

# Construction Cost Indexes

Presentation to NSW Local Roads  
Congress  
*May 2011*

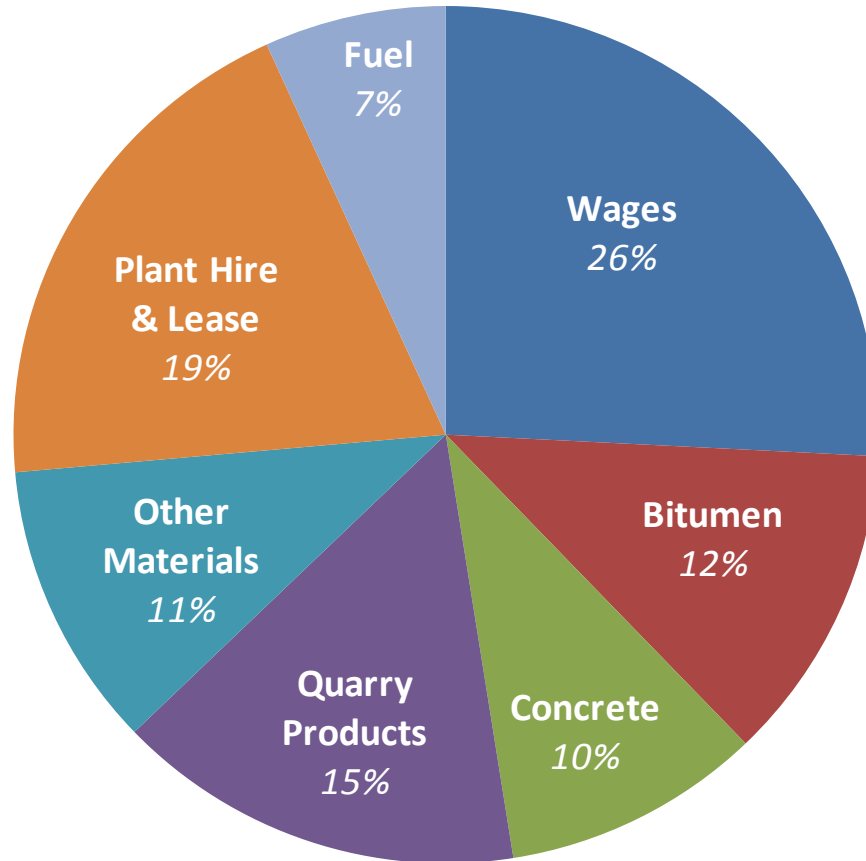
**Nigel Hatcher**

Director – Macromonitor Pty Ltd

# Topics

- How we produce cost escalation indexes
  - the drivers of costs
- How to use cost escalation indexes
- Outlook for construction activity and other cost drivers
- Forecasts for cost items
- Summary of overall cost outlook

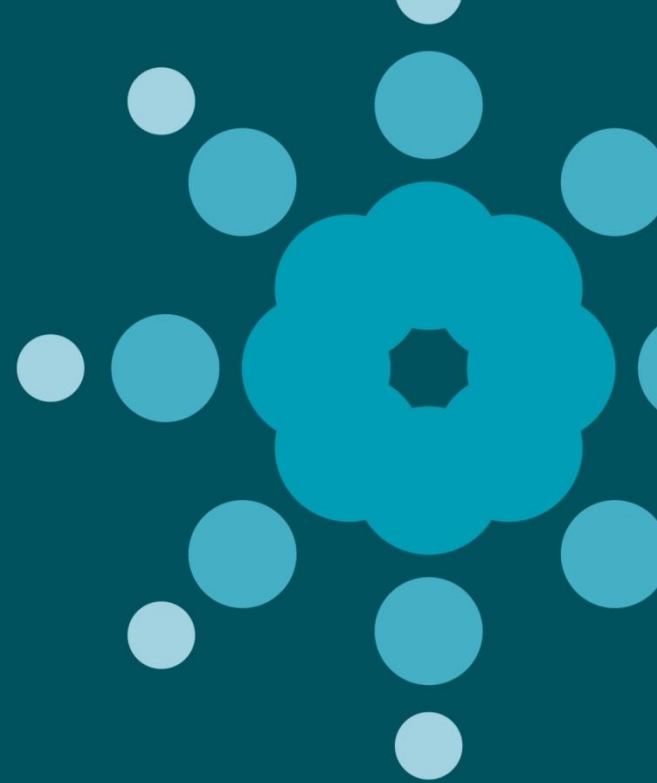
## Assumed Composition of Road Construction Costs All Roads - Total Australia



Source: BTRE & Macromonitor

# Drivers

- The level of, and growth in, road works
- Competing demand for inputs
- Supply capacity
- General inflation
- Other specific influences:
  - oil / fuel prices
  - world metals prices
  - exchange rates
  - award wage increases
  - announced increases from suppliers
- IMPORTANCE OF CONTEXT



## Examples of Applying Cost Escalation Indexes

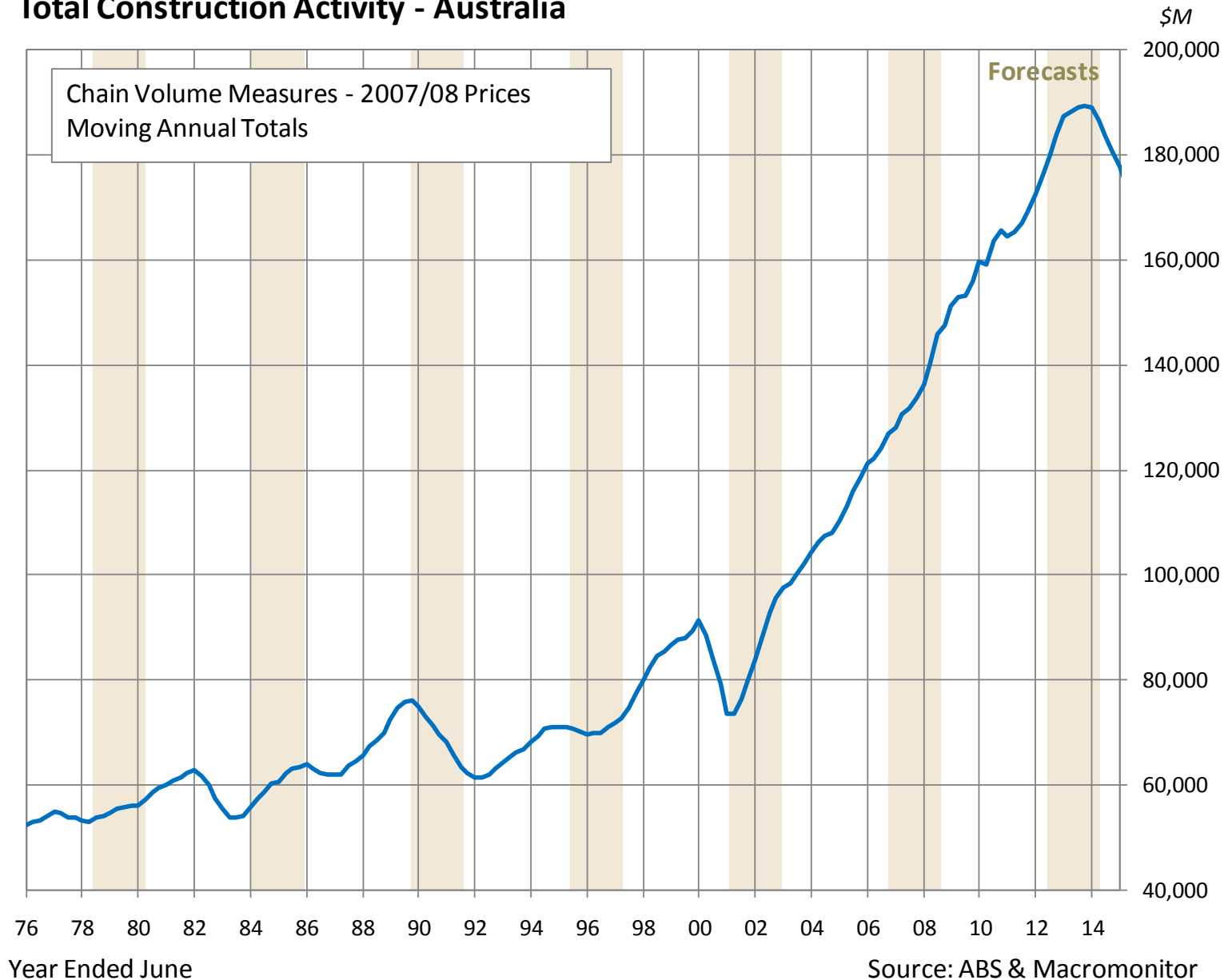
		June 2011	June 2012	June 2013	June 2014	June 2015	June 2016	June 2017	June 2018	June 2019	June 2020
Readymixed Concrete Costs	\$/m3	230	242	258	271	278	289	306	326	342	351
	Ann. % Ch.		5.3	6.5	5.0	2.5	4.0	6.0	6.5	5.0	2.5
Concrete Index	1989/90=100	171.8	180.9	192.7	202.3	207.4	215.7	228.7	243.6	255.8	262.2
	Ann. % Ch.		5.3	6.5	5.0	2.5	4.0	6.0	6.5	5.0	2.5

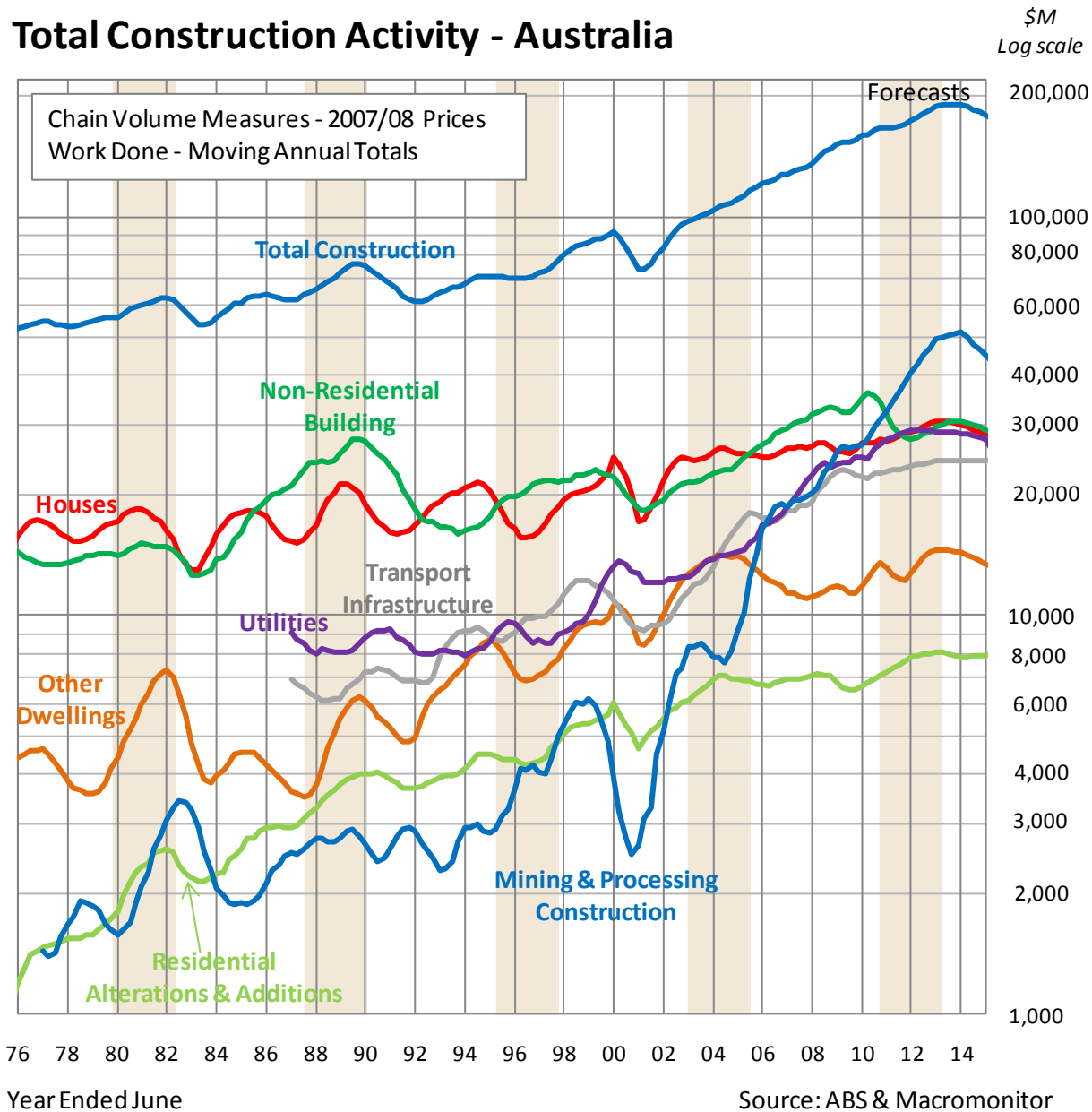
		June 2011	June 2012	June 2013	June 2014	June 2015	June 2016	June 2017	June 2018	June 2019	June 2020
Total cost road pavement work	\$/km	300,000	319,219	332,947	339,536	349,054	366,992	386,211	398,658	414,399	418,060
	Ann. % Ch.		6.4	4.3	2.0	2.8	5.1	5.2	3.2	3.9	0.9
Total Road Pavement Construction Index	1998/99=100	163.9	174.4	181.9	185.5	190.7	200.5	211.0	217.8	226.4	228.4
	Ann. % Ch.		6.4	4.3	2.0	2.8	5.1	5.2	3.2	3.9	0.9

Source: Macromonitor

# Total Construction Activity - Australia



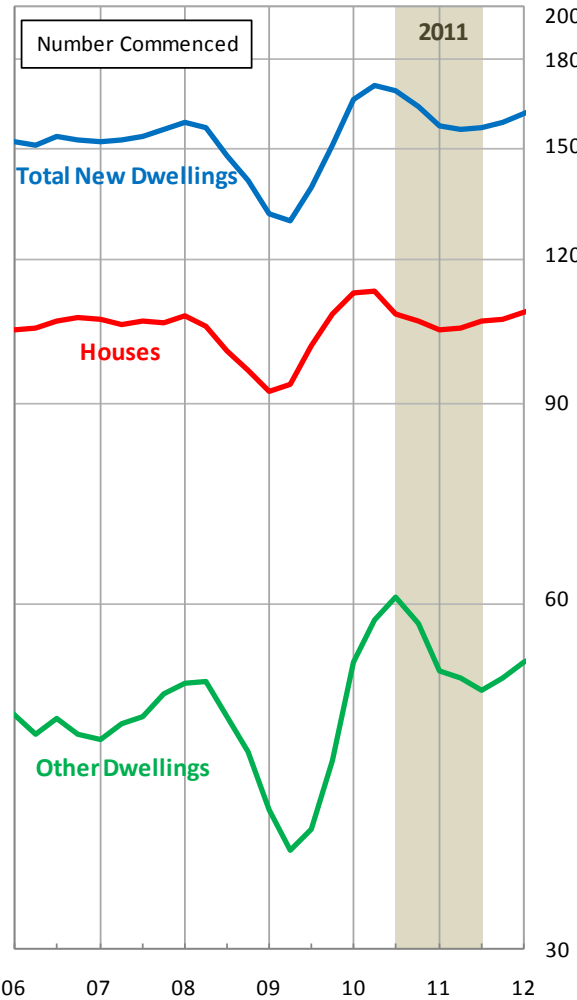
# Total Construction Activity - Australia



