Illinois IIT Micro-simulation model: *Modeling the Illinois Individual Income Tax Increase*

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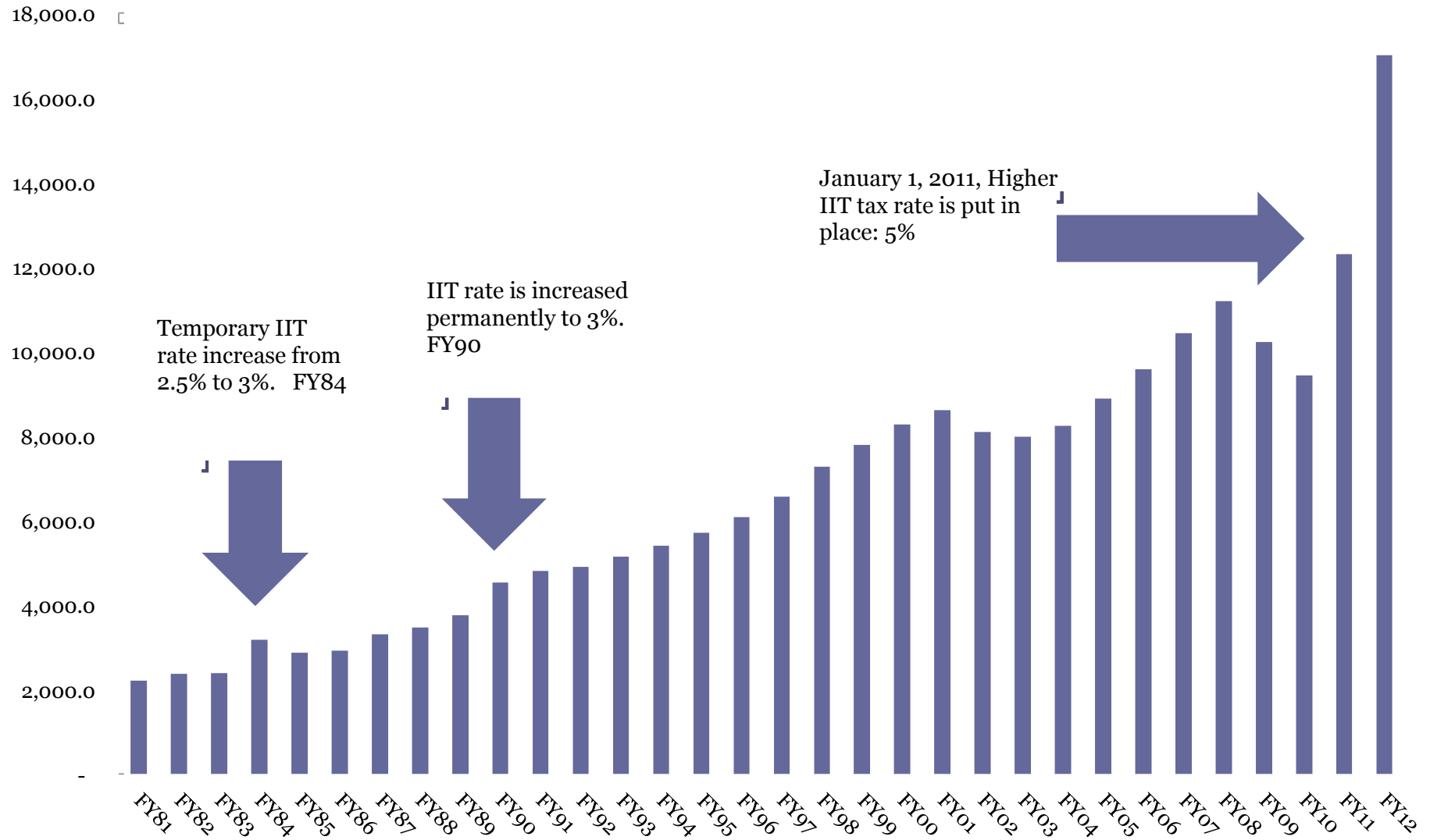
October 2012

IL Individual Income Tax (IIT) brief history:

- August 1, 1969: Individual Income tax is introduced in Illinois.

