The Making of a Nation: Who Voted for Australian Federation?

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Introduction

- In 1901 six self-governing British colonies federated to become the Commonwealth of Australia.
- In 1898 and 1899/1900 the colonies conducted referendums on whether or not to join the proposed federation.
- We focus on NSW which was pivotal to eventual approval. We analyse votes across polling-booths using a range of countylevel variables to represent different hypotheses. We find:
 - No support for external tariff effect; positive border effects.
 - Colony-born strongly opposed federation.
 - Distance from Sydney matters a lot; but no 'frontier' effect.
 - Low turnout might have made the difference in 1898.

What happened?

- After a decade of debate on whether to unite, four colonies (NSW, Vic, Tas and SA) conducted referendums in 1898 (the other two (Qld and WA) failed to agree on a referendum).
- All had majorities for 'yes' but the vote in New South Wales failed to pass the minimum set by the legislature of 80,000 'yes' votes. So the other colonies would not proceed.
- After some renegotiation a second round of referendums took place in all 6 colonies in 1899/1900 and federation was approved in each of them (following the result in NSW).
- NSW was pivotal. The first round failed due to insufficient support in NSW. The second round (and thus federation) was contingent on approval by NSW.

Referendum votes

	NSW	Vic	SA	Tas	Qld	WA	
	Referendums in 1898						
Vote date	3/6/1898	3/6/1898	4/6/1898	3/6/1898			
Yes votes	71,595	100,520	35,800	11,746			
No votes	66,228	22,099	17,320	2,689			
Yes majority	5,367	78,421	18,480	9,057			
Turnout (%)	45.2	48.9	39.5	46.5			
	Referendums in 1899-1900						
Vote date	20/6/1899	27/7/1899	29/4/1899	27/7/1899	2/9/1899	31/7/1900	
Yes votes	107,420	152,653	65,990	13,437	38,488	44,800	
No votes	82,741	9,805	17,053	791	30,996	19,691	
Majority	24,679	142,848	48,937	12,646	7,492	25,109	
Turnout (%)	62.2	57.0	61.6	41.5	65.2	72.6	

Relevant Literatures

- Size of nations: Alesina and Spolaore (2003) argue that the equilibrium size of nations depends on the trade-off between the benefits of scale (public goods; gains from trade) and the costs of diversity (disputes over common rules & distribution).
- F. J. Turner (1893) argued that 'frontier experience' in the US led to rugged individualism and support for democracy. Recently revived in quantitative analysis by Bazzi et al. (2020).
- Literature on federation initiated by Parker (1949) and Blainey (1950). This debated the economic interpretation of voting.
 Later, the focus turned to social influences (Irving ed. 1999) and political machinations (Coleman 2022).

Tariffs and trade

- New South Wales was (relatively) free trade, others had a high tariffs, esp. on manufactures and semi-manufactures.
- Tariff rates applied to both external and inter-colonial trade but averages differ because of different commodity composition.

Average Import Duties on Major Items in 1900 (percent)						
Average tariff rate	NSW	Vic	S A	Tas	Qld	W A
on:						
Imports from rest of world	3.2	12.1	12.2	34.2	16.1	22.9
Imports from other colonies	3.7	4.5	5.7	19.3	9.1	11.7

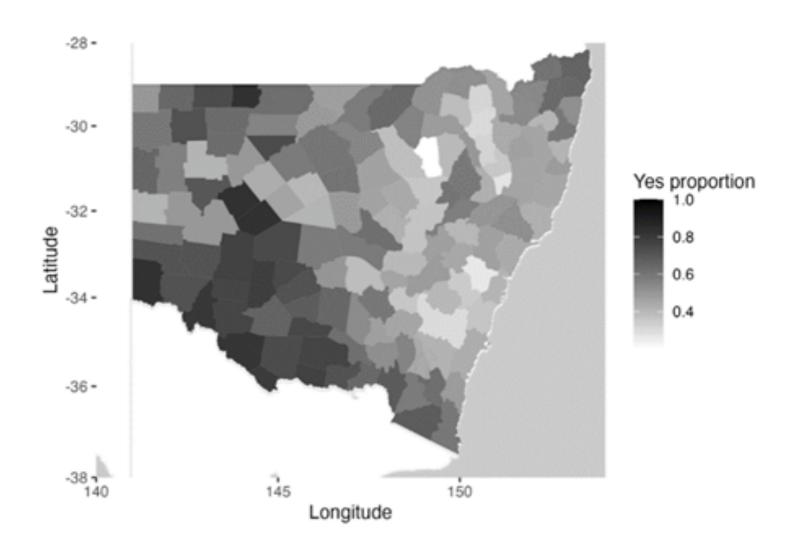
Economic interests

- The federal tariff would likely resemble that of Victoria as the receipts would be a major source of revenue for the federal government.
- If that was an important issue then manufacturing districts in NSW should have voted for federation, and export-oriented sectors possibly against.
- Border districts might support federation because of trade barriers, especially the Riverina districts (but tariffs low).
- More important was border bureaucracy and lack of integration, e.g. the railways, management of waterways etc.

Population characteristics

- Almost all the (white) population had UK ancestry, so not much ethnic diversity. But some potential differences:
- Religion. Catholics may have supported federation, as a step towards greater independence from Britain.
- Gender. Female presence could be associated with more progressive outcomes (e.g. Grosjean & Khattar, 2019).
- Education. More educated people might have been better informed and have a less parochial outlook.
- Native to NSW. Those born in NSW may have been more loyal to their colony and less keen on a more distant government that would serve the needs of others.

