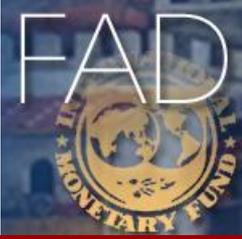


# Preparing budget baselines

**Fiscal Affairs Department**

May 29, 2018

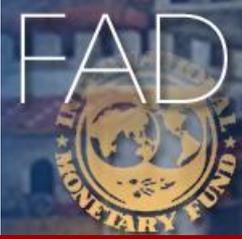




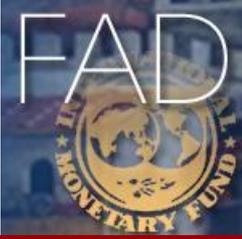
## Outline

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- **Concept and benefits**
- **No policy change**
- **A general approach**
- **Specific Issues**
- **The example of Australia**



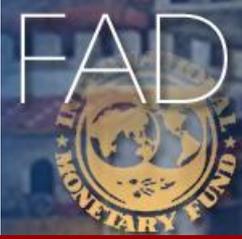
# Concept and benefits



# Baseline estimates

## Key concept

- A baseline is a benchmark against which to identify change
- A budget baseline is an estimate of future spending on a no policy change basis?
- What is NPC?
  - How is “*policy*” defined in a country? Past laws and government decisions. Can this include announced policies?
  - What is “*current*” policy? Is it what has been approved/decided, or what is currently being implemented (current level of service delivery)?
- A tentative definition of a budget baseline:  
**“best estimate of the cost of continuing existing policies at the currently agreed levels of service”**
- A budget baseline is neither a spending floor, nor a ceiling.
- It is not meant to be a prediction of future outcomes, i.e. it is not the “most likely forecast”. It does not include policies not yet official announced/approved even though these may be very likely to happen.



# Baseline estimates

## Key concept

### Baselines, appropriations and realizations

	2019	2020	2021	2022
	BY	BY+1	BY+2	
<b>2019 – 2021 baseline</b>	<b>100</b>	<b>110</b>	<b>120</b>	
Policy decisions	1	2	-4	
<b>2019 – 2021 appropriations</b>	<b>101</b>	<b>112</b>	<b>117</b>	
Price variation	-3	-4	-4	
Volume variation	1	5	6	
Policy adjustment	0	0	0	
Technical adjustment	0	1	0	
Total variation	-1	1	2	
	Estimated actual	BY	BY+1	BY+2
<b>2020 – 2021 baseline</b>	<b>100</b>	<b>113</b>	<b>119</b>	<b>120</b>
Policy decisions		-1	-1	0
2019 – 2021 appropriations		112	118	120

# Baseline estimates

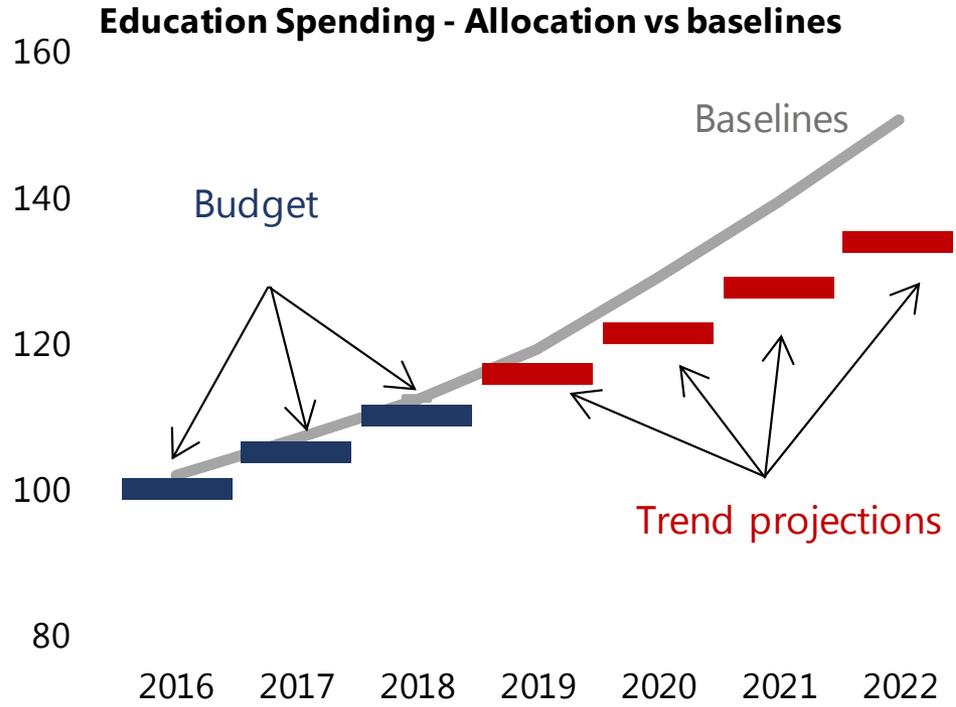
## Benefit 1 – Identify sources of fiscal pressures