- FY84: Transitory increase of tax rate from 2.5% to 3% (July 1, 1983 to June 30, 1984)

- FY90 on: Permanent increase in tax rate to 3% (In place July 1, 1989)

- FY11 IIT tax rate was increased to 5% (January 1, 2011)

Projected Changes to IIT:

- FY15 IIT rate is scheduled to decrease to 3.75% (January 1, 2015)

- FY25 IIT rate is scheduled to decrease to 3.25% (January 1, 2025)
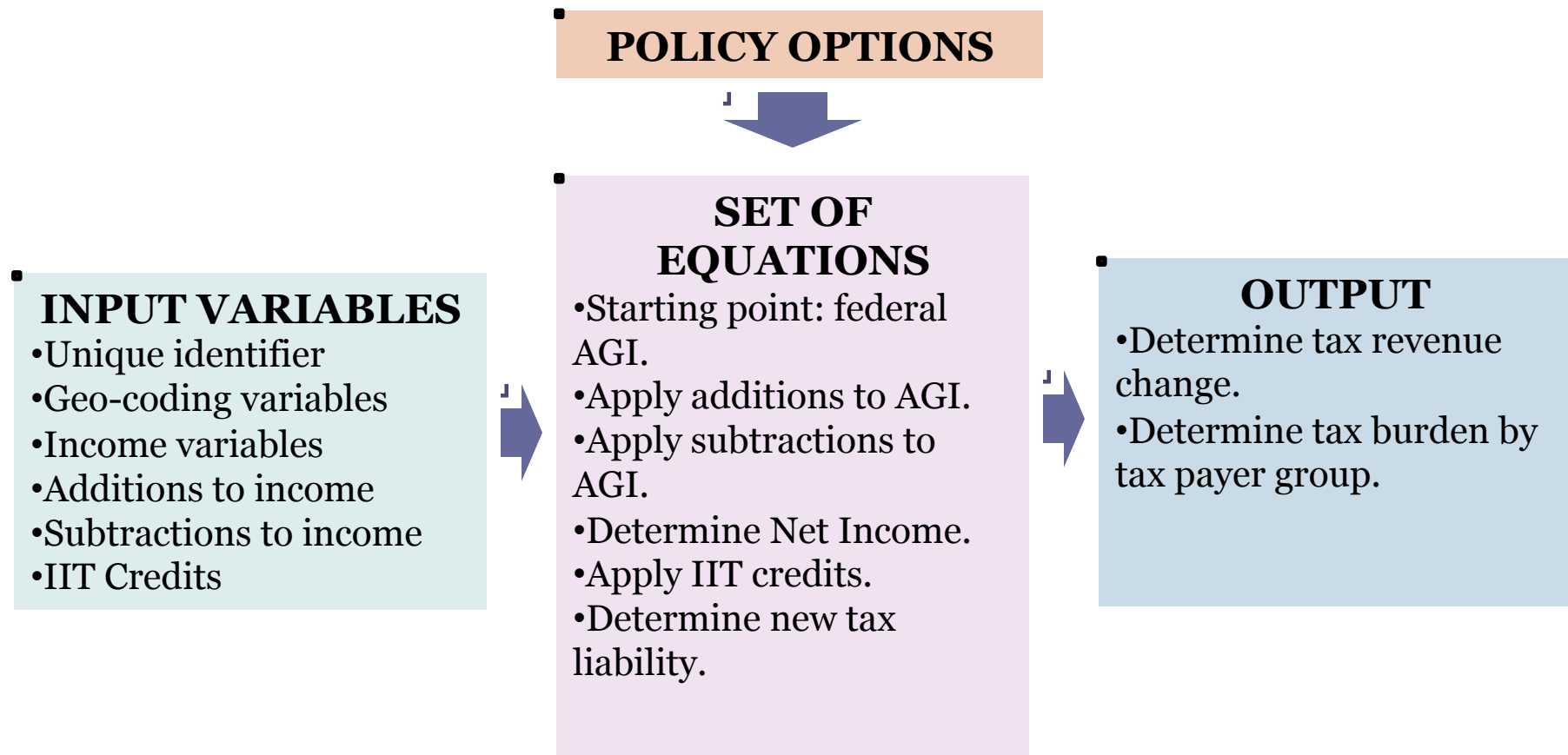
IL IIT Revenue history