Source: ABS & Macromonitor

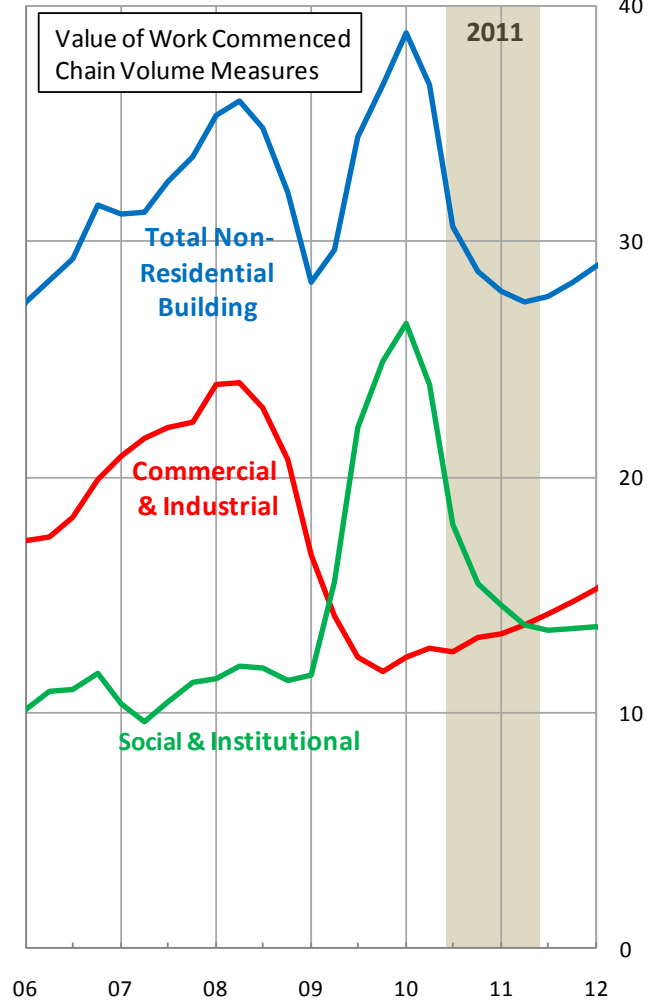
# Short Term Outlook

## Dwellings

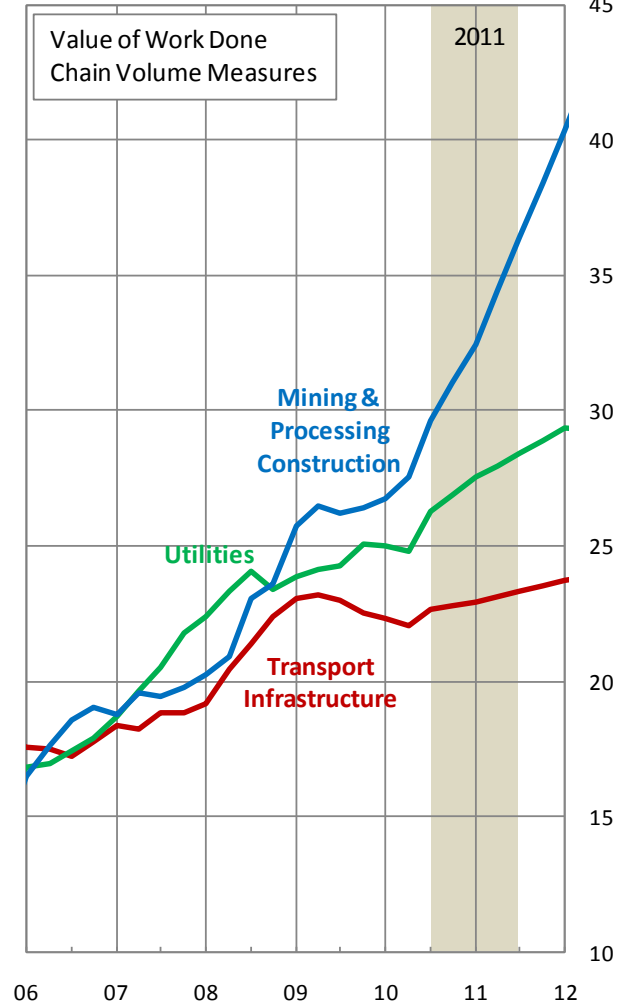


Years Ended June

## Non-Residential Building



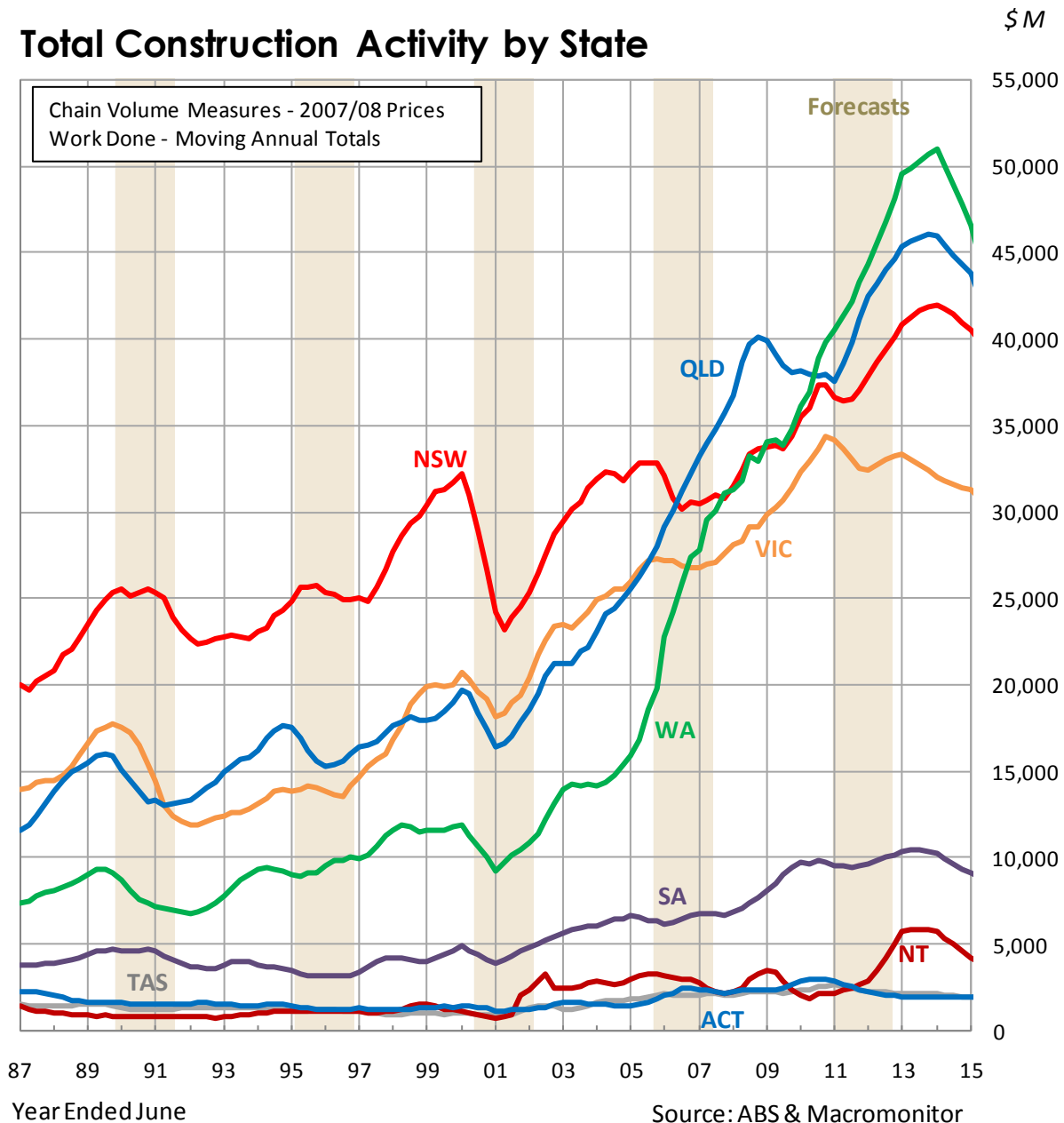
## Engineering Construction



Source: ABS & Macromonitor

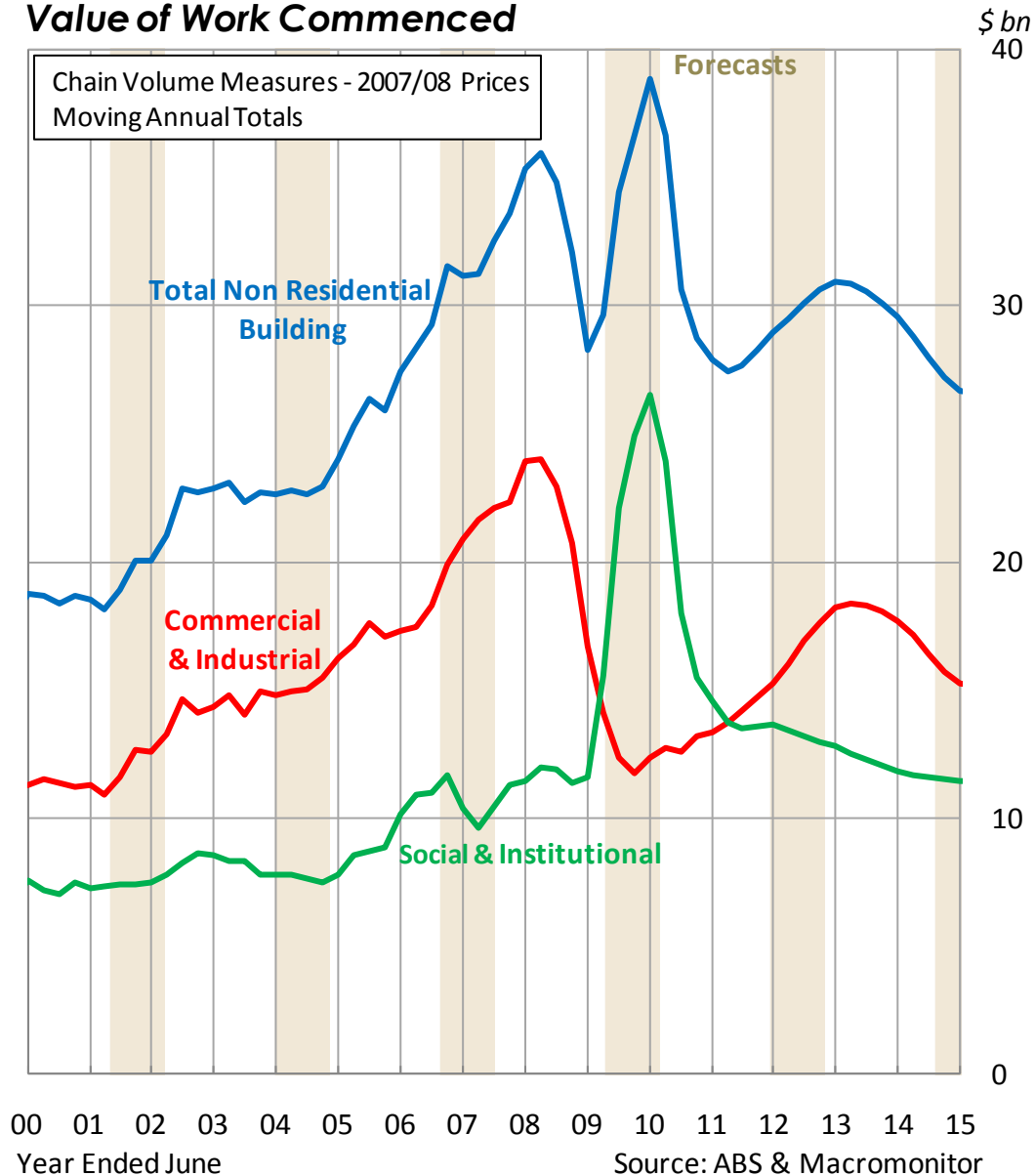


# Total Construction Activity by State

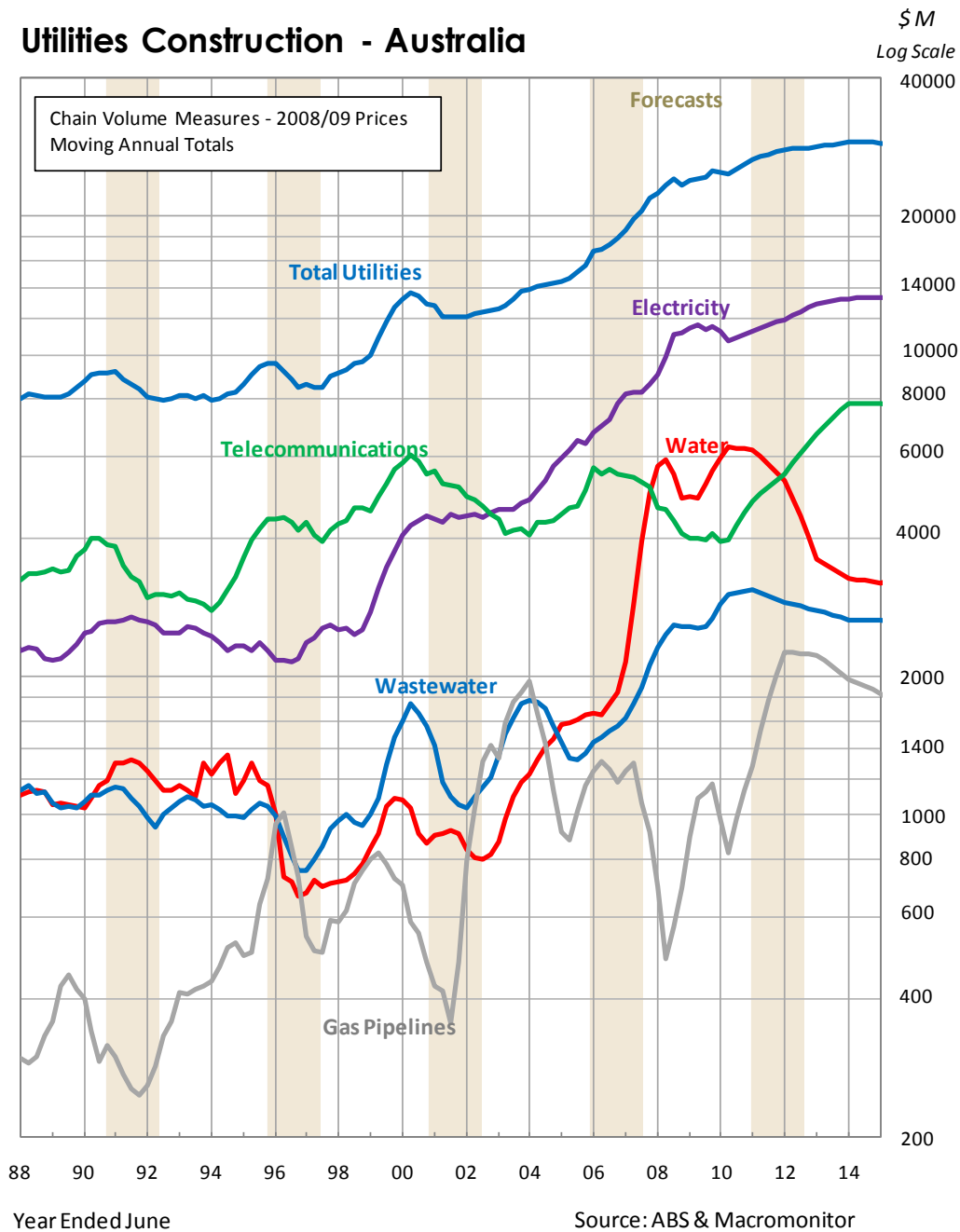


