



## **Megabang for megabucks**

Driving a harder bargain on megaprojects

## Megabang for megabucks

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- **Australian governments don't care enough about costs**
- **Governments are too concerned about what industry wants**
- **Competition is fundamental**
- **Governments should aim for the right procurement for the job**

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## **1. Australian governments don't care enough about costs**

- Governments rush to market, and often end up paying more than they expected
- Governments don't copy similar countries that build at lower cost
- Governments don't collect benchmarking data to track how much infrastructure costs over time
- Local content requirements risk increasing cost
- Better scheduling of transport infrastructure construction could reduce costs

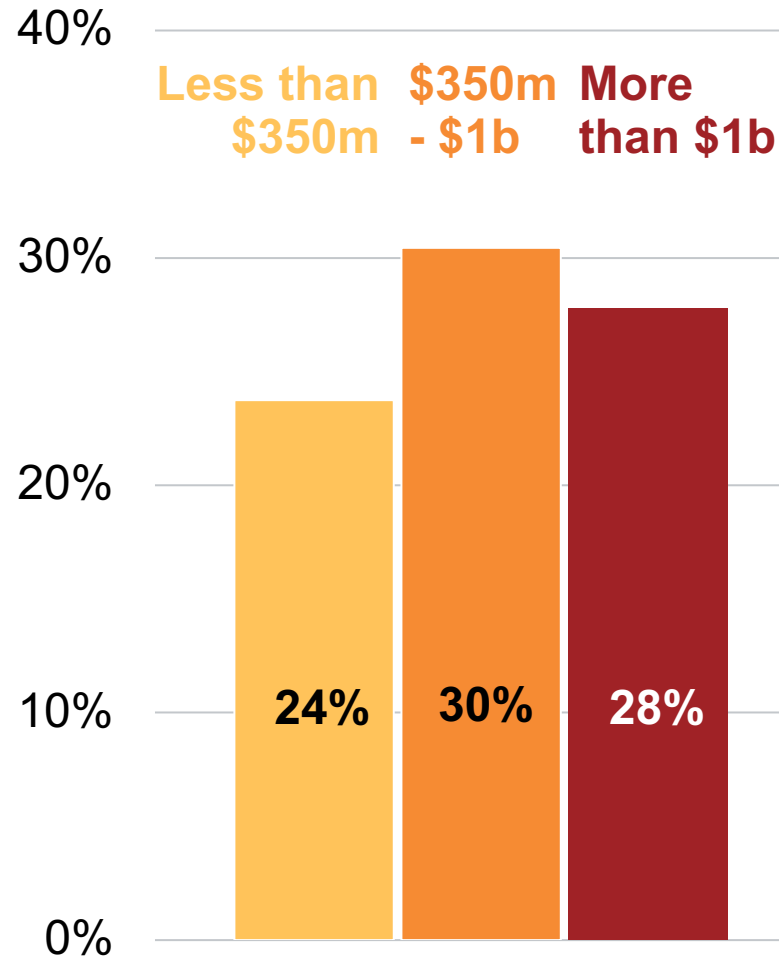
## **2. Governments are too concerned about what industry wants**

## **3. Competition is fundamental**

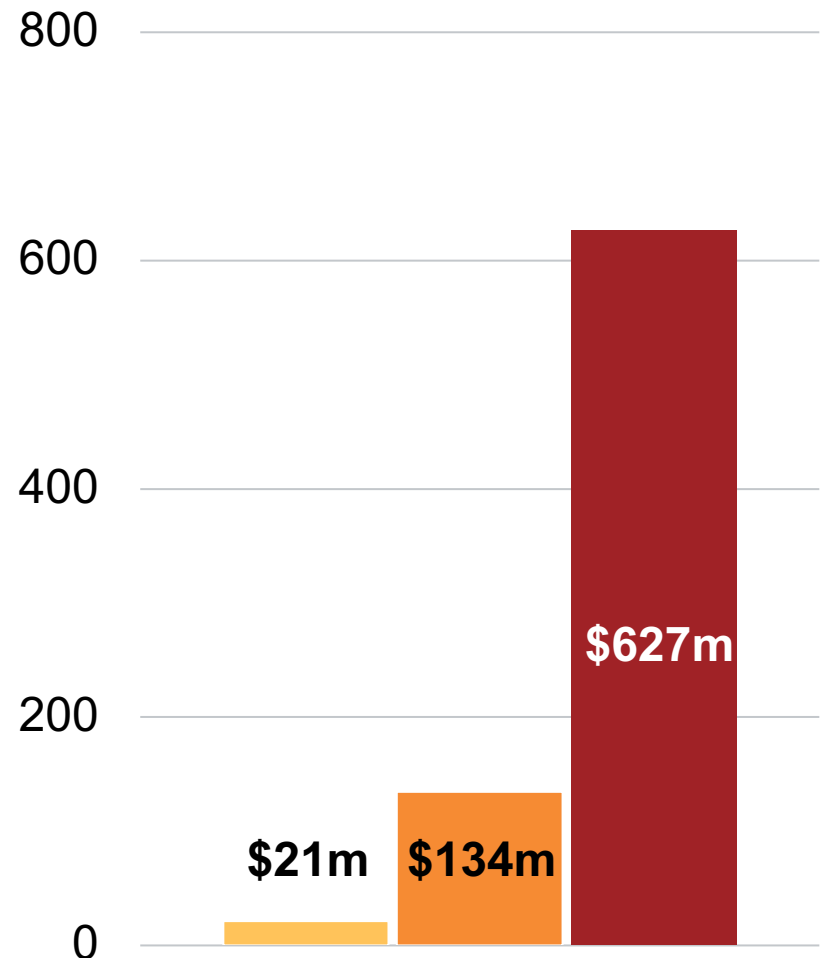
## **4. Governments should aim for the right procurement for the job**

# Even during construction, costs increases on megaprojects are common and large

Proportion of all projects >\$20m with cost increase



Median size of cost increase (2020 \$m)

