



Budget projection errors: causes, consequences and correctives

**Melbourne Economic Forum
John Daley and Danielle Wood, Grattan Institute
30 May 2017**

Budget projection errors

Problems

- Reality has not matched repeated projections of return to budget balance
- Projections of growth in nominal GDP, wages, and revenues were too high
- Asymmetrical projections – risks not evenly balanced

Causes

- Assume the world hasn't changed
- Assume short economic cycle: generates over-optimism in bad times
- Amplify optimism by assuming outperformance to close output gap

Consequences

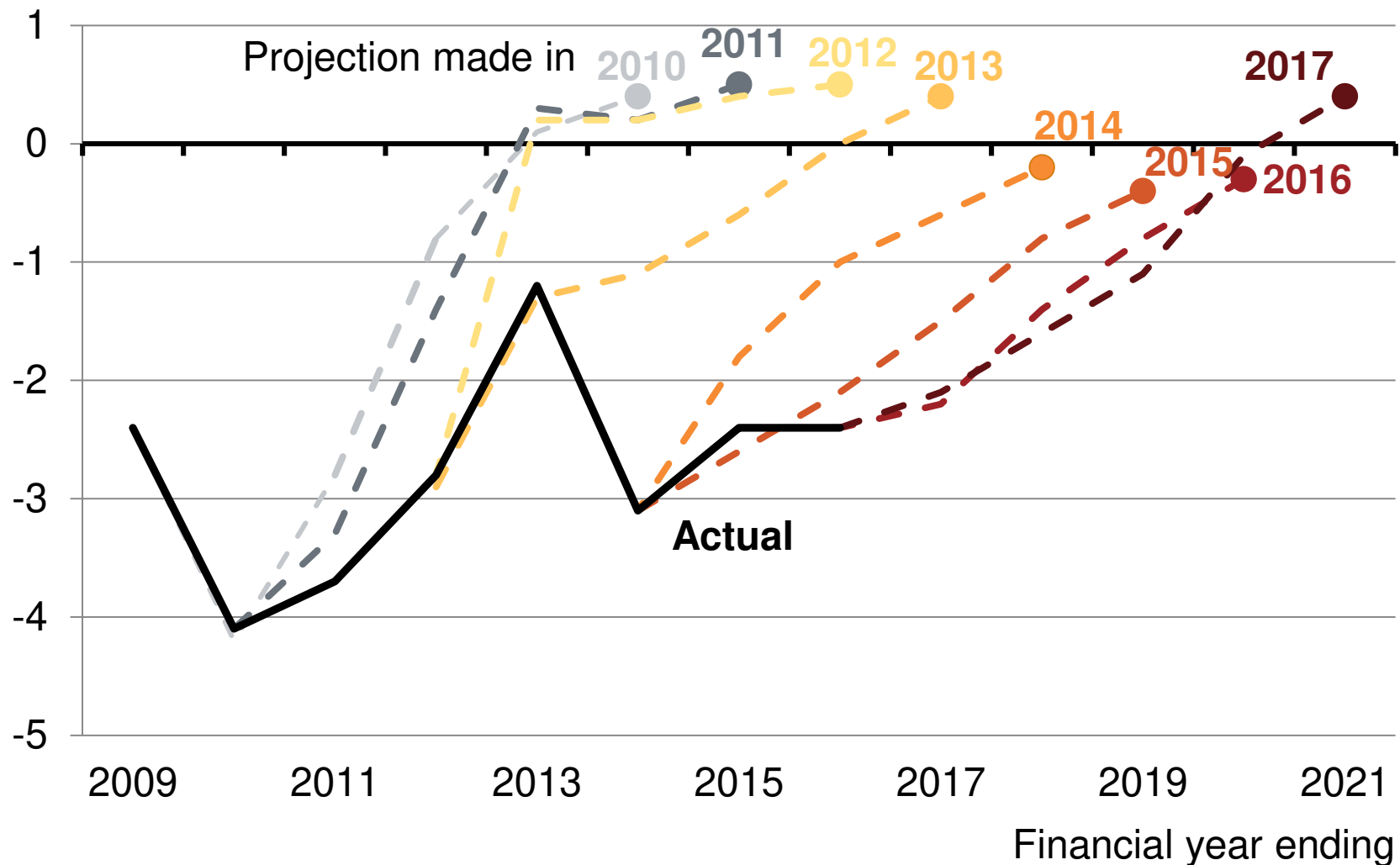
- Governments have forecast-led denial about need for budget repair
- Budget repair relies on bracket creep rather than measures
- Realpolitic suggests we need a pessimism-generator

Correctives

- More judgement and common sense
- Key modelling issues: what is “trend” (average what period?); how fast do we return to trend; is spare capacity absorbed?
- What are the institutional barriers to change?