# Non-Residential Building Construction - Australia

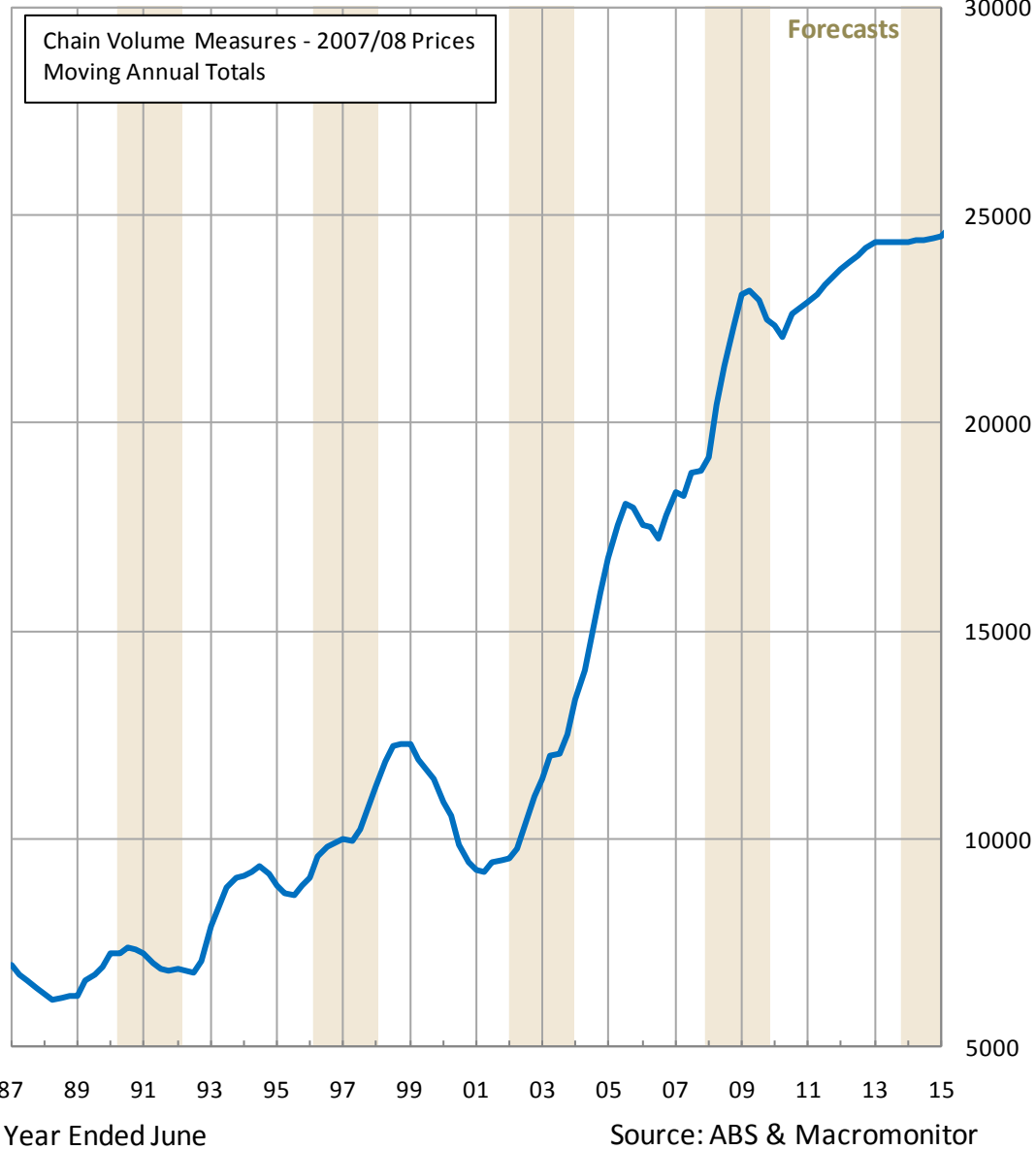
## Value of Work Commenced



# Utilities Construction - Australia

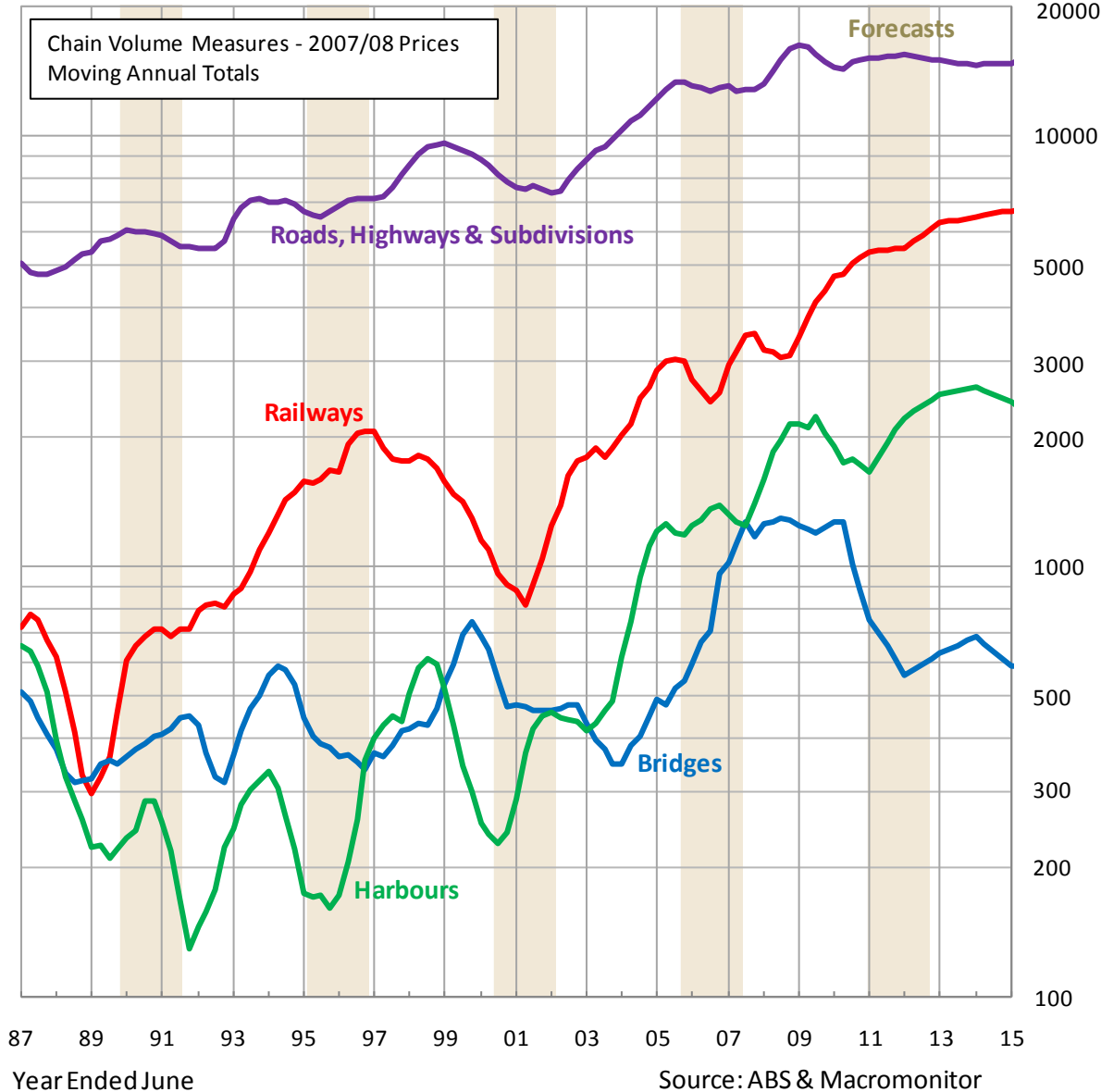


# Transport Infrastructure Construction - Australia

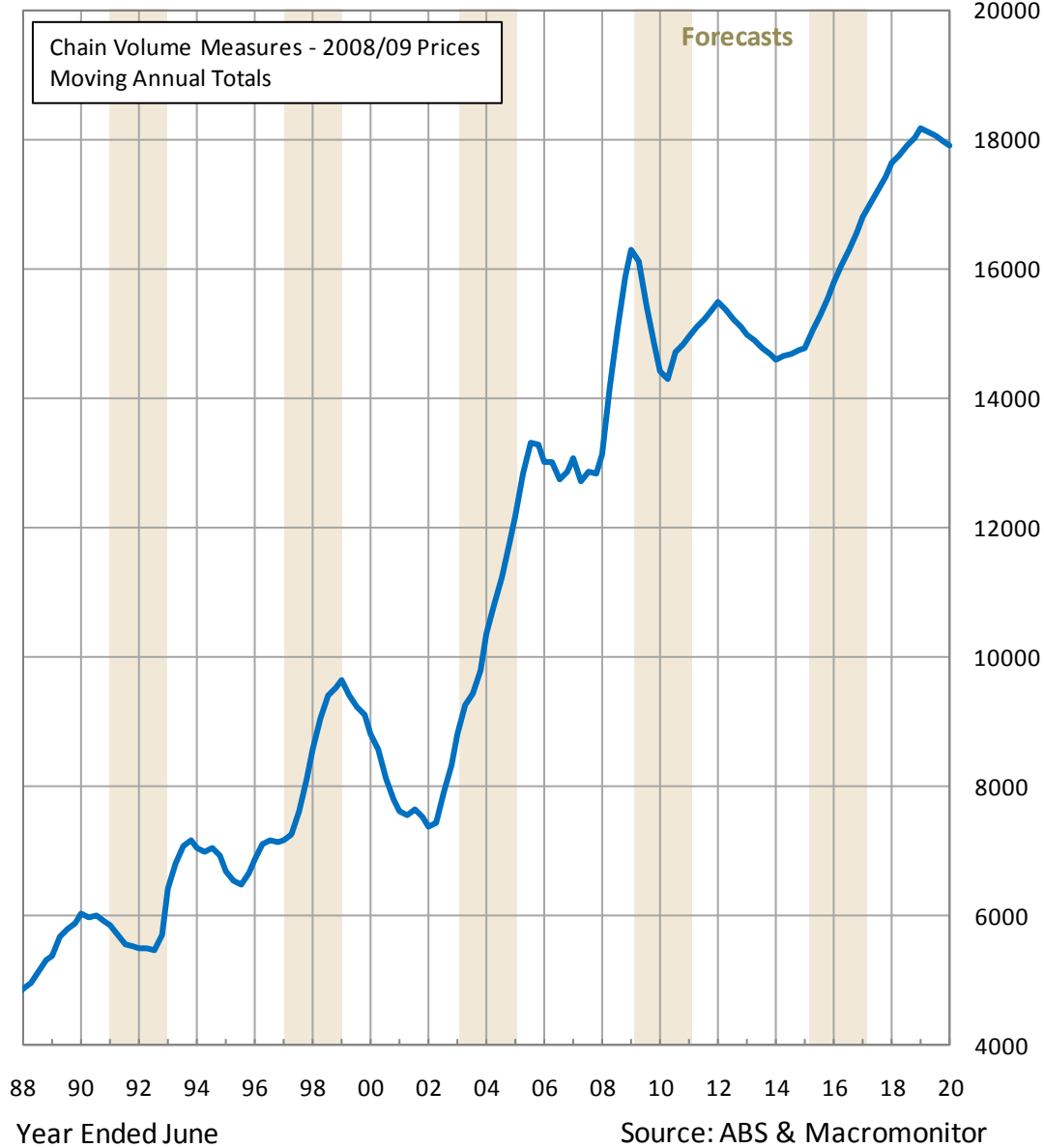


# Transport Infrastructure Construction - Australia

\$M  
Log Scale