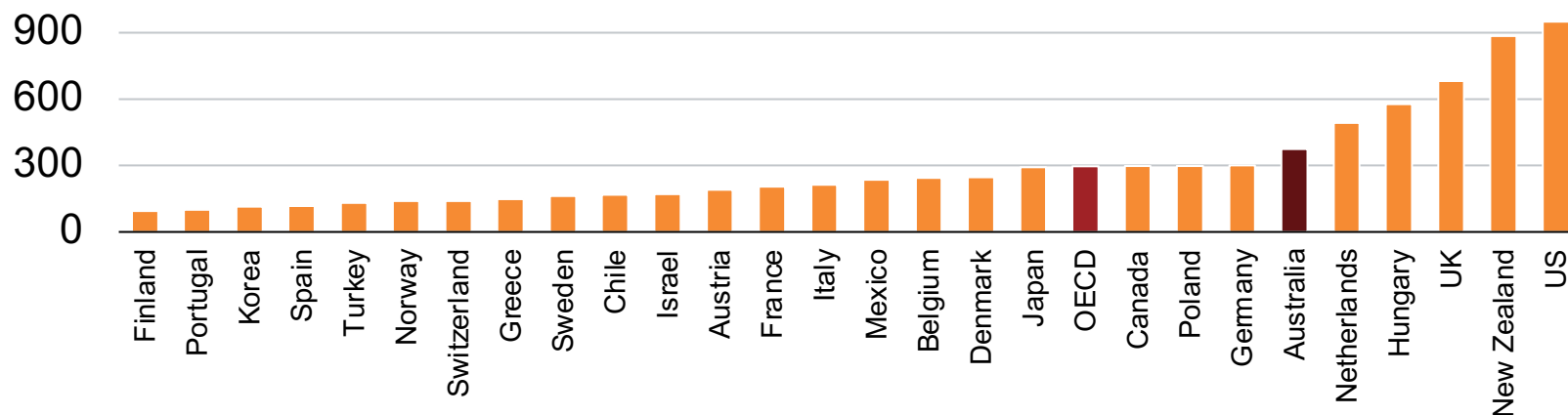


Notes: Includes all projects worth more than \$20 million, completed between March 2001 and December 2020. A cost increase is defined as the final project cost exceeding the estimated cost at the start of the construction period. The median sizes shown are medians across all projects that had a cost increase.

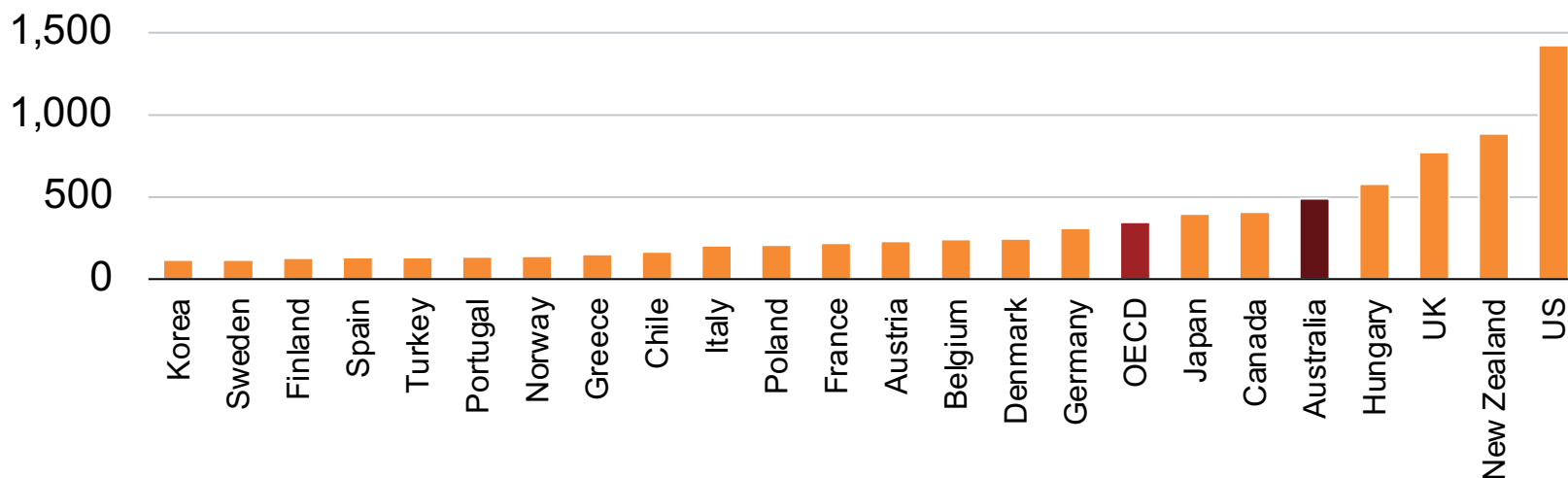
Source: Grattan analysis of Deloitte Access Economics Investment Monitor.