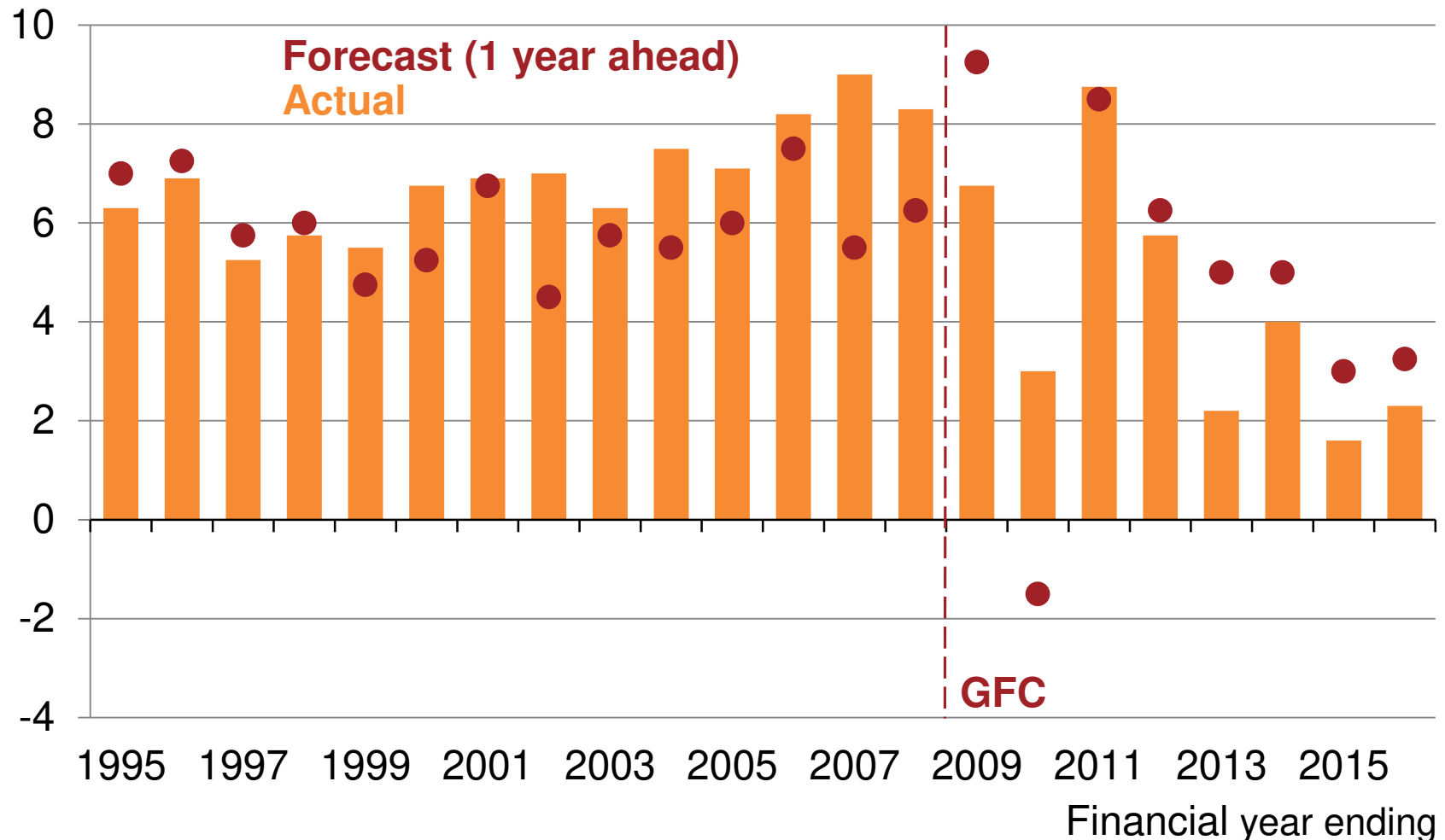
Projected surpluses have not happened

Actual and projected Commonwealth underlying cash balance, % of GDP



