Politics and eminent domain: Evidence from the 1879 California Constitution

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I. Introduction

One of the enduring themes in U.S. legal history is the ongoing and persistent tension between private property rights and public needs. Well-defined and secure property rights promote investment in resources and are thus generally regarded as crucial to economic development and wealth production. Given this well-established fact, it is striking that over the history of the U.S., common law and statutory law have both been somewhat schizophrenic in supporting and protecting private property rights. Ample evidence suggests plenty of judicial and legislative support for secure property rights. However, history also offers numerous examples of court rulings and legislative actions that clearly undermine secure private rights.[1] This raises the important interpretive question of how to understand the efficiency of property law and in particular, the specific property rights institutions that have emerged over time.

There are many dimensions to the question of how private property rights can be made less secure: this issue has been viewed through many lenses, including the police power, government regulation, local land policies, armed conflicts, and civil war. This paper focuses on one issue that has received much scholarly attention: the principle of eminent domain, the power of governments to engage in takings of private property for public uses upon payment of fair or just compensation. A sizable law-and-economics literature has been devoted to understanding its features, especially its ostensible economic justification – to circumvent problems of opportunistic hold-up under situations of high transaction costs, mostly by landowners – and the issue of

[1] See, for example, Scheiber(1973); Scheiber and McCurdy(1975); Lamoreaux(2011).

appropriate compensation.[2] But there is a separate, less-studied, outstanding question about the political determinants of the eminent domain rule.

In the archetypal eminent domain case, a government condemns a piece of private property to further some public purpose, such as construction of a railroad. Why does the government do this? The traditional view is that condemnation is in the public interest because it, say, promotes development of a needed transportation network. Whether such a condemnation is efficient depends upon a complex set of factors, including the amount of compensation, private information possessed by sellers, availability of alternative comparable properties, distortion of land development decisions, risk-aversion, and fiscal illusion and other forms of government failure.[3] However, the less politically naive view of eminent domain is that it can serve as a tool for rent-seeking behavior by individuals or entities who seek to expropriate rents through the condemnation process. Indeed, over its long history, eminent domain has been used repeatedly to condemn property for private uses.[4] As a result, many eminent domain actions have been challenged in the courts. Perhaps the most notorious recent example of this is the famous 2005 case of *Kelo v. City of New London*.

Given the fact that significant rents are often at stake, economists and legal scholars have begun to explore the political factors that influence the use of eminent domain. Two broad approaches have been taken: to examine the legislative actions that invoke eminent domain, and

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[2] Of direct relevance to this study, Harry Scheiber emphasizes hold-up as a crucial issue for 19th century economic development[Scheiber(1973), p. 237]. For an historical application to French agriculture, see Rosenthal(1990). For some recent studies on opportunistic hold-up, see Benson(2005); Kitchens(2014); and Miceli and Segerson (2007, 2012). On the issue of compensation, see Munch(1976); Blume, Rubinfeld, and Shapiro(1984); Miceli (1991); and Chang(2012).

[3] See, for example, Munch(1976); Blume, Rubinfeld, and Shapiro(1984); Innes(1997); Benson(2005).

[4] Berliner(2003), Kerekes(2011).

to examine the legislative response to court rulings on the use of eminent domain.[5] Taken together, the evidence is suggestive that politics do matter on both fronts. However, existing studies attempting to document the importance of politics tend to focus almost exclusively on political and institutional factors such as ideology, political party, intra-party competition, and corruption. They are thus unable to convincingly link legislative outcomes to factors that measure the stakes of interest groups, which is a central feature of the modern public choice approach.

The challenge may be that the exercise of eminent domain is generally unpredictable, idiosyncratic, and applied in a wide range of economic circumstances. It is thus not entirely clear how organized political demand for action relative to eminent domain would be generated.

This paper proposes to provide insights into the political factors that influence the use of eminent domain by applying tools and concepts of public choice to a particular historical event: the enactment of the California constitution of 1879. The 1879 constitution was enacted at a time when there was urgent demand for water development to service growing agricultural, mining, and municipal needs, but water developers were being subjected to opportunistic hold-up by landowners. These conditions generated intense political demand to enshrine eminent domain in the new constitution, a possibility that was extensively debated in the constitutional convention. The proceedings of the convention contain a variety of evidence, including arguments advanced in debate, committee assignments, and roll-call votes. Using this evidence, it is possible to discern the influence of interest groups – especially farmers, miners, and urban residents – in a concerted effort to insert a provision legitimizing eminent domain into the constitution. In the

[5] For studies on the determinants of the legislative use of eminent domain, see Kereke (2011); Lanza et al.(2013). For studies of the legislative response, see Somin(2008-09); Morriss (2009); Lopez et al(2009).

process they very nearly, but not quite, succeeded in inserting a provision that would have upheld eminent domain powers explicitly for water development projects for irrigation and hydraulic mining. The findings illustrate the potential importance of special interests in shaping eminent domain policy as well as the practical limits to their influence.