Temporary IIT rate increase from 2.5% to 3%.   FY84

IIT rate is increased permanently to 3%. FY90

January 1, 2011, Higher IIT tax rate is put in place: 5%

IL 1040 return data: 5,955,292 data records

INPUT VARIABLES:

- Primary SSN
- Spouse SSN
- Address
- City
- County
- State
- Zip Code
- Filing Status
- Federal Adjusted Gross Income
- Federal Tax Exempt Income
- Other Income Additions
- Social Security Benefits
- IL Income Tax Overpayment
- Other Income Subtractions
- Number Of Exemptions From Fed. Form.

- Number Of Exemptions
- Exemption Prime 65+
- Exemption Spouse 65+
- Exemption Prime Blind
- Exemption Spouse Blind
- Exemption Allowance
- Residents Net Income
- Resident Indicator
- Non Resident Net Income
- Tax Amount
- Recapture Of Investment Credit
- Income Tax Paid To Other State
- IL Property Tax Credit Base
- IL Property Index Number
- IL Business Expense
- IL Property Tax Credit
- Education Expense Credit Base
- Education Expense Credit

- Income TaxCredit1299C
- Use Tax
- IL Income Tax Withheld
- Estimated Payments
- Pass Through Credits
- Earned Income Credit Base
- Earned Income Credit
- Over Payment
- Tax Due
- Late ES Penalty
- Farming
- Nursing Home
- Annualized Income
- Donations Total
- Over Payment After Penalty And Donations.
- Refund Amount
- Direct Deposit Indicator
- Credit Carry Forward
- Amount Owed

Micro-simulation model flow

POLICY OPTIONS

SET OF EQUATIONS
- Starting point: federal AGI.
- Apply additions to AGI.
- Apply subtractions to AGI.
- Determine Net Income.
- Apply IIT credits.
- Determine new tax liability.

INPUT VARIABLES
- Unique identifier
- Geo-coding variables
- Income variables
- Additions to income
- Subtractions to income
- IIT Credits