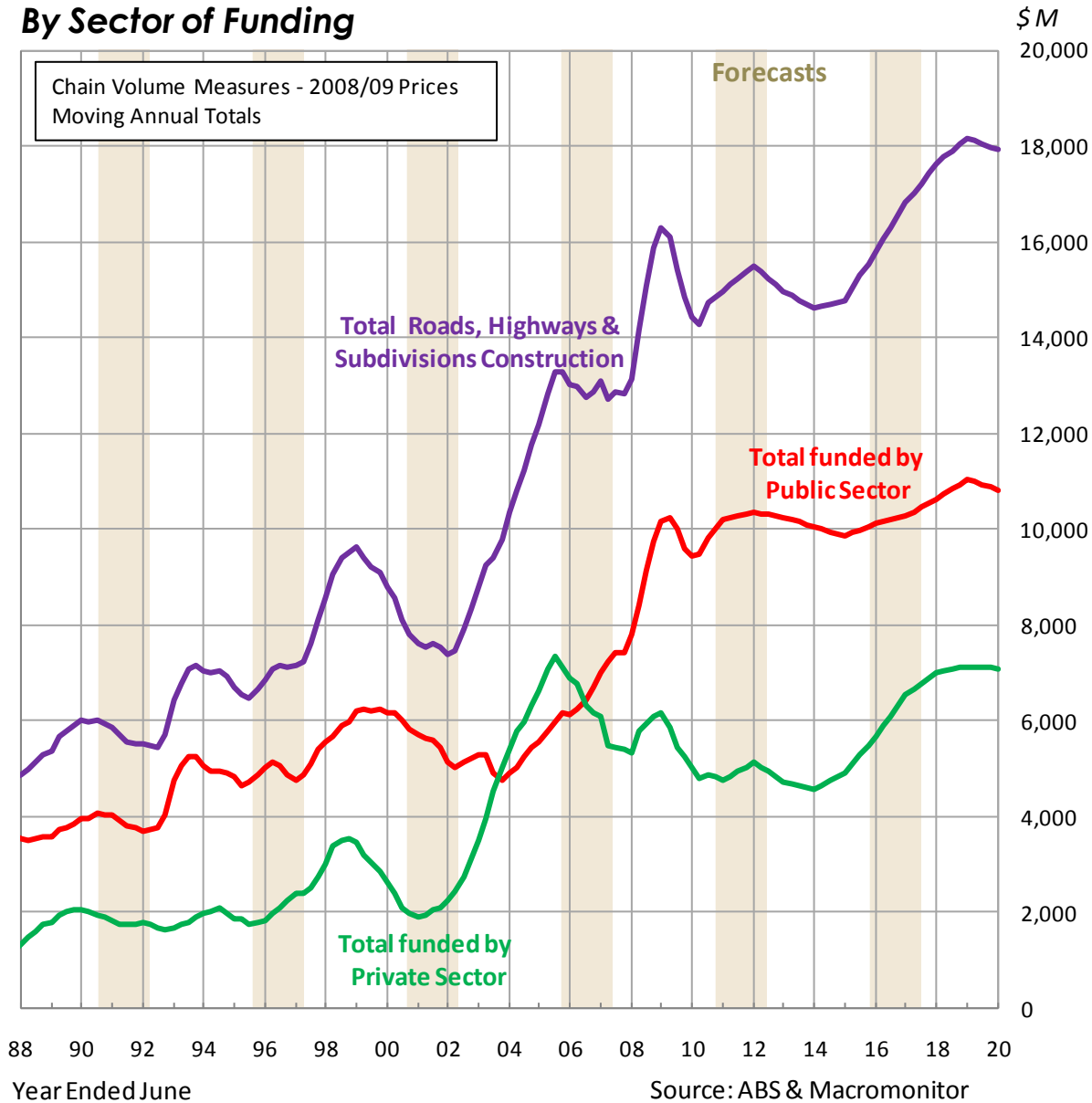


# Road Construction - Australia

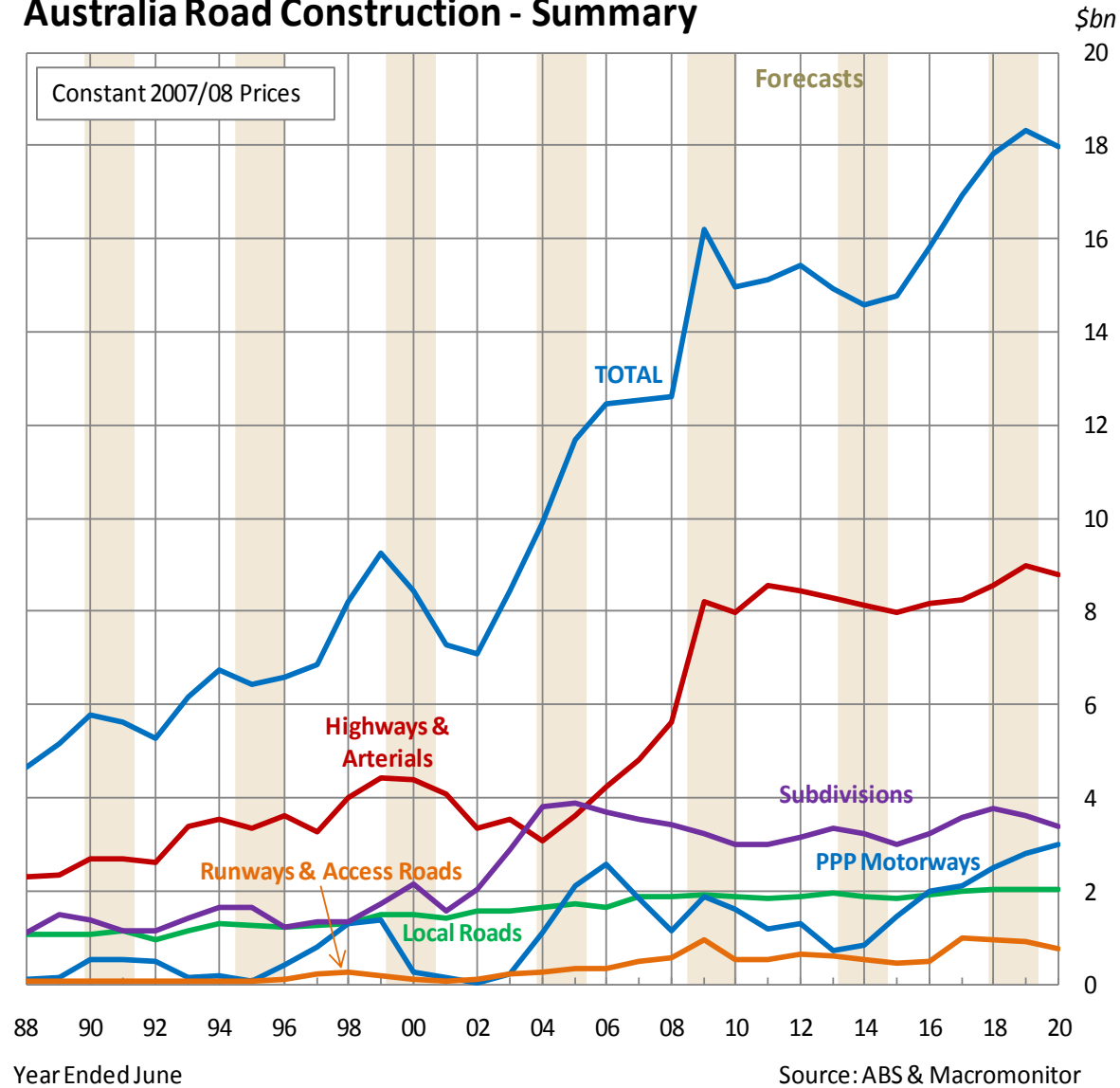


# Road Construction - Australia

## By Sector of Funding

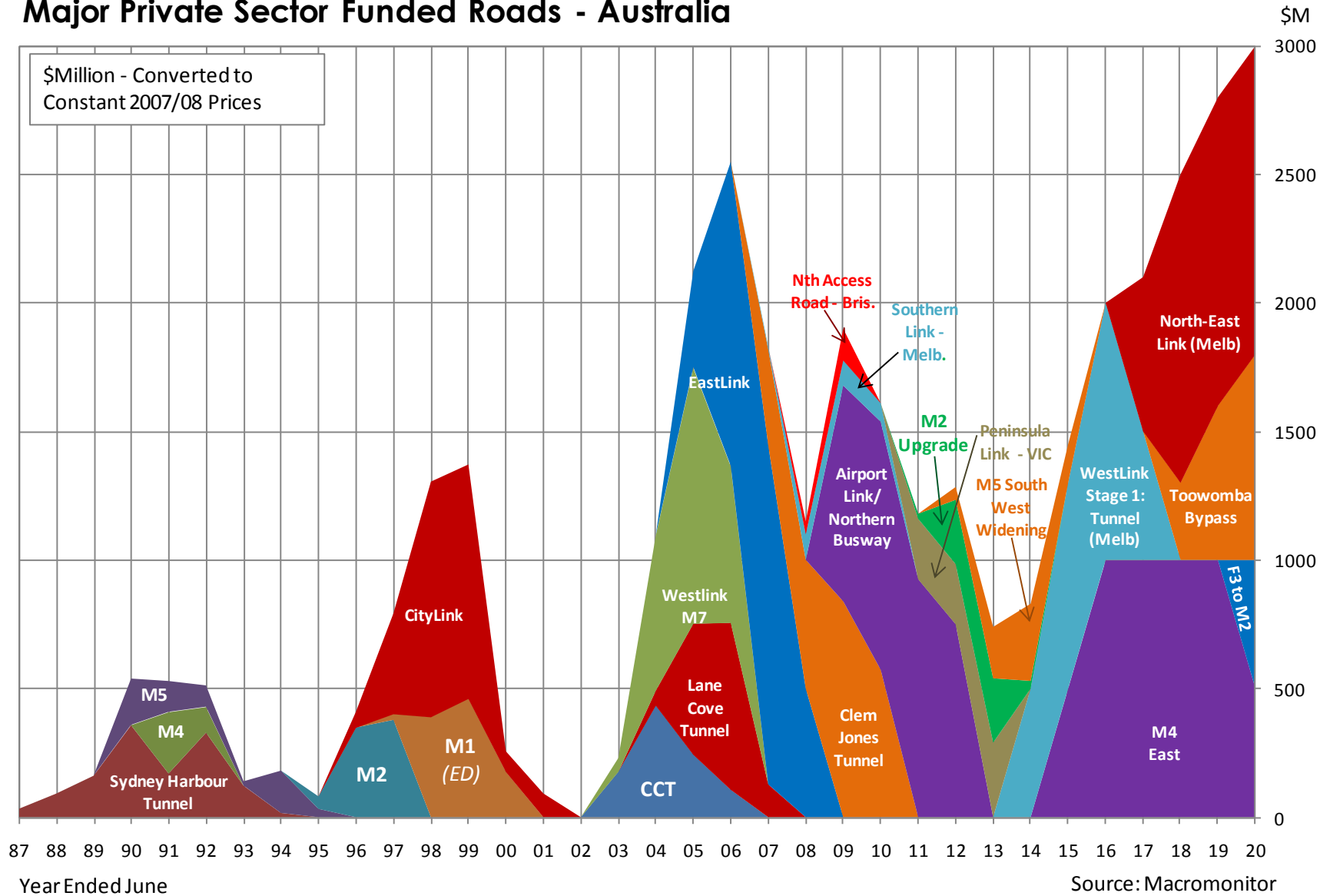


# Australia Road Construction - Summary

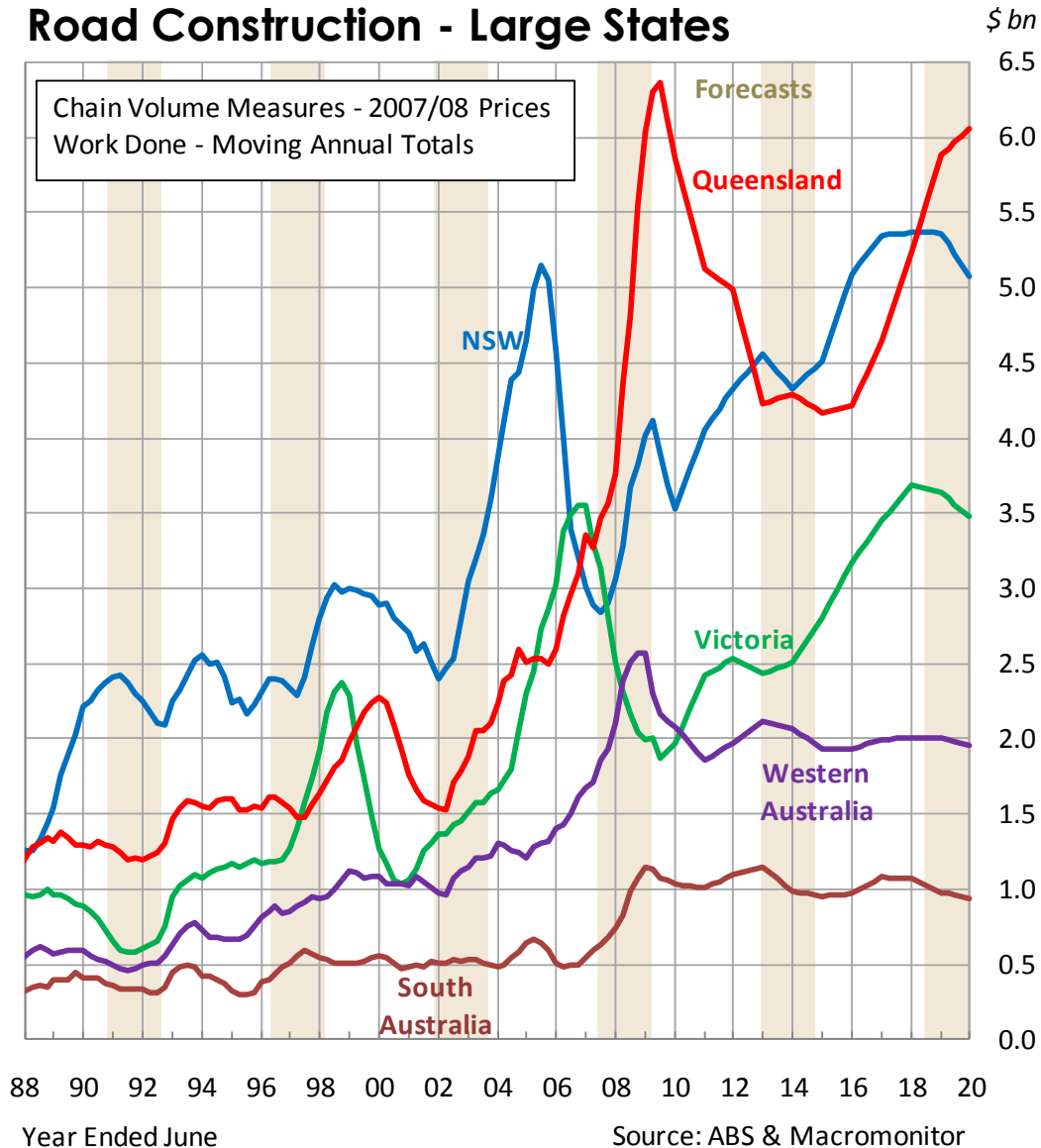




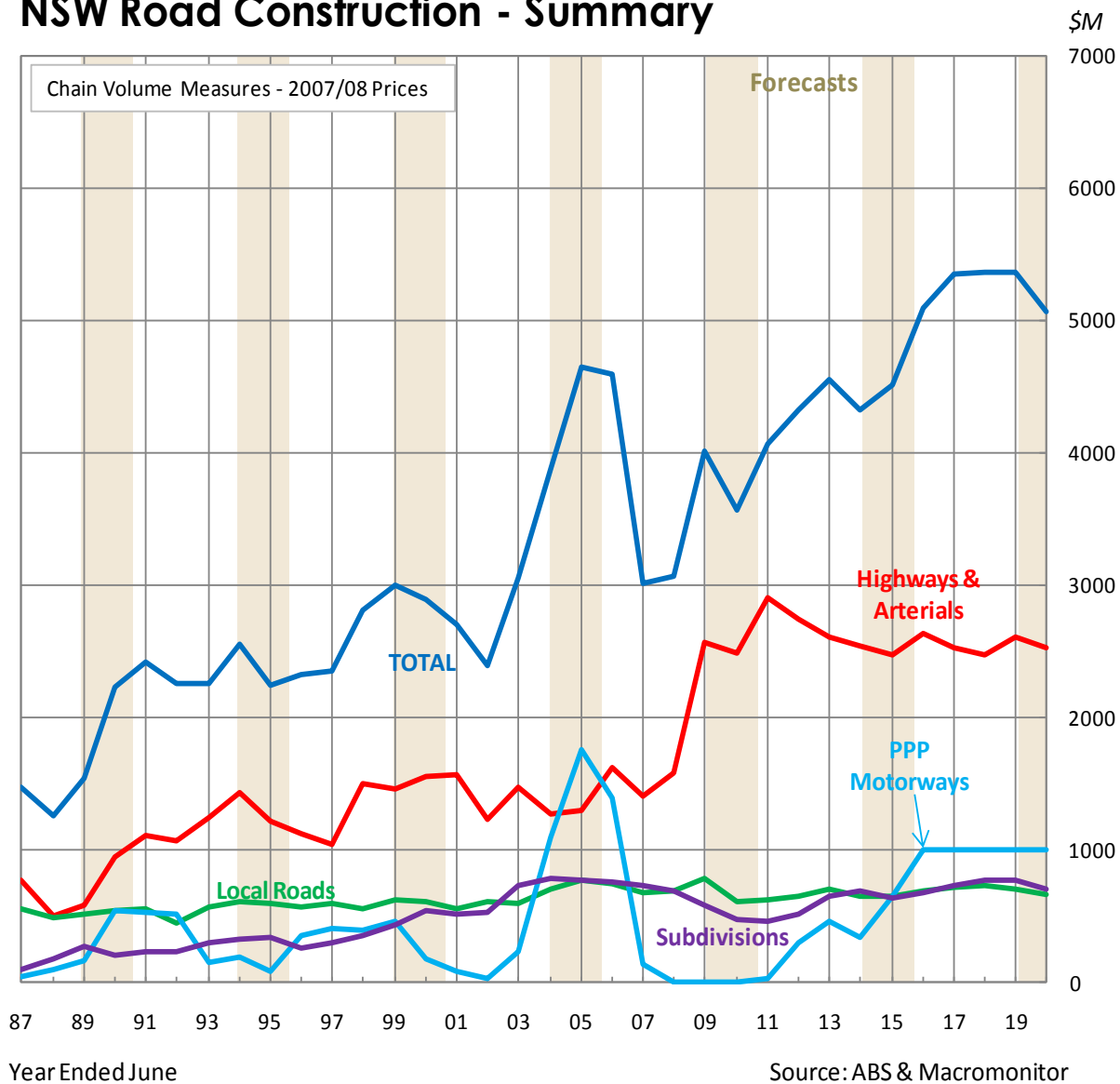
# Major Private Sector Funded Roads - Australia