II. 19th century water development in California

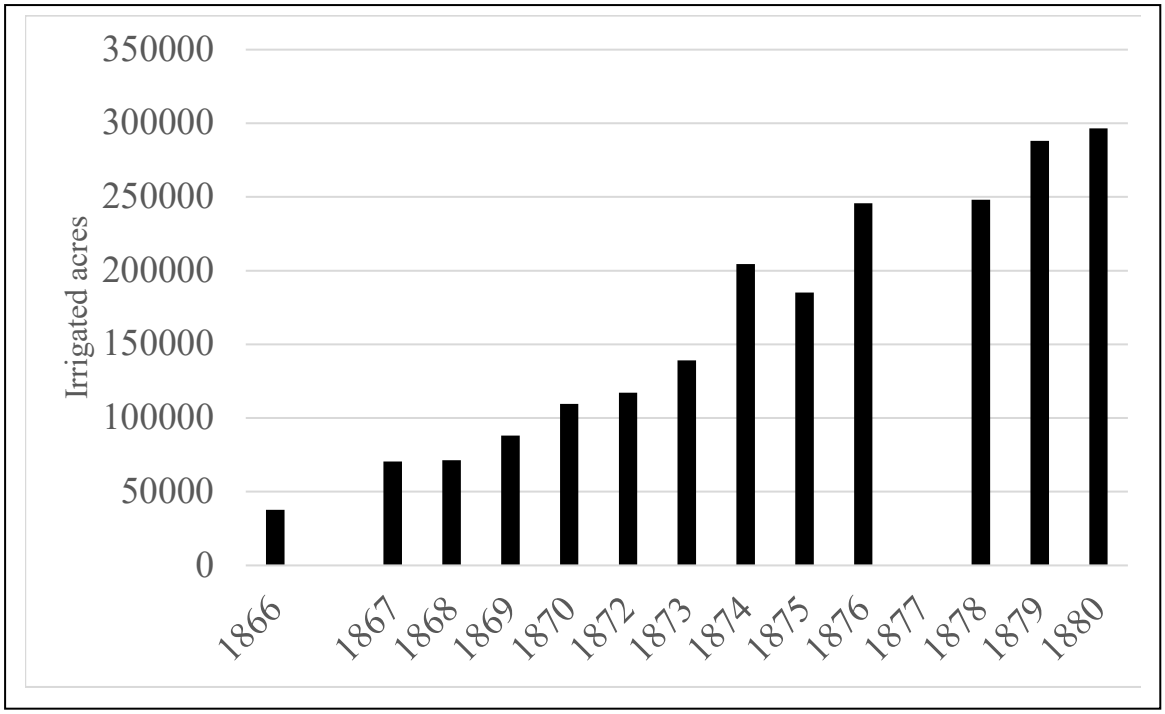
The constitutional debate over eminent domain took place within the setting of a vigorous push to develop water for irrigation, mining, and municipal uses, which occurred in overlapping stages over the first thirty years of statehood. In the first stage beginning in the early 1850s, the demands of miners for water to prosecute placer mining stimulated the development of surface water supplies, initially by the miners themselves and then by an independent ditch industry. By the end of the decade, thousands of miles of ditches were in place, the vast majority in the placer mining regions in the Sierra foothills and northern California [Kanazawa(2015)]. For these earliest water projects, eminent domain was largely a non-issue, as most early placer mining took place on public lands. Rather, miners and ditch companies would simply establish rights of way and conflicts would be resolved either in mining camps or in the courts.