Identify natural evolution of costs of providing services. Enable early identification of cost of making policy decisions

**Example:**

- Demographic pressures require volume increase (schools and teachers) by 3%;
- Wages and prices are expected to rise by 5%.
- But allocation has only been rising by 5% in recent years.

Implication: underfunding of education



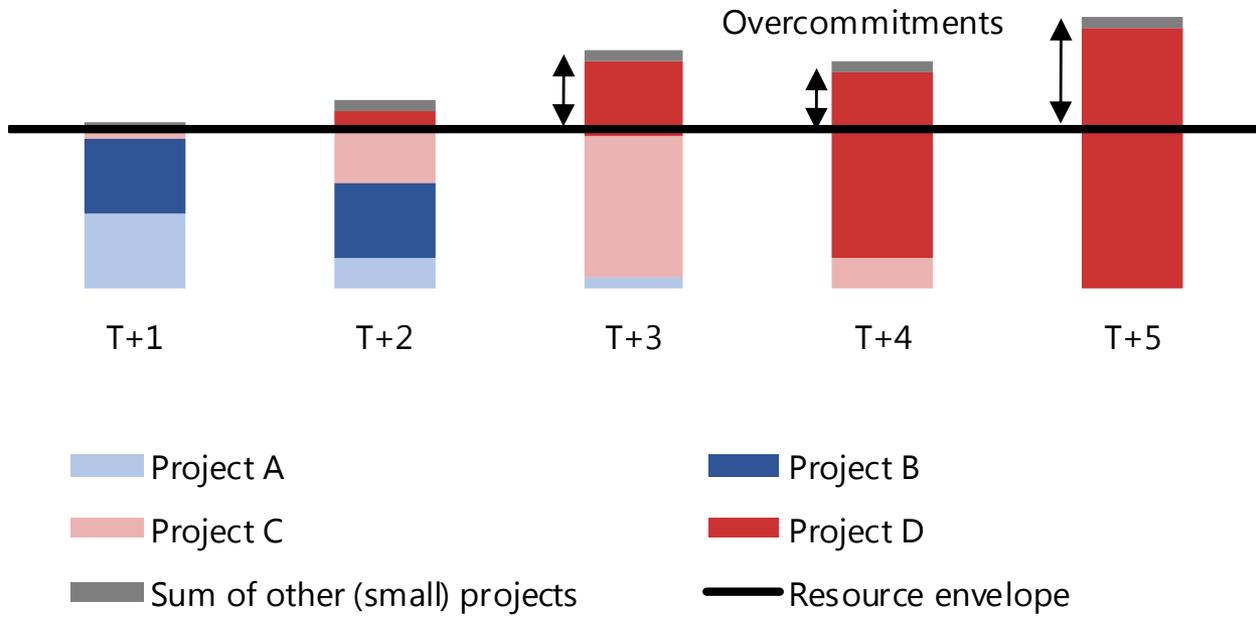
# Baseline estimates

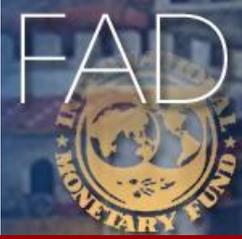
## Benefit 1 – Identify sources of fiscal pressures