# Australian governments don't learn from similar countries that build quality infrastructure at lower cost

Average cost per kilometre, railway projects, 2020 \$US million



Average cost per kilometre, railway projects with 100% tunnel, 2020 \$US million

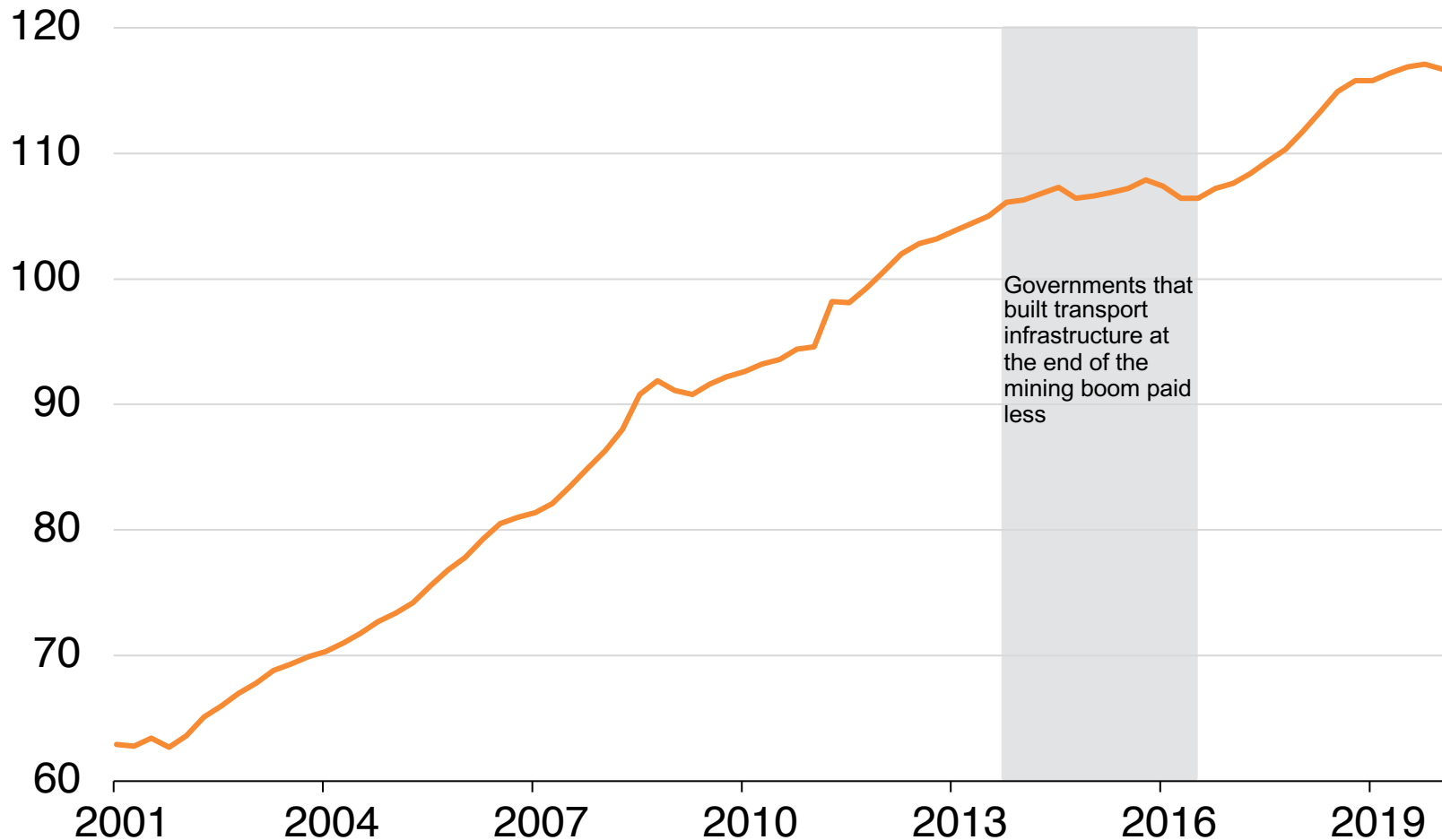


Notes: Includes all OECD countries in the study. Converted to US dollars on a Purchasing Power Parity basis.

Source: Levy (2020). Transit Costs Project.

# Australian governments don't time their pipelines to take advantage of times when inputs are cheaper

Producer Price Index, road and bridge construction, Australia



Source: Index Number 3101 from Table 17 of Australian Bureau of Statistics (2021)

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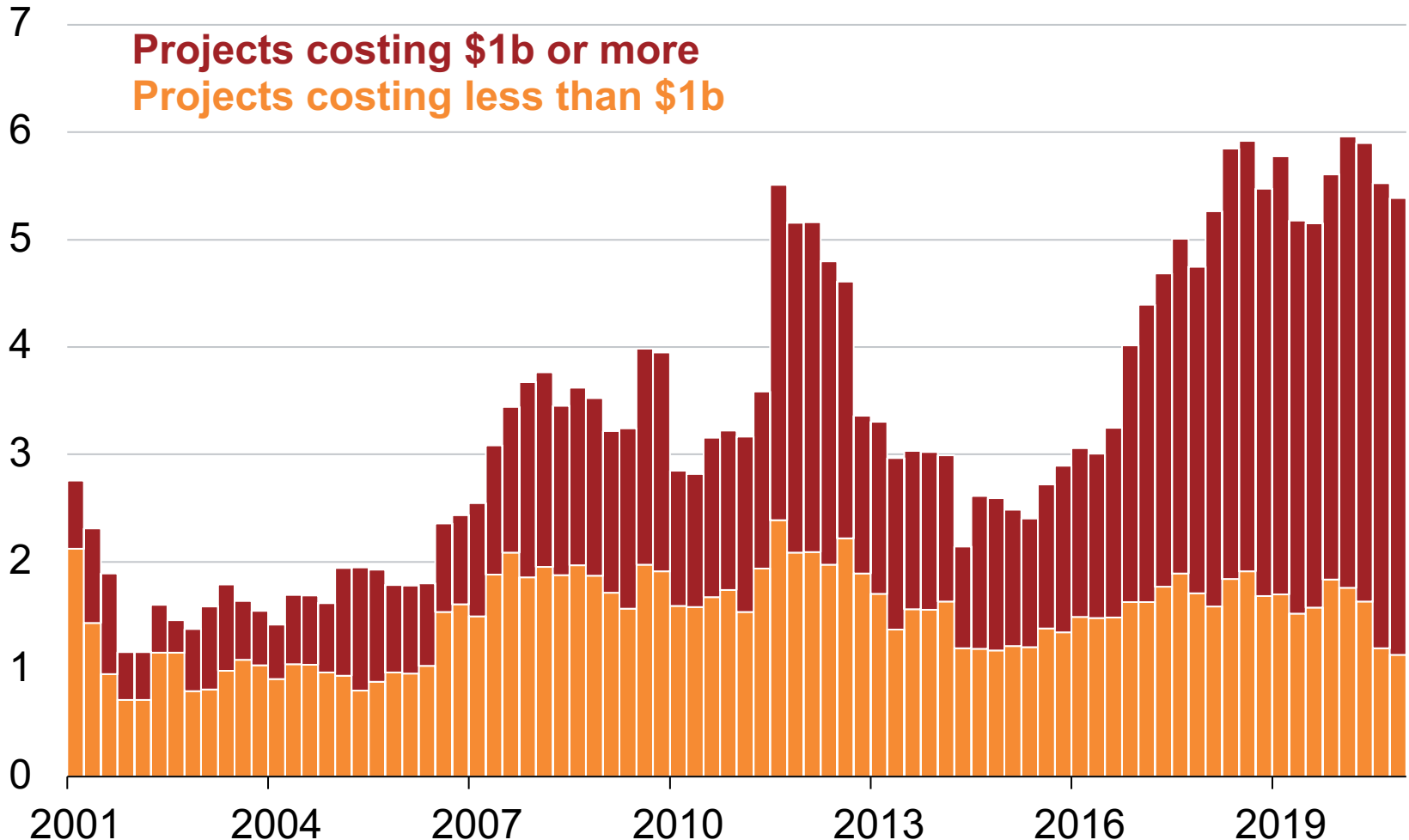
- Industry claims of low profitability aren't government's problem
- There's no evidence of a widespread exodus of firms from the sector
- Government construction work has been relatively unscathed by the pandemic recession

## 3. Competition is fundamental

## 4. Governments should aim for the right procurement for the job

# Government construction work has been relatively unscathed by the pandemic recession

Estimated value of work done on transport infrastructure projects per quarter, \$2020 billion



Notes: Includes all projects worth more than \$20 million. Where a project is under construction across multiple quarters, we have assumed the total project cost is incurred equally across the period of construction.

