

Commonwealth of Pennsylvania

ECONOMIC and ACT 1 INDEX UPDATE

68TH PASBO Annual Conference & Exhibits

March 16, 2023

Good Morning and a Quick Overview

I PA Economy: Where are we?

- Latest data: jobs, inflation, labor market
- Focus: labor market and demographics
- Focus: inflation and wages

II Statewide Public School Employment, Payroll and Wages

- COVID jobs contraction
- Real Average Weekly Wage contracts

III Act I Index Outlook

- Statewide Average Weekly Wage (SAWW) remains elevated
- Significant and sudden jump in Employment Cost Index (ECI)

“Why the Recession is Always Six Months Away”

THE WALL STREET JOURNAL.

March 6, 2023 10:45 am ET

“The next economic downturn has become the most anticipated recession in recent U.S. history. It also keeps getting postponed.”

WSJ Economist Survey: Odds of Recession in Next 12 Months

| | |
|----------|------------------------|
| Nov 2007 | 34% |
| Dec 2007 | 38% (Dec 07 to Jun 09) |
| Jun 2022 | 44% |
| Jul 2022 | 49% |
| Oct 2022 | 63% |
| Jan 2023 | 61% |

I. PA Economics: Recent Statewide Trends

| | June 2022 | Dec 2022 | Latest | Latest Data For |
|------------------------|---------------|-------------|-------------|-----------------|
| Philly CPI-U All Items | 8.8% | 6.4% | 6.9% | February 2023 |
| Energy Only | 46.0% | 11.8% | 6.6% | February 2023 |
| Grocery Only | 13.1% | 14.2% | 13.3% | February 2023 |
| Gasoline (\$/gallon) | \$5.07 | \$3.40 | \$3.63 | March 14 |
| Unemployment Rate | 4.3% | 4.3% | 4.3% | January 2023 |
| Wage Growth | 9.8% | 5.6% | 5.1% | 2023 Q1 |

Note: All growth rates are year over year. Energy is 7.0% of CPI-U and includes gasoline and household utilities. Groceries are 7.6% of CPI-U. Sources: U.S. Bureau of Labor Statistics and AAA (PA average gasoline price).

PA Labor Market: Pre vs Post Pandemic

| | 2019 Q4 | 2022 Q4 | Change |
|--|---------|---------|--------|
| Number Jobs (000s) | | | |
| Establishment Survey (# jobs) | 6,142 | 6,099 | -42 |
| Household Survey (# people) | 6,314 | 6,222 | -92 |
| Labor Force (age 16+) | | | |
| Number (000s) | 6,580 | 6,474 | -105 |
| Participation Rate | 63.2% | 61.8% | -1.5% |
| Population (000s) | | | |
| Age 18 to 64 | 7,917 | 7,777 | -140 |
| Age 65+ | 2,362 | 2,537 | +174 |
| <p>Note: Data not seasonally adjusted. Establishment survey excludes self-employed. Participation rate is share age 16+ working or actively looking for work. Source: U.S. Bureau of Labor Statistics.</p> | | | |

PA Payroll Job Gains/Losses (000s)

| Sector or Sub-Sector | Change |
|-----------------------------------|------------|
| Warehousing and Storage | +30 |
| Management (HQs) | +14 |
| Couriers and Messengers | +6 |
| Nursing Home and Residential Care | -27 |
| Full-Service Restaurants | -18 |
| Local Gov't: municipals | -10 |
| Colleges and Universities | -9 |
| Non-Profits | -9 |
| Accommodation | -8 |
| Local Gov't: school districts | -7 |
| All Other | -4 |
| Total Change | -42 |

