



Mid-Year Update

**Economic Forecast
Revenues Through January
Revised Forecast FY 2018-19
Preliminary Forecast FY 2019-20**

January 29, 2019

IFO Independent Fiscal Office

Forecast: June 2018 vs Jan 2019

| | | Annual Growth or Change | | | | |
|-----------------|----------|-------------------------|------|------|------|------|
| | | 2016 | 2017 | 2018 | 2019 | 2020 |
| Real GDP | Jun 2018 | 0.9% | 1.8% | 2.3% | 2.2% | |
| | Jan 2019 | 1.2% | 2.2% | 2.2% | 2.0% | 1.9% |
| Wages-Salaries | Jun 2018 | 1.3% | 3.8% | 4.3% | 4.2% | |
| | Jan 2019 | 1.3% | 4.0% | 4.1% | 4.0% | 3.9% |
| Philly CPI-U | Jun 2018 | 0.6% | 1.3% | 1.8% | 2.2% | |
| | Jan 2019 | 0.6% | 1.3% | 1.5% | 1.8% | 2.0% |
| Net Jobs (000s) | Jun 2018 | 50.0 | 62.9 | 62.5 | 57.1 | |
| | Jan 2019 | 50.0 | 62.9 | 70.9 | 58.7 | 54.7 |

Note: Real GDP and Wage data revised for 2016 and 2017.
 Source: Historical data from U.S. Bureau of Economic Analysis and U.S. Bureau of Labor Statistics. Forecasts by IFO.

Annual Economic Trends

| | 2015 | 2016 | 2017 | 2018 | 2019 |
|--|-------|-------|-------|-------|------|
| United States | | | | | |
| Real GDP | 2.9% | 1.6% | 2.2% | 2.9% | 2.6% |
| Wages-Salaries | 5.1% | 2.9% | 4.6% | 4.4% | 4.2% |
| Equipment Investment | 2.5% | -2.5% | 5.5% | 7.3% | 4.4% |
| Pennsylvania | | | | | |
| Real GDP | 2.0% | 1.2% | 2.2% | 2.2% | 2.0% |
| Wages-Salaries | 3.9% | 1.5% | 4.0% | 4.1% | 4.0% |
| Net Jobs (000s) | 47.3 | 50.0 | 62.9 | 70.9 | 58.7 |
| U.S. Financials | | | | | |
| Corporate Domestic Profits | -3.5% | -1.1% | 2.3% | 8.6% | 7.7% |
| 10 Year Note | 2.14 | 1.84 | 2.33 | 2.93 | 3.31 |
| S&P 500 Index | 5.8% | 2.0% | 16.6% | 12.2% | n.a. |
| <p>Note: S&P 500 Index uses average values for entire year. Source: U.S. Bureau of Economic Analysis, U.S. Bureau of Labor Statistics. U.S. forecasts by IHS Markit. PA forecasts by IFO.</p> | | | | | |

Recent Quarterly Economic Trends

| | 2018.1 | 2018.2 | 2018.3 | 2018.4 | 2019.1 |
|---|--------|--------|--------|--------|--------|
| United States | | | | | |
| Real GDP | 2.2% | 4.2% | 3.5% | 2.5% | 1.9% |
| Wages-Salaries | 4.6% | 4.5% | 4.2% | 4.3% | 3.9% |
| Equipment Investment | 9.5% | 8.2% | 6.6% | 4.8% | 3.5% |
| Pennsylvania | | | | | |
| Real GDP | 0.6% | 3.6% | 3.0% | 2.5% | --- |
| Wages-Salaries | 4.1% | 4.0% | 3.4% | 4.3% | --- |
| U.S. Financials | | | | | |
| Corporate Domestic Profits | 5.7% | 6.5% | 11.8% | 10.2% | 11.9% |
| 10 Year Note | 2.76 | 2.92 | 2.93 | 3.11 | 2.75 |
| S&P 500 Index (prior year) | 11.8% | 12.2% | 17.7% | -6.2% | 0.1% |
| S&P 500 Index (prior qtr) | -1.2% | 2.9% | 7.2% | -14.0% | 5.5% |
| Notes: Real GDP growth rates are quarterly annualized rates. S&P 500 Index uses values from end of quarter. Value for 2019.1 is close for Jan. 28, 2019. Non-GDP growth rates are year-over-year. Source: U.S. forecasts from IHS Markit. Data from U.S. Bureau of Economic Analysis and Wall Street Journal. | | | | | |