Identify medium term consequences of past decisions

### Example 2:

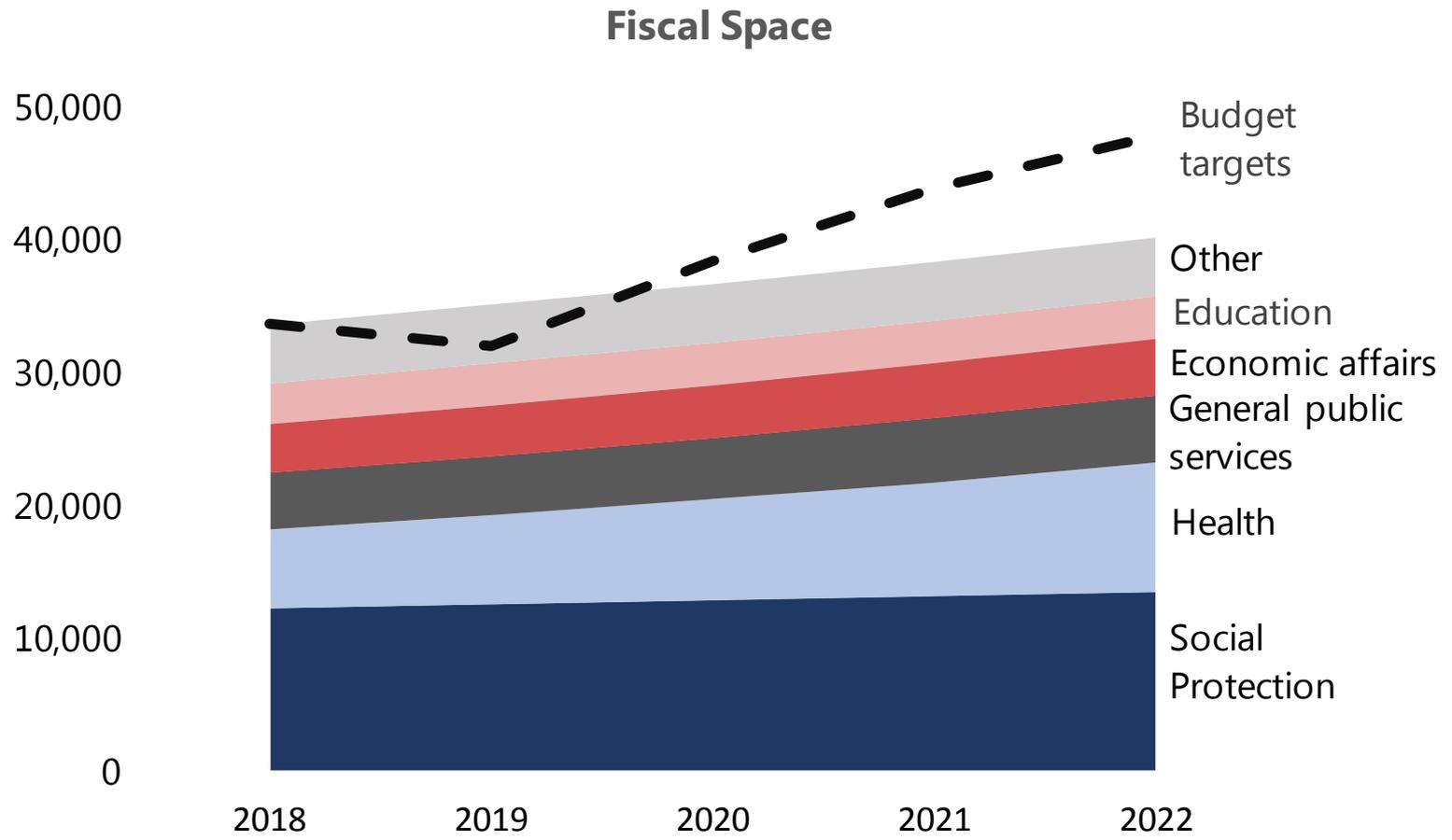
Over commitment of infrastructure spending

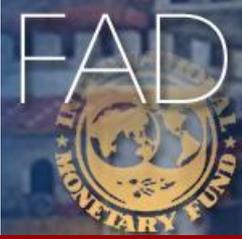




# Baseline estimates

## Benefit 2 – Identify overall fiscal space

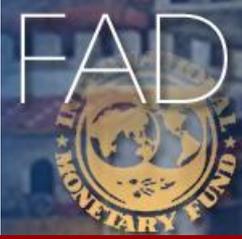




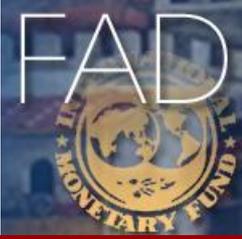
# Baseline estimates

## Other benefit – Better budgeting

- Better budgeting through **more accurate costing**
  - Use of uniform costing methodology across line ministries. E.g. ministries using same volume or price adjustment parameter for similar spending items (e.g. pension spending)
  - Improved relations between central budget office and line ministries. Central budget staff learn about cost drivers from line ministries
- Better budgeting through **simplified and transparent budget negotiation process.**
  - Once baseline is agreed upon, tedious line by line discussion can be replaced by negotiation on incremental (discretionary) items only
  - Use of uniform methodology across line ministries ensures higher level of transparency in the allocation of resources
- Better budgeting through higher **predictability of resources available to line ministries.** This facilitates planning by line ministries.



