structural adjustment to the consensus Michigan state corporate tax growth rates for FY2014 and FY2015 yields City growth rates of 2.8% and 4.8%, respectively. From FY2016-2023, the forecasted growth rate is 2.0%, closer to the longer-run statewide growth rate.

C. 40-Year Forecasts

(1) *40-Year Corporate Tax Growth Rates for Michigan:* For the projection period, CBO's projected U.S. GDP growth rate is reduced by -1.5% to estimate the State's growth in corporate profits (and, therefore, corporate income taxes).

(2) *40-Year Corporate Tax Growth Rates for Detroit:* From FY2033 – FY2053, corporate profits in Detroit are projected to grow at the same rate as Michigan overall.

Wagering Tax Revenues

I. Methodology

A. Develop a Baseline Scenario Forecast for Wagering Tax Revenues

(1) *Evaluate the historical wagering tax collections as reported in the FY2013 – FY2014 Detroit Executive Budget:* Mr. Cline determined that over the last decade (from FY2004 through FY2013), revenues from the three Detroit casinos (MGM Grand Detroit, Motor City Casino, and Greektown Casino) grew at an average rate of 1.8% per year. In contrast, over the past five years (since FY2009), revenues from these three casinos grew an average of 0.6%. See City Council, Fiscal Analysis Division, *Report on Gaming Tax Revenue through April 2013* (May 17, 2013), available at <http://www.detroitmi.gov/Portals/0/docs/legislative/fiscalanalysis/2013/Report%20on%20Gaming%20Tax%20Revenue%20through%20April%202013.pdf>; Michigan Gaming Control Board, *Detroit Casino Revenues & State Wagering Tax Receipts, 1999-2014* [POA00276114 – POA00276114]; City of Detroit, *FY2013 – FY2014 Executive Budget*, Summary Chart 9, available at http://www.detroitmi.gov/Portals/0/docs/budgetdept/2013-14_Budget/EB_Charts_Schedules_stamped_14.pdf.

(2) *Forecast long-run growth projections for Detroit wagering tax revenues:* Because the City Council Fiscal Analysis Division's May 17, 2013 report did not estimate the long-run effect of the Toledo casino on Detroit revenues,

Mr. Cline made adjustments to the historical growth rate to account for the increased competition. Based on the most recent wagering tax collections data, these taxes are anticipated to drop -4.3% in FY2014. It is assumed that there will be an additional year of decline in FY2015 (-1.0%), two years of growth at 0.5%, then a transition to a slightly higher growth rate of 1.0% after FY2018.

B. Extrapolate 10-Year Forecasts to Create 40-Year Forecasts

Mr. Cline extrapolated the 10-year forecasts to create 40-year forecasts by assuming that wagering tax revenues would continue to grow at an average rate of 1.0% per year.

II. Assumptions

A. Baseline Scenario

(1) Mr. Cline assumed that the wagering tax rate remains constant at 10.9% throughout the forecast period.

(2) Mr. Cline assumed that wagering tax revenues would decrease through FY2015 due to competition from out-of-state casinos, but would increase thereafter due to improved Michigan and Detroit economic growth. The projections assume a 0.5% growth rate in FY2016 and FY2017, and a 1.0% annual growth in wagering taxes (1.0% change in gross receipts) in all years after FY2017.

B. Restructuring Scenario

Mr. Cline assumed that the City's reinvestment spending would not have a material, direct impact on its wagering tax revenues.

C. 40-Year Forecasts

Mr. Cline assumed a 1.0% annual long-run growth rate in wagering tax revenues for FY2023 through FY2053.

Utility Users' Tax Revenues

I. Methodology

A. Develop a Baseline Scenario Forecast for Utility Users' Tax Revenues

(1) *Evaluate actual utility users' tax collections reported in the FY2014-FY2015 Executive Budget:* Mr. Cline observed that gross utility users' tax collections have decreased significantly since FY2008, declining by a total of -25.0% through FY2013, and equating to an average annual decline of -6.0% per year. See City of Detroit, *FY2013 – FY2014 Executive Budget*, Summary Chart 9, available at http://www.detroitmi.gov/Portals/0/docs/budgetdept/2013-14_Budget/EB_Charts_Schedules_stamped_14.pdf.

(2) *Determine effect of transfers to the Detroit Public Lighting Authority ("PLA"):* Mr. Cline incorporated information provided by Gaurav

Malhotra and the EY restructuring team on the reduction in gross utility users' tax receipts due to the transfers to the PLA. The PLA transfers will reduce net tax collections by the City by -\$1.8 million in FY2013 and an anticipated -\$16.9 million in FY2014. From FY2015 through FY2023, Mr. Cline held transfers to the PLA constant at -\$12.5 million.