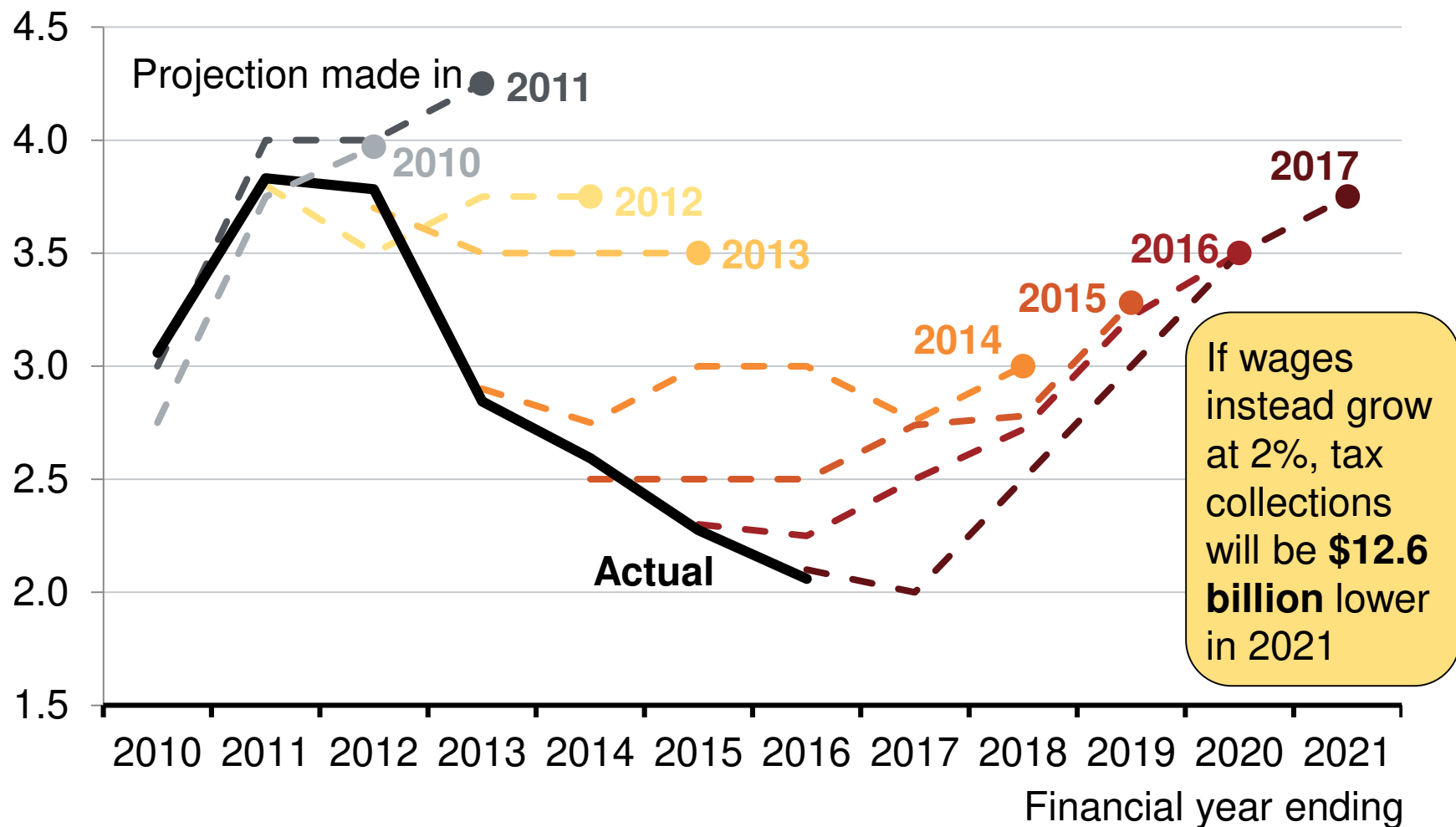
Forecasts consistently over-pessimistic before GFC; over-optimistic after