OUTPUT
- Determine tax revenue change.
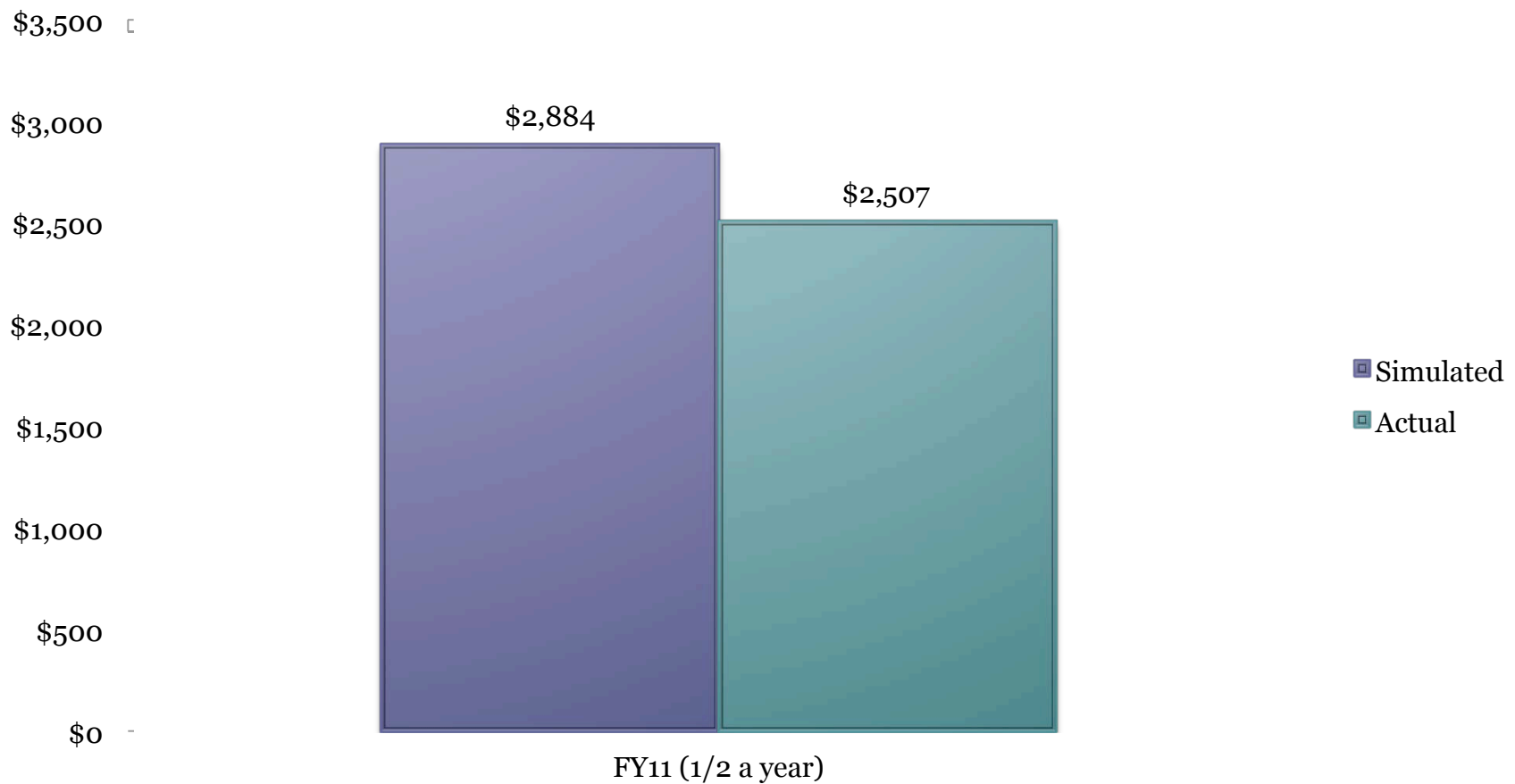- Determine tax burden by tax payer group.