During the 1860s, placer mining continued at considerable levels, albeit well below the peak years of the Gold Rush in the early 1850s.[6] Mining was gradually replaced over time by agriculture, as total improved acreage in farms increased from minimal levels in 1850 to nearly 2.5 million acres in 1860 and over 6.2 million acres by 1870 [*Statistics of Agriculture* (1890), p. 108]. Over the same period, cereal grains production, especially wheat and barley, increased

[6] During the 1860s, the number of miners in the state declined by nearly fifty-seven percent, from 83,000 in 1860 to 36,000 in 1870. At the same time, average annual precious metal production fell by nearly half from the first five years of the decade to the second five years. See Pisani(1984), pp. 102-03.

from virtually non-existent levels in 1850 to nearly 8.8 million bushels of barley and to nearly 16.7 million bushels of wheat in 1870 (*Statistics of Agriculture* (1890), pp. 111-12). This era has been dubbed the era of the wheat bonanza, during which California ultimately grew to the status of the seventh largest wheat producing state in the country by 1880 and the second largest wheat producer by 1889 (*Statistics of Agriculture* (1890), p. 15).

Figure 1: Annual total irrigated acreage in California, 1866 – 1880



Source: Annual reports, CA Surveyor General, various years.

Toward the end of the 1860s, irrigated farming began to take off in various parts of the state. By 1867, irrigation was beginning to take hold in counties as far north as Trinity and Shasta and as far south as Los Angeles and San Bernardino. Irrigation expanded rapidly over the next decade, with annual irrigated acreage roughly quadrupling between 1868 and 1880 (See Figure 1).[7] This growth occurred primarily in the southern San Joaquin Valley, plus Los

[7] Annual reports, CA Surveyor General.

Angeles County and in various parts of northern California. By 1890, total irrigated acreage in the state totaled over one million acres, the majority of which was located in eight counties in southern California, plus five northern California counties. Altogether, these thirteen counties accounted for nearly eighty-nine percent of the total irrigated acreage in the state.[8]

Initially, irrigated farming was prosecuted on tracts of land near surface water sources. Gradually over time, the fertile lands near rivers were all taken up and farming expanded outward, away from the rivers. Some of these new lands were less desirable lands on more rugged terrain, while other lands were Central Valley swamplands, which had to be drained before it could be successfully farmed. The expansion of agriculture was associated with privatization of public lands through a series of land disposal acts. Through 1880, the primary mechanisms for land disposal were cash sales, preemption, swamplands reclamation, and homesteading. In addition, many claims for lands contained in ranchos obtained under Mexican rule were confirmed. Once lands were in private hands, irrigating farmers not located adjacent to surface water sources would often face hold-up challenges to obtaining rights of way to sources of water. This occurred because irrigation ditches would typically have to pass through the lands of various landowners, any of whom could hold out in order to expropriate some of the rents of the irrigation venture [Bretsen and Hill(2006), pp. 291-92; Libecap(2011), p. 73].

Beginning in the late 1860s as well, the use of heavily water-intensive mining methods – especially hydraulic mining – became increasingly widespread, especially in the Sierra foothills and parts of northern California. These new methods typically required diversion of water from surface sources, also often requiring rights of way over private lands, which could be subject to

[8] These counties were, in declining order of irrigated acreage: Tulare, Kern, Fresno, Modoc, Los Angeles, Lassen, Inyo, Mono, San Bernardino, Plumas, Merced, Orange, and Siskiyou.

hold-up, just as with irrigating farmers. As an added complication, hydraulic mining generated large amounts of waste-filled water, which was vented by miners into streams exiting the mining regions and mostly flowing into the Sacramento River and its tributaries [Kelley(1959, 1989)]. This waste water deposited on river beds, hindering navigation and causing rivers to overflow their banks more frequently, resulting in flood damages to towns and neighboring fields.

Another notable trend in water development during this period was the development of municipal water supplies for expanding urban areas, especially San Francisco. By virtue of her central coastal location, San Francisco had emerged from the Gold Rush as the preeminent and most heavily populated city in the state. This made her an ideal transshipment point for goods and supplies, as well as the main final destination in California for miners and other immigrants arriving from overseas. As early as 1855, the city was concerned with developing water supplies for its rapidly expanding population. In 1857, it contracted with a company – the Spring Valley Water Company – to develop water supplies for the city, essentially providing it a monopoly franchise for a term of twenty years. As it turns out, this issue was to play a major role in debates in the convention.