Actual and forecast nominal GDP growth



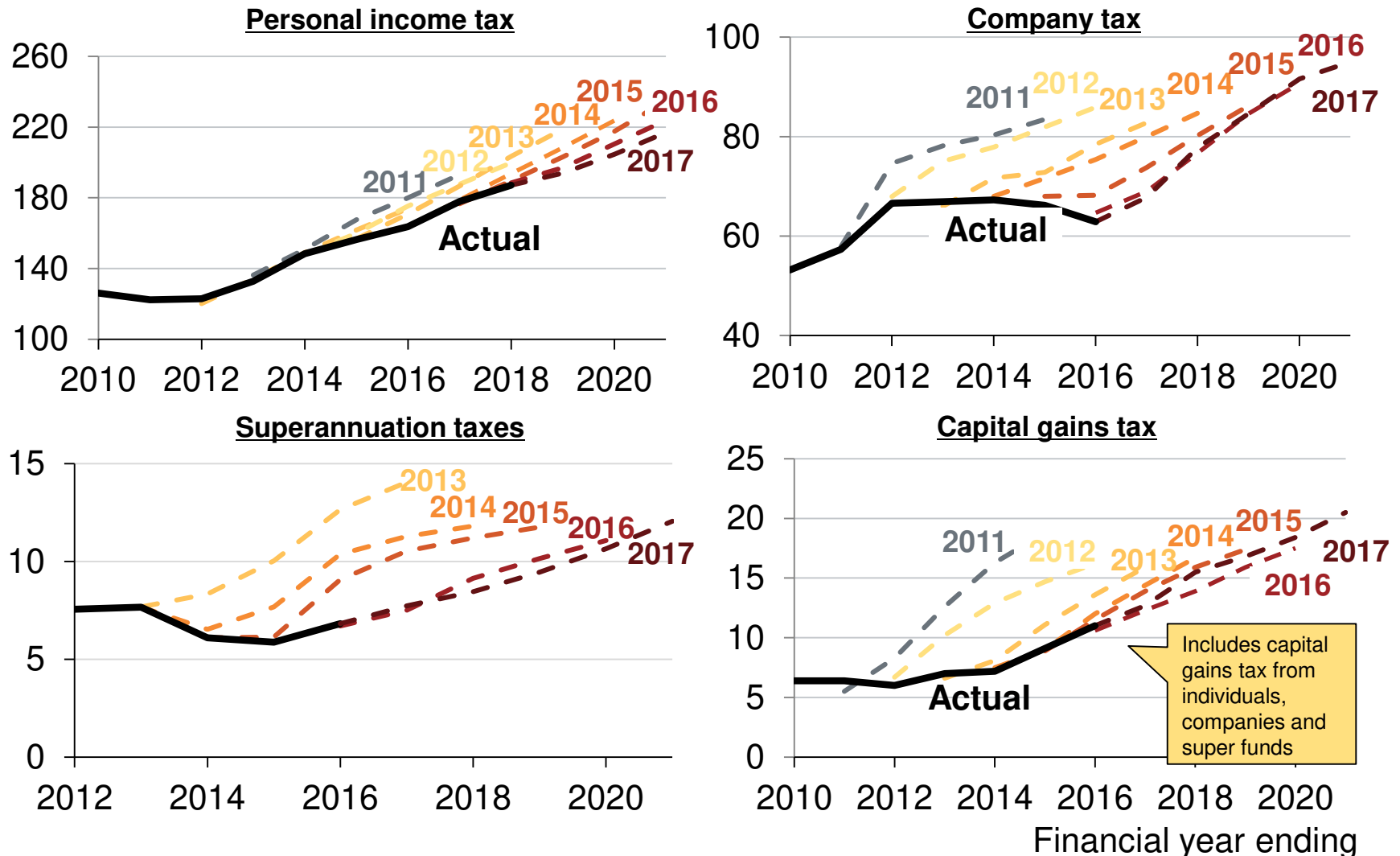
2017 budget doubles down: increases forecast wage growth as the reality goes lower

Actual and projected growth in wages, per cent



Fiscal projections have missed particularly for company tax and capital gains tax

Actual and projected tax receipts, \$ billions



Budget projection errors

Problems

- Reality has not matched repeated projections of return to budget balance
- Projections of growth in nominal GDP, wages, and revenues too high
- Asymmetrical projections – risks not evenly balanced

Causes

- Assume the world hasn't changed
- Assume short economic cycle: generates over-optimism in bad times
- Amplify optimism by assuming outperformance to close output gap