Simulate IL1040 calculation

- Federal Income tax – starting point
  - Minus state subtractions, for example federally taxed retirement and SS income.
  - Plus state additions, such as federally tax exempt interest income.
  - Minus state allowed exemptions:
    - Personal exemption.
    - Legally blind exemption.
    - 65 or over exemption.
- = Net Income
  - Times the tax rate = Tax liability before credits
  - Minus:
    - Income tax credits such as: taxes paid to other states, property tax credit, education expense credit and earned income tax credit.
  - Plus:
    - Late payment penalty, voluntary donations
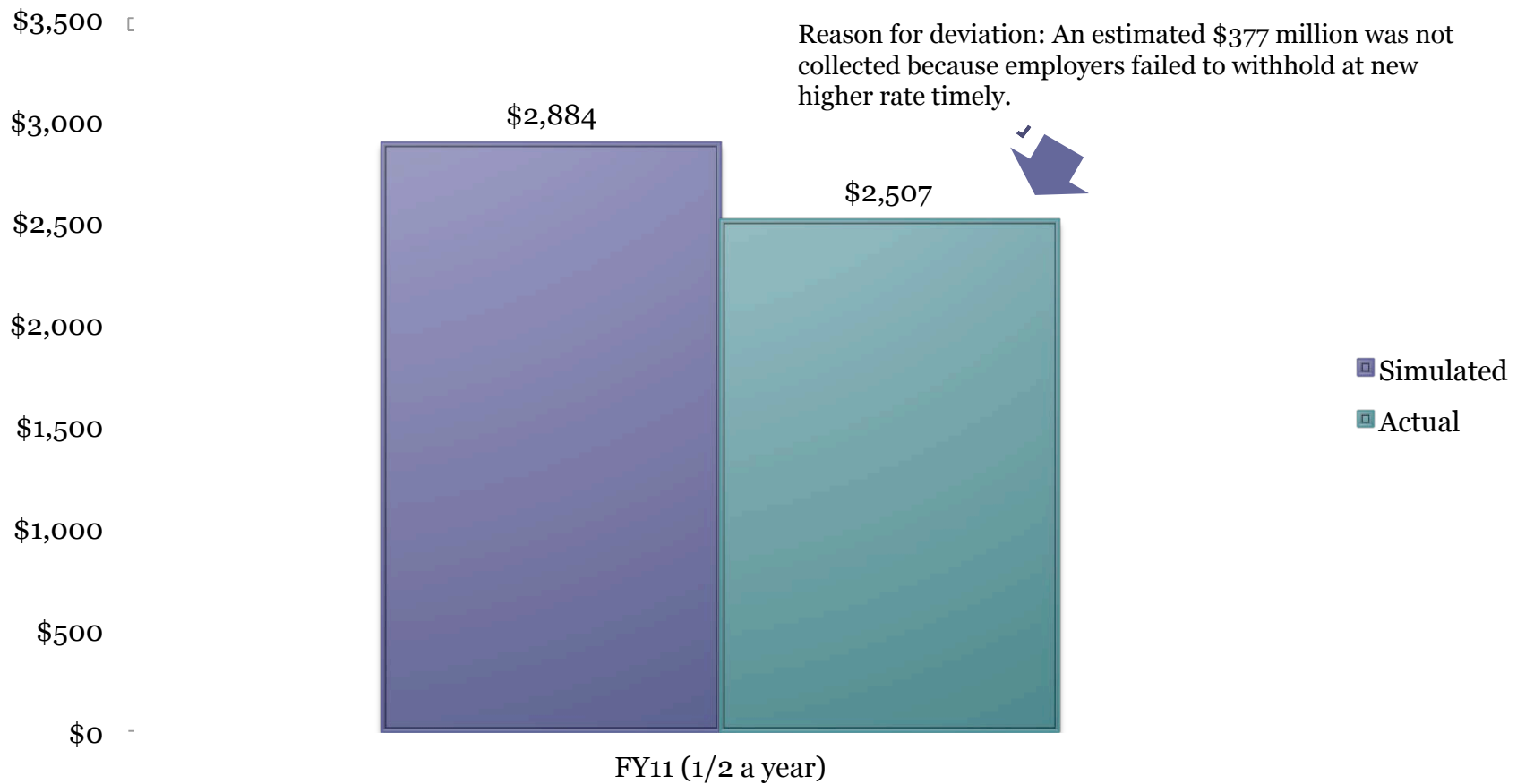- = Net Tax Liability

Estimating procedure after micro-simulation result:

- Adjustment for non-resident tax revenue

- Estimate of Local and State impact.