To summarize: by the late 1870s irrigated farming was strongly on the rise throughout southern California and the Central Valley, while a significant amount of hydraulic mining was still taking place, mostly in the foothills of the Sierras in the Sacramento Valley. By this time irrigated farming was the considerably larger industry, in terms of productive value, but both activities were creating strong demand for water development, and both were experiencing difficulties with obtaining rights of way to surface water sources. At the same time, the urban sector was growing rapidly, especially around San Francisco, creating an additional third source of demand for water development. All of this would come together and present a plethora of

issues that challenged the courts and legislatures to come up with satisfactory policies. One issue that the courts and legislatures would have to confront was the appropriate use of eminent domain to support economic growth.

III. Eminent domain law in the 19th century

Over time, there has been a persistent tension between private property rights and the interests of the larger society, what legal scholar Harry Scheiber has called "one of the enduring themes of American constitutional and legal history" [Scheiber(1982), p. 306. See also Pisani (1987)]. More recently, Naomi Lamoreaux has described it as a mystery that over the course of U.S. history, property rights can even be considered secure when reallocations of those rights, in the name of economic development, has occurred so frequently [Lamoreaux(2011)].

On the one hand, jurists have long argued for the sanctity of private property, based on Lockean natural law principles. Under the doctrine of vested rights, it violated the social compact for private property to be seized by the government "arbitrarily" or "capriciously." [Howe(1930); Saunders(1997)]. This English common law notion was affirmed early on in a series of rulings by the Marshall court and by eminent jurists such as Kent and Story [Anderson and Hill(1976), p. 939; Scheiber(1982), pp. 305-06]. It ultimately became a foundational principle of 19th century constitutional jurisprudence [Yudof(1990); Gillman 1993)].

At the same time, jurists have long recognized a right of the state to place limits on private rights under certain conditions. There are two fundamental constitutional bases for doing so. First, under eminent domain, property may be taken for public uses if the property owner is provided fair or just compensation. Second, private property rights may be abridged in the exercise of police power by the states, if done so for legitimate purposes; namely, the promotion of public health, safety, morals, and economic welfare [McCurdy(1975); Pisani(1987)]. The

general principle is that the state may use either eminent domain or the police power to protect the broader interests of the community, even if it means imposing limitations on individual property rights.

The constitutional basis for eminent domain lies in the takings clause of the Fifth Amendment of the federal constitution, which explicitly states that private property shall not "be taken for public use, without just compensation." Similar statements may also be found in various state constitutions, including the 1879 California constitution [Article I, section 14]. For most of the 19th century, disputes over eminent domain were adjudicated in state courts, because most condemnations were performed by state or local governments [Scheiber(1971), Benson (2005)]. And in these early cases emerged two distinct legal interpretations of the meaning of the term "public use."

One interpretation was that the property on behalf of which a taking had occurred had to be open and accessible to the general public. This interpretation of the term public use appears to have originally derived from the common law treatment of surface waterways [Scheiber (1971), pp. 335-37]. For example, the 1819 case *People v. Platt* hinged on the distinction between a public river and a wholly private river. In this case, the New York Supreme Court had to decide whether a dam constituted a nuisance because it interfered with salmon migrations from Lake Champlain up the Saranac River. It ended up ruling that it did not, on the basis that the river was not navigable and therefore, did not constitute a public river. For the Court, the crucial issue regarding whether rivers were public or not was "whether they are susceptible, or not, of use as a common passage for the public."[9]

[9] *People v. Platt*, 17 Johns 195(1819), at 211.

This notion – actual use by the public – applied naturally to navigable rivers, for which the notion of actual use was clear and made sense: boaters and rafters on navigable rivers were actually "using" the river, in a real sense. And it was not much of a stretch to apply the same reasoning to other common carriers, like ferries, bridges, canals, turnpikes, and steam railroads. In the famous 1829 case of *Charles River Bridge v. Warren Bridge*, the Massachusetts Supreme Court ruled that bridges and ferries were public uses.[10] And in 1831, the New York Supreme Court extended the same logic to railroads in *Beekman v. Saratoga and Schenectady Railroad*.[11] In these and other cases, the courts were persuaded that the traditional common law conception of "public use," originally narrowly applied to navigable rivers, was appropriately applied to the expanded universe of common carriers in general.[12]

The other interpretation of "public use" that emerged during this period was that private property could be taken for some broader and more nebulous notion of public benefit, or public purpose [Scheiber(1971); Paul(1988); Melton (1996); Benson(2005), p. 175]. This alternative interpretation likely evolved organically, as it were, from the original notion of public use, in the context of common carriers. When turnpikes and canals were built and operated by the government, courts invariably approved eminent domain powers: the government itself exercising eminent domain probably seemed like a no-brainer, especially given the demands of economic development [Scheiber(1971), p. 362; Scheiber(1982); Wallis(2005)]. However, many state governments were strapped for sufficient funds to undertake internal development projects themselves. As a result, many states granted charters to private corporations to

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[10] *Charles River Bridge v. Warren Bridge*, 7 Pick. 344(1829)

[11] *Beekman v. Saratoga and Schenectady Railroad Company*, 3 Paige 45(1831).