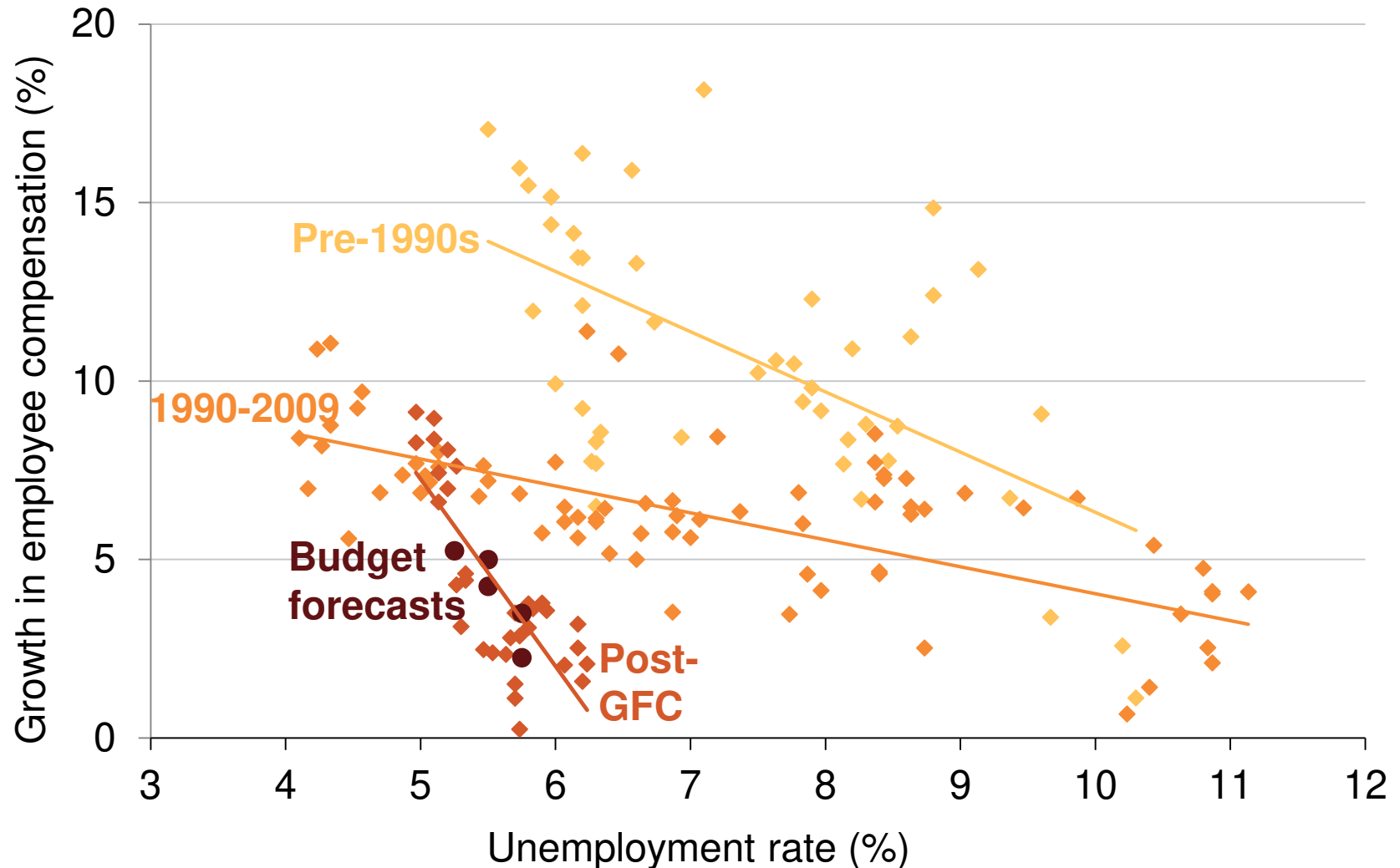
Consequences

- Governments have forecast-led denial about need for budget repair
- Budget repair relies on bracket creep rather than measures
- Realpolitic suggests we need a pessimism-generator

Correctives

- More judgement and common sense
- Key modelling issues: what is “trend” (average what period?); how fast do we return to trend; is spare capacity absorbed?
- What are the institutional barriers to change?

The disappearing and supposedly reappearing Phillips curve



Notes: Employee compensation is total remuneration of employees including wages, ad hoc bonuses, termination payments and in-kind benefits
Source: Based on NAB analysis of ABS Labour Force data

Budget projection errors

Problems

- Reality has not matched repeated projections of return to budget balance
- Projections of growth in nominal GDP, wages, and revenues too high
- Asymmetrical projections – risks not evenly balanced

Causes

- Assume the world hasn't changed
- Assume short economic cycle: generates over-optimism in bad times
- Amplify optimism by assuming outperformance to close output gap

Consequences

- Governments have forecast-led denial about need for budget repair
- Budget repair relies on bracket creep rather than measures
- Realpolitic suggests we need a pessimism-generator

Correctives

- More judgement and common sense
- Key modelling issues: what is “trend” (average what period?); how fast do we return to trend; is spare capacity absorbed?
- What are the institutional barriers to change?