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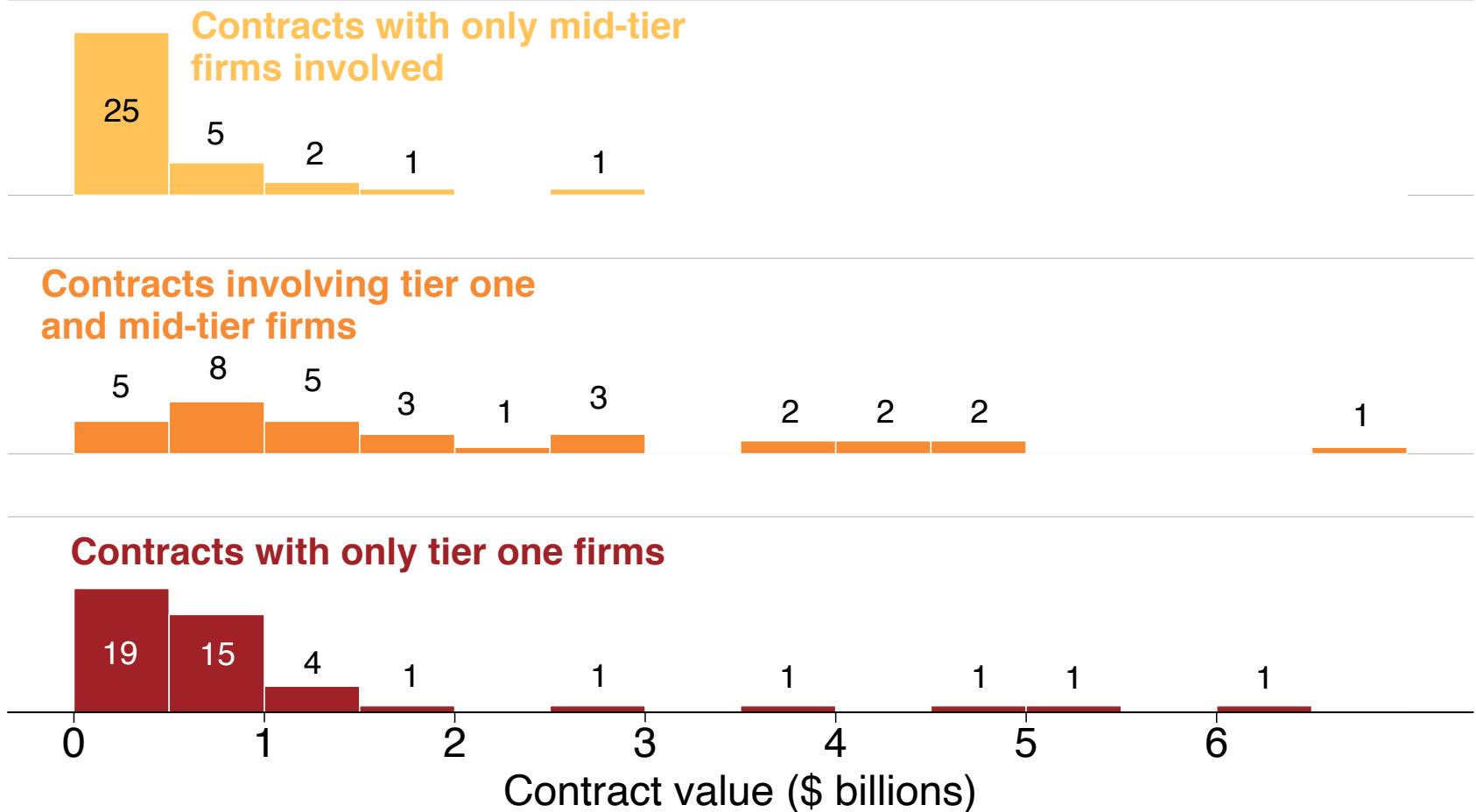
## 3. Competition is fundamental

- No shortage of competition for contracts up to \$500m, but beyond that point, competition thins
- But gigantic contracts are becoming more common
  - On gigantic contracts, a joint venture of two tier one firms risks an uncompetitive price
- International firms have won megaproject work, and this must continue
- Market-led proposals reduce competition
- More transparency would reduce the risk of collusion and inadequate competition