Proportion of 'yes' votes by county in 1898



The Tyranny of Distance

- Those further from the metropolitan centres could have less loyalty to colonial governments and be more willing for vote for federation.
- We might see this as reflecting frontier experience as in Turner (1893). Also suggested for Australia by Palmer (1954) and Ward (1958), the latter evoking 'upcountry ethos'.
- Finally, support for federation by district could be undermined by low turnout.

Data

- We have voting data by individual polling booth so the dependent variable is the share of 'yes' votes of formal votes at the booth level (~1,500 obs).
- We geo-locate the polling booths and measure distance from Sydney.
- We match county-level variables from the 1901 census (for which we have maps to create a shape file) to the polling booth data. (NB: census districts differ from electoral districts)
- Because the dependent variable is a proportion, we estimate using glm with link logit and distribution binomial. We estimate the odds ratio but report the associated marginal probabilities.

Results: share of 'yes' in formal votes

	NSW 1898		NSW 1899	
	Marginal effect	Std Error	Marginal effect	Std Error
Share of I/f in manufacturing – share of I/f in primary sectors	-0.263***	(0.08)	-0.246***	(0.07)
Catholic share	0.017	(0.19)	0.215	(0.14)
Share of adults literate (read and write)	0.752**	(0.32)	0.602*	(0.35)
Share of adult population female	0.660*	(0.37)	0.854**	(0.36)
Share of adult population born in NSW	-0.744***	(0.19)	-0.878***	(0.14)
Border county (=1)	0.067*	(0.03)	0.058**	(0.03)
Log distance from Sydney	0.041***	(0.01)	0.044***	(0.01)
Observations (booths)	1456		1592	

The frontier effect

- Bazzi et al. (2020) measure frontier experience as the number of years that a county was on the frontier of settlement in the US (meaning < 2 persons per sq. mile).
- Our measure is the time elapsed in decades between the year that a county was gazetted and the year that its population density reached two adults per square mile or until 1898.
- As a basis for comparison we use a dummy variable for less than two adults per square mile in 1901.

Share of 'yes' votes and the frontier effect

(sectoral variable, catholic, literacy & female included but not reported)

	NSW 1898		NSW	1899
Share of adult population	-0.636***	-0.580**	-0.852***	-0.795***
born in colony	(0.23)	(0.24)	(0.19)	(0.19)
Border county	0.141***	0.147***	0.114***	0.121***
	(0.03)	(0.03)	(0.03)	(0.03)
Log distance from Sydney	0.044***	0.037***	0.050***	0.046***
	(0.01)	(0.01)	(0.01)	(0.01)
Frontier exper (decades of	0.013		0.008	
pop. density < 2 per sq. m)	(0.01)		(0.01)	
Population density < 2 per		0.050*		0.057**
sq. mile (=1) in 1901		(0.03)		(0.02)
Observations (booths)	1,456	1,456	1,592	1,592

Turnout

- So far we have just looked at the proportion of 'yes' among those who voted.
- But turnout was low (esp. in 1898), and it could be associated with some of the same variables that explain the share of yes.
- So we use as the dependent variable the number of 'yes' votes relative to the number on the electoral roll. This incorporates turnout.
- An alternative approach is to enter turnout directly into the regression for 'yes' votes as a proportion of formal votes.
- This would give an indication of whether higher turnout increased the share of yes votes (but likely endogenous!)

Results for 'yes' votes/electoral roll

(sectoral variable, catholic, literacy & female included but not reported)

	NSW 1898		NSW 1899	
Share of adult population	-0.244***	-0.240***	-0.454***	-0.455***
born in colony	(0.09)	(0.09)	(0.13)	(0.13)
Border district (=1)	0.064***	0.065***	0.058**	0.058**
	(0.02)	(0.02)	(0.02)	(0.02)
Log distance from Sydney	0.007	0.007	0.012*	0.012*
	(0.01)	(0.00)	(0.01)	(0.01)
Population density < 2 per		0.038**		-0.002
sq. mile (=1)		(0.02)		(0.02)
Observations (booths)	1,456	1,456	1,592	1,592

Using turnout as an explanatory variable

(sectoral variable, catholic, literacy & female included but not reported)

	NSW	1898	NSW	1899
Turnout	0.344	0.385*	0.068	0.080
	(0.22)	(0.22)	(0.14)	(0.14)
Share of adult population	-0.558**	-0.513**	-0.825***	-0.776***
born in colony	(0.24)	(0.23)	(0.21)	(0.20)
Border county (=1)	0.138***	0.143***	0.115***	0.122***
	(0.03)	(0.03)	(0.03)	(0.03)
Log distance from Sydney	0.037***	0.041***	0.045***	0.048***
	(0.01)	(0.01)	(0.01)	(0.01)
Population density < 2 per		0.055*		0.058**
sq. mile (=1)		(0.03)		(0.02)
Observations (booths)	1,456	1,456	1,592	1,592

Conclusions (1)

- Implications of the external tariff for voting are not supported, perhaps because manufacturing workers saw federation more as a threat to their bargaining power.
- Border counties are associated with support for federation, even though inter-colonial tariffs were relatively low.
- More women and more education in a county are positively associated with federation; the sectarian divide is not.
- Native-born shares are strongly associated with voting 'yes' votes—a point sometimes neglected (at least for NSW).

Conclusions (2)

- Distance from the seat of government is strongly associated with voting 'yes', at least among those who did vote.
- But there is no support for a Turner-style frontier effect, at least as measured by county-level frontier experience.
- The support for federation associated with remoteness was offset by lower turnout.
- We may speculate that higher turnout would have been associated with stronger support for federation.
- Had NSW turnout in 1898 been higher (as in 1899), perhaps a second round of referendums would not have been needed.