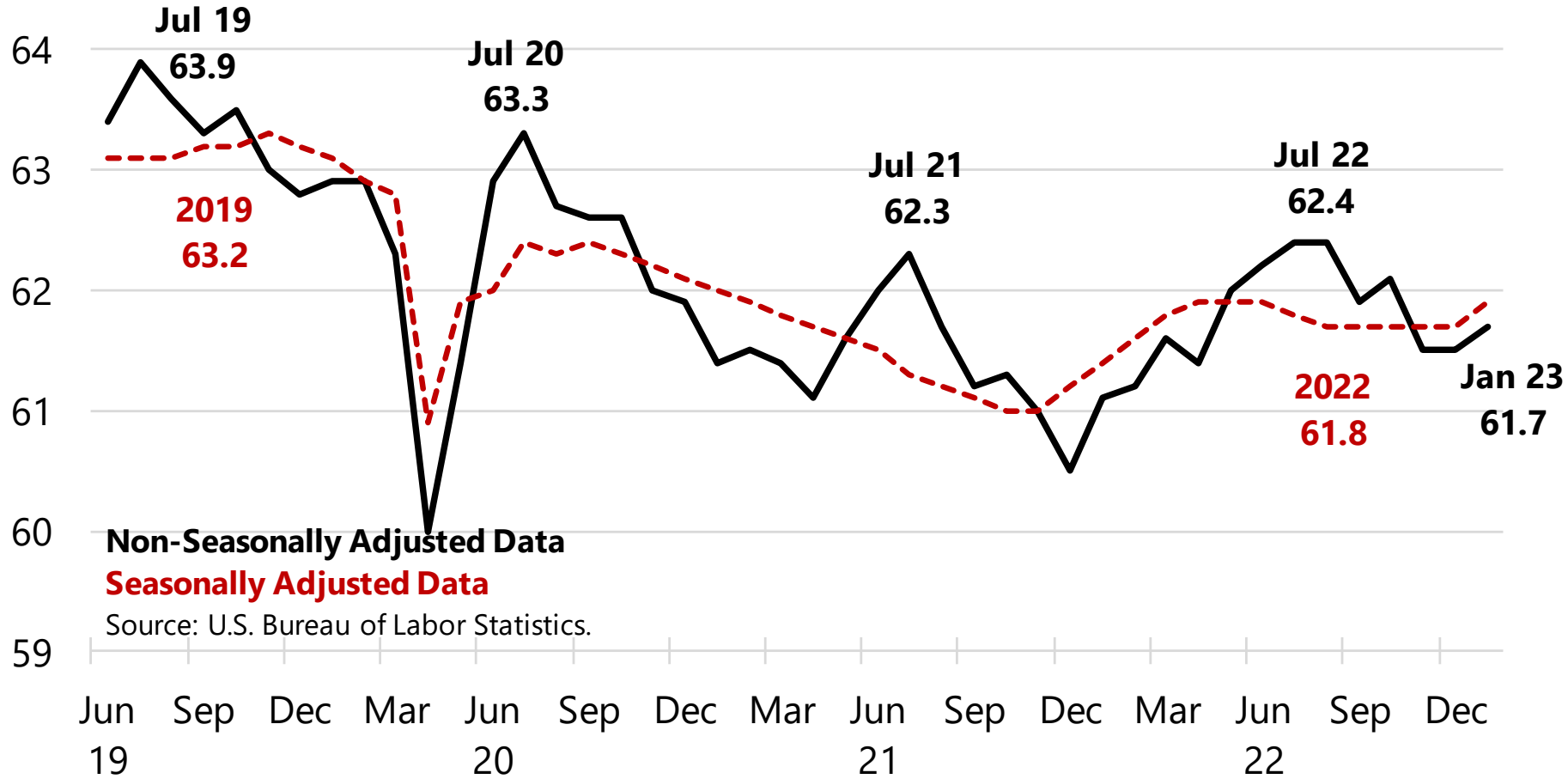
Source: U.S. Bureau of Labor Statistics.

2019 Q4 vs 2022 Q4
excludes self-employed
count of jobs, not people

FedEx, UPS

Limited-Service Restaurants
now > pre-COVID (+3k)

PA Labor Force Participation Rate Declines During COVID



LFPR = share of adults age 16+ working or looking for work

Growth of age 65+ pushes LFPR down

Pre-COVID LFPRs by Age Group

| | |
|-------|-------|
| 25-54 | 82.5% |
| 55-64 | 65.3% |
| 65-69 | 34.3% |
| 70-74 | 19.8% |