(3) *Forecast growth of utility users' tax revenues:* Mr. Cline relied upon the Detroit FY2014 Executive Budget, which indicates that more taxpayers have been added to the utility users' tax base through compliance activities. Mr. Cline thus assumed that, after the Detroit economy stabilizes through FY2015 and FY2016, utility users' taxes net of PLA transfers will increase at an annual growth rate of 1.5% from FY2019 through the rest of the forecast period.

B. Extrapolate 10-Year Forecasts to Create 40-Year Forecasts

Mr. Cline extrapolated the 10-year forecasts of utility users' taxes by assuming that utility users' taxes will continue to grow at the long-run rate of 1.5%.

II. Assumptions

A. Baseline Scenario

(1) Unpaid PLA transfers will be passed forward from FY2013 to FY2014, reducing net utility users' tax collections in that year. FY2014 PLA transfers total -\$16.9 million: -\$12.5 million annual transfers, plus -\$4.4 million for FY2013.

(2) PLA transfers will return to -\$12.50 million in FY2015, resulting in an increase in net tax collections from FY2014 even though gross collections are flat (no growth).

B. Restructuring Scenario

Mr. Cline assumed that the City's reinvestment spending would not have a material, direct impact on its net utility users' tax revenues.

C. 40-Year Forecasts

Mr. Cline assumed that utility users' taxes would continue to grow at a rate of 1.5% annually during FY2023 – FY 2053.

EXHIBITS

Attached as Exhibit B are exhibits Mr. Cline intends to rely upon during his testimony. The City reserves its right to use other exhibits during Mr. Cline's testimony, including demonstrative exhibits created from or summarizing existing exhibits.

MATERIALS CONSIDERED IN REACHING OPINIONS

Attached as Exhibit C is a listing of the materials Mr. Cline considered in reaching his opinions. Mr. Cline also had available to him City officials, advisors, and consultants, as well as the expertise of Gaurav Malhotra and Caroline Sallee and the materials they considered.

QUALIFICATIONS

Mr. Cline's biography and curriculum vitae is attached as Exhibit D.

PRIOR EXPERT TESTIMONY

Mr. Cline has previously testified as an expert on state and local tax apportionment in *In re Disney Enterprises, Inc. & Combined Subsidiaries*, No. 818378 (N.Y. Div. of Tax Appeals 2003).

COMPENSATION

Jones Day retained Ernst & Young LLP on behalf of the City to provide expert witness services to the City in connection with *In re City of Detroit, Michigan*, Case No. 13-53846 (Bankr. E.D. Mich.) (Rhodes, J.). The City compensates EY at an hourly rate of \$754 for actual time incurred by Mr. Cline, as well as reasonable out-of-pocket expenses. These fees are subject to a 10% hold-back contingent on plan confirmation by December 31, 2014.