## 4. Governments should aim for the right procurement for the job

# There is no shortage of competition for contracts up to \$500m, but beyond that point, competition thins

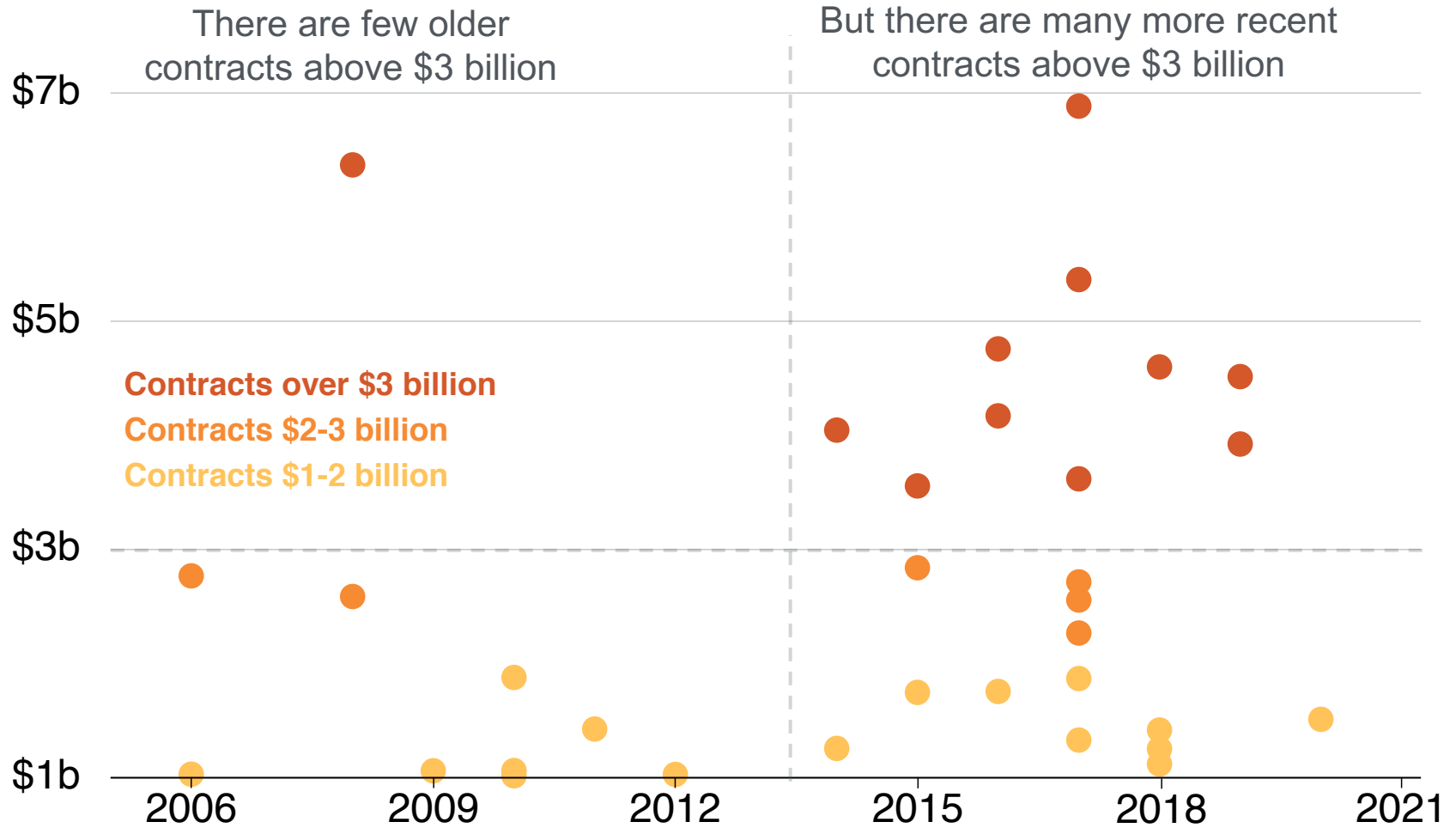
Number of contracts of different sizes, in projects over \$1 billion, awarded to firms since 2006, by value (\$2020 million)



Notes: We classify John Holland, CIMIC Group firms CPB Contractors (formerly Leighton Holdings) and Thiess, Lendlease, Bilfinger Berger (including Valemus firms Abigroup and Baulderstone) and Acciona as tier one firms. Acciona is included as tier one firm for all past projects, even though it only became a tier one with the acquisition of Lendlease Engineering in 2020. All construction contracts considered by the procuring agency as a major contract or work package are included, for projects over \$1 billion since 2006. Does not include rollingstock contracts.

# The problem is there has been an increase in very large contracts

Contracts over \$1 billion since 2006, by value (\$2020 billion)

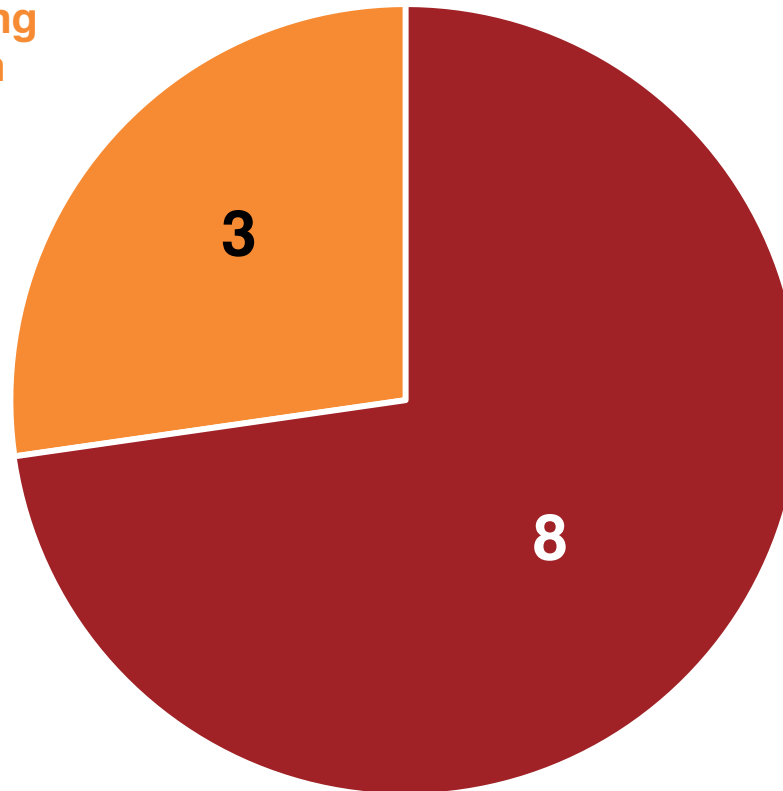


Notes: This chart includes only construction contracts worth over \$1 billion, in megaprojects (projects over \$1 billion) where the first contract was signed during or after 2006. All construction contracts considered by the procuring agency as a major contract or work package are included, for projects over \$1 billion since 2006. Does not include rollingstock contracts.

# For the largest contracts, joint ventures between tier one firms are most common, meaning competition is even thinner

Number of construction contracts worth more than \$3 billion (2020 dollars) awarded since 2006