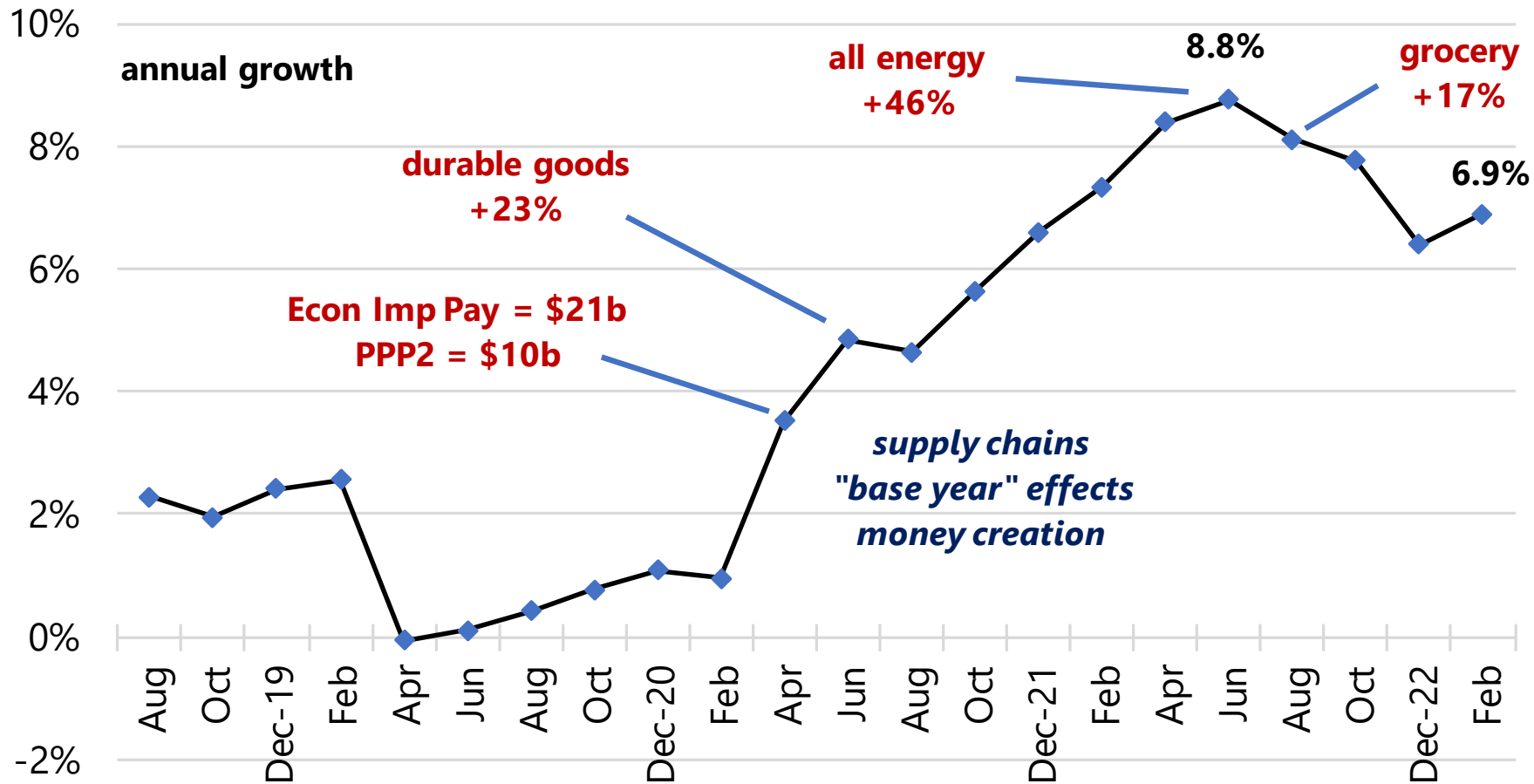
Roughly 2/3 of total labor force decline (-105k) due to demographic factors

Federal Pandemic Stimulus Ends (\$ billions to PA)

| | 2020 | 2021 | 2022 | 2023.1 | 2023.2 | 2023.3 |
|--------------------------------|--------------|--------------|--------------|--------------|--------------|------------|
| Unemployment Comp | \$31.5 | \$16.9 | \$0.1 | -- | -- | -- |
| Economic Impact Payments | 11.2 | 22.1 | 0.8 | -- | -- | -- |
| PPP Loans | 20.7 | 10.0 | -- | -- | -- | -- |
| CTC/ERC/Dependent Care | -- | 4.4 | 3.8 | -- | -- | -- |
| SNAP and P-EBT | 1.3 | 3.4 | 2.7 | \$0.4 | \$0.1 | \$0.2 |
| Rent and Childcare Assist | <u>0.1</u> | <u>1.6</u> | <u>1.2</u> | <u>0.3</u> | <u>0.2</u> | <u>0.2</u> |
| Total | 64.8 | 58.3 | 8.6 | 0.7 | 0.3 | 0.4 |
| Student Loan Moratorium | \$5.7 | \$7.7 | \$7.7 | \$1.9 | \$1.9 | ?? |

Note: Unemployment Comp includes \$5.2 (2020) and \$0.8 (2021) billion of state monies. Excludes most direct federal monies to state and local government units and higher education institutions. Childcare includes stabilization funds (\$820m) and block grants (\$865m).