Dated: July 8, 2014

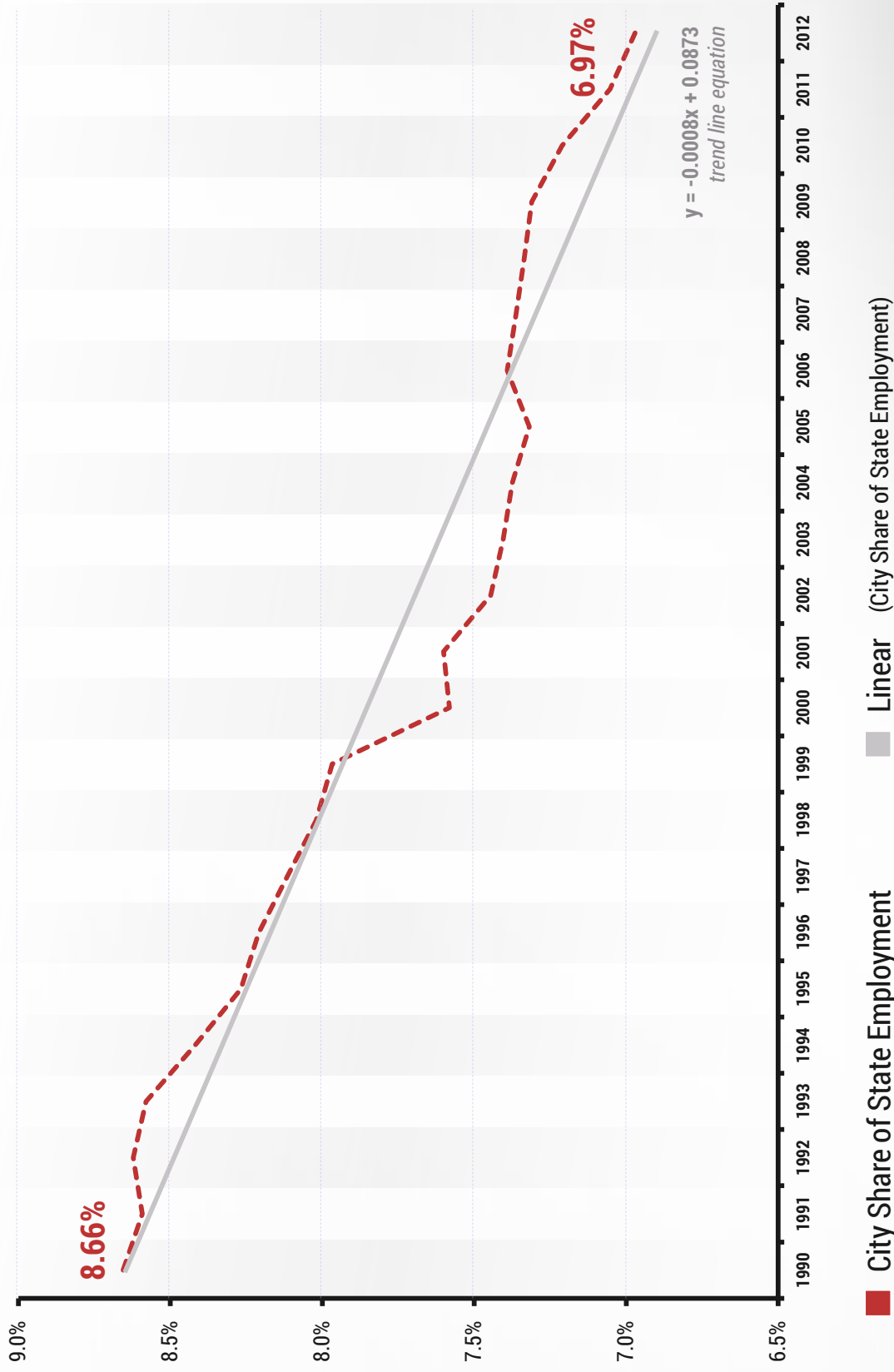


Robert Cline

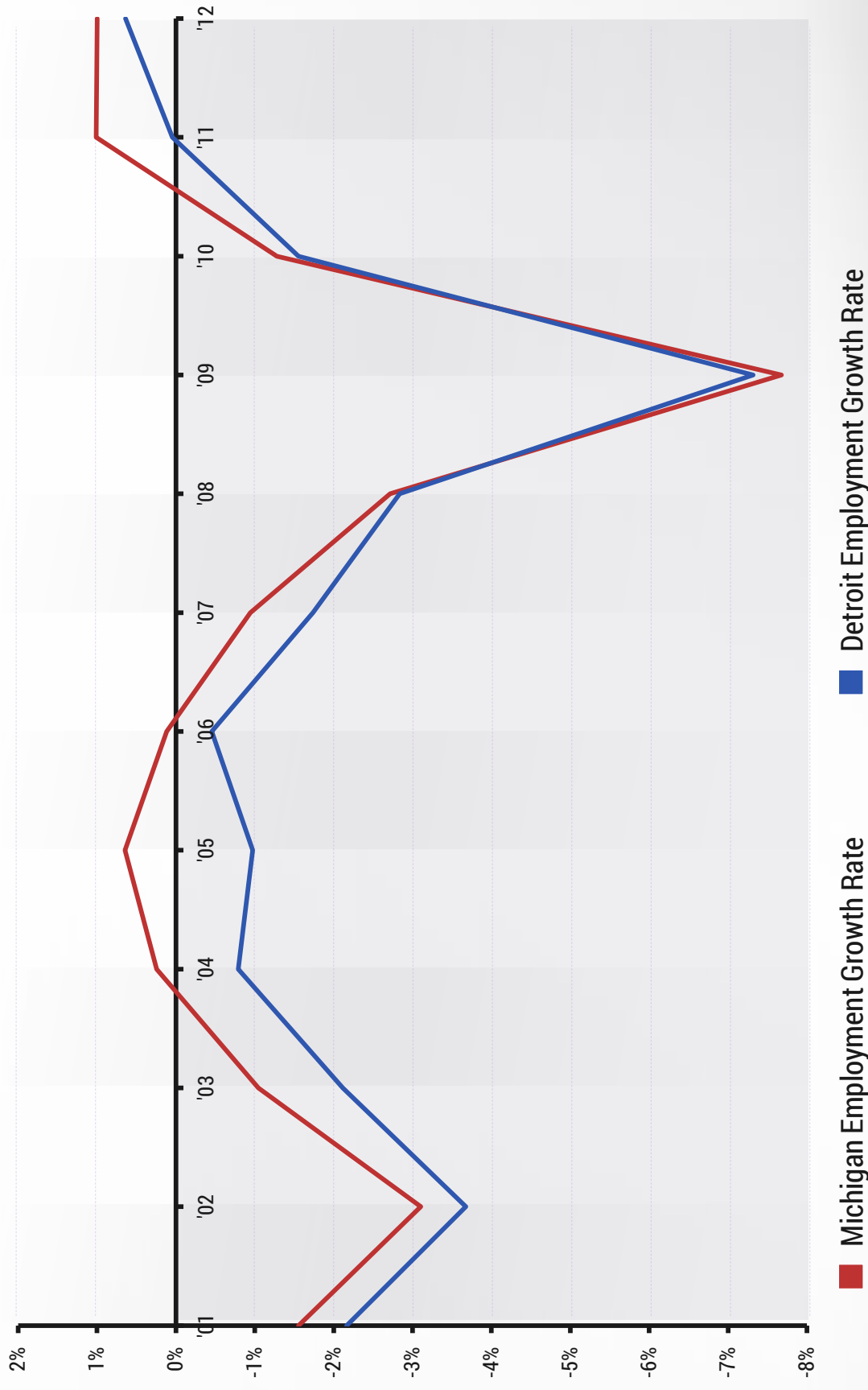
EXHIBIT A