Forecast-led denial is a common affliction

We are on track for surplus in 2012-13, on time, as promised — and this provides the solid foundations for the targeted investments we announce tonight.



This budget keeps us on a sustainable path to bring the budget back to balance.



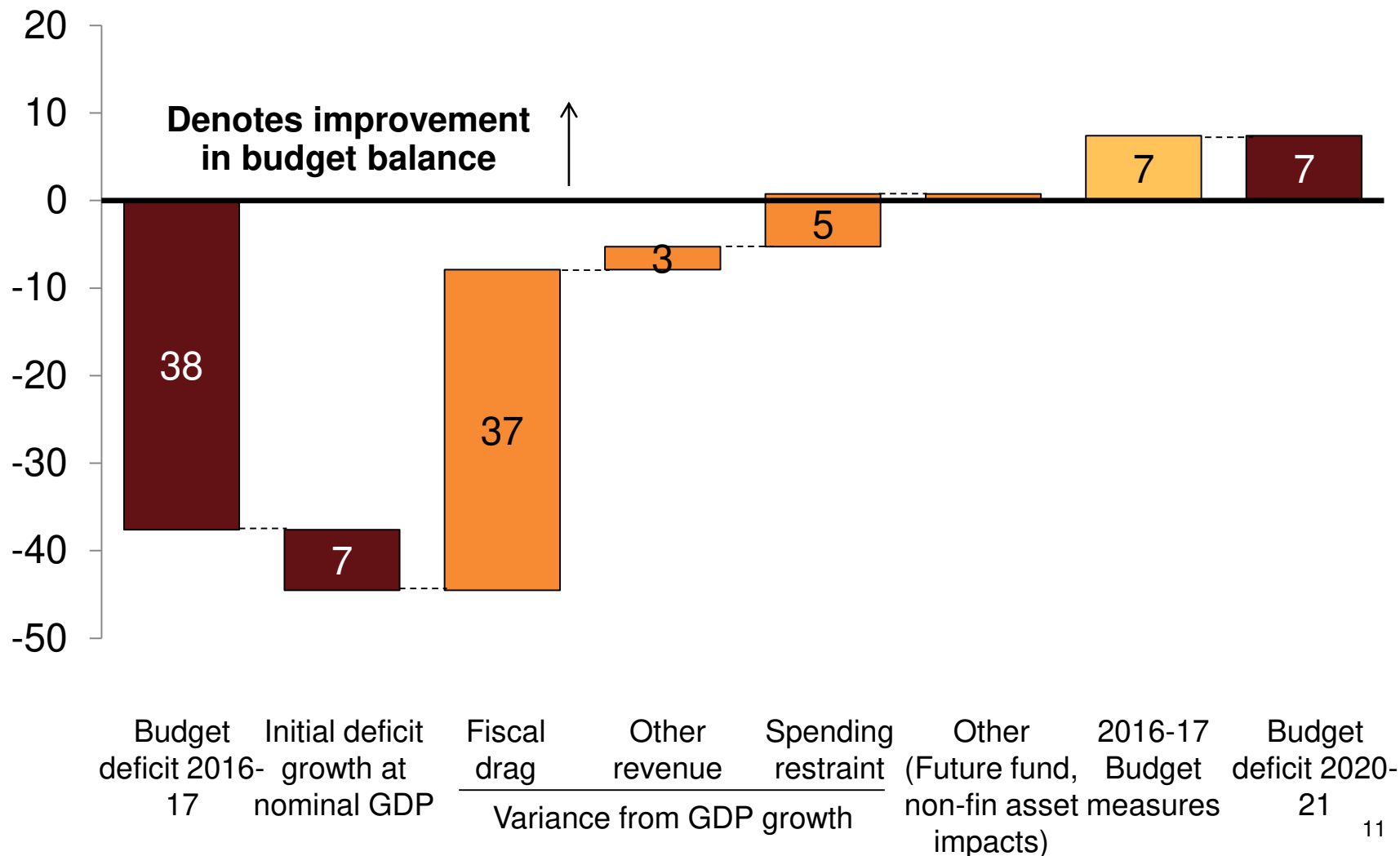
I can report tonight that despite the headwinds, our timetable back to a Budget surplus is unchanged from last year.



