Commonwealth of Pennsylvania 2017 Revenue Conference

IFO Mid-Year Update January 25, 2017





IFO Mid-Year Update

▶ Presentation has three parts.

- Economic update. Unexpected broad weakness.
- Revenue update for FY 2016-17.
- Revenue forecast for FY 2017-18.

▶ Theme: What is driving weakness?

- Base General Fund growth rate is ~0.0%.
- Both economic and technical factors are cause.
- Inflation, business spending and consumers.

▶ No public presentation.

But will be posted to IFO website.

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Economic Forecast Comparison

| | | Annua | al Growth Ra | ates or Char | <u>ige</u> |
|-------------|----------|-------|--------------|--------------|------------|
| | | 2015 | 2016 | 2017 | 2018 |
| Real GDP | Jun 2016 | 1.7% | 1.9% | 2.0% | |
| inear GDF | Jan 2017 | 2.8% | 0.7% | 1.7% | 2.0% |
| Total Wagos | Jun 2016 | 3.4% | 3.2% | 3.7% | |
| Total Wages | Jan 2017 | 4.0% | 2.5% | 3.3% | 3.8% |
| CPI-U | Jun 2016 | -0.1% | 1.2% | 1.8% | |
| CPI-U | Jan 2017 | -0.1% | 0.6% | 1.8% | 2.1% |
| Employment | Jun 2016 | 48.6 | 50.1 | 50.6 | |
| (000s) | Jan 2017 | 48.6 | 43.5 | 50.0 | 48.9 |

Note: Real GDP and Wage data revised from preliminary to final for 2015.

Source: Historical data from U.S. Bureau of Economic Analysis and U.S. Bureau of Labor Statistics. Forecasts by IFO.

PA Employment Growth (000s)

| | 2014 | 2015 | 2016 | 2017 |
|------------------------------|------------|------------|------------|------------|
| Mining-Logging | 1.7 | -3.6 | -8.6 | 0.9 |
| Construction | 4.9 | 4.8 | 0.2 | 3.1 |
| Manufacturing | 3.0 | 0.5 | -2.2 | 1.5 |
| Wholesale-Retail | 2.6 | 3.6 | 5.3 | 5.2 |
| Transportation | 7.5 | 10.1 | 5.2 | 4.4 |
| Professional Services | 13.6 | 13.4 | 12.0 | 10.9 |
| Health-Social | 14.4 | 11.7 | 15.9 | 15.3 |
| Leisure-Hospitality | 5.3 | 9.5 | 12.3 | 7.4 |
| State-Federal Govt | -2.0 | 1.4 | 0.8 | -1.2 |
| Local Govt | -7.5 | -7.5 | -3.4 | -1.6 |
| All Other | <u>4.1</u> | <u>4.3</u> | <u>5.9</u> | <u>4.1</u> |
| Total Job Gains | 47.6 | 48.6 | 43.4 | 50.0 |