Annual PA Employment Growth (000s)

| | 2015 | 2016 | 2017 | 2018 |
|---------------------------|-------------|-------------|-------------|-------------|
| Mining-Logging | -3.8 | -8.9 | 1.6 | 1.9 |
| Construction | 6.6 | 3.8 | 9.6 | 6.1 |
| Manufacturing | 0.1 | -8.1 | 1.7 | 4.5 |
| Wholesale-Retail | 1.2 | -3.8 | -8.6 | -8.9 |
| Transport-Storage | 11.2 | 9.5 | 8.0 | 8.5 |
| Professional Services | 17.9 | 13.9 | 8.7 | 11.9 |
| Healthcare-Social Service | 11.1 | 22.6 | 26.9 | 30.0 |
| Leisure-Hospitality | 7.9 | 12.4 | 8.6 | 10.8 |
| State-Federal Gov't | 0.2 | 1.0 | -0.6 | -0.3 |
| Local Gov't | -6.7 | -2.2 | 0.6 | -1.0 |
| All Other Sectors | <u>1.5</u> | <u>9.7</u> | <u>6.4</u> | <u>7.4</u> |
| Total Job Gains | 47.3 | 50.0 | 62.9 | 70.9 |

Note: Figures represent change in average level for calendar year.
 Source: U.S. Bureau of Labor Statistics. Figures for 2018 based on preliminary data through December.

Factors That Could Impact Growth

Maintain / Boost

- Strong labor market
- Solid income growth
- Stable interest rates
- Low/stable energy prices

Constrain / Reduce

- International slowdown
- Federal shut down (?)
- Federal tax cut / refunds
- Consumer sentiment
- Stock market volatility

FYTD Revenues Through January

| | Actual Revenues | | IFO Estimate | | Admin Estimate | |
|---------------------|-----------------|-------------|-----------------|--------------|-----------------|--------------|
| | Amount | Growth | Amount | \$ Diff | Amount | \$ Diff |
| General Fund | \$18,144 | 4.5% | \$17,835 | \$310 | \$17,865 | \$279 |
| Corp. Net Income | 1,651 | 24.7 | 1,459 | 191 | 1,383 | 267 |
| Sales - Non-Motor | 5,758 | 8.1 | 5,599 | 158 | 5,617 | 141 |
| Sales - Motor Veh. | 873 | 9.2 | 825 | 48 | 813 | 61 |
| PIT - Withholding | 6,041 | 3.3 | 6,076 | -35 | 6,126 | -85 |
| PIT - Other | 1,317 | -9.5 | 1,489 | -172 | 1,591 | -274 |
| Cigarette | 660 | -6.2 | 660 | 0 | 665 | -4 |
| Inheritance | 594 | 6.5 | 593 | 1 | 605 | -11 |
| Gaming Expansion | 148 | n.a. | 86 | 62 | n.a. | n.a. |
| All Other | 1,101 | -12.7 | 1,047 | 55 | 1,065 | 185 |

Note: Millions of dollars. Tax revenues up 5.7% from prior fiscal year.

Growth Rate Comparison Thru January

| | Projected | Actual |
|-----------------------|-------------|-------------|
| General Fund | 2.7% | 4.5% |
| Corporate Net Income | 10.3% | 24.7% |
| Sales - Non-Motor | 5.1% | 8.1% |
| Sales - Motor Vehicle | 4.1% | 10.2% |
| PIT - Withholding | 3.9% | 3.3% |
| PIT - Other | 2.2% | -9.6% |
| Cigarette | -6.3% | -6.2% |
| Inheritance | 6.3% | 6.5% |
| Gaming Expansion | n.a. | n.a. |
| All Other | -17.0% | -12.1% |

Update for FY 2018-19

| | IFO Official Estimate | Mid-Year Update | | |
|-----------------------|--------------------------|-----------------|--------------|--------------|
| | | Amount | \$ Change | Growth |
| General Fund | \$33,899 | \$34,272 | \$373 | -0.9% |
| Corporate Net Income | 3,075 | 3,280 | 206 | 13.9 |
| Sales - Non-Motor | 9,324 | 9,562 | 239 | 6.4 |
| Sales - Motor Vehicle | 1,427 | 1,497 | 69 | 7.4 |
| PIT - Withholding | 10,450 | 10,424 | -26 | 3.9 |
| PIT - Other | 3,530 | 3,282 | -248 | -2.4 |
| Cigarette | 1,136 | 1,138 | 2 | -5.0 |
| Inheritance | 1,046 | 1,046 | 0 | 2.6 |
| Gaming Expansion | 86 | 201 | 114 | 56.0 |
| All Other | 3,826 | 3,843 | 17 | -30.9 |

Note: Millions of dollars. The IFO Official Estimate was \$76 million lower than the Administration. Growth rate for tax revenues is 4.6%.