Most of the planned structural repair depends on fiscal drag

Budget balance

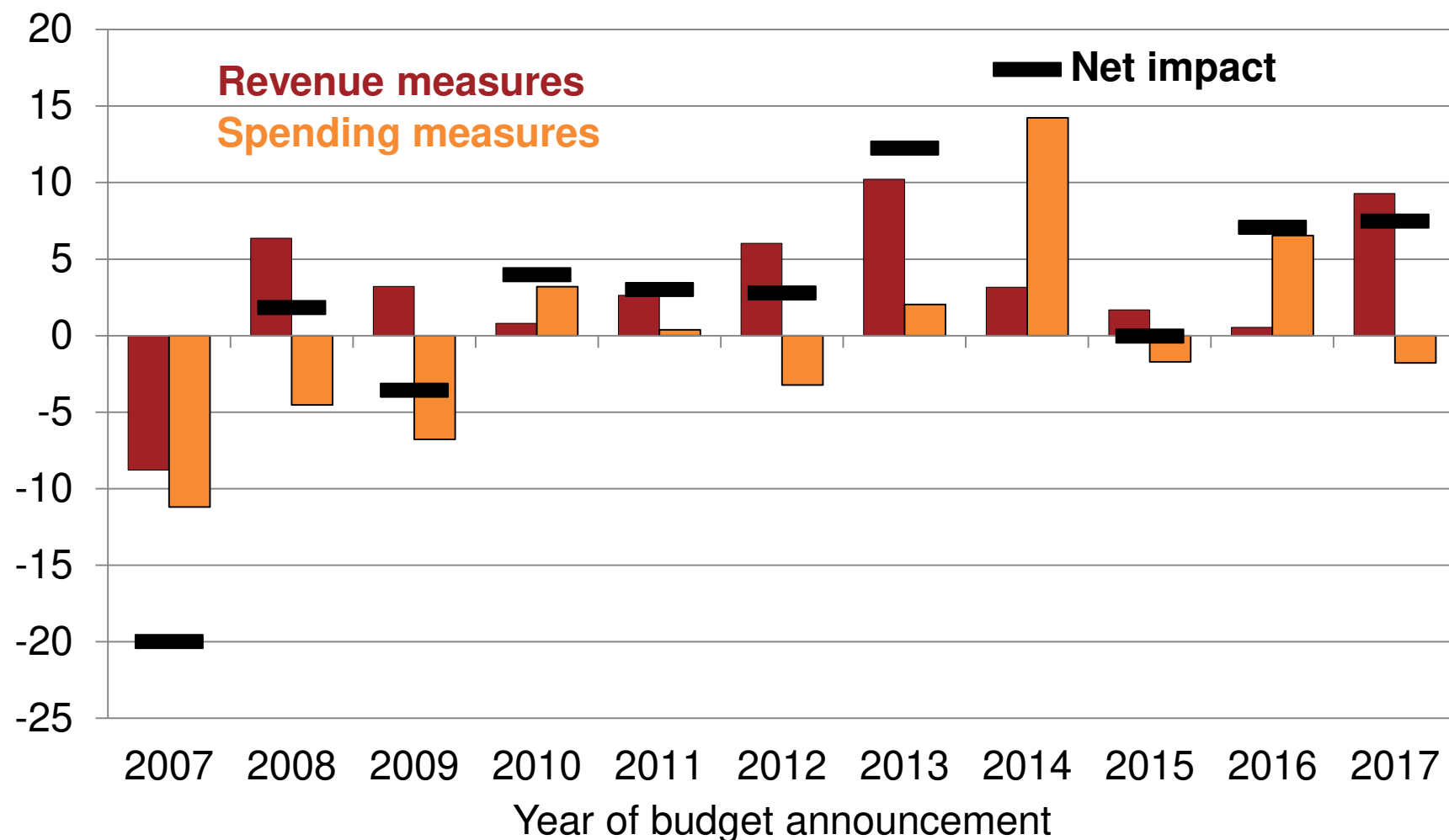
2020-21 budget outcome compared to 2016-17 outcome, \$2017 billions



Budgets have included some structural repair measures, but not many

Contribution of budget measures to fiscal balance at end of four years

\$bn budget measures



Budget projection errors

Problems

- Reality has not matched repeated projections of return to budget balance
- Projections of growth in nominal GDP, wages, and revenues too high
- Asymmetrical projections – risks not evenly balanced

Causes

- Assume the world hasn't changed
- Assume short economic cycle: generates over-optimism in bad times
- Amplify optimism by assuming outperformance to close output gap

Consequences

- Governments have forecast-led denial about need for budget repair
- Budget repair relies on bracket creep rather than measures
- Realpolitic suggests we need a pessimism-generator