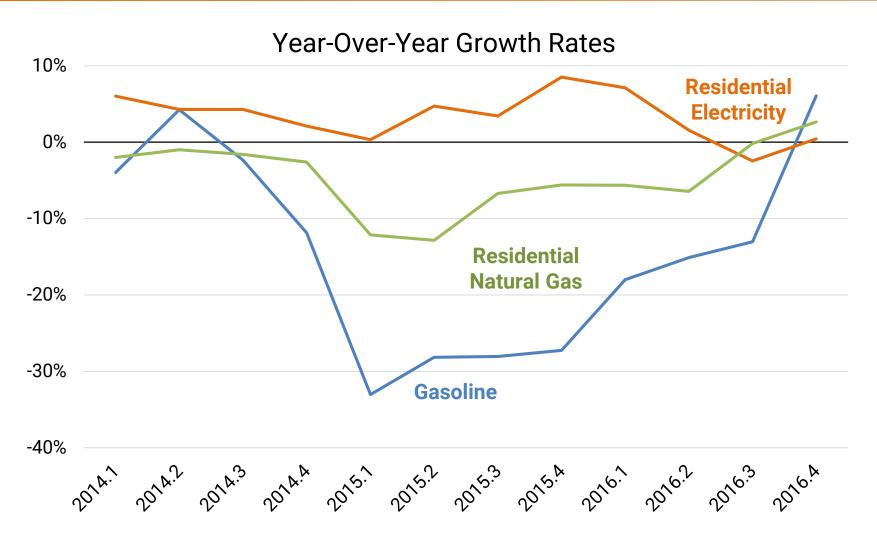
PA Inflation Picks Up

| | Year-Over-Year Increase | | | | |
|----------------------------------|-------------------------|------------------|--------|--------|--------|
| | 2015.4 | 2016.1 | 2016.2 | 2016.3 | 2016.4 |
| Philly CPI-U (100%) | -0.4% | 0.2% | 0.4% | 0.6% | 1.5% |
| Fuel-Utilities (5%) | -5.5 | -4.8 | -2.8 | -1.6 | 0.2 |
| Gasoline (3%) | -26.1 | -17.7 | -13.7 | -9.8 | 7.2 |
| Core CPI-U (92%) | 1.1 | 1.2 | 1.1 | 1.1 | 1.5 |
| Food (13%) | 0.9 | 0.8 | -0.5 | -0.5 | -0.9 |
| Medical (9%) | 3.1 | 3.0 | 3.7 | 4.0 | 3.4 |
| Note: Amounts in parentheses rep | resent weights used | d in CPI computa | ation. | | |

Core CPI-U excludes all energy purchases such as household fuel and gasoline.

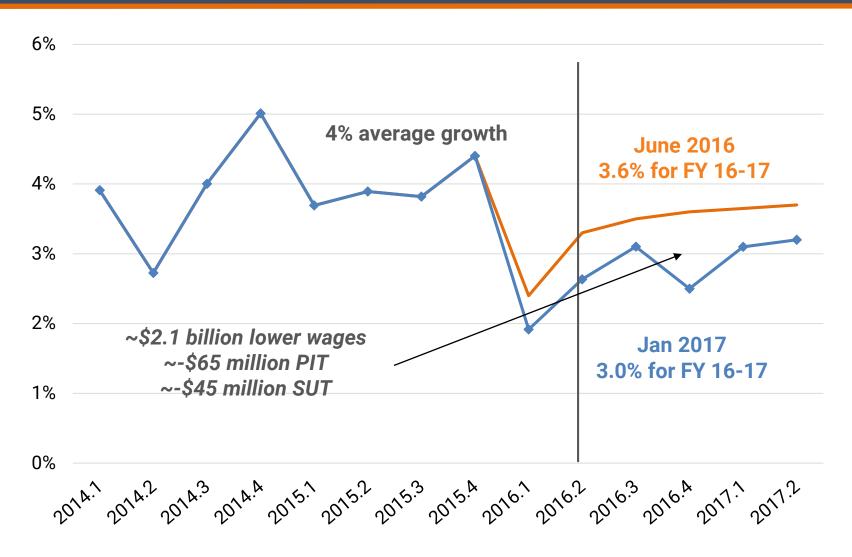
Source: U.S. Bureau of Labor Statistics.

PA Energy Inflation Returns



Source: U.S. Energy Information Administration.

PA Wage Growth Underperforms



Source: U.S. Bureau of Economic Analysis. Forecast by IFO.

U.S. Profits and Business Investment

| | | Year-O | /er-Year Gro | owth Rate | |
|--|-------------------------|------------------------|-----------------------|------------------------------------|--------|
| | 2012 | 2013 | 2014 | 2015 | 2016 |
| Domestic Corporate Profits Non-Financial Financial | 15.0% 10.7 31.0 | 1.7% 6.9 -14.9 | 6.2% 5.5 9.2 | -2.2% -3.6 3.3 | -1.5% |
| Equipment Investment | 10.8 | 4.6 | 5.4 | 3.5 | -2.5 |
| | 2015.4 | 2016.1 | 2016.2 | 2016.3 | 2016.4 |
| Domestic Corporate Profits Non-Financial Financial | -13.7% -15.9 -4.8 | -8.3% -6.9 -13.0 | -7.7% -7.5 -8.5 | 0.3% - <mark>2.9</mark> 11.9 | 11.3% |
| Equipment Investment | 4.2 | -1.0 | -1.6 | -4.6 | -2.2 |