- Adjustment to tax year – fiscal year cash flows

  - Withholdings

  - Non-Withholdings
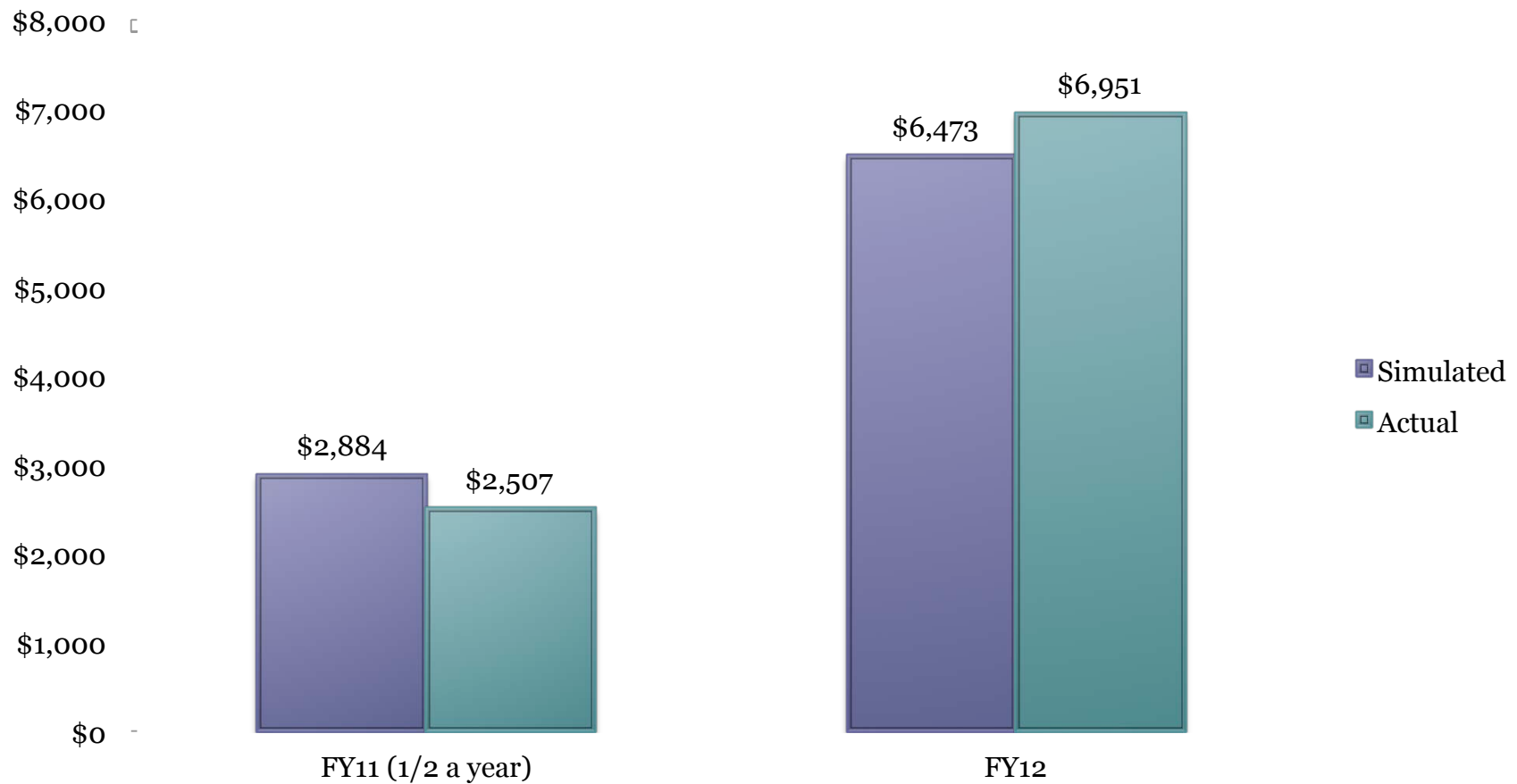
- Annual growth adjustment

Simulated versus actual revenue increase: FY11 tax increase.

$2,884 — Simulated

$2,507 — Actual

FY11 (1/2 a year)

Simulated versus actual revenue increase: FY11 tax increase.