Philadelphia CPI-U: Three Inflation "Waves"



Wage-Price "Persistence"
 is 5% wage growth
 consistent with
 2% inflation?

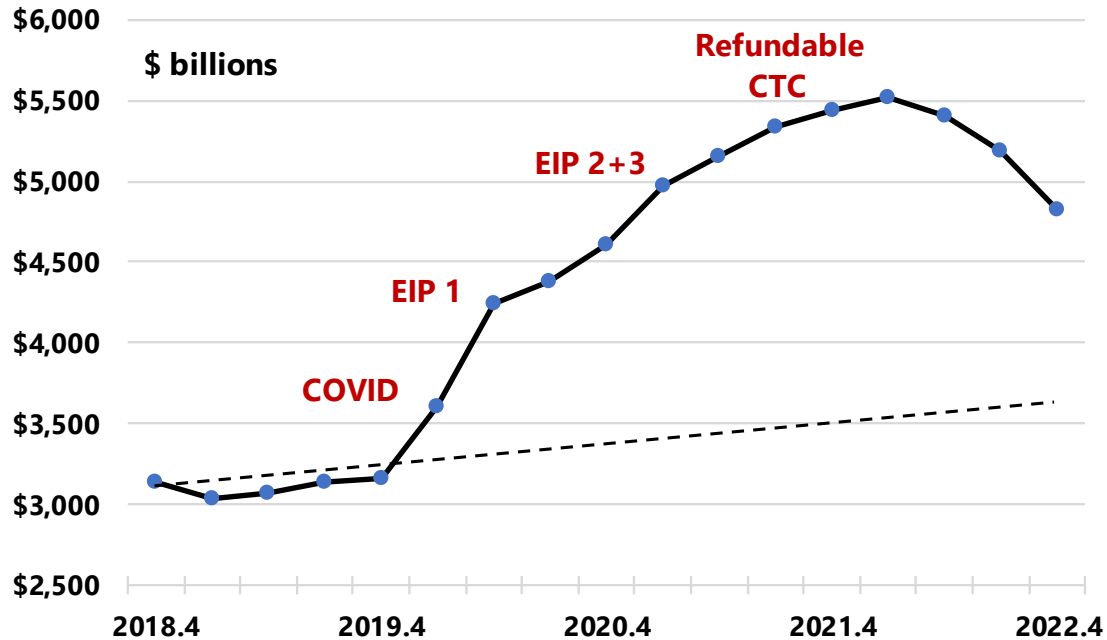
Something must give
 productivity gains?
 reduced profits?

Consumer Price Index Growth - February 2023

| Component | U.S. | Philadelphia |
|----------------------------------|-------------|--------------|
| All Items | 6.0% | 6.9% |
| Groceries | 10.2% | 13.3% |
| Dining Out | 8.4% | 7.2% |
| Rent of Residence | 8.8% | 8.3% |
| Owner Occupied Housing | 8.0% | 7.6% |
| All Energy (gasoline, utilities) | 5.2% | 6.6% |
| New Cars | 5.8% | 5.7% |
| Used Cars | -13.6% | -13.6% |
| All Durable Goods | -1.8% | 0.7% |
| Medical Care | 2.1% | 4.9% |
| Airline Fares | 26.5% | n.a. |
| Vehicle Insurance | 14.5% | n.a. |

Note: Growth rates are year-over-year. Source: U.S. Bureau of Labor Statistics.