## **Back to NPC**



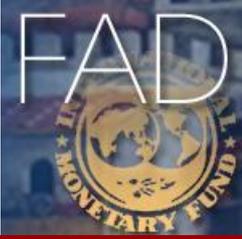
# No Policy Change

## Definition and difficult areas

**Best estimate of continuing existing policies at the currently agreed level of service**

**But there may be difficult areas where future spending is not explicit in policies:**

- i. the state of existing policies may not be clear;**
- ii. the currently agreed level of services may not be clear;**
- iii. programs may be set to expire in the future;**
- iv. the baseline may breach budgetary rules.**



# No Policy Change

## Challenge 1: the state of existing policies may not be clear

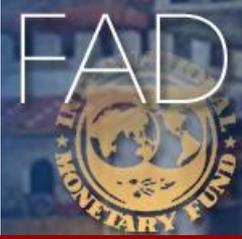
This occurs when new policy decisions are announced but these are not well-defined and not properly costed.

**General principle:** consider only decisions that (i) are adopted or credibly announced; and (ii) are specified in sufficient detail.

EC guidelines:

“A NPC forecast is always consistent with past policy orientation, unless there is a sufficiently detailed and adopted, or at least credibly announced, measure producing changes therein, which is known at the cut off date of the forecast.”

- EC, “Report on Public Finances in the EMU,” 2016.

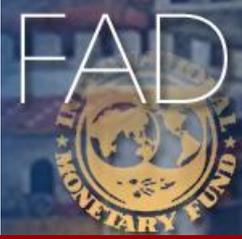


# No Policy Change

**Challenge 2: Currently agreed level of services may not be clear**

**Example:** A given level of service is set by law or by policy, but this is not currently met in the budget.

**General principle:** The default presumption here should be the continuation of the current level of services. As such, the current budget funding level should be viewed as the best indicator of the current policy of the government.



# No Policy Change

## Challenge 3: Policies are set to expire in the future

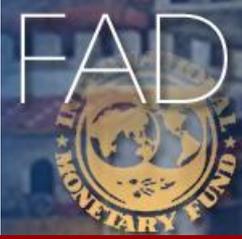
**Example:** A program is set to expire in the future

**General principle:** Distinguish between mandatory and discretionary policies. Mandatory programs can be forecast assuming policies are rolled over, or reasonable assumption on program can be made

E.g. US federal budget: **mandatory spending** government by statutory criteria vs **discretionary spending** controlled by annual appropriation acts.

Agencies prepare baselines assuming that

- mandatory programs continue to operate after their scheduled expiration dates (Deficit Control Act)
- appropriations are not expected to continue



# No Policy Change

## Challenge 4: Baseline breach budgetary rules

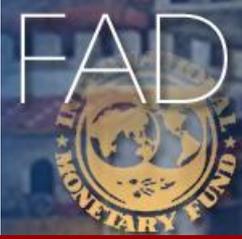
Should the baseline be adjusted if it will breach budgetary rules?

**General principle:** Compliance to budgetary rules and targets should not be assumed, unless

- (i) they are automatic (e.g. further expenditure in a certain category are blocked when the budget line is exhausted), or
- (ii) there is a rock-solid track record of enforcement, and government is not required to make major choices of policy orientation

Example: There are legislated limits on some discretionary spending items in the US federal budget

# General Approach



# General approach

## Mechanics of the general process

### 1. Understand the existing budget

- Understand the current spending base: know what the agency spend on
- Identify past one-off spends. E.g. Election spending; cost of recent IT upgrade that will be not be incurred in coming years

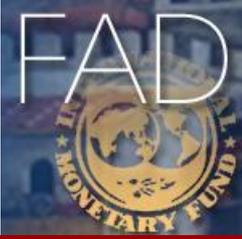
### 2. Understand the spending pressures that will change the cost of delivering current levels of services

- Price pressures: inflation; or specified level of indexation
- Volume pressures: population; number of retirees; numbers of school-age population

### 3. Include any future impact of current or approved policy that are not reflected in the base year

- Recently implemented program that needs to be annualized as it is not fully mature in the base year.
- Recently agreed addition to program

### 4. Aggregate to get overall baseline for a Ministry or spending area

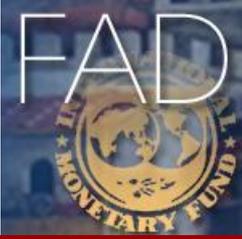


# General Approach

## The level of details

At what level should forward estimates be calculated – at the detailed level of budget appropriation or at more aggregated level?