# Road Construction - Large States

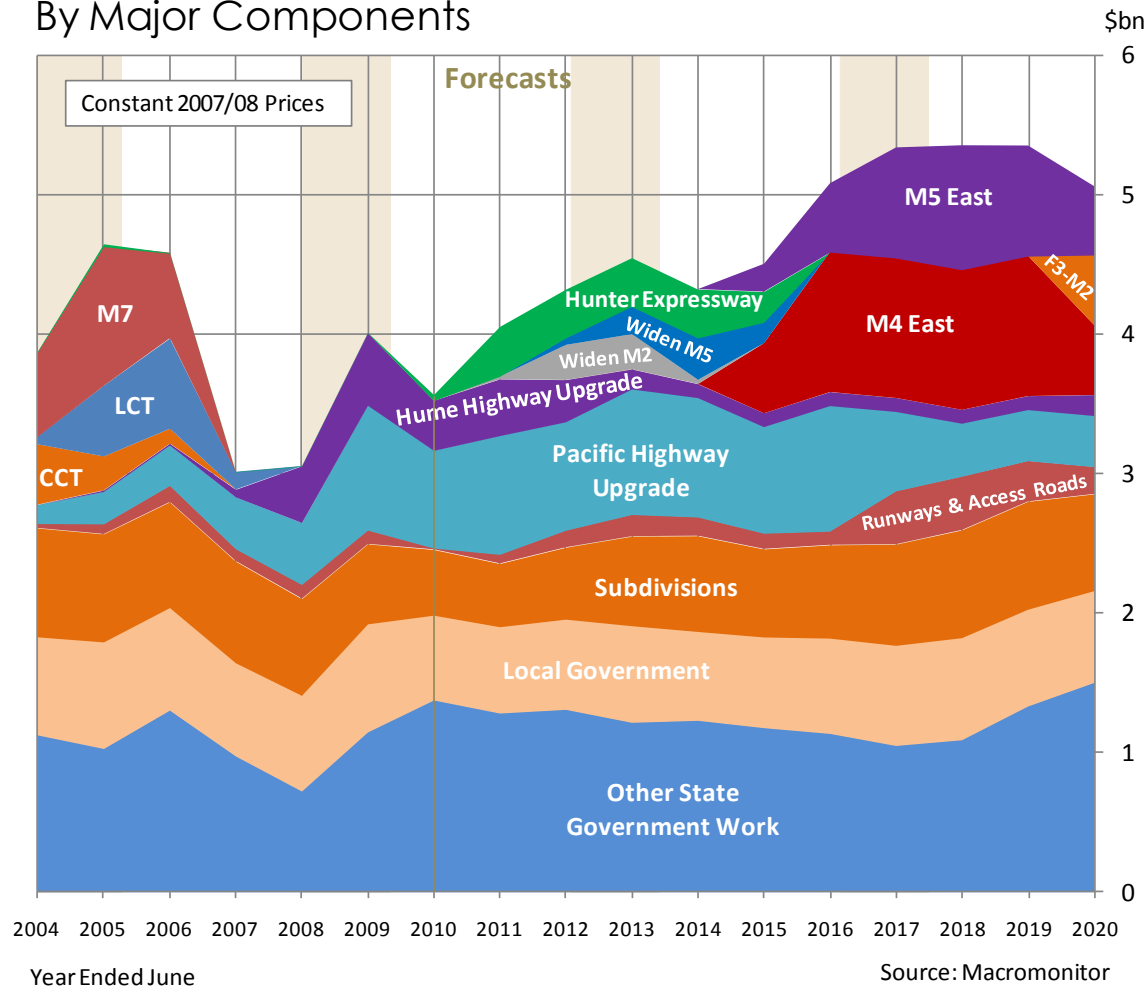


# NSW Road Construction - Summary

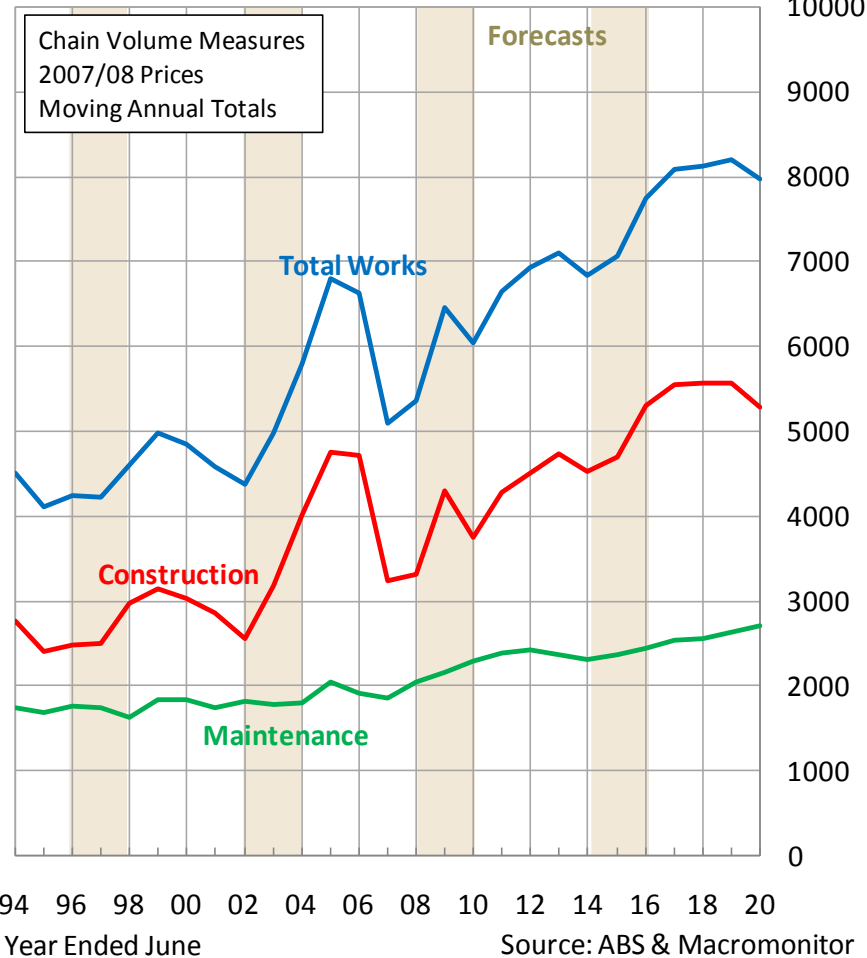


# Road Construction Work Done - New South Wales

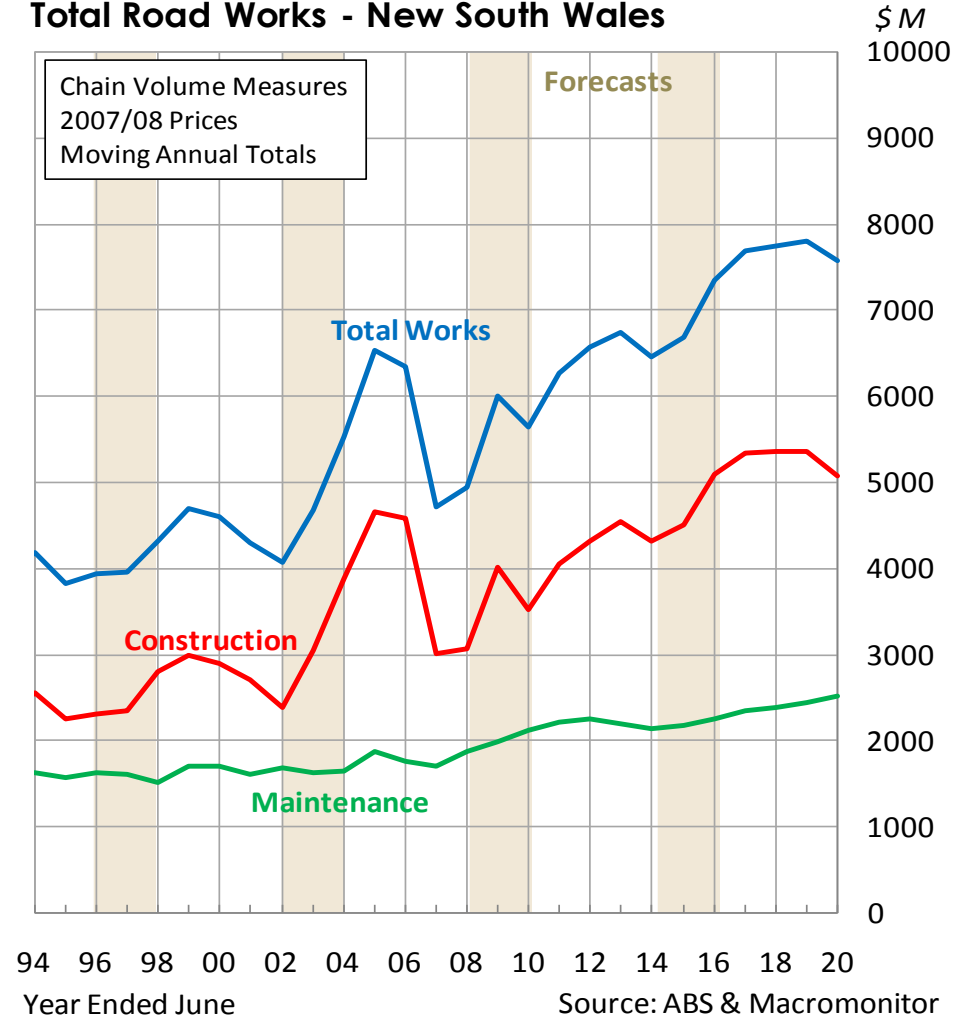
## By Major Components



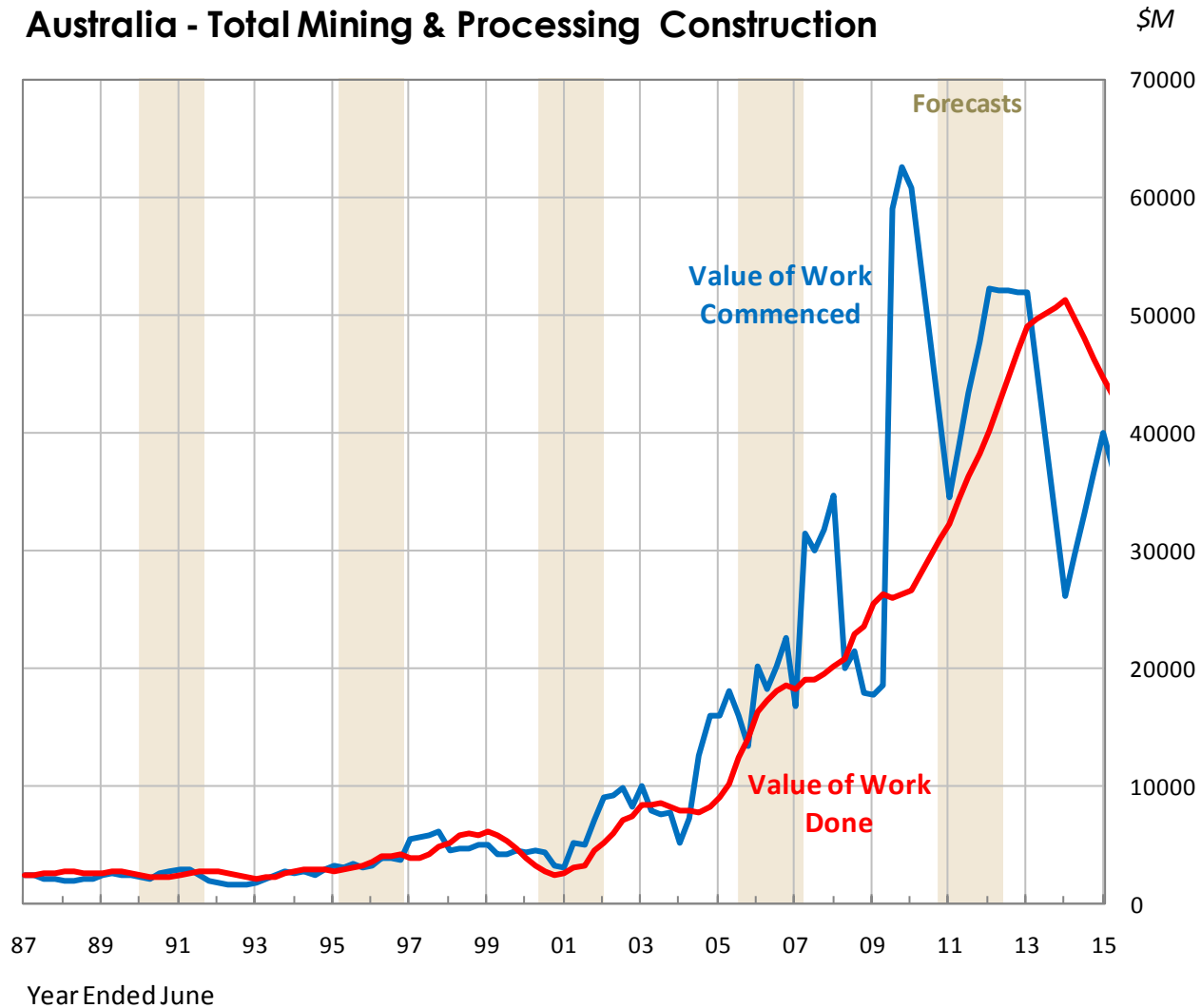
## Total Road & Bridge Works - New South Wales