Contracts involving  
one tier one firm

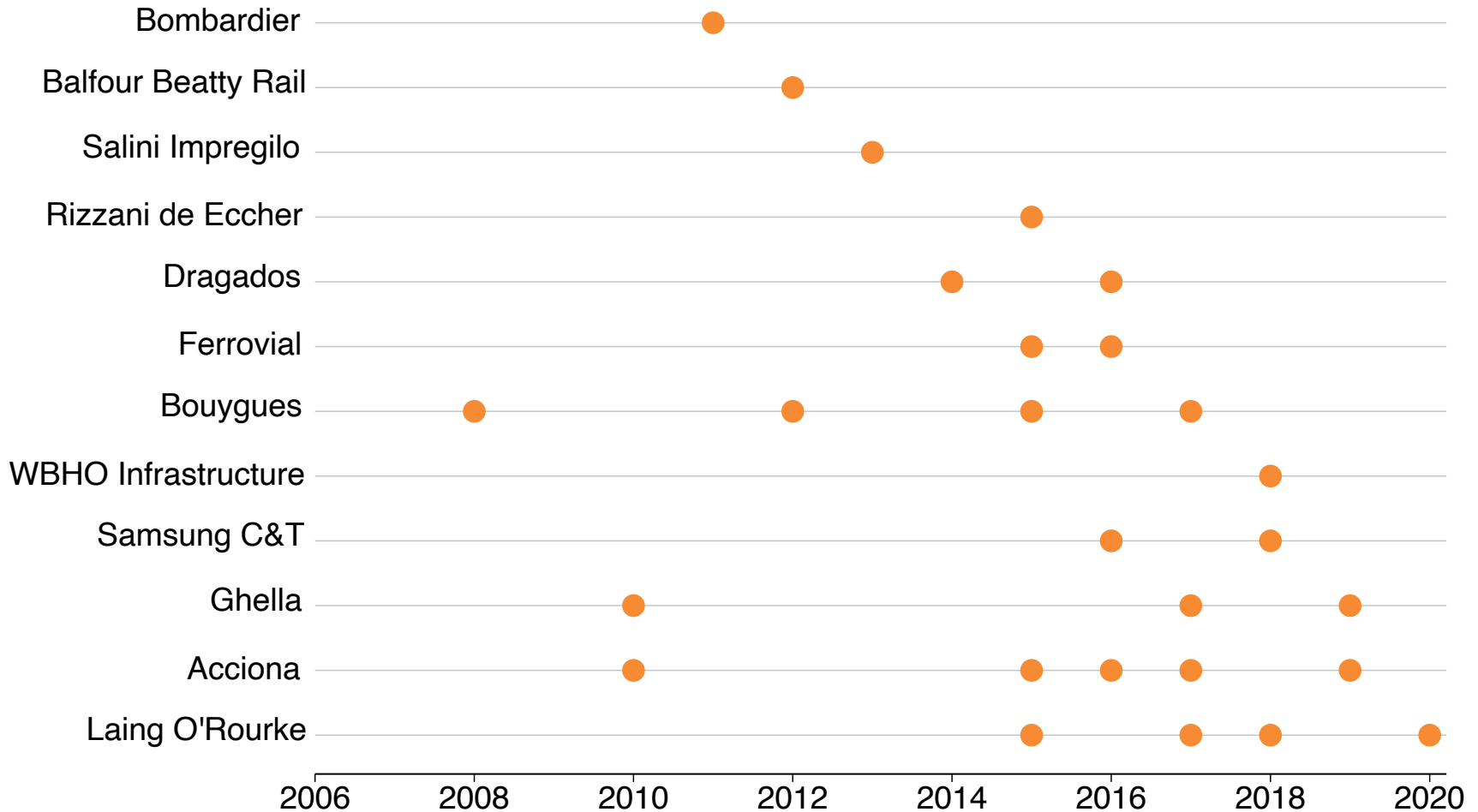


Contracts  
involving joint  
ventures between  
multiple tier one  
firms

*This includes construction contracts only. We classify John Holland, CIMIC Group firms CPB Contractors (formerly Leighton Holdings) and Thiess, Lendlease, Bilfinger Berger (including Valemus firms Abigroup and Baulderstone) and Acciona as tier one firms. Acciona is included as tier one firm for all past projects, even though they only became a tier one with the acquisition of Lendlease in 2020. If a contract was awarded to a partnership between two or more of these firms, it is classified as a tier one joint venture. Does not include rollingstock contracts.*

## ...so international entrants are very important to the competitive landscape

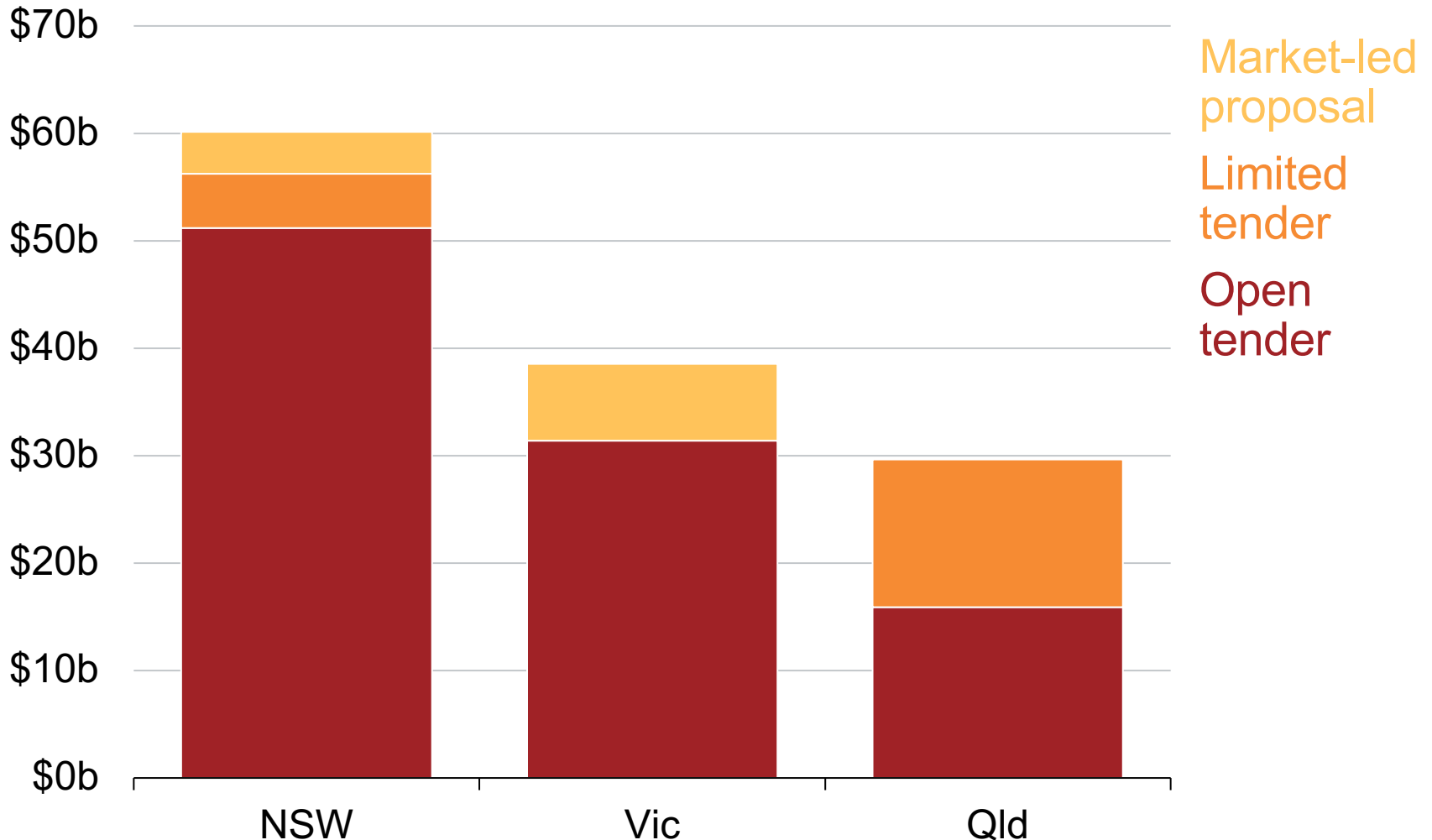
Years in which international have been awarded contracts in projects over \$1 billion, since 2006