Savings Cushion?: US Deposits at FDIC Banks and Savings/Loans



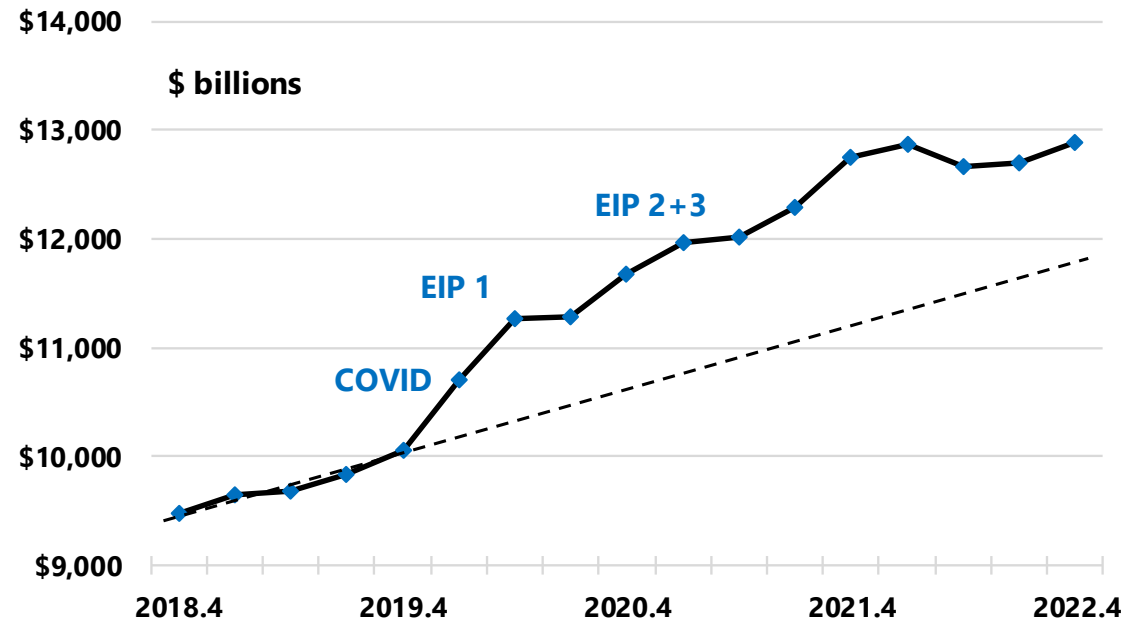
FDIC non-interest bearing deposits

~\$1.2 trillion (+34%) above trendline
but falling rapidly

FDIC interest bearing deposits

~\$1.0 trillion (+9%) above trendline

Inflation = +15% 2019.4 to 2022.4



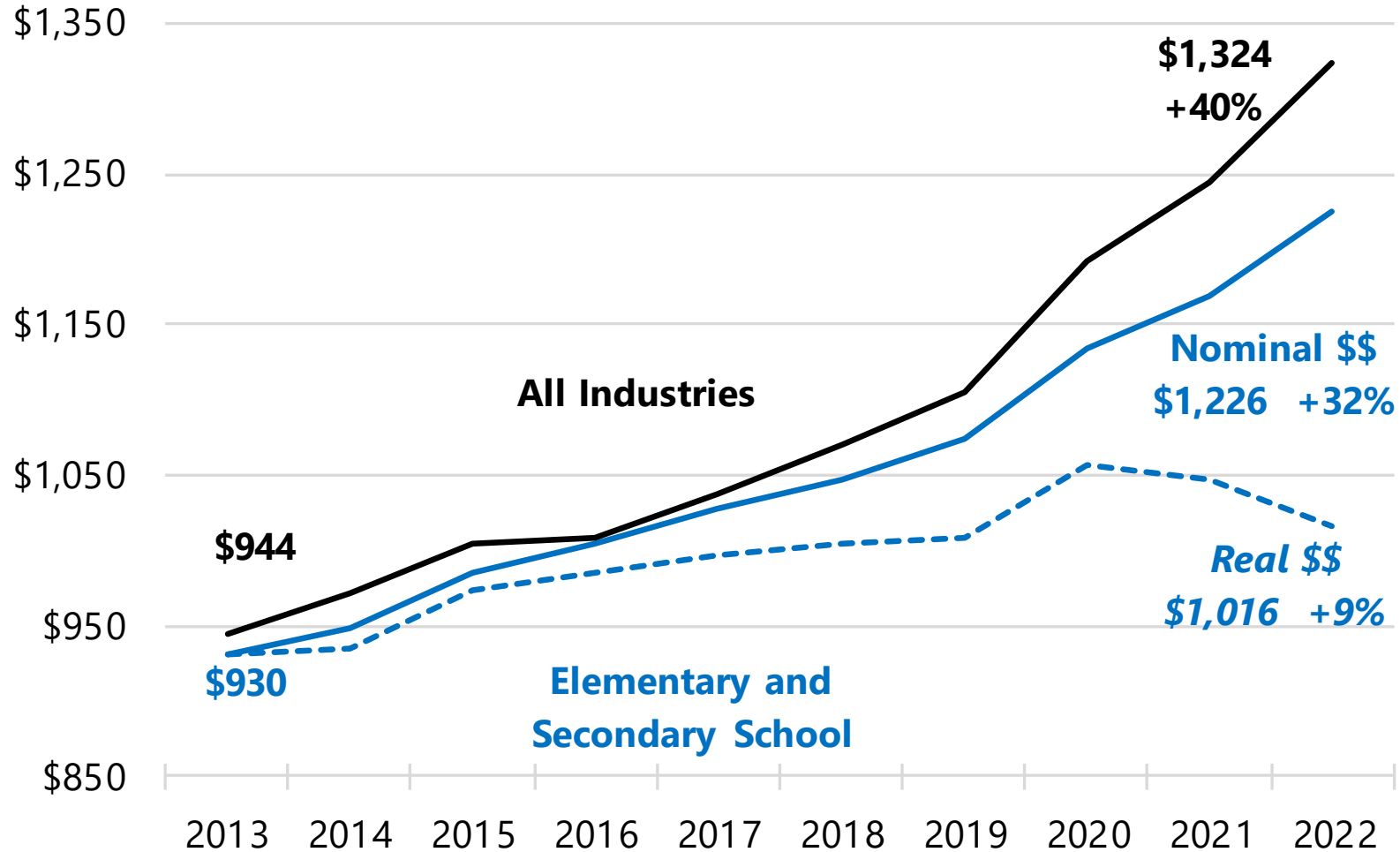
II. Statewide Public School Employment and Payroll

| | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 | 21-22 | 22-23 |
|-----------------------|---------|---------|---------|---------|---------|---------|---------|
| Employment (000s) | 267.9 | 268.1 | 268.8 | 267.2 | 257.7 | 263.0 | 265.3 |
| Growth | -0.3% | 0.1% | 0.3% | -0.6% | -3.6% | 2.0% | 0.9% |
| Payroll (\$ billions) | \$13.31 | \$13.47 | \$13.79 | \$14.04 | \$14.18 | \$14.70 | \$15.07 |
| Growth | 2.8% | 1.1% | 2.4% | 1.8% | 1.0% | 3.7% | 2.5% |

Notes: Blue text denotes projection. Employment and payroll includes all public schools (traditional, charters, and cyber charters) and a small number of higher education jobs (2,630 in 2022) held by PSERS members.

Source: Employment from U.S. Bureau of Labor Statistics, Local Government – Education. Total Payroll from PSERS.