[12] See also *Raleigh & Gaston Railroad v. Davis*, 2 Dev. & Batt. 454(N.C., 1837); *Sinnickson v. Johnsons*, 2 Harr. 120(N.J., 1839).

undertake the projects. And when they did, they delegated to these corporations the right to condemn land for rights of way.

At this point, the question of what constituted public use became more ambiguous. Here were private corporations exercising eminent domain powers on their own behalf, so that they could build their bridge, turnpike, or railroad. They were not the government, and the fact that they charged tolls or fees for their services made it less clear that their activity was for the "public benefit." Yet the importance of their services to spurring economic development was unquestionable. The question was: How would the courts apply eminent domain in cases like these?

The answer came quickly, in the early 1830's. In 1830, a federal court ruled, in *Bonaparte v. Camden and Amboy Railroad*, that private railroads were corporations "under a special liability to the public," which distinguished them from many other kinds of businesses. In 1831, in the *Beekman* ruling, the New York Supreme Court ruled on the exercise of eminent domain by a private railroad company. The court ruled in favor of the railroad, arguing:

> *"if the public interest can be in any way promoted by the taking of private property, it must rest in the wisdom of the Legislature to determine whether the benefit to the public will be of sufficient importance to render it expedient for them to exercise the right of eminent domain, and to authorize an interference with the private rights of individuals for that purpose." [p. 73]*

In so ruling, they dramatically expanded the notion of what constituted a public benefit:

> *"The eminent domain ... remains in the government, or in the aggregate body of the people in their sovereign capacity; and they have a right to resume the possession of ...(private property) whenever the public interest requires it, ...*[and] ***not only where the safety, but also where the interests, or even the expediency****, of the State is concerned, - as, where the land is wanted for a road, canal, or other public improvement." [p. 73, emphasis added]*

These and other cases treated railroads and other common carriers as special types of businesses, whose special nature entitled them to enjoyment of eminent domain privileges.[13]

While these cases clarified the legal status of eminent domain as enjoyed by common carriers, they said very little about eminent domain as exercised by other types of businesses, such as mills and factories. In these latter cases, it was less clear to the courts that the exercise of eminent domain by private companies was constitutional. Prior to mid-century, however, the courts largely deferred to the legislatures when they assigned eminent domain powers to private companies [Scheiber (1971), pp. 372-73]. An example of this occurred in 1832, in the case of *Scudder v. Trenton Delaware Falls Company*, where the New Jersey legislature had given eminent domain powers to a company developing mill sites on the Delaware River. The New Jersey Supreme Court ruled for the company, essentially arguing that the notion of a private company acting in the public interest was simply false, arguing that: "Private interest or emolument, is the *primum mobile* in all [such corporations]." [emphasis in original]

As the 19th century progressed, however, the stance of the courts on eminent domain shifted toward one of greater resistance to the idea of granting eminent domain powers to private corporations. By the 1870s, a substantial minority of state courts had overturned milldam legislation on the basis that they infringed on private rights for private purposes [Scheiber(1971), p. 386]. Some evidence from these cases suggests that over time, it became harder to argue that the public good was served by granting these powers to mill dams.

A good example of this is given in the 1877 case *Ryerson v. Brown*, in which the Michigan Supreme Court overturned legislation that granted eminent domain privileges to

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[13] See also *Commonwealth v. Wilkinson*, 16 Pick. 175 (Mass., 1834); *Raleigh and Gaston Railroad v. Davis*, 2 Dev. And Bat. 451 (N.C., 1837); *Louisville v. Chappell*, Rice 383 (S.C., 1838).

private milldams.[14] In its ruling, the Court strongly resisted the argument that granting eminent domain powers to mill dams would stimulate greater mill dam development, which undercut the notion of associated public benefit. It noted, for example, that many mill-sites remained unimproved "because the power is not in demand."[15] Furthermore, it was not at all clear to the court that the power generated would not simply redound to the benefit of the dam proprietor, not the locality or the state:

> *"The statute appears to have been drawn with studious care to avoid any requirement that the person availing himself of its provisions shall consult any interest except his own, and it therefore seems perfectly manifest that when a public use is spoken of in this statute nothing further is intended than that the use shall be one that, in the opinion of the commission or jury, will in some manner advance the public interest. But incidentally every lawful business does this." [at 339]*

So the *Ryerson* court was unconvinced not only that the mill dam would confer any significant benefit, but even if it did, it questioned that anyone would benefit besides the proprietor himself.