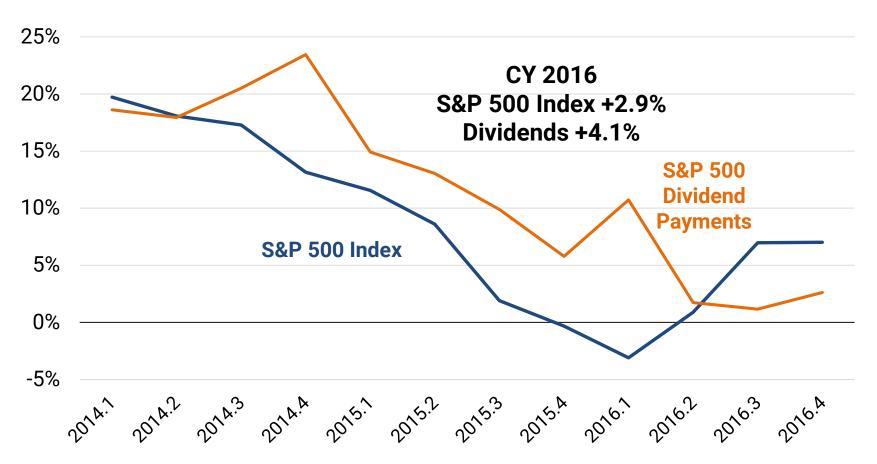
Note: Represents Economic Profits, which includes the Capital Consumption Adjustment for depreciation.

Excludes foreign profits and Federal Reserve Profits. Includes both C and S corporations.

Source: U.S. Bureau of Economic Analysis. 2016 Q4 forecast from IHS Economics.

Financial Markets Recover

Year-Over-Year Growth Rates



Note: Dividend data for 2016 04 is an estimate.

Sources: Yahoo Finance and Factset.

Revenue Outlook

Original IFO FY 2016-17 Estimate

| | Dollar Amount | Growth | Policy & Timing | Adjusted Growth |
|-----------------------------------|------------------|--------|-----------------|--------------------|
| General Fund | \$32,510 | 5.2% | \$875 | 2.4% |
| Corporate Net Income | 2,945 | 3.6 | 26 | 2.7 |
| SUT - Non-Motor | 8,859 | 4.9 | 90 | 3.8 |
| SUT - Motor | 1,382 | 2.6 | 0 | 2.6 |
| PIT - Withholding | 9,680 | 3.1 | -96 | 4.1 |
| PIT - Other | 3,376 | 8.4 | 33 | 7.3 |
| Cigarette and OTP | 1,331 | 46.0 | 448 | -3.1 |
| Inheritance | 1,013 | 5.3 | 4 | 4.9 |
| Loan and Transfers | 266 | n.a. | 266 | n.a. |
| All Other | 3,658 | -5.8 | 104 | -8.5 |
| Note: dollar amounts in millions. | | | | |

General Fund Revenues Through January

| | 2015-16 | 2016-17 | Actual Growth | Adjusted Growth |
|------------------------|----------|----------|------------------|--------------------|
| General Fund | \$15,900 | \$16,085 | 1.2% | 0.1% |
| Corporate Net Income | 1,367 | 1,245 | -8.9 | -6.1 |
| SUT - Non-Motor | 5,048 | 5,110 | 1.2 | 0.8 |
| SUT - Motor | 782 | 790 | 1.0 | 1.0 |
| PIT - Withholding | 5,388 | 5,480 | 1.7 | 2.9 |
| PIT - Other | 1,279 | 1,230 | -3.8 | -3.8 |
| Cigarette and OTP | 529 | 765 | 44.6 | -3.8 |
| Inheritance | 515 | 533 | 3.4 | 3.4 |
| Cap. Stock & Franchise | 98 | 32 | -67.1 | n.a. |
| All Other | 894 | 900 | 0.6 | -2.2 |