Real PA Average Weekly Wage Contracts



Average Weekly Wage contracts past two years

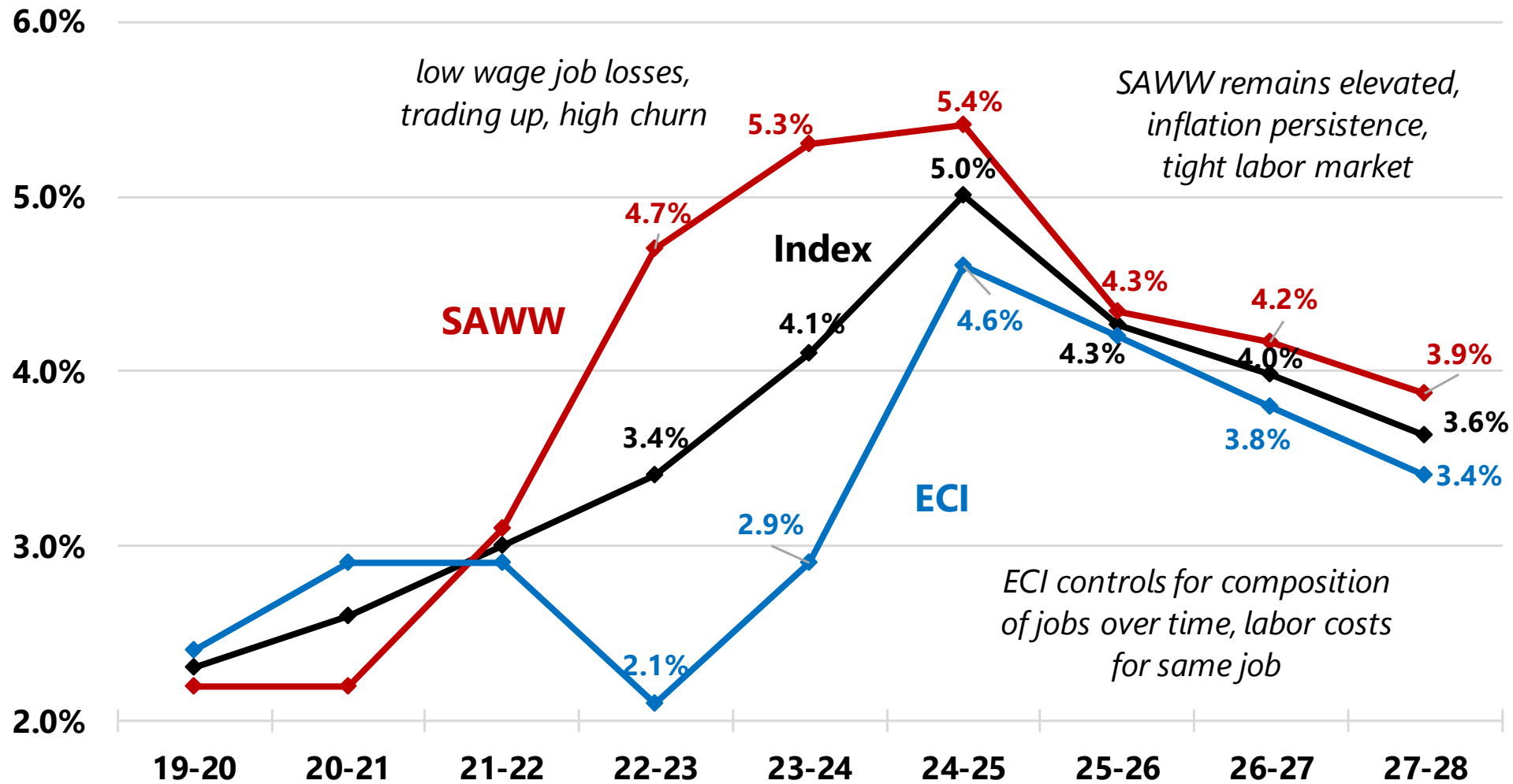
Philadelphia CPI-U
 2021 +4.0%
 2022 +7.9%
 2023 +5.0% to 5.5%

Source: U.S. Bureau of Labor Statistics.

III. Act 1 Index Forecast

| | 19-20 | 20-21 | 21-22 | 22-23 | 23-24 | 24-25 | 25-26 | 26-27 |
|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Base Index | 2.3% | 2.6% | 3.0% | 3.4% | 4.1% | 5.0% | 4.3% | 4.0% |
| SAWW | 2.2% | 2.2% | 3.1% | 4.7% | 5.3% | 5.4% | 4.3% | 4.2% |
| ECI | 2.4% | 2.9% | 2.9% | 2.1% | 2.9% | 4.6% | 4.2% | 3.8% |
| August 2022 Forecast (Base Index) | | | | | 4.2% | 4.5% | 4.0% | 3.8% |
| Change | | | | | -0.1% | +0.5% | +0.3% | +0.2% |
| Notes: SAWW is statewide average weekly wage. ECI is employment cost index (2022.4 growth rate is 4.7%). | | | | | | | | |
| Source: Reported by the Department of Education through 23-24, forecast by the IFO thereafter. | | | | | | | | |