EXHIBIT B

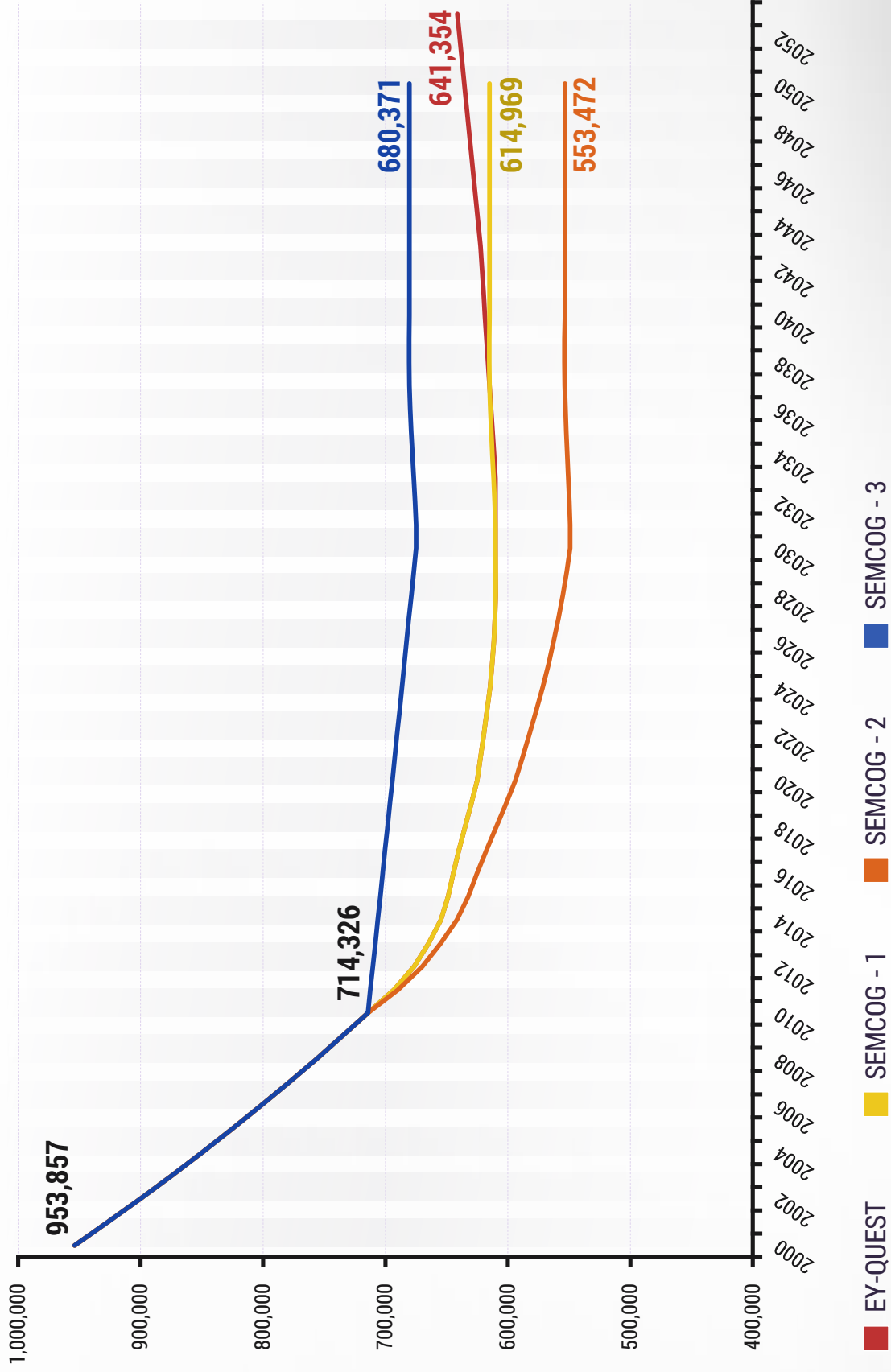
City of Detroit's Share of Total State of Michigan Employment, 1990 - 2012