Personal Income Tax Trends

Withholding for CY 2018 close to forecast (4.1%).

- Wage growth slightly lower than expected.

Estimated payments strong until Dec-Jan.

- April (+16.4%) | June (+9.7%) | Sept (+14.8%).
- Jan-Dec: -32.1% vs. 17-18 and -9.5% vs. 16-17.
- Large stock of overpayment credits (speculative).
- S&P 500 Index drops -14.4% from September high to year end.

Reduce Mar-Apr final payments by \$50 million.

- 10.5% growth revised down to 5.1%. Some downside risk.

Sales and Use Tax Trends

Strong growth in non-motor vehicle revenues.

- Up +8.1% thru Jan. | Adding +\$239 million to official.
- Big gain: marketplace sales act (Act 43 of 2017).
- Original FY 18-19 estimate is \$40 million. Revise to \$257 million.

Motor vehicle revenues very strong.

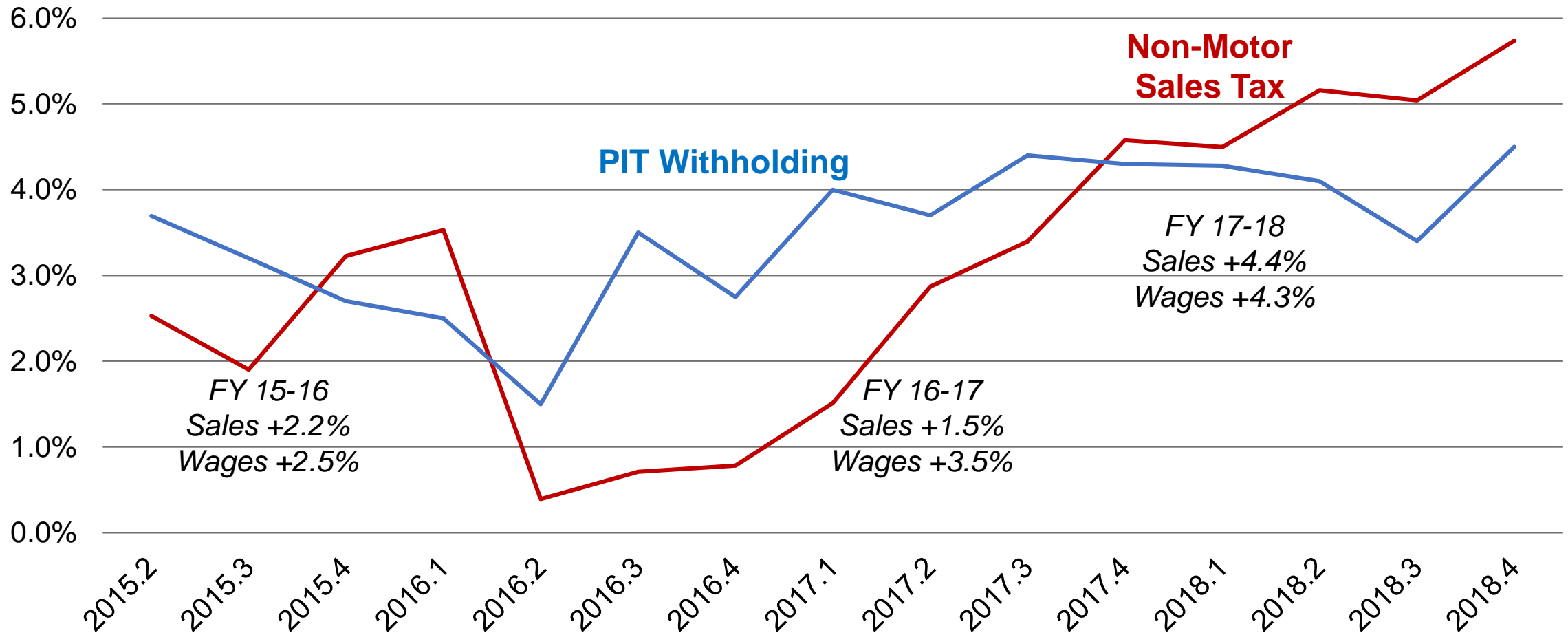
- Up +10.2% thru Jan. | Adding \$69 million to official.
- U.S. passenger car sales down -13.1% in 2018.
- Truck and SUVs up +8.0%. Total sales +0.3%.
- A shift in mix of sales drives revenue gains.