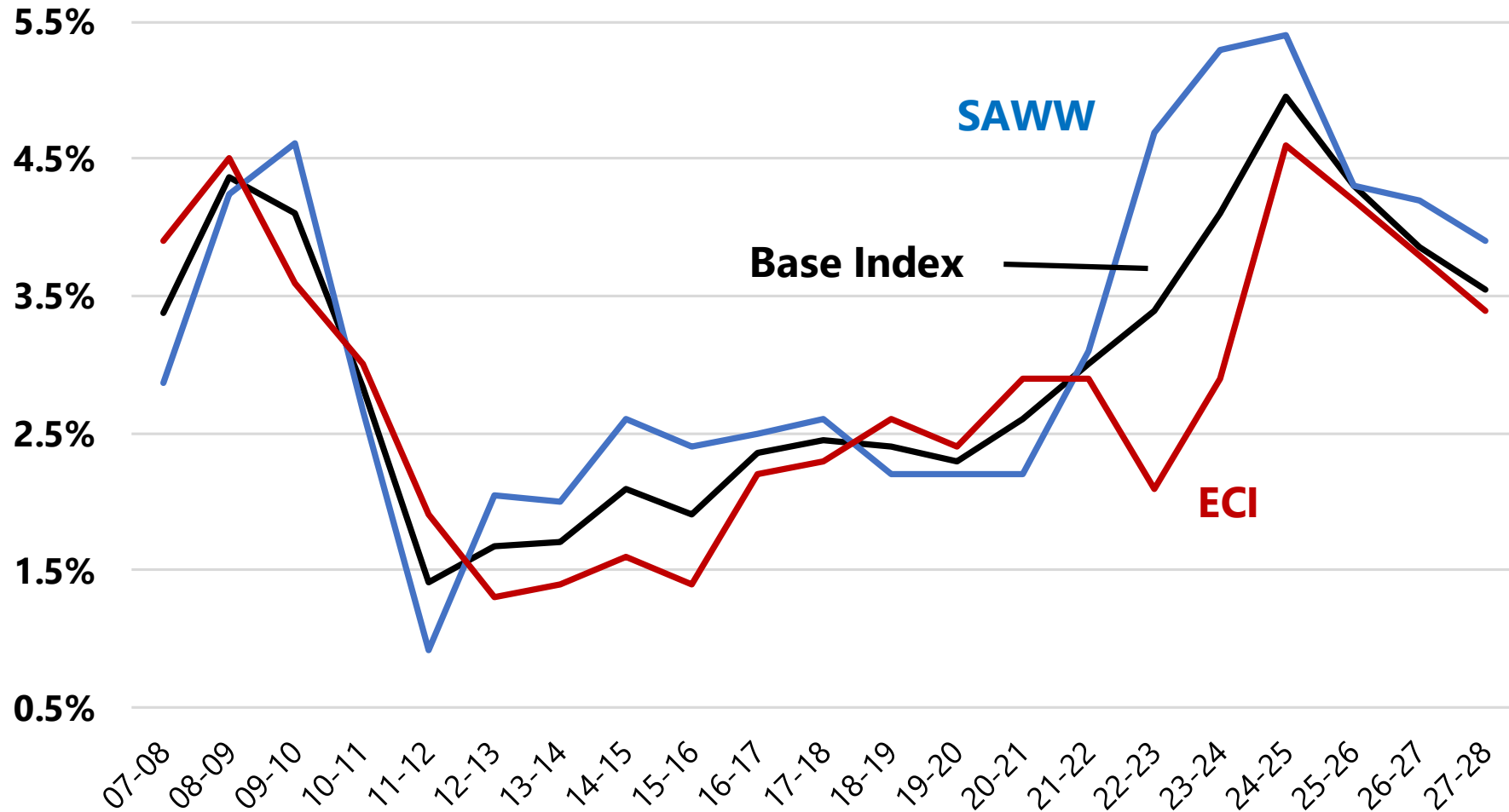
Act 1 Index Components



ECI response rates
down dramatically

| | |
|------|-------|
| 2010 | 71.8% |
| 2019 | 62.3% |
| 2021 | 54.3% |
| 2022 | 50.6% |

Act 1 Index: Long-Term Perspective



Closing Comments

Pennsylvania (and its public schools) face significant challenges

- Contracting working age population implies tight labor markets going forward
- 2019 to 2022: -131,000 (-1.7%)
- 2022 to 2025: -128,000 (-1.7%)
- Inflation appears persistent for now

How long will Act 1 Index remain elevated?

- Latest release for ECI growth was 4.7% for 2022 Q4
- Much depends on ECI | SAWW forecast is more reliable (assumes no recession)
- Falling ECI response rates complicate the forecast