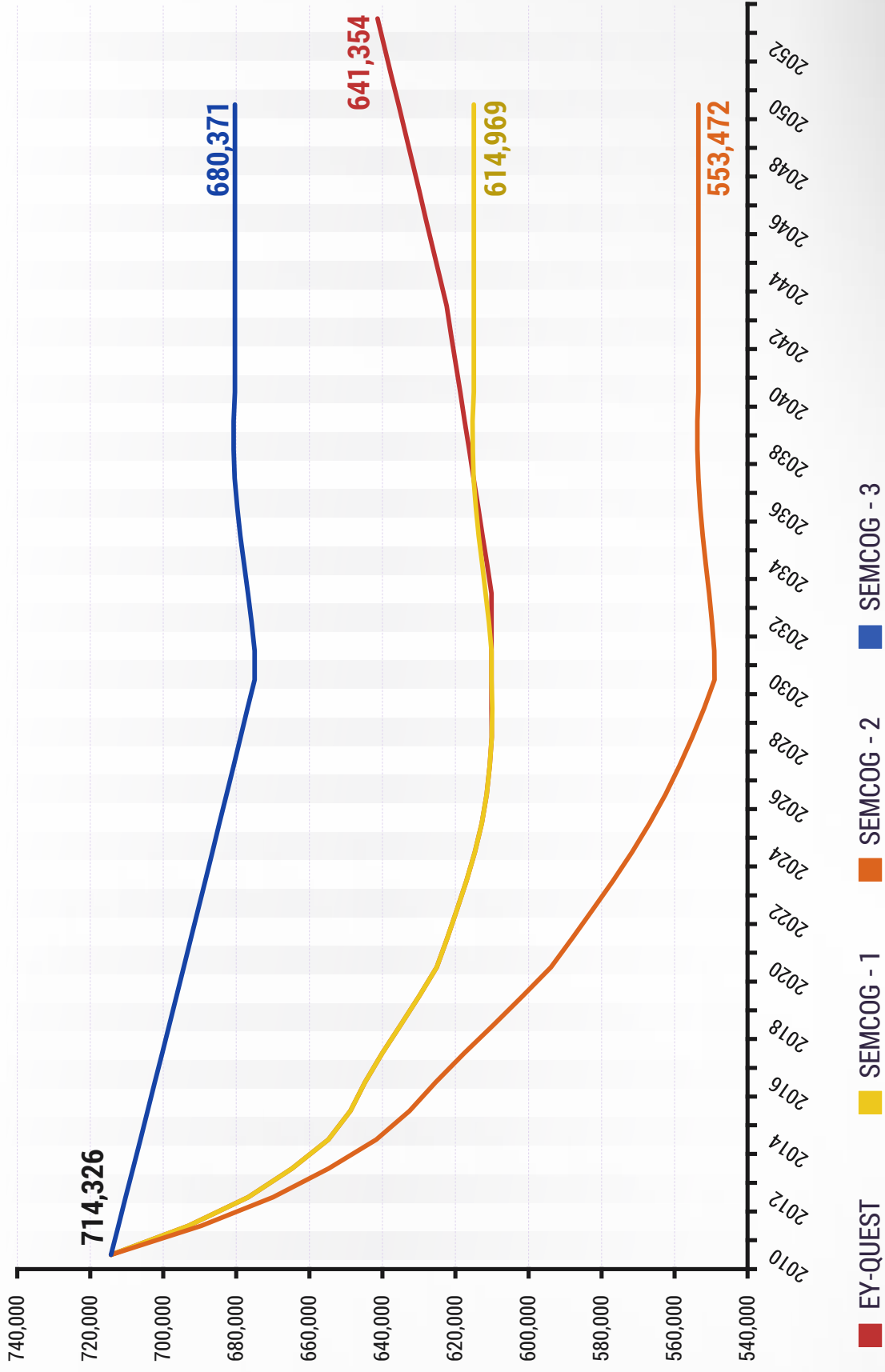
Growth Rates of City of Detroit & Michigan Employment, 2001 – 2012