Reason for deviation: An estimated $377 million was not collected because employers failed to withhold at new higher rate timely.
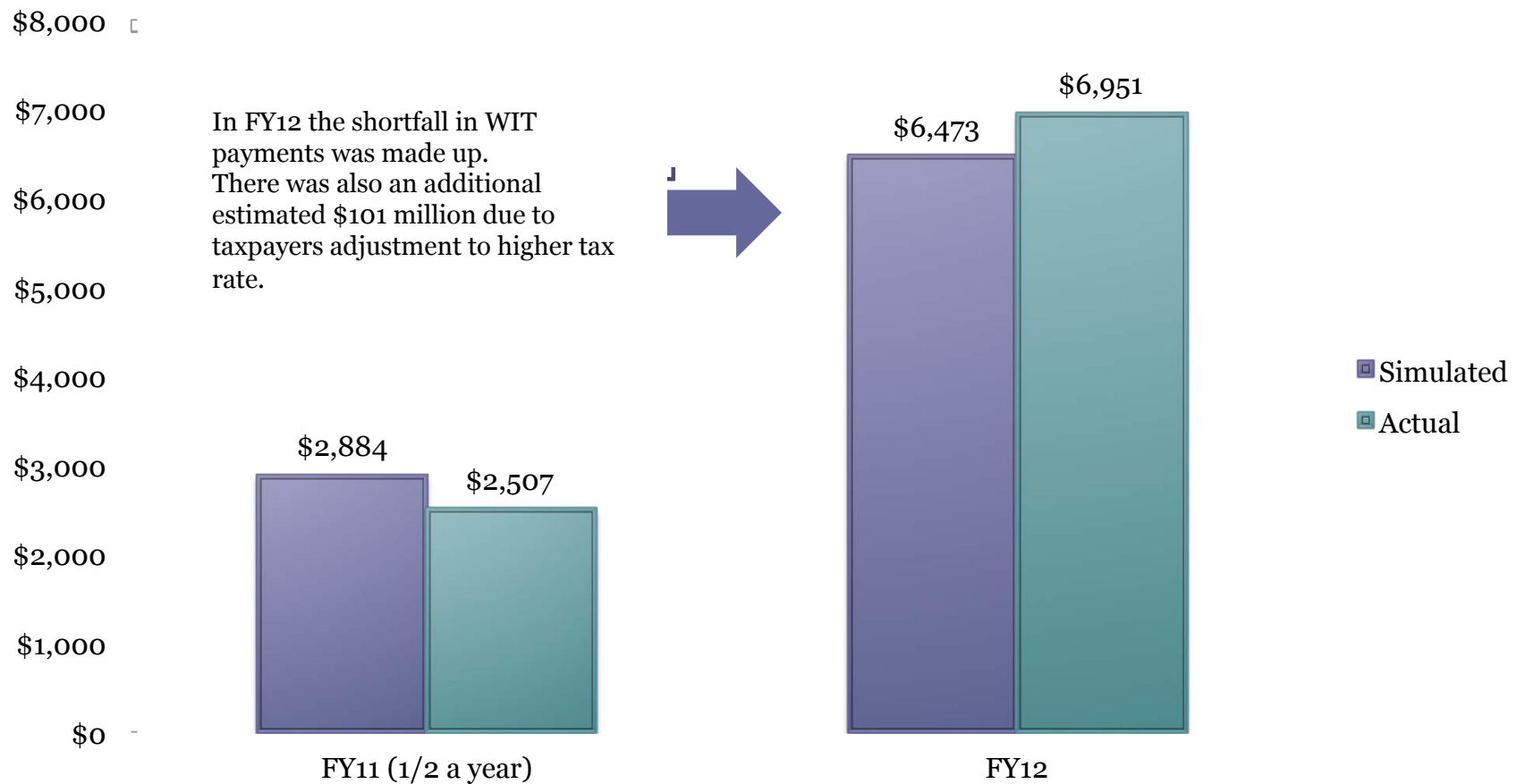
$2,884

$2,507

Simulated
Actual

FY11 (1/2 a year)

Simulated versus actual revenue increase: FY11 tax increase.

Simulated versus actual revenue increase: FY11 tax increase.

In FY12 the shortfall in WIT payments was made up.
There was also an additional estimated $101 million due to taxpayers adjustment to higher tax rate.

$8,000

$7,000

$6,000

$5,000

$4,000

$3,000

$2,000

$1,000

$0

$2,884

$2,507

$6,473

$6,951

FY11 (1/2 a year)

FY12

Simulated

Actual

Other uses of IL micro-simulation model:

- Modeling tax expenditures
  - Income Subtractions
  - Property tax credit
  - Education credit
  - Retirement income
  - Etc.
- Modeling revenue effect of Personal Exemption increase
- Modeling increases of Earned Income Tax Credit.
- Revenue impact of legislative proposals.

Recent estimates derived from micro-simulation model:

- January 10 2012, Governor Quinn signs SB400 (P.A. 97-0652). SB400 increases the Earned Income Tax Credit from 5% to 7.5% of the federal tax credit.

- Personal exemption is increased to $2,050 effective January 1, 2012. On or after January 1 2013, the personal exemption will be $2,050 plus a cost of living adjustment (P.A. 97-0652).

- SB2505 enacted on January 10, 2011 increased IIT rate from 3% to 5% for tax years ending on December 31 1014.   January 1, 2015 IIT rate is scheduled to decrease to 3.75%.

Lessons learned and recommendations:

- Data quality

- Cash Flow analysis

- Tax payers behavior

- Be aware of expectations and requests.

- Next step: Corporate Income Tax.