There is no set rule. The level chosen depends on the composition and drivers of spending. It is necessary to separate components where they are indexed differently, or they have significantly different volume drivers. Similarly, it makes sense to combine components when they have same drivers



## **Specific Issues**



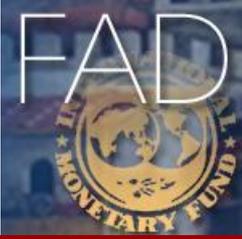
# Specific Issues

## Making volume adjustments

Question: Should all spending be adjusted for volume (e.g. demographic) changes ?

Answer: **Not always.**

- **Some services (e.g. law and order) are inherently discretionary in nature.** Volume changes can be typically treated as policy decisions.  
For these services, no volume adjustment should be made in the baseline
- **Others are mandatory and driven by the number of users.** Examples: Transfer to local government for payment of teacher salaries – function of number of students; Spending on border guards – function of inward migration  
For these types of spending, volume adjustments should be made
- **Other spending items are more difficult as they are a mix of discretionary and non-discretionary.** E.g. new schools that may or may not be built when number of students increases.  
Decision can be based on past trends.



# Specific Issues

## Making price adjustments

- This is often mandated by law
  - E.g. Pensions or family benefits are to increase by inflation plus a coefficient
- In other cases, trade-off exists between complexity and simplicity
  - Simplicity: CPI can be used for all volume adjustments
  - Complexity: specific price indices can be developed for each spending type
- A good rule of thumb is to use a broad measure of inflation (CPI), unless there is a compelling reason to do otherwise
  - Example: Price of delivering health care or pharmaceuticals rise faster than CPI.



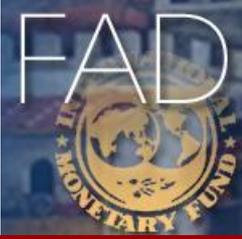
# Specific issues

## The treatment of wages

Trade-off in projecting wages: Avoid prejudicing future wage negotiations, while keeping estimates as realistic as possible

Approaches differ and depend on wage bargaining context:

- **Australia. Decentralized public wage bargaining system, i.e. agency sets wage**  
Baseline salary component of each agency is adjusted by an index based on the increase in the minimum wage. Agency heads can negotiate the level of salary increases with their staff. Any increase beyond the level of the index adjustment requires an offsetting reduction in the number of staff for the agency.
- **Austria. Centralized public wage bargaining system.** Expected wage increase is generally tied to inflation. But this is not made transparent in the baselines in order not to prejudge negotiations with the union. When wage increases exceed the price adjustment included in the MTBF, line ministries are expected to make savings elsewhere in order to stay within their ceiling.
- **South Africa. Centralized public wage bargaining system.** Government is transparent about medium-term wage assumption, which is to budget according to inflation, effectively setting the expectation that wages will grow with inflation.



# Specific issues

## Capex baseline

Challenge 1: What constitute existing policy or when is a project considered approved?

**Major projects:** projects move through a number of stages (development plans, feasibility study, etc) before decision is taken.

Need to identify the crucial decision point? Government approval on the basis of sound cash-flow requirements

**Minor projects:** current (real) level can be used as baseline, esp. when spending has been stable

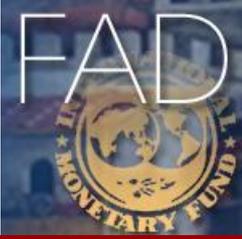
Challenge 2: How to project capex.

**Major projects:** Rely on estimated spending profile of each project. Costs and timing need to be continuously adjusted.

**Minor projects and current spending:** Use standard forecasting method, i.e. adjust base for one-off and parameter changes. In addition, the associated maintenance costs for each major project should be added to forward estimates of current spending

Challenge 3: Where should the threshold be drawn?