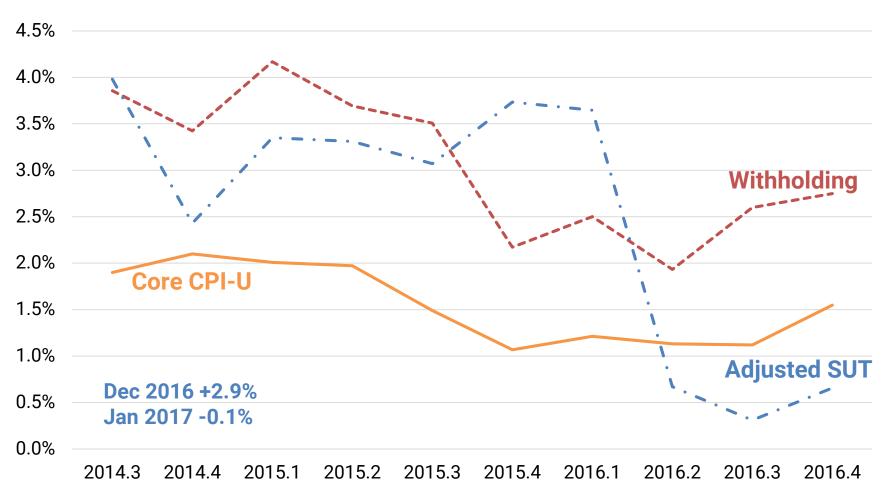
Note: dollar amounts in millions.

Corporate Net Income adjusted for extra ERCA monies removed through January (\$39 million, to be deposited in June). Non-motor SUT and Cigarette and OTP adjusted for tax changes. PIT – Withholding adjusted for extra due date. CSFT assumed to be zero both years.

IFO Revised Estimate FY 2016-17

| | Through January | | | Revised Estimate | |
|-----------------------------------|-----------------|----------|--------|------------------|--------|
| | Actual | Estimate | Diff | Amount | Change |
| General Fund | \$16,085 | \$16,456 | -\$371 | \$32,060 | -\$450 |
| Corporate Net Income | 1,245 | 1,329 | -84 | 2,845 | -100 |
| SUT - Non-Motor | 5,110 | 5,300 | -190 | 8,619 | -240 |
| SUT - Motor | 790 | 805 | -15 | 1,367 | -15 |
| PIT - Withholding | 5,480 | 5,520 | -40 | 9,620 | -60 |
| PIT - Other | 1,230 | 1,289 | -59 | 3,301 | -75 |
| Cigarette and OTP | 765 | 755 | 10 | 1,347 | 15 |
| Gross Receipts | 40 | 32 | 8 | 1,300 | 40 |
| Escheats | -40 | -78 | 38 | 168 | 40 |
| All Other | 1,465 | 1,504 | -39 | 3,494 | -55 |
| Note: dollar amounts in millions. | | | | | |

Non-Motor SUT Growth



Note: Adjusted SUT controls for expanded tax base and transfers. Uses one month lag to coincide with withholding and economic activity. Withholding growth rates are adjusted for extra deposit days during the quarter.

What Drives Weak Sales Tax?

▶ Low inflation crimps pricing power.

- Last year Philly CPI-U > 2.0% was 2011.
- Energy deflation. Now basics such as food and clothing.
- Difficult for businesses to pass on costs. Hits profits.

▶ Weak profits impact business purchases.

Research suggests roughly 1/3 of SUT from business.

▶ PA consumers reluctant to spend.

- Modest wage gains.
- PA mortgage debt continues to fall (higher savings).
- Auto loans remain strong.