Population Change Scenarios



Population Change Scenarios



Methodology for Individual Income Taxes

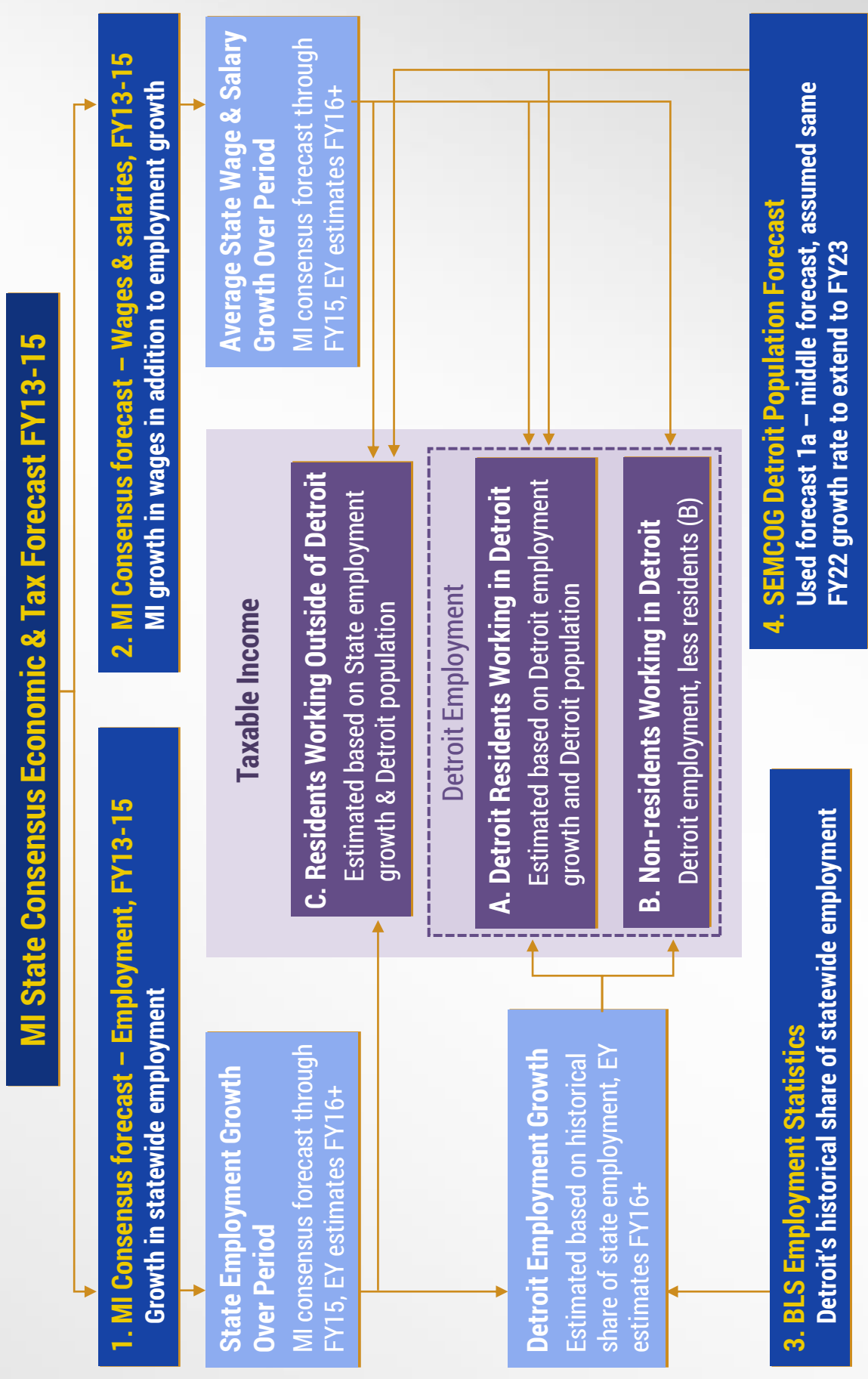


EXHIBIT C

Sources Considered By Robert Cline

Name	Bates Range	
10-Year Forecast as of 5.5.2014	POA00275421	POA00275502
40-Year Forecast as of 5.5.2014	POA00275503	POA00275511
2013 Long term budget outlook inflation projections 2013-2088	POA00275848	POA00275849
BEA Data -- GDP Inflation 1992 2012	POA00275850	POA00275850
Census On the Map data Detroit worker flow (2002-2012)	POA00275851	POA00275851
Detroit income tax forecast information (08.09.2013)	POA00275852	POA00275854
Income Tax Revenue Calculations	POA00275855	POA00275855
MI Economic & Revenue Forecast Presentation	POA00275856	POA00275895
MI Economic & Revenue Forecast Presentation	POA00275929	POA00275978
SEMCOG 2040 Forecast Summary (April 2012)	POA00275979	POA00276041
SEMCOG Population Estimates	POA00276042	POA00276042
SFA Economic Outlook May 2013	POA00276043	POA00276112
US Bureau of Labor Statistics LAUS MI Detroit (1990 - 2013)	POA00276113	POA00276113
MGCB Casino Adjusted Gross Receipts	POA00276114	POA00276114