## Total Road Works - New South Wales

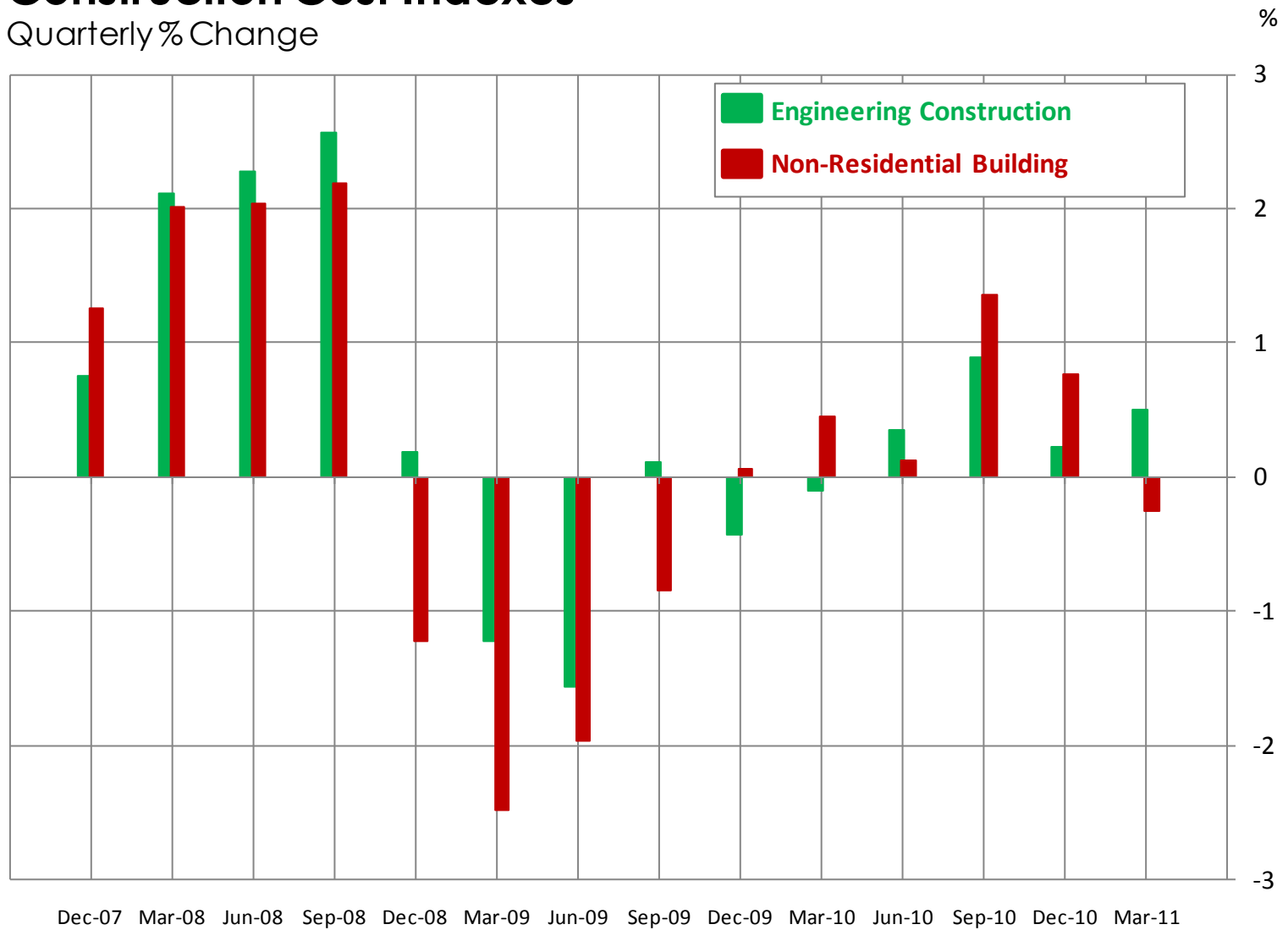


## Australia - Total Mining & Processing Construction



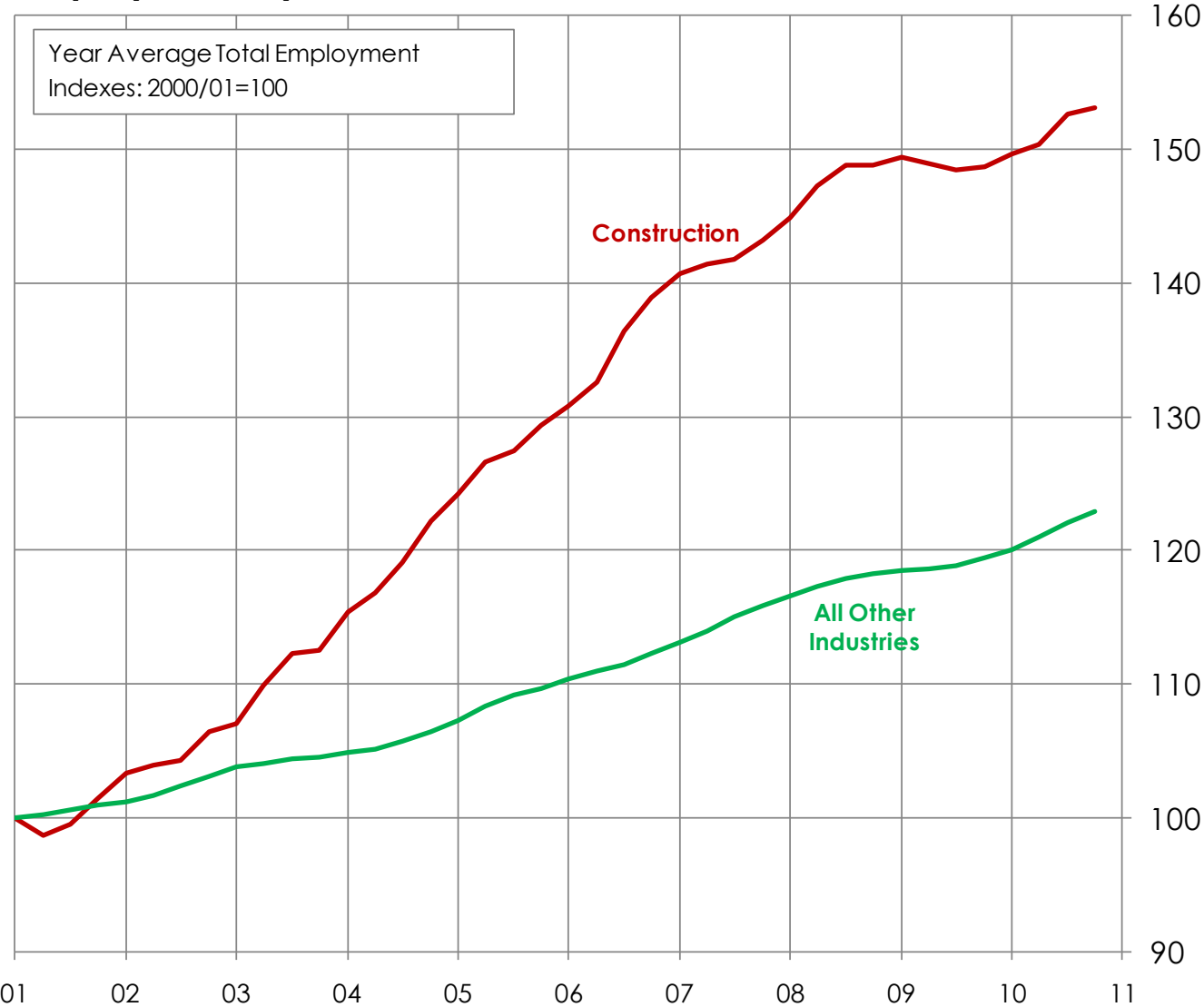
# Construction Cost Indexes

Quarterly % Change



Source: ABS

# Employment by Sector

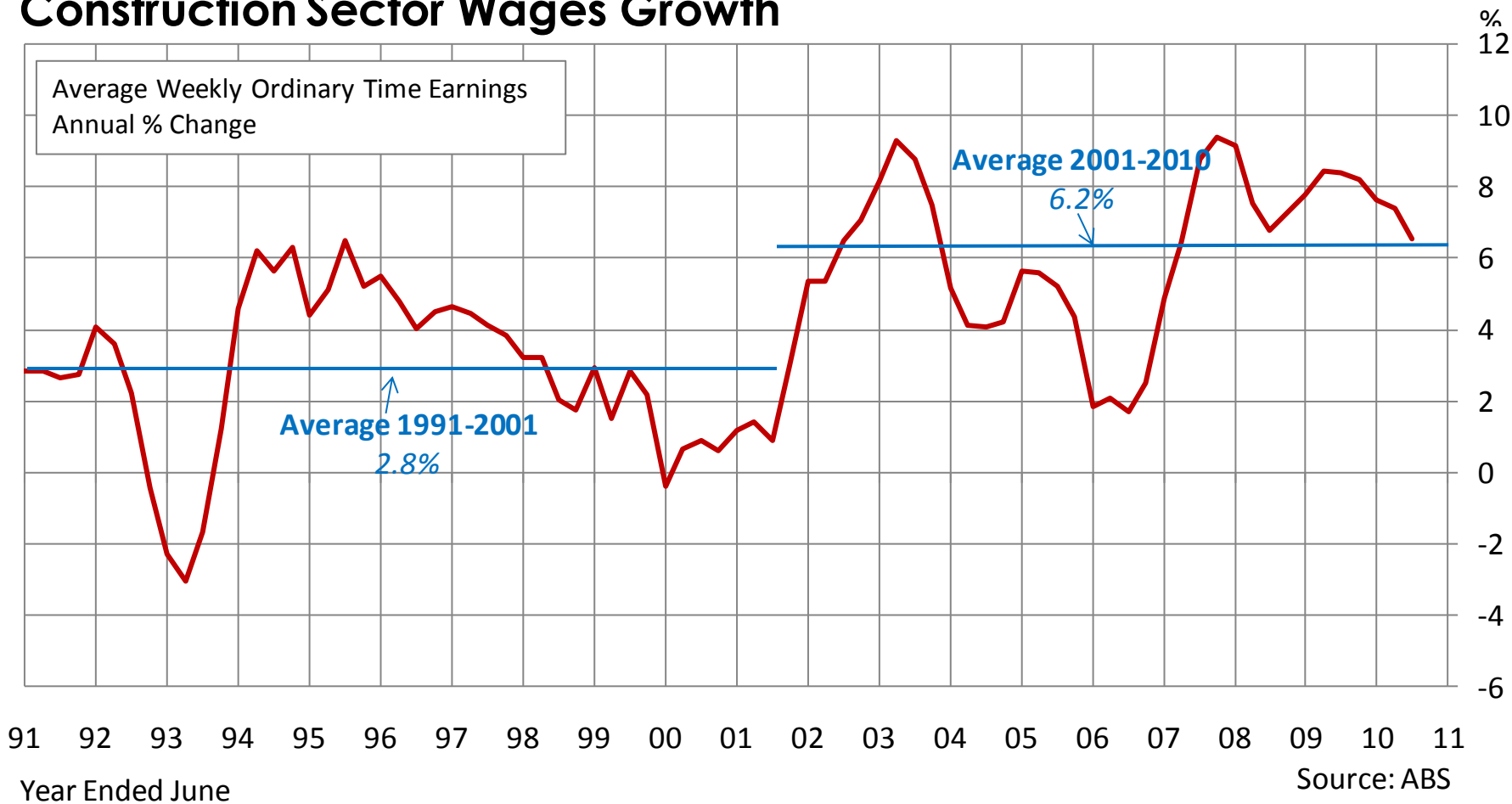


Year Ended June

Source: ABS & Macromonitor

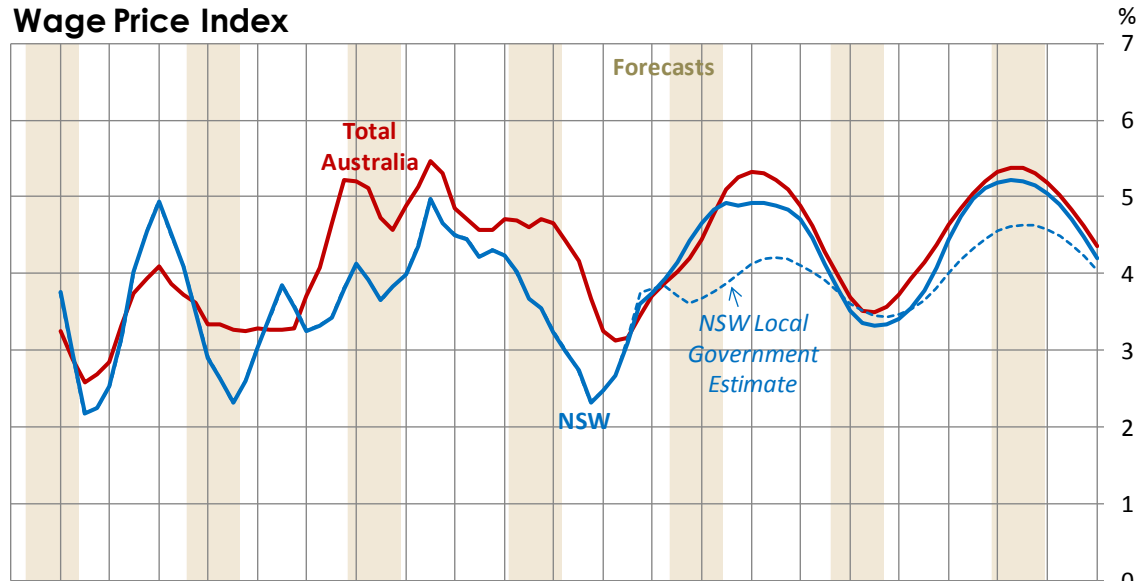


# Construction Sector Wages Growth

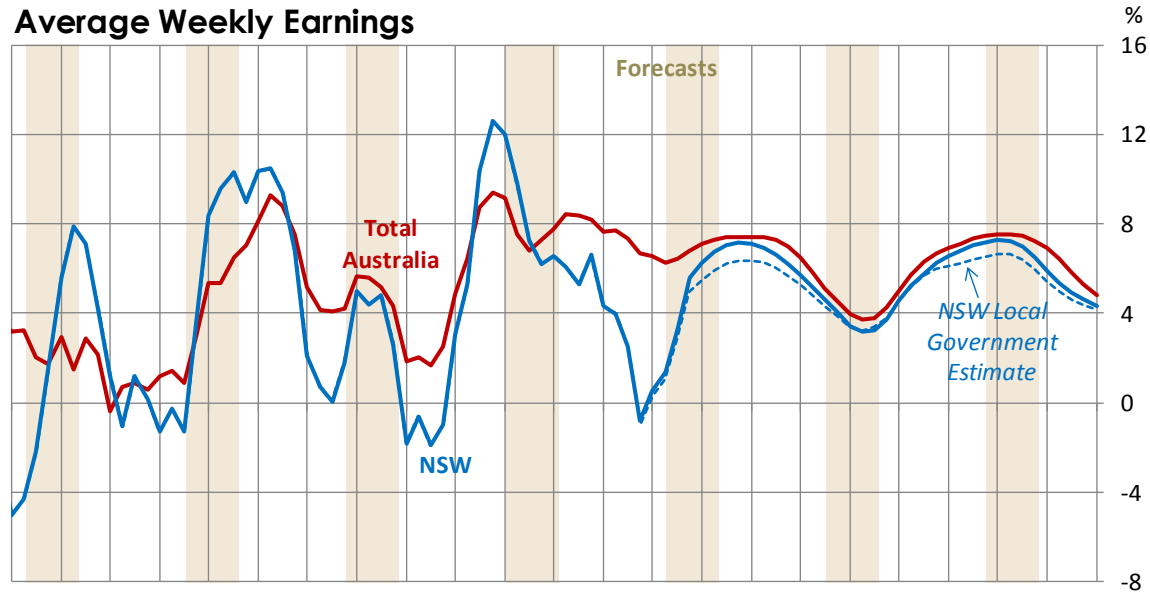


# Construction Sector Wages – Ann. % Change in Annual Averages

## Wage Price Index



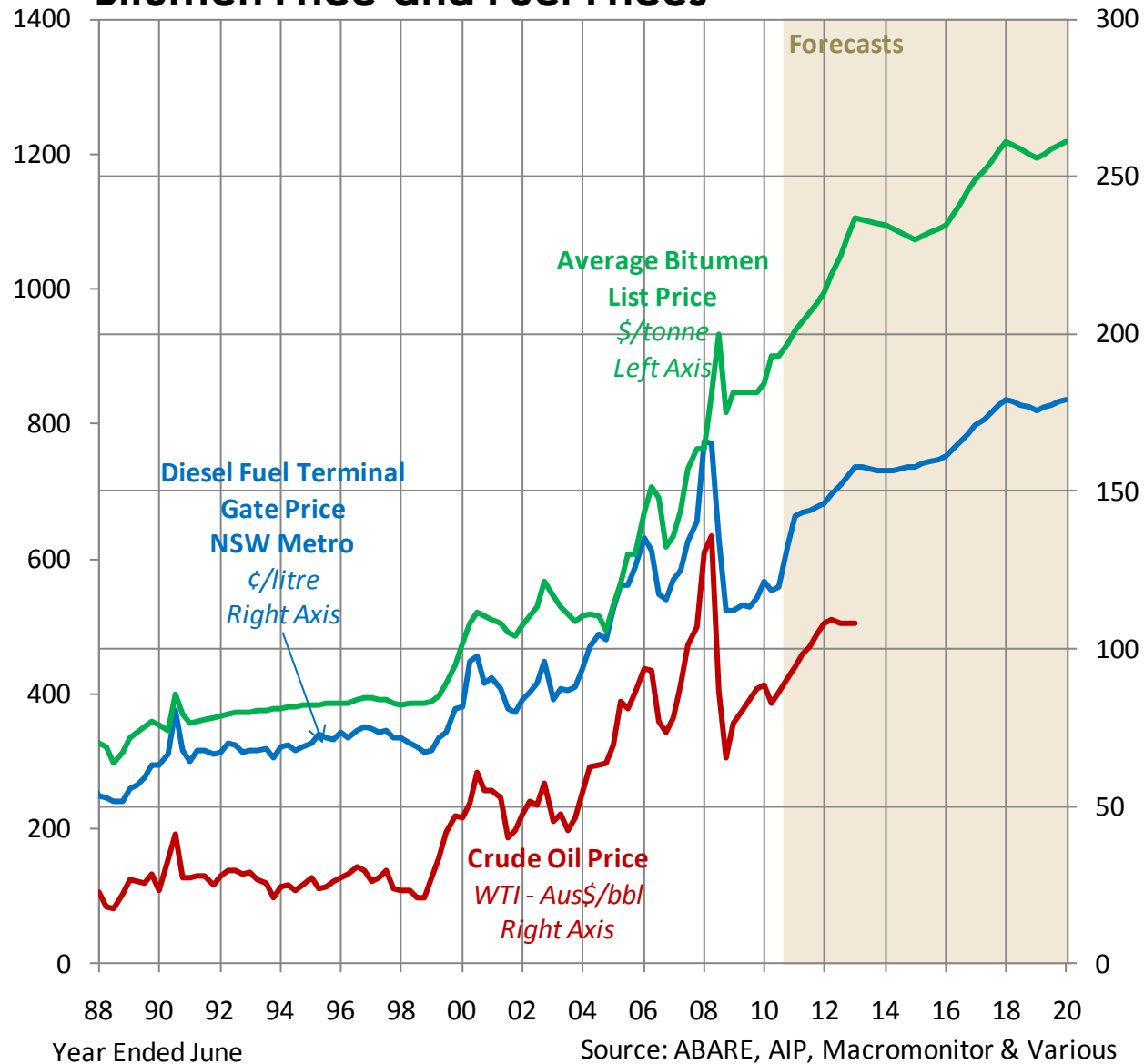
## Average Weekly Earnings



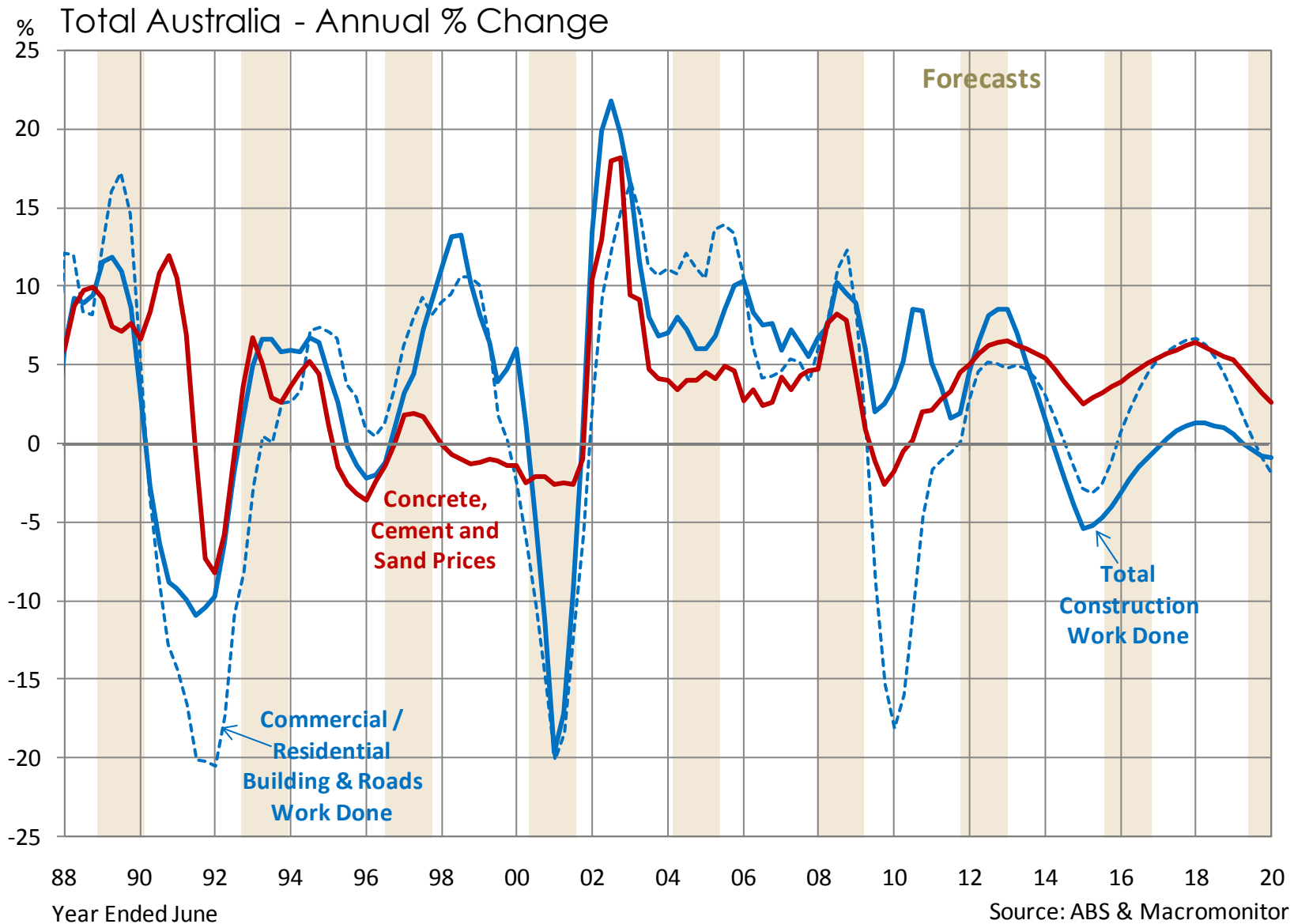
98 99 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20  
Year Ended June