Thus, by the time of the calling of the constitutional convention in California in 1878, the courts had not entirely resolved the questions of public benefit in eminent domain cases and what it consisted of. This means that water developers for mining and agricultural purposes could not be assured of being able to invoke eminent domain in pursuing their projects. This provided the impetus for their representatives to push for provisions to be inserted in the new constitution.

IV. Eminent domain in the 1879 constitutional convention

In late 1878, a constitutional convention was held in California to write a new constitution for the state, to replace the original state constitution written in 1849. As required by law, the call for a convention had to come from the legislature. This was the first successful

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[14] *Ryerson v. Brown*, 35 Mich. 333(1877).
[15] *Ibid*., at 338.

call in the history of the legislature for a convention to design a new constitution, even though such measures had been introduced in the legislature as early as the late 1850s [Pisani(1984)].

The issue of eminent domain came up in the context of Article 14 of the constitution, which specifically targeted water rights. Article 14 declared that all water appropriated for sale, rental, or distribution was a public use and subject to the regulation and control of the State. The issue of eminent domain appeared in the report of the committee charged with writing the article, which was then debated on the floor of the convention. Much of this debate centered on whether Article 14 should extend eminent domain powers to miners and irrigating farmers.

The article reported by the committee on water rights contained three sections. The first two sections declared that all appropriated water for sale or rental, and water not yet appropriated, were public and subject to state control and regulation. These sections were assertions of police power by the state, to regulate and manage the state's water resources in the public interest. The third section directed the legislature to enact laws that permitted appropriators of water to construct water conveyance facilities across the land of others. The section read:

> *"The Legislature shall enact laws permitting the appropriators of water and the owners or occupants of land to construct levees, ditches, canals, flumes, and aqueducts, or run their water through natural channels for agricultural, mining, manufacturing, milling, domestic, drainage, reclamation, or sanitary purposes, across the land of others."*

This proposed section was quickly amended on the floor to add that "just compensation" was required, making it obvious that it was a statement about the exercise of eminent domain powers.

The explicit stated objective of the committee in proposing section three was to facilitate reclamation of farmlands. The specific problem it attempted to address was opportunistic hold-up by landowners. As stated by the chairman of the committee Tinnin:

> *"Section three was placed in the report of the committee… in deference to the farming interests of the State… The object in putting it there was to overcome a*

> *difficulty that has often occurred; namely, say, a party owns a piece of land between a tule swamp and the river. The tule swamp is useless unless it can be drained. The party who owns the high lands demands an exorbitant price for the privilege of cutting a drain through his land. He really blackmails the party owning the tule lands. The committee did not think it was right that any such state of affairs should exist."*

However, this proposed section was immediately attacked by delegates who argued that it was unconstitutional because it constituted a takings for a private use; namely, to benefit an individual farmer. Said delegate Caples from Sacramento:

> *"Then the section permits the taking of private property for private use. I deny the power. I hold that it would be in conflict with the Federal Constitution, and with the well understood and universally recognized exercise of the power of eminent domain."*

Delegate Howard from Los Angeles was more explicit about the constitutional basis for his opposition:

> *"It was decided… in the case of Fletcher v. Peck, that a grant is a contract protected by the Constitution of the United States, and you cannot violate it… Now, this decision in Fletcher vs. Peck has been reaffirmed repeatedly by the Supreme Court of the United States… [You] cannot take a man's land for private use at all under the right of eminent domain, and you cannot take it for public use without making just compensation."*

However, supporters of the provision were able to summon constitutional support as well. Delegate Filcher, in arguing for the provision, invoked the Illinois constitution, which contained a very similar provision that empowered its legislature to pass laws granting farmers rights of way to construct drains and ditches "across the lands of others." He also invoked the 1831 *Beekman* ruling, concluding: "Are the public not benefited by the promotion of the agricultural interest?"