Any firm that has entered the Australian transport construction market within the past 15 years and was previously operating in other regions is considered an international entrant. This is distinct from whether a firm is internationally or locally owned. Each point represents a year in which an international entrant won one or more contracts. In some cases a point represents multiple contracts.

# Market led proposals are unlikely to deliver good value. They make up almost a sixth of Victoria's transport megaproject spend

Value of tenders in projects over \$1 billion since 2006



## More transparency would reduce the risk of collusion – NSW is doing it better than other states

	Most transparent		Least transparent	
	NSW	WA	Vic	Qld
Overall transparency ranking	0.7	0.6	0.6	0.4
Contract value obtained from a government source	0.6	1.0	0.8	0.4
Tender process published	0.9	0.7	0.8	0.7
All bidders published	0.6	0.0	0.3	0.1
Shortlisted bidders published	0.7	0.8	0.5	0.5
Information ease ranking	0.7	0.6	0.6	0.2

*Notes: Includes construction contracts on Australian infrastructure projects larger than \$1 billion in 2020 dollars, contracted from 2006 onwards. The 'overall transparency ranking' is calculated as the sum of the factors shown. The 'information ease ranking' equals 1 for projects where the information is clearly obtainable from documents stored in a centralised register, 0.5 for projects where the information is relatively easy to find but is not in a centralised register, or 0 for projects where the information is no longer stored on a government website or can only be gleaned from irregular sources. Source: Grattan analysis.*

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## 4. Governments should aim for the right procurement for the job

- Bundle the work packages efficiently
- Risks should be allocated to construction partners only where it's economical
- A more systematic approach to selecting contract type should create incentives that are in the taxpayer's interest



# Governments should adopt a systematic approach to bundling and risk allocation

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## Bundle work packages efficiently:

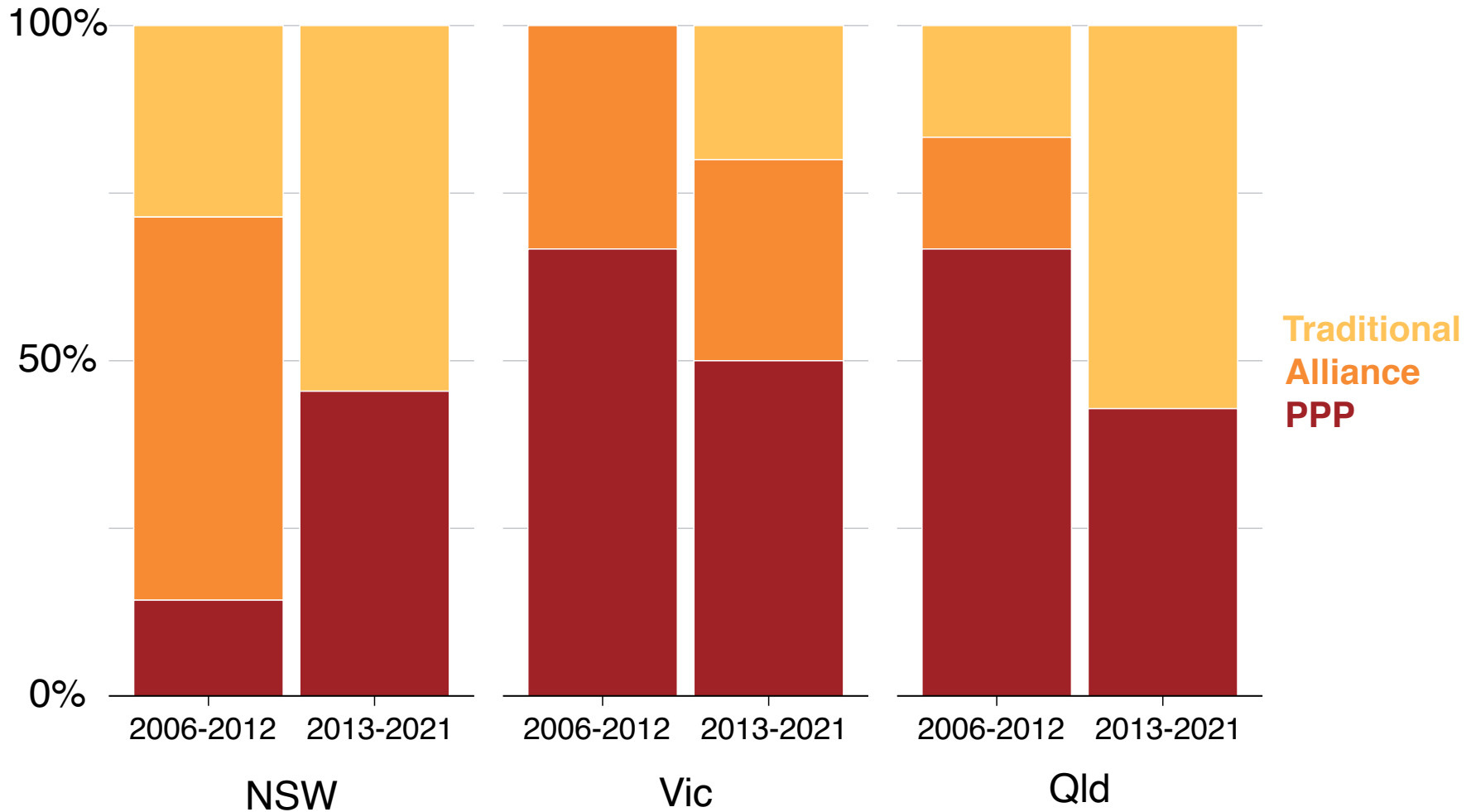
- Governments may have a preference for larger packages, for simpler contract management, and less interface risk
- But larger heterogeneous packages of work may decrease the number of firms that can bid
- Develop and use a systematic, consistent, and transparent process