Source: ABS & Macromonitor

# Bitumen Price and Fuel Prices

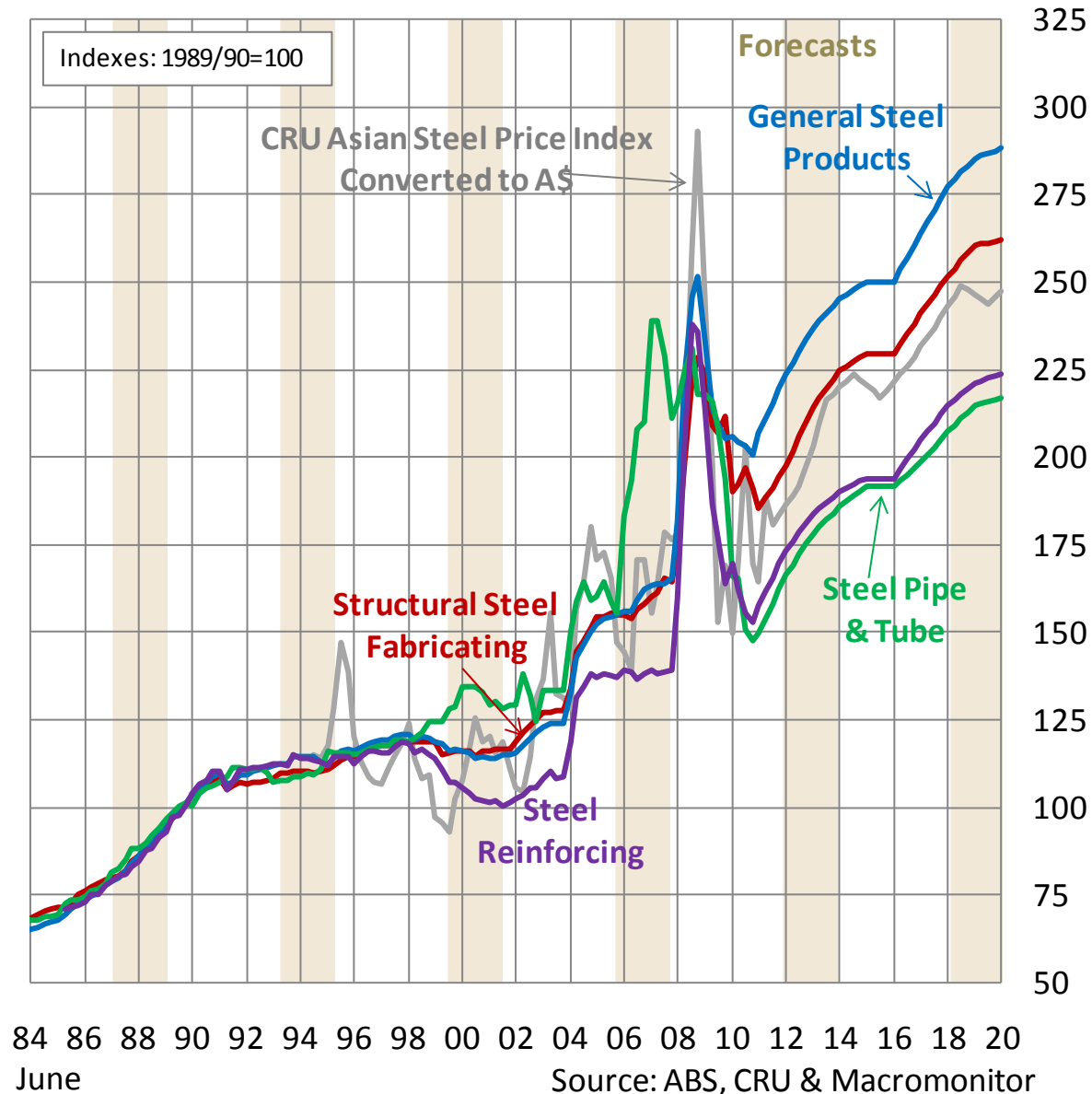


# Concrete, Cement & Sand Prices and Construction Work Done

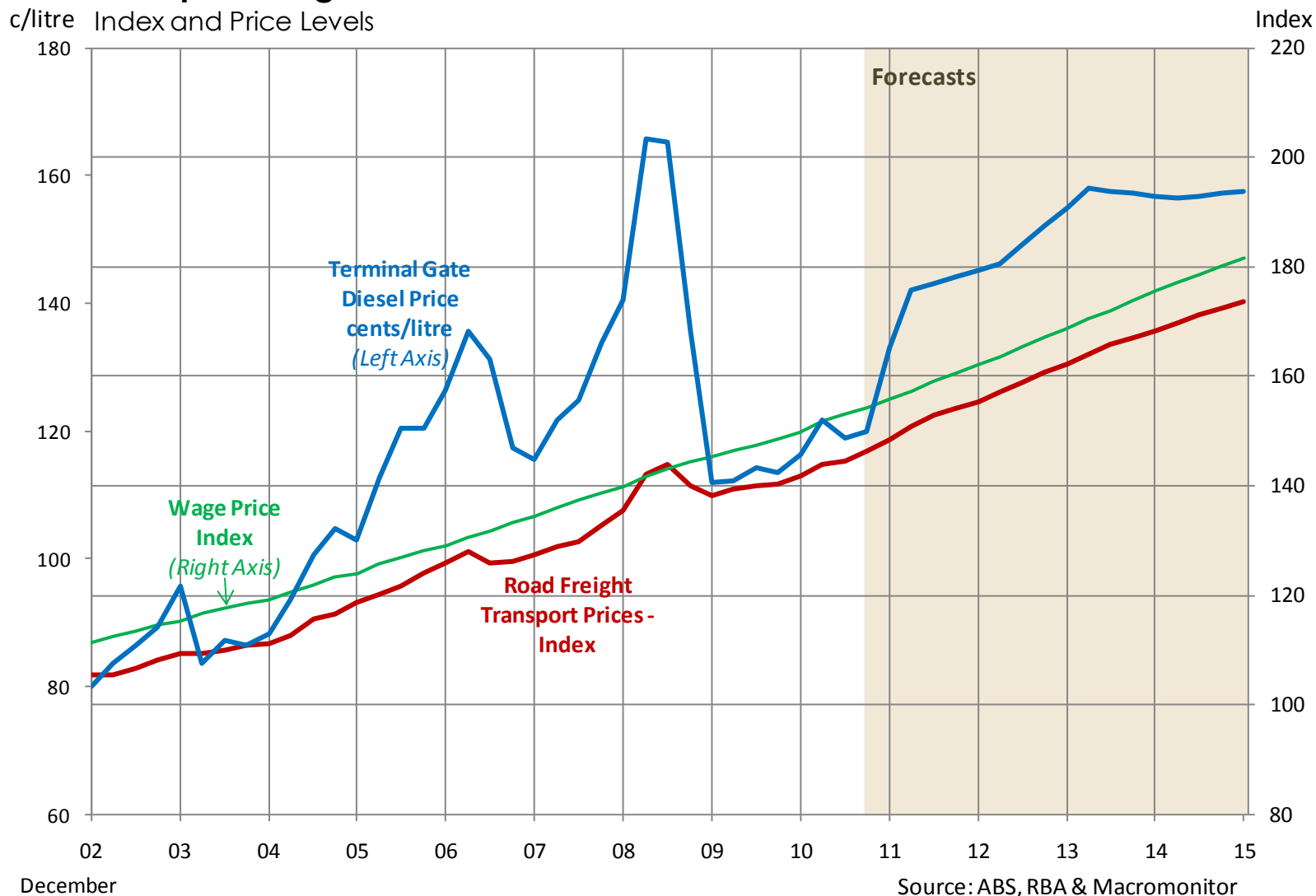


Source: ABS & Macromonitor

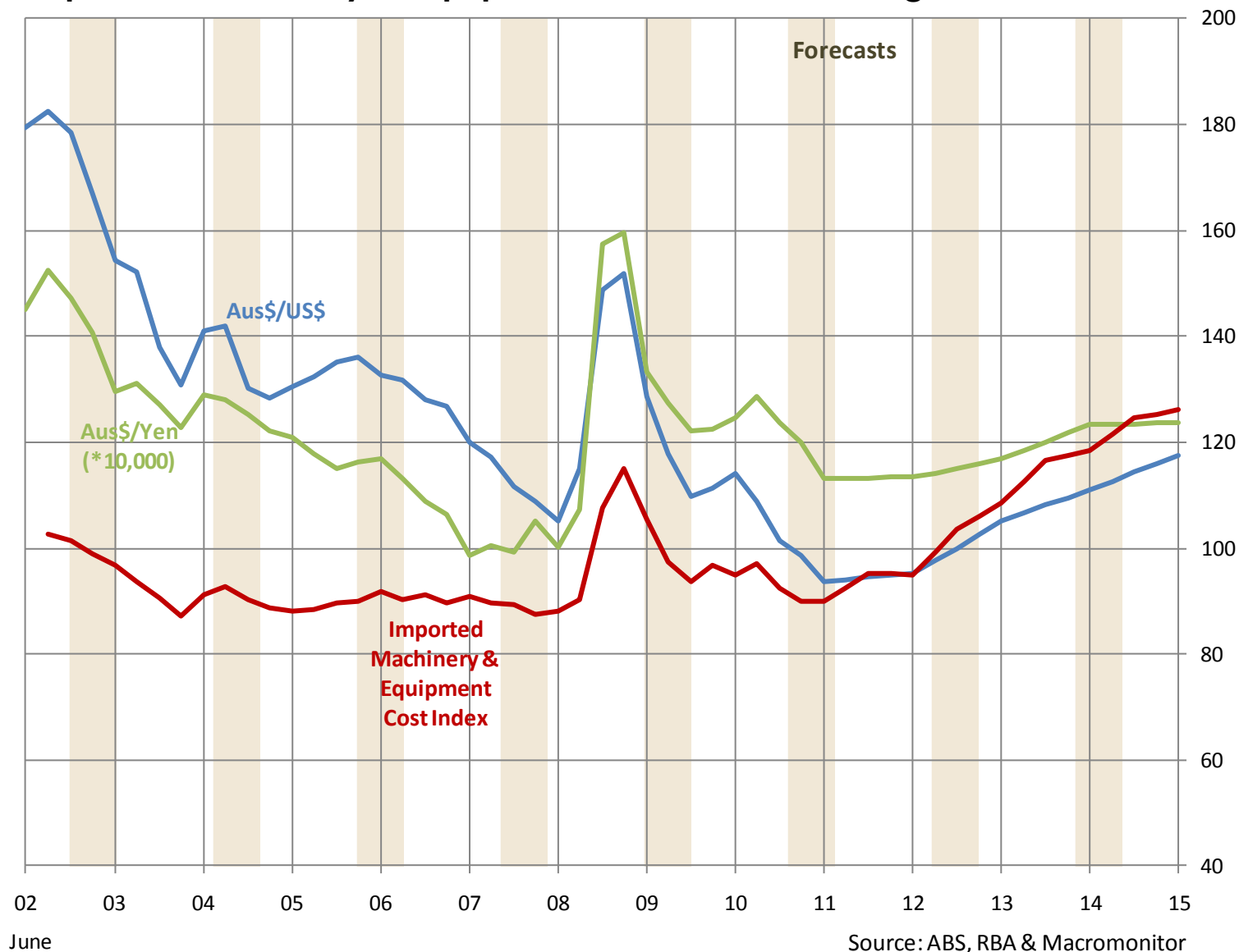
# Steel Prices



# Transport Freight Prices & Fuel Costs



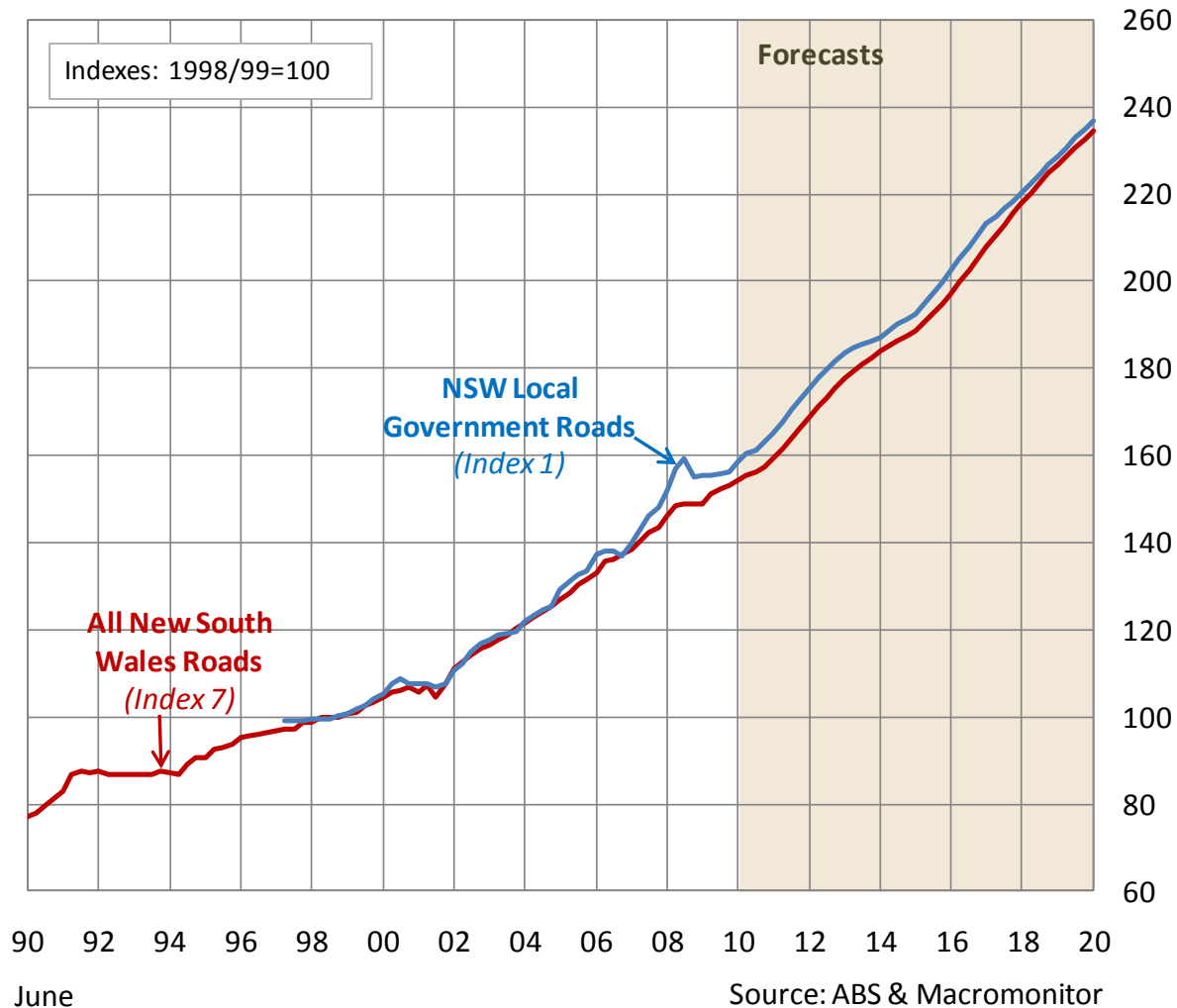
# Imported Machinery & Equipment Costs and Exchange Rates



Source: ABS, RBA & Macromonitor