Sources Considered By Robert Cline

Name	Bates Range	
Description of Estimating Methodology (06.06.2013)	POA00276188	POA00276193
Detroit Tax Forecast Information (07.24.2013)	POA00276194	POA00276195
CBO - 2013 Long term budget outlook inflation projections 2013-2088	POA00275647	POA00275648
BEA Data - GDP Inflation (1992 - 2012)	POA00275649	POA00275649
40 Year Revenue Projections	POA00275651	POA00275651
40 Yr Projections - Revenue and Dept Summary Overview (01.08.2014)	POA00275652	POA00275654
CBO 2013-02-Economic Projections (Property Taxes)	POA00275655	POA00275655
Metro Populations (30 Years) Data	POA00275656	POA00275656
QUEST Revenue Discusison Items (01.11.2014)	POA00275657	POA00275660
Statistical Abstract of the United States: 2012, Table 20: Large Metropolitan Statistical Areas—Population: 1990 to 2010, <i>available at</i> http://www.census.gov/prod/2011pubs/12statab/pop.pdf	--	--
City Council, Fiscal Analysis Division, Report on Gaming Tax Revenue through April 2013 (May 17, 2013), <i>available at</i> http://www.detroitmi.gov/Portals/0/docs/legislative/fiscalanalysis/2013/Report%20on%20Gaming%20Tax%20Revenue%20through%20April%202013.pdf	--	--
City of Detroit, FY2013 – FY2014 Executive Budget, <i>available at</i> http://www.detroitmi.gov/DepartmentsandAgencies/BudgetDepartment/2013-2014ExecutiveBudget.aspx	--	--
City of Detroit's Proposal for Creditors (June 2013)	POA00215882	POA00216015
10-Year Plan of Adjustment Restructuring and Reinvestment Initiatives Bridge (June 2014)	POA00706448	POA00706448
40-Year Plan of Adjustment Financial Projections Bridge (July 2014)	POA00706601	POA00706602

EXHIBIT D

June 26, 2014

ROBERT J. CLINE, Ph.D.

**National Director of SALT Policy Economics
Ernst & Young LLP**

Dr. Cline is National Director of State and Local Tax Policy Economics in EY's National Tax Practice in Washington, DC. Dr. Cline assists the business community, state tax agencies, legislatures and tax commissions with the evaluation of tax policy options, including revenue estimates, distributional analysis and dynamic fiscal and economic impact analysis. Prior to joining EY in 1999, Dr. Cline was Director of State and Local Finance, Barents Group LLC of KPMG LLP (1996-1999) and a consultant to Price Waterhouse LLP (1995-1996) on state tax reform.

Dr. Cline has extensive state and local tax policy and research experience having served as Tax Research Director in the Michigan Department of Management and Budget (1984-1986) and in the Minnesota Department of Revenue (1989-1995). His responsibilities as research director included tax policy development, tax bill revenue estimating, economic and revenue forecasting, and dynamic economic impact analysis. While at the Minnesota Department of Revenue, Dr. Cline directed the preparation of the state's tax expenditure report, the development of a tax incidence model for all major state and local taxes, and the construction of a corporate income tax policy simulation model. Earlier research experience included serving as a Senior Public Finance Resident, U.S. Advisory Commission on Intergovernmental Relations (1982-1983).

Dr. Cline has directed or participated in tax reform and tax policy studies, tax modeling projects, fiscal studies and economic impact studies in over 40 states. For example, he has directed state tax policy studies in California, Connecticut, Louisiana, Michigan, New York, Ohio, Pennsylvania, Maryland, North Carolina, Illinois and Virginia. As part of these studies, Dr. Cline was responsible for estimating impacts of changes in corporate income tax structures, including apportionment and income combination, revenues from the expansion of sales tax bases, and revenues expected from alternative business tax bases, including value added and gross receipts bases. A number of the studies included industry-by-industry analysis of proposed changes in business tax liabilities and estimates of the dynamic economic impacts of tax changes and tax reform on state economies. Dr. Cline has also directed a number of business tax studies for specific industries, including electricity production, telecommunications, natural resource extraction, and financial services.

He directed state and local business tax studies for the Council on State Taxation, including the annual 50-state study of state and local business taxes. He was the author of the COST studies (published in Tax Analyst's State Tax Notes), "Combined Reporting: Understanding the Revenue and Competitive Effects of Combined Reporting" (May 2008), and "What's Wrong with Taxing Business Services?" (April 2013) In the past year, Dr. Cline worked on several state tax policy projects that included evaluating proposals to expand the retail sales tax to

business services in Louisiana, Ohio and Puerto Rico, estimating the impacts of tax reform on Ohio's business tax competitiveness and economy, and estimating the dynamic impact of corporate tax reform in New York.

Dr. Cline has completed business tax studies in other countries, including Canada, Australia and the European Union. He was a co-author of the EY study prepared for the Irish Department of Finance, *Study of the Economic and Budgetary Impact of the Introduction of a Common Consolidated Corporate Tax Base in the European Union* (2009). The study included estimating the country-by-country changes in EU corporate income tax collections, as well as dynamic economic impacts, of a proposal for changing the assignment of corporate income among the Member states. Most recently, he directed an EY study of the expected impact of the adoption of a VAT on the tourism industry in the Bahamas.