PA Consumer Debt Growth

| | | Year-Ove | er-Year Grov | wth Rates | |
|-----------------------|-------------|------------|--------------|------------|-------------|
| | 2015.3 | 2015.4 | 2016.1 | 2016.2 | 2016.3 |
| Auto Loans (10%) | 5.0% | 8.6% | 9.2% | 9.4% | 7.6% |
| Credit Card (7%) | 3.0 | 5.2 | 4.5 | 1.8 | 3.6 |
| Home Mortgage (60%) | 1.4 | 0.0 | 2.7 | 3.0 | -0.8 |
| Home Equity (6%) | 7.1 | 1.8 | 1.3 | 7.2 | 6.7 |
| Student Loans (14%) | 2.0 | 2.5 | 2.3 | 4.8 | 8.1 |
| All Other (3%) | <u>11.6</u> | <u>8.3</u> | <u>10.7</u> | <u>2.5</u> | <u>-1.6</u> |
| Total (100%) | 2.5 | 1.8 | 3.5 | 4.0 | 1.8 |
| Exclude Student Loans | 2.6 | 1.7 | 3.7 | 3.9 | 0.9 |

Note: Based on data from all consumers with a credit report. All Other includes personal loans and other miscellaneous lines of credit. Numbers in parentheses represent share of total consumer debt for 2016 Q3.

Source: Federal Reserve Bank of New York.

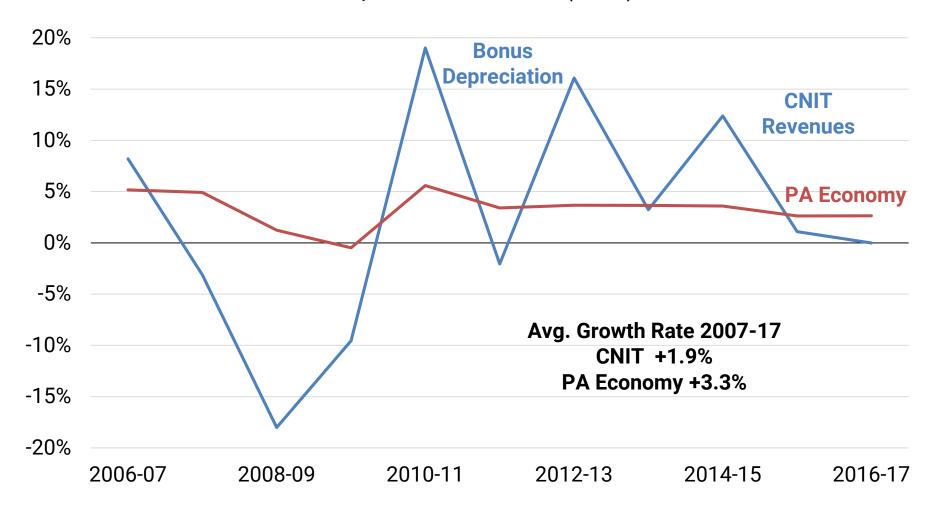
Strong Annual PIT Payment

April payment should have strong growth despite weak quarterly payments.

| Year-Over-Year Growth Rates (Quarterlies) | | | | | | | | |
|--|-------|--------|-------|-------|-------|---------|----------|--|
| Tax Year | Q1 | Q2 | Q3 | Q4 | Total | Annuals | Combined | |
| 2014 | 4.2% | 0.1% | 2.8% | 0.1% | 1.5% | 6.8% | 3.7% | |
| 2015 | 13.3% | 17.2% | 11.9% | 20.1% | 16.1% | -9.7% | 5.4% | |
| 2016 | 3.1% | -10.6% | -4.2% | -0.9% | -3.1% | 13.7% | 2.9% | |
| Note: Annual payments are for March to May only. Growth rate for 2014 controls for shift of revenues into tax year 2012 (\$130 million) due to federal tax law changes. Annual Payment \$1.12 billion | | | | | | | • | |