# Road & Bridge Construction Cost Indexes

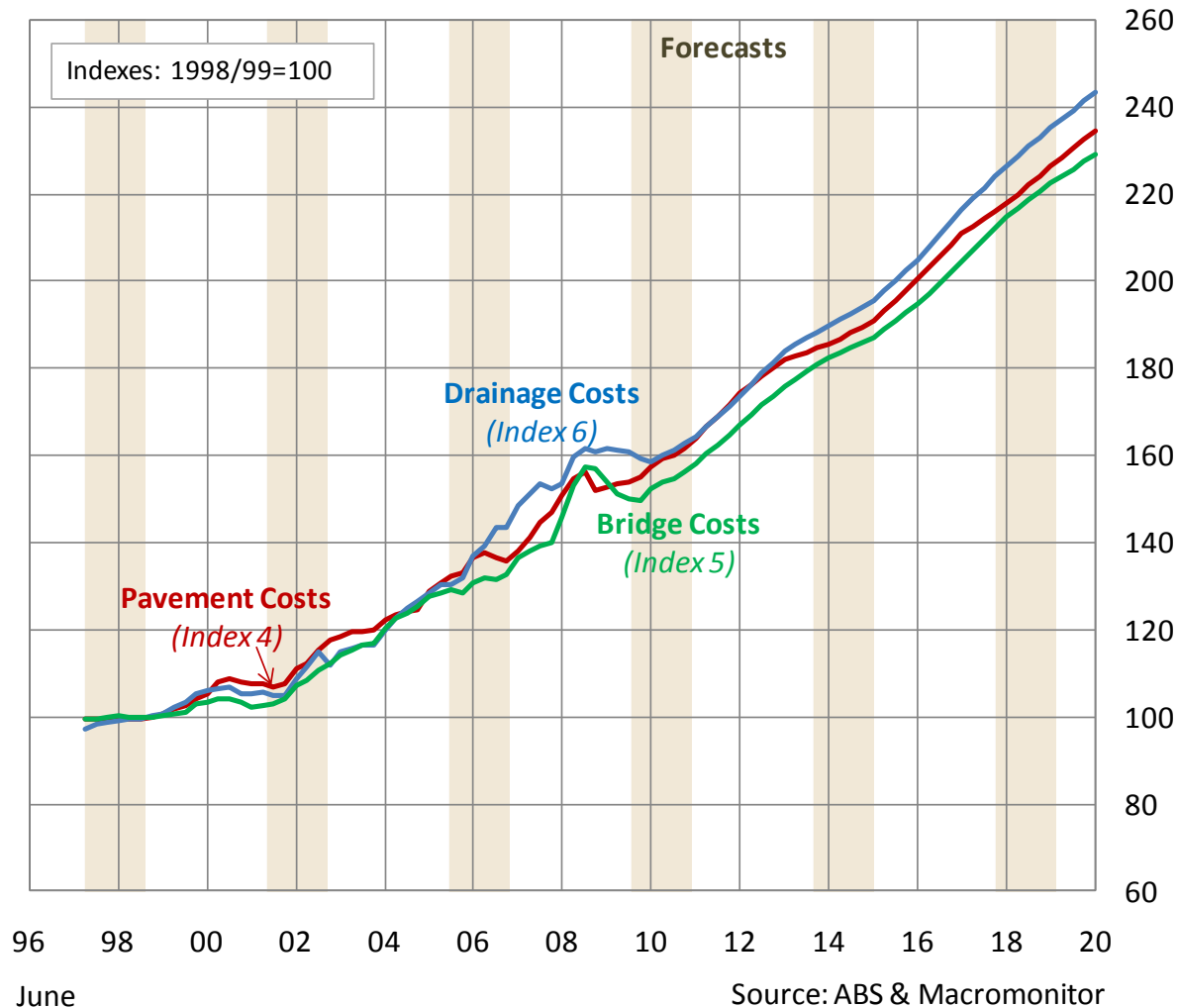
New South Wales



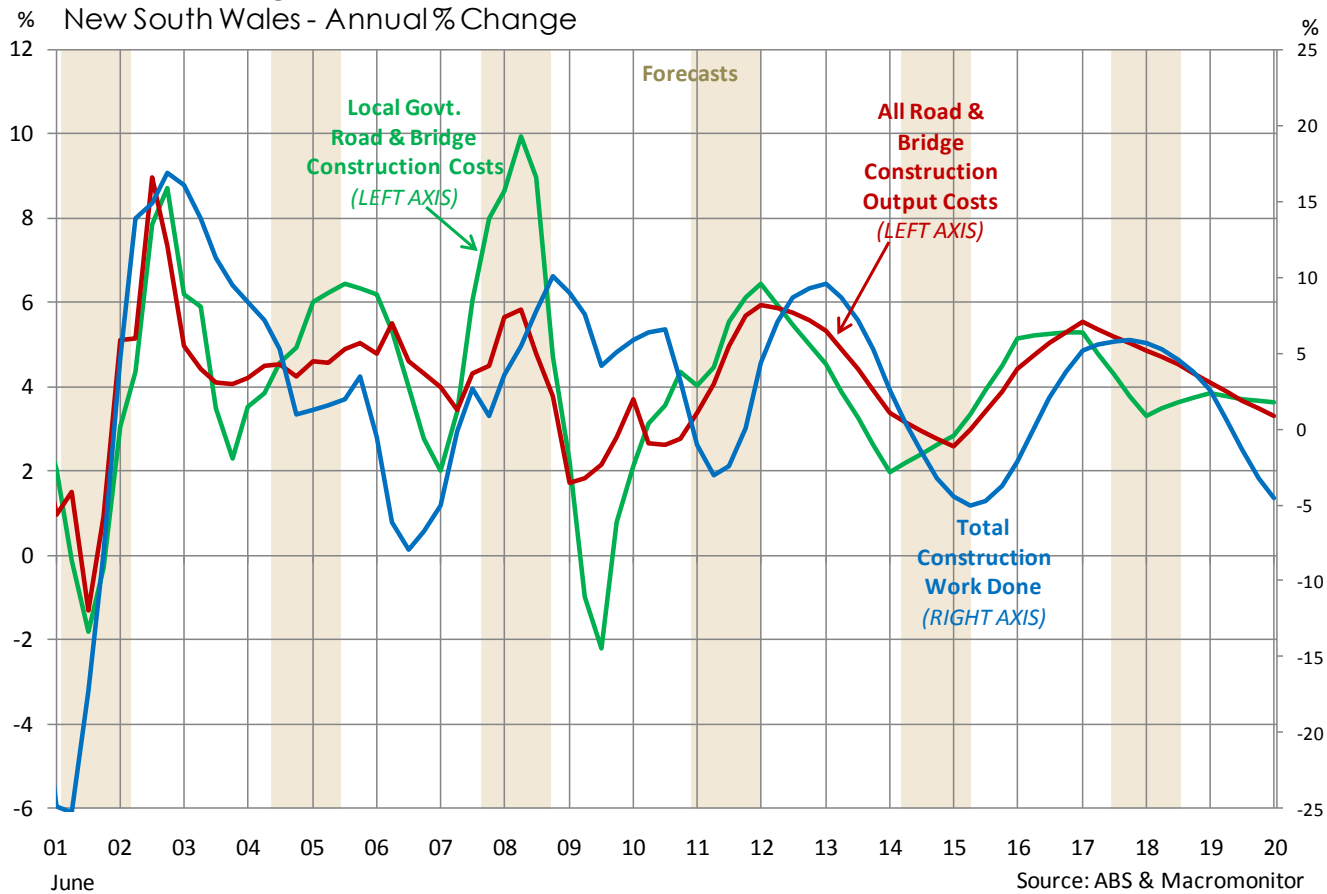


# Road & Bridge Construction Cost Indexes

Local Government - New South Wales

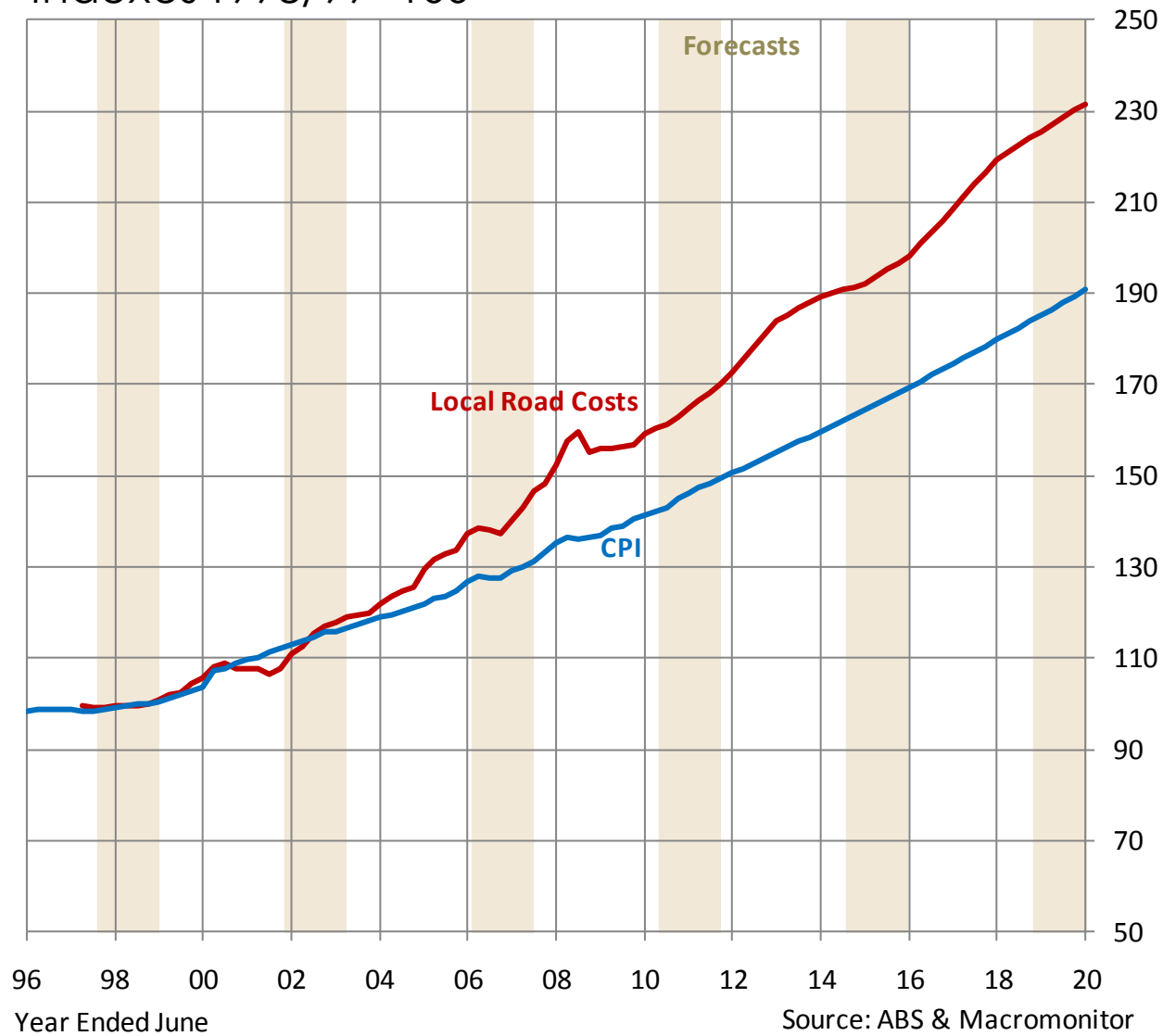


## Road & Bridge Construction Output Costs and Construction Activity



# Local Road Construction Costs & CPI

Indexes 1998/99=100



Source: ABS & Macromonitor