## Risks should be allocated to construction partners only where it's economical

- Transferring as much risk as possible to private contractors is not likely to lead to the lowest costs for government
  - And risks may not always be effectively transferred, since the political imperative remains to get the project done
- The party best able to manage a given risk at the lowest cost should hold that risk
- Better yet, more exploratory work before contracting can reduce the risk for all parties

# The pendulum has swung away from the more collaborative alliance contracts

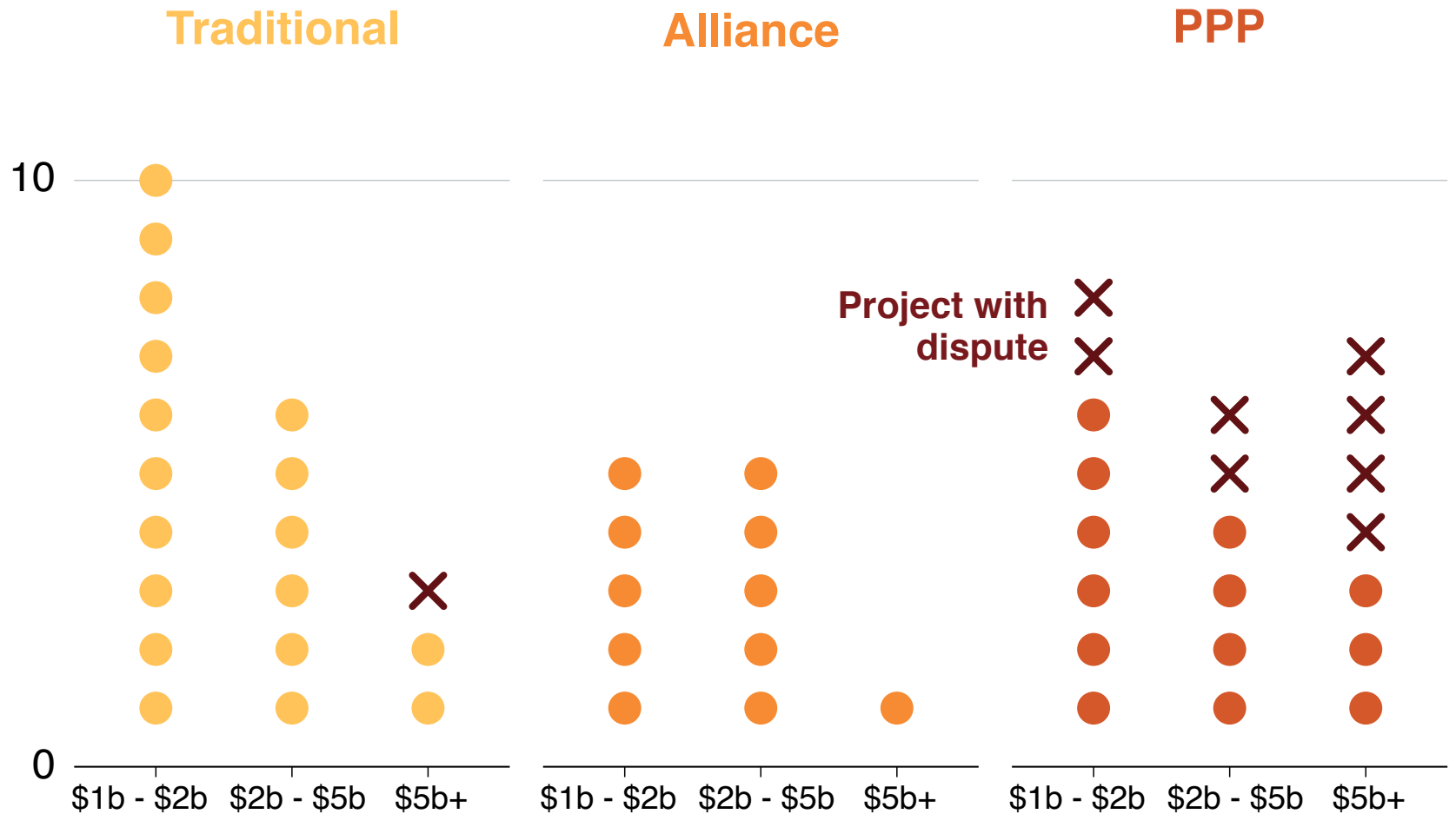
Proportion of projects greater than \$1 billion in value, since 2006



Note: contract type is allocated to a project based on the procurement method that makes up the largest share (by value) of construction contracts.

# PPPs incentivise firms to deliver on time and on budget, but can be prone to disputes

Number of projects greater than \$1b in value, since 2006



*Includes any publicised government-contractor dispute or failure by contractor to fulfil contract. Based on public reports. Contract type is allocated to a project based on the procurement method that makes up the largest share (by value) of construction contracts.*

## Recommendations

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### Pay more attention to costs

- Governments should only sign contracts that they are prepared to enforce. They should show by their actions that they will not pay additional amounts.
- Regularly update a benchmarking series of road and rail construction costs.
- Study international best practice on cost reduction.
- Coordinate state schedules and collaborate with neighbouring states to minimise costly bottlenecks.
- Avoid giving preference to bidders for transport infrastructure construction projects who pledge to use Australian-produced materials.

### Improve transparency

- If governments decide to provide industry assistance to the engineering construction sector, they should do so transparently on-budget.
- Publish a central register of all projects larger than \$500 million, on a comparable basis across projects and jurisdictions.
- State auditors-general should provide an expert panel governing renegotiation of major public construction projects.

## Recommendations

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### Foster greater competition

- Publish weightings of the criteria used to select the winning bid for a contract. Do not weight local experience too heavily.
- Award all infrastructure contracts through an open tender process.

### Don't rush: scope projects properly, and procure systematically

- Perform sufficient discovery of site conditions before going to market, and certify to potential bidders what's been discovered.
- Develop and use a systematic approach to bundling work packages and selecting contract type.