Dr. Cline also has extensive experience teaching economics and public finance. Positions include:

- Assistant Professor of Economics, Department of Economics, Georgia State University, Atlanta, Georgia (1972-1975)
- Professor of Economics, Department of Economics and Business Administration, Hope College, Holland, Michigan (1975-1989)
- Visiting Professor of Economics, Department of Economics, University of Michigan, Ann Arbor, Michigan (1977-1978)
- Adjunct Professor, Humphrey Institute, University of Minnesota, St. Paul, Minnesota (1994-1995)

Dr. Cline holds a Ph.D. (1977) and an M.A. degree (1971) in economics from the University of Michigan and a B.A. in economics in (Phi Beta Kappa) from the College of William and Mary in 1968.

Additional Experience and Other Selected Publications for Robert Cline

Professional Experience:

National Director of State and Local Tax Policy Economics, Ernst & Young LLP (June 1999 - present)

Director, State and Local Finance, Barents Group LLC of KPMG LLP (1996-1999).

Consultant to Price Waterhouse LLP (1995-1996).

Director, Tax Research Division, Minnesota Department of Revenue (1989-1995).

Adjunct Professor, Humphrey Institute, University of Minnesota Director (1994-1995)

Director, Office of Revenue and Tax Analysis, Michigan Department of Management and Budget (1984-1986).

Senior Public Finance Resident, U.S. Advisory Commission on Intergovernmental Relations (1982-1983).

Professor of Economics, Department of Economics and Business Administration, Hope College (1975-1989).

Research Economist, Urban Institute (1978).

Visiting Professor of Economics, Department of Economics, University of Michigan (1977-1978).

Assistant Professor of Economics, Department of Economics, Georgia State University (1972-1975).

Other Selected Publications:

“Federal Tax Reform: Lessons from the States,” with Steven Wlodychak, *State Tax Notes*, February 13, 2012.

“Competitiveness of State and Local Business Taxes on New Investment,” with Andrew Phillips And Tom Neubig, *State Tax Notes*, May 16, 2011.

“Five Federal Lessons from California’s Near-VAT Experience,” with Tom Neubig, *State Tax Notes*, June 7, 2010.

“Economic Incidence of State Business Taxes,” with Andrew Phillips, Joo Mi Kim, and Tom Neubig, *State Tax Notes*, January 11, 2010.

“Future State Business Tax Reforms: Defend or Replace the Base, with Tom Neubig, *State Tax Notes*, January 21, 2008.

“Illinois State and Local Business Tax Burden,” with Andrew Phillips, *State Tax Notes*, May 26, 2003. Study prepared for Illinois Chamber of Commerce.

“Total State and Local Business Tax Burden Study,” with William Fox, Tom Neubig and Andrew Phillips, *State Tax Notes*, January 27, 2003. Study prepared for the Council on State Taxation.

“Telecommunications Taxes: 50-State Estimates of Excess State and Local Tax Burden,”
State Tax Notes, May 2002.

“Can the Current State and Local Business Tax System Survive the New Economy
Challenges?,”
State Tax Notes, April 2002.

“Total Corporate Taxation: Hidden, Above-the-Line, Non-Income Taxes,” with Kevin
Christensen and Thomas S. Neubig, *State Tax Notes*, November 12, 2001.

“Reducing Out-of-Line Telecommunications Taxes: State Responses to Increased Competition,”
State Tax Notes, September 18, 2000.

“Masters of Complexity and Bearers of Great Burden: The Sales Tax System and Compliance
Costs for Multistate Retailers,” with Thomas S. Neubig, *State Tax Notes*, September 1999.

“Tariffs and Consumption Taxes: Understanding the Differences,” Ernst & Young, July 1999.

“The Sky Is Not Falling: Why State and Local Revenues Were Not Significantly Impacted by the
Internet in 1998,” with Thomas S. Neubig, *State Tax Notes*, June 18, 1999.

“Utility Deregulation: Fiscal Impacts on State and Local Governments,” presentation to
National Conference of State Legislatures, Fiscal Chairs Seminar, Washington, DC,
December 1998.

“Consumption Tax Incidence: A State Perspective,” with Paul Wilson, *Proceedings of the 88th
Annual Conference*, National Tax Association, 1995, pp. 225-235.

“State Financing of Health Care Reform: Minnesota’s Health Right Act,” *Proceedings of the 85th
Annual Conference on Taxation*, National Tax Association, 1993.

“Should States Adopt a Value-Added Tax?,” in Steven D. Gold, ed., *The Unfinished Agenda for
State Tax Reform*, National Conference of State Legislatures, 1988.

“Personal Income Tax,” in Steven D. Gold, ed., *The Unfinished Agenda for State Tax Reform*,
National Conference of State Legislatures, 1988.

“The Property Tax in a High-Quality State-Local Revenue System,” with John Shannon, in C.
Lowell Harriss, ed., *The Property Tax and Local Finance*, the Academy of Political Science,
Vol. 35, No. 1, 1983.