Correctives

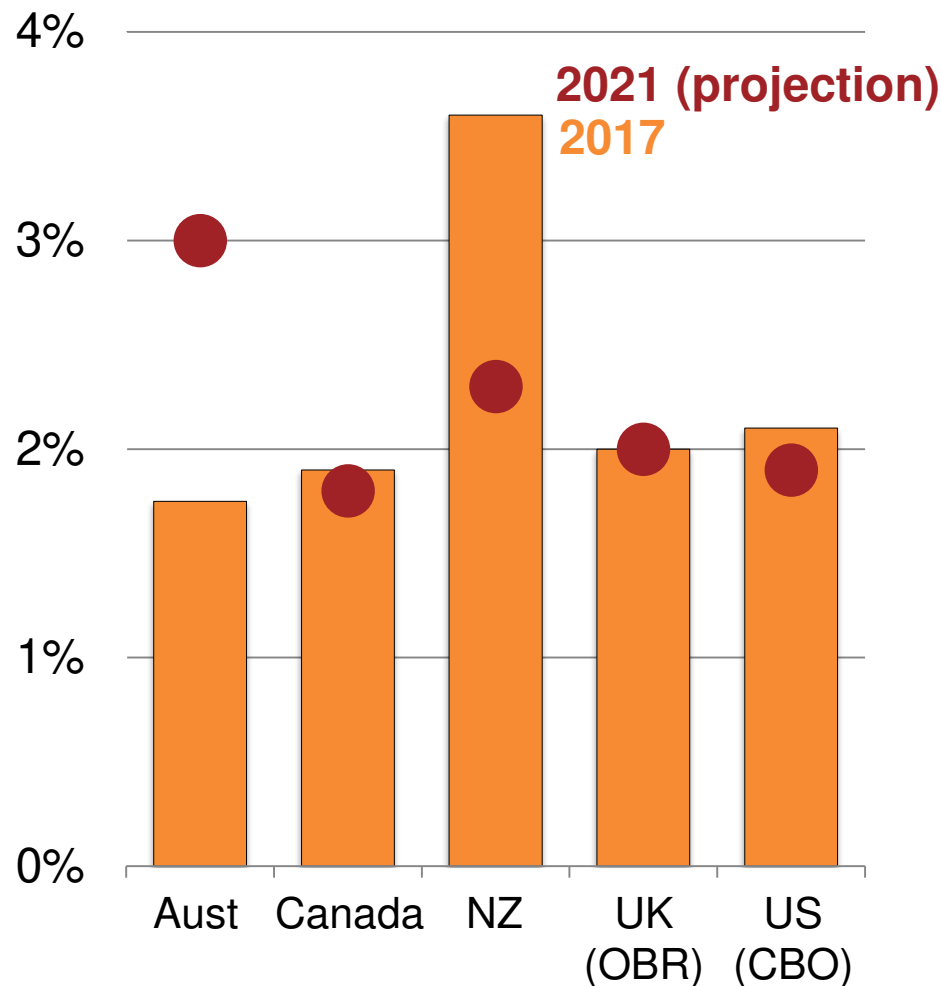
- More judgement and common sense
- Key modelling issues: what is “trend” (average what period?); how fast do we return to trend; is spare capacity absorbed?
- What are the institutional barriers to change?

Reviews have not led to agile reform

	Errors	Forecast model
<i>Review of Treasury macroeconomic and revenue forecasting (2012)</i>	<ul style="list-style-type: none"> • Nominal GDP and taxation revenue projections: little evidence of bias over two decades • BUT forecast errors correlated with economic cycle 	<ul style="list-style-type: none"> • Recommended new economy-wide model to be embedded into forecasting
<i>Review of Treasury macroeconomic forecasting capabilities (2015)</i>	<ul style="list-style-type: none"> • Too rigorous adherence to models – not enough judgement • Risk that short-term forecasts are anchored by long run projections 	<ul style="list-style-type: none"> • Endorsed recommendation for economy-wide forecasting model
<i>Review of economic modelling at Treasury (2017)</i>	<ul style="list-style-type: none"> • Forecasts should be adjusted based on judgement – views of sectoral experts, surveys, business liaison, views of senior staff • Models should use historical evidence of adjustment process rather than mechanical assumption 	<ul style="list-style-type: none"> • Endorsed recommendation for economy-wide forecasting model • Macro-econometric model should span forecast and projection period

Other nations use more judgement and are less optimistic

Real GDP growth



Wages growth