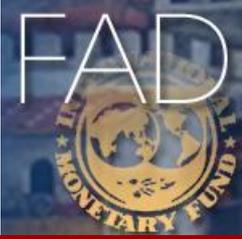
# **How to prepare baselines: the case of Australia**



# The example of Australia

## A short background

- **Three year no policy change baselines first prepared in 1987**
  - Baselines published with the budget estimates for that year
  - Baselines prepared by the Department of Finance
  - Methodology
    - Price indexation
    - Limited volume adjustments
    - Aggregate allowance to offset potential understatement of 1 per cent of spending per annum
  - Used as the starting point for the next year's budget process
  - Baselines maintained and adjusted for policy decisions and changes in prices and volumes

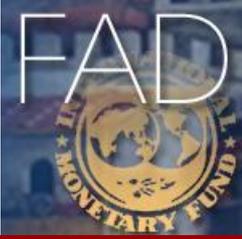


# The example of Australia

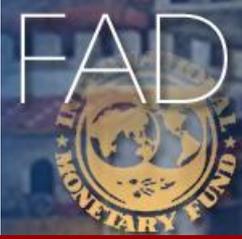
## A short background

- **Preparation of no policy change baselines transferred to line ministries in 1997**
- **Department of Finance validates baselines to ensure consistency with no policy change**
- **Line ministries developed more detailed methodologies using administrative data**
  - Prepared at the level of program, function, economic type, appropriation
- **Economic parameters provided by Department of Finance**

# The example of Australia – preparing baselines



- **Mandatory programs with no expiry date**
  - eg welfare programs, health benefits, student loans
  - baselines are prepared on the basis of legal entitlements and expected demand
- **Mandatory programs where legislation has an expiry date**
  - eg transfers to other levels of government for schools and hospitals
  - forecasts use formula set out in legislation - beyond expiry date baselines use assumptions agreed by ministers
- **Discretionary programs**
  - baselines provide for price adjustment and, in a small number of cases, for volume adjustment
  - new programs are either ongoing or have a set termination date



## The example of Australia – baselines the basis for the budget process

- **Each Budget includes estimates for the next three years prepared on a no policy change basis**
- **In the 2017 Budget, the estimates published for the first forward year became the starting point for consideration in the 2018 Budget**
  - **These estimates were adjusted in the preparation of the budget for:**
    - changes in economic parameters;
    - changes in the uptake for some programs; and
    - the impact of policy decisions
- **These changes were published as part of the 2018 Budget (see table)**

# The example of Australia

**Table 2: Reconciliation of expense estimates**

	Estimates			Projections	Total
	2017-18	2018-19	2019-20	2020-21	
	\$m	\$m	\$m	\$m	\$m
<b>2017-18 Budget expenses</b>	<b>464,262</b>	<b>486,863</b>	<b>503,198</b>	<b>522,907</b>	<b>1,977,230</b>
<b>Changes from 2017-18 Budget to 2017-18 MYEFO</b>					
Effect of policy decisions(a)	877	40	384	98	1,398
Effect of parameter and other variations	1,798	-1,392	-2,556	-5,687	-7,837
<b>Total variations</b>	<b>2,675</b>	<b>-1,351</b>	<b>-2,172</b>	<b>-5,589</b>	<b>-6,437</b>
<b>2017-18 MYEFO expenses</b>	<b>466,937</b>	<b>485,512</b>	<b>501,026</b>	<b>517,318</b>	<b>1,970,792</b>
<b>Changes from 2017-18 MYEFO to 2018-19 Budget</b>					
Effect of policy decisions(a)	1,530	1,064	735	254	3,582
Effect of economic parameter variations					
Total economic parameter variations	1,105	1,777	1,932	2,126	6,940
<i>Unemployment benefits</i>	-152	-190	-157	-126	-626
<i>Prices and wages</i>	180	584	949	1,110	2,823
<i>Interest and exchange rates</i>	37	87	5	31	160
<i>GST payments to the States</i>	1,040	1,296	1,135	1,111	4,583
Public debt interest	88	10	83	-124	58
Program specific parameter variations	2,637	-2,045	-1,832	-2,530	-3,770
Other variations	-3,509	2,266	2,228	1,203	2,187
<b>Total variations</b>	<b>1,851</b>	<b>3,072</b>	<b>3,145</b>	<b>929</b>	<b>8,998</b>
<b>2018-19 Budget expenses</b>	<b>468,788</b>	<b>488,584</b>	<b>504,171</b>	<b>518,247</b>	<b>1,979,791</b>

(a) Excludes secondary impacts on public debt interest of policy decisions and offsets from the Contingency Reserve for decisions taken.