CNIT Growth Underperforms Economy

Annual Growth Rates: Corporate Net Income (CNIT) and PA Nominal GDP



Revisions to Estimates for Tax Policy

| | <u>Orig</u> | <u>iinal</u> | Revised | Cha | nge |
|---------------------------------|-------------|--------------|-----------------|-------|-------|
| | 16-17 | 17-18 | 16-17 17-18 | 16-17 | 17-18 |
| Cigarette Tax | \$411.7 | \$440.5 | \$411.7 \$440.5 | \$0.0 | \$0.0 |
| Other Tobacco | 46.4 | 66.4 | 61.4 84.4 | 15.0 | 18.0 |
| Liquor Code | 72.8 | 81.8 | 43.5 62.1 | -29.3 | -19.7 |
| Vendor Discount | 61.5 | 70.4 | 61.5 70.4 | 0.0 | 0.0 |
| Digital Downloads | 45.7 | 59.2 | 80.2 112.2 | 34.5 | 53.0 |
| Bank Shares | 21.1 | 22.5 | 21.1 22.5 | 0.0 | 0.0 |
| Table Games | 17.6 | 18.2 | 17.6 18.2 | 0.0 | 0.0 |
| Tax Amnesty | 100.0 | -10.0 | 100.0 -10.0 | 0.0 | 0.0 |
| Note: dollar amounts in million | ns. | | | | |

Lottery Sales

| Sales through January | | | | | | |
|--|------------|------------|---------------|--|--|--|
| | 2015-16 | 2016-17 | Growth | | | |
| Instant Tickets | \$1,572 | \$1,579 | 0.5% | | | |
| Numbers | 335 | 346 | 3.2% | | | |
| In-State Lotto | 141 | 142 | 0.7% | | | |
| Multi-State Lotto | <u>350</u> | <u>226</u> | <u>-35.5%</u> | | | |
| Total | 2,398 | 2,293 | -4.4% | | | |
| | | | | | | |
| Note: dollar amounts in millions. Multi-state lotto includes raffle. | | | | | | |
| Data for January are based on first three weeks of sales. | | | | | | |

Enhanced Revenue Collections Account

| <u>Through January</u> | | | | | | | |
|------------------------|------------|------------|-------------|--|--|--|--|
| | 2015-16 | 2016-17 | Change | | | | |
| Corporate Net Income | \$23.0 | \$61.9 | \$38.9 | | | | |
| Sales and Use | 60.5 | 49.3 | -11.2 | | | | |
| Personal Income | 42.4 | 51.1 | 8.7 | | | | |
| Gross Receipts | 2.8 | 15.7 | 12.9 | | | | |
| Inheritance | 15.0 | 16.0 | 1.0 | | | | |
| All Other | <u>4.2</u> | <u>1.3</u> | <u>-2.9</u> | | | | |
| Total | 147.9 | 195.3 | 47.4 | | | | |

Note: dollar amounts in millions.

Excludes PIT refunds. ERCA collections for FY 2016-17 are projected to total \$430 million, including \$100 million for tax amnesty (deposited to General Fund in June).

FY 2017-18 Revenue Outlook

- ▶ Preliminary outlook for FY 2017-18 indicates a 1.8% growth rate.
- ▶ Underlying growth rate is 3.1% after adjusting for:
 - Full-year collections from prior tax law changes.
 - One-time proceeds in FY 2016-17 from tax amnesty, fund transfers, loans from other funds, liquor modernization fees and litigation settlements.

FY 2017-18 Estimate

| | Amount | Growth |
|-----------------------------------|----------|--------|
| General Fund | \$32,637 | 1.8% |
| Corporate Net Income | 2,901 | 2.0 |
| Sales and Use | 10,252 | 2.7 |
| Personal Income | 13,381 | 3.6 |
| Other Tax Revenue | 5,500 | 0.8 |
| Non-Tax Revenue | 604 | -29.1 |
| Note: dollar amounts in millions. | | |

Changes from Prior Estimate

| | November 2016 | January 2017 | Total Revision | |
|-----------------------------------|------------------|-----------------|-------------------|--|
| FY 2016-17 | \$32,311 | \$32,060 | -\$250 | |
| FY 2017-18 | \$32,971 | \$32,637 | -\$334 | |
| Two-year revision | n.a. | n.a. | -\$584 | |
| Note: dollar amounts in millions. | | | | |

The IFO's revised estimate for FY 2016-17 is \$716 million lower than the official estimate certified by the governor in July.

Questions/Discussion

Presentation to be Posted at IFO website www.ifo.state.pa.us