Here we see the issue that was the crux of the matter for the delegates regarding the eminent domain provision: Was farming a public use that justified, under eminent domain, the taking of land for drainage? As we have seen, during the 19th century the meaning of the term

"public use" was in rapid flux, expanding and changing in meaning as judges sought ways to balance the needs of economic development. It was probably inevitable that multiple precedents could be found in existing legal sources, and that these would not necessarily provide the same guidance on the question of exactly what constituted a public use. This uncertain state of affairs left delegates free to select precedents that would support their preferred political outcome.

In the end, section three was excised from the article and unfortunately, there are no roll call votes available on this decision. However, later in the convention, supporters of section three attempted to revive the issue by proposing the following amendment to section one, offered by delegate Hitchcock of San Joaquin:

> *"provided, that the Legislature may, by general laws, authorize the taking of private property on just compensation made therefor, when necessary to the construction or maintenance of water ditches or canals for the drainage or reclamation of lands, and may on like conditions authorize the taking of private property when necessary to secure rights of way to or from draining of mines."*

This amendment was obviously a final attempt to support farmers and miners in their quest to obtain rights of right-of-way across the lands of others. And as before, it was subject to vigorous debate. But in the end, it was narrowly defeated, 59 to 57. These and other roll call votes in the convention will form the basis for a regression analysis in the next section.

Before turning to that analysis, one other important feature of the debates should be mentioned. As we have seen, for some twenty years the city of San Francisco had been supplied water by the Spring Valley Water Company, with which it signed a contract in the 1850's. However, by the time of the convention, the city was chafing at what it considered to be the usurious terms under which the Company was supplying water. As a result, the delegates from San Francisco came into the convention with a definite agenda: to obtain relief from these usurious practices. So for example, at one point the following amendment was offered by delegate Herrington:

> *"The right to collect rates of compensation for the use of water supplied to any county, city and county, city, or town, or the inhabitants thereof, is a franchise, and cannot be exercised except by authority of and in the manner prescribed by law."*

As explained by delegate Reynolds:

> *"[This amendment] is an attempt to reduce… these corporations which undertake to furnish incorporated cities and towns with water, to the control of law, and to make them amenable to law, and make their operations conform to law and to established rules."*

Here, Reynolds was obviously speaking directly to the practices of the Spring Valley Water Company, even if not mentioning the company by name.

It would turn out that the San Francisco delegation, by voting as a solid bloc, was able to commandeer much of the water rights article for its own purposes. The final version of the article would look very little like the version introduced by the committee. The key differences were two. First, section three was excised, as we have seen. Second, a provision was added that empowered local authorities to fix water rates of water companies every year and allowed "any party interested" to sue to compel the local authority to set rates if it failed to do so. In addition, it called for water companies to forfeit their franchises and waterworks if they failed to abide by the decisions of these local authorities.

The rationale for the new provision was explained at length by Barbour, delegate from San Francisco. Under the General Incorporation Act passed in 1858, water rates charged by water companies were to be determined by a Board of Commissioners consisting of two representatives of the locality, two representatives of the water company, and in case they could not agree, they should choose a fifth member, to serve as tiebreaker. The performance of the Board of Commissioners model had been unsatisfactory, Barbour argued, resulting in rates being arbitrarily and haphazardly set. The new provision would require local authorities, like Boards of Supervisors, to act, and "not to shuffle the responsibility off upon any Commissioners." Later

on in the debate, Smith, a delegate also from San Francisco, argued that the "Spring Valley Water Company controls the city [of San Francisco] in its grasp," in supporting a provision to limit water supply to only "lawfully constituted authorities," hence placing more control over water supplies in the hands of localities, like San Francisco. It is clear that the San Francisco delegates were highly exorcised over the Spring Valley Water Company and in the end, they were able to largely hijack the water article for their own purposes.

V. What determined roll-call voting on eminent domain in the convention?

In this section, I report the results of an econometric analysis of several roll-call votes in the convention. The Hitchcock amendment will be the main focus, as it is the only roll-call vote that pertained directly and unambiguously to eminent domain. However, the results of analyses of other votes will also be presented, as the pattern in these other results provide context and support for a particular interpretation of the Hitchcock amendment.