Sales and Use Tax Base Expansion

| | 15-16 | 16-17 | 17-18 | 18-19 | 19-20 |
|--------------------------------------|----------------|----------------|----------------|----------------|----------------|
| Non-Motor Sales Tax | \$8,448 | \$8,638 | \$8,989 | \$9,562 | \$9,934 |
| Growth Rate | 3.4% | 2.2% | 4.1% | 6.4% | 3.9% |
| Less: Internet Sales Revenues | \$220 | \$285 | \$380 | \$580 | \$670 |
| Equals: Baseline Revenues | \$8,228 | \$8,353 | \$8,609 | \$8,982 | \$9,264 |
| Growth Rate | | 1.5% | 3.1% | 4.3% | 3.1% |

Note: Millions of dollars. Internet Sales Revenues include (1) e-commerce/nexus, (2) digital downloads and (3) marketplace sales.

Sales-Use vs. Withholding Growth



Note: Sales tax series controls for expanded tax base and transfers. PIT withholding controls for shifting due dates.

Corporate Net Income Tax Trends

Estimated payments very backloaded for TY 2018.

- March (+9.0%) | June (+5.5%) | Sept (+20.0%) | Dec (+25.7%).
- U.S. Domestic Profits stronger: +6.3% forecast, +9.3% thru Q3.
- Base broadening impact: +\$125 million (permanent).

Regular or final payments also very strong.

- Up +33% for July to January.
- Settlement payments for old tax years. Overpayments too?

Looking forward: modest growth.

- Shifting profits out of 2017 to 2018 (temporary).
- Pull forward of settlement payments (temporary).

Gaming Expansion Estimates

| | 17-18 | 18-19 | 19-20 |
|-----------------|--------------|--------------|-------------|
| iGaming | \$0 | \$118 | \$6 |
| Category 4 | 127 | 0 | 13 |
| Sports Wagering | 0 | 75 | 28 |
| All Other | <u>2</u> | <u>8</u> | <u>10</u> |
| Total | \$129 | \$201 | \$56 |

Note: Millions of dollars.

Initial Outlook for FY 2019-20

| | Amount | \$ Change | Growth |
|-----------------------|-----------------|----------------|-------------|
| General Fund | \$35,272 | \$1,000 | 2.9% |
| Corporate Net Income | 3,378 | 98 | 3.0 |
| Sales - Non-Motor | 9,934 | 372 | 3.9 |
| Sales - Motor Vehicle | 1,533 | 36 | 2.4 |
| PIT - Withholding | 10,846 | 422 | 4.0 |
| PIT - Other | 3,500 | 218 | 6.6 |
| Cigarette | 1,094 | -44 | -3.8 |
| Inheritance | 1,066 | 20 | 1.9 |
| Gaming Expansion | 56 | -144 | -71.9 |
| All Other | 3,864 | 21 | 0.5 |

Note: Millions of dollars. General Fund growth rate without Gaming Expansion is 3.3%.

Factors That Impact Revenue Forecasts

Has the federal shutdown been resolved?

- Will IRS process refunds in a timely fashion?

How strong is the international slowdown?

Have interest rates stabilized?

- Federal deficit continues to grow. Fed continues to shrink portfolio.
- China cuts back on bond purchases.

On-going impact of federal tax cuts.

- Most tax cuts already realized. Some start to reverse (bonus depr.).
- TY 2016: PA federal tax refunds were \$14.1 billion. Higher or lower?

Summary

Through January, actual revenues exceed estimates.

- IFO: +\$310 million gain.
- Administration: +\$279 million gain.

Most net gains are permanent.

- SUT internet sales. Higher corporate profits.
- Profit shifting and gaming gains are temporary.

Slower growth, but no recession for FY 2019-20.

- Most of federal tax cut has been realized. Starts to reverse.
- International slow down.
- Some downside risk to FY 2019-20 forecast.