The convention debates strongly suggest that two interest groups had a strong stake in the passage of the Hitchcock amendment: farmers and miners. Both groups would have had an interest in its being added to section one, after section three had been discarded. So my basic model of convention voting will include measures of the financial stakes in the home district of both miners and farmers. These basic measures are per capita mining value *PCMinevalue* and per capita farm production value *PCFarmvalue*. Conceptually, these variables capture the demand, at the individual level, of rent-seeking farmers and miners for approval of this amendment, so both of their coefficients are predicted to be positive.

Of course, one would not necessarily expect all farming counties to feel the same way about the Hitchcock amendment, since farming counties varied in terms of the extent of irrigation occurring locally. That is, regions of the state that were less reliant on irrigation for

growing crops would not have been expected to support the Hitchcock amendment as strongly. Regions without irrigation entirely should have been indifferent to the passage of this amendment. To capture the distinction between irrigated farming counties and non-irrigated counties, I created a 0-1 dummy variable D^{IRRIG} that assumes a value of one for irrigating counties.[16] This dummy variable is interacted with *PCFarmvalue* to create the new variable (D^{IRRIG} X *PCFarmvalue*). In combination with the prediction of a positive coefficient on *PCFarmvalue* alone, the coefficient on this variable is predicted to be negative.

Many histories of this period in California stress the importance of party affiliation in influencing political attitudes toward interventionist government policies [Kelley(1959, 1989); Hundley(1992)]. The California Democratic Party was the party of the Jeffersonian Anti-Federalists, who believed in limited central government. The Republican Party carried on the tradition of the Federalists, who supported a strong central government. The anti-vested interest, interventionist policy of eminent domain may have appealed more to delegates representing Republican concentrations of voters. To capture this ideological factor, I created a variable *ForPerkins*, which is defined as the percentage of the popular vote received by the Republican candidate for governor, George Perkins, in the 1880 election.

Finally, as we have seen, the delegates representing San Francisco came into the convention with a specific agenda; namely, to obtain relief from alleged monopoly practices of the Spring Valley Water Company. This suggests that they may have voted on common grounds not shared by delegates from other parts of the state. In addition, in other votes more directly involving their interests, they might have been expected to vote as a bloc on behalf of their joint

[16] The counties counted as irrigating counties were the thirteen counties listed in footnote 8.

interests. Part of the strategy here is to examine and compare roll call votes other than on the Hitchcock amendment, including ones that fall into this latter category, with the overall pattern of voting being used to tell a general story of delegate interests and motivations. To accomplish this, I created a 0-1 dummy variable D^{SF} that assumes a value of one if a delegate represents San Francisco.

The final model is shown in equation (1). The dependent variable D^{HITCH} is a 0-1 dummy variable that assumes a value of 1 for a "yes" vote and zero for a "no" vote on the Hitchcock amendment.

$$D^{HITCH}_i = ß_0 + ß_1\ PCFarmvalue_i + ß_2\ (D^{IRRIG}_i\ X\ PCFarmvalue_i) + ß_3\ PCMinevalue_i + ß_4\ ForPerkins_i + ß_5\ D^{SF}_i + u_i \qquad (1)$$

The data are cross-sectional, with i indexing convention delegates. The residual u_i is assumed to satisfy the usual conditions. There are 114 total observations.

Table 1 reports the results of a series of regressions of this model. Columns (1) – (2) contain the results of estimations of a linear probability model, while columns (3) – (4) contain the results of logit estimations. Since *ForPerkins* is not significant at standard levels of significance, I report the results both including and excluding this variable. The results are robust to its exclusion and indicate several things. First, both farmers and especially miners favored passage of the Hitchcock amendment. This strongly suggests that both groups supported having the ability to use eminent domain to gain rights-of-way across others' lands, in order to have access to water supplies.

Table 1: Analysis of the vote on the Hitchcock amendment

	Linear Probability		Logit	
	(1)	(2)	(3)	(4)
PCFarmvalue	0.0023*	0.0023*	0.0112*	0.0100*
	(0.0012)	(0.0012)	(0.0061)	(0.0057)
(D^{IRRIG} X PCFarmvalue	-0.0028**	0.0032**	-0.0171*	-0.0187*
	(0.0013)	(0.0013)	(0.0104)	(0.0104)
PCMinevalue	0.0081***	0.0081***	0.0420***	0.0388**
	(0.0029)	(0.0030)	(0.0173)	(0.0160)
ForPerkins	0.9563	---	4.9956	---
	(0.6452)	---	(3.2290)	---
D^{SF}	0.4588***	0.4869***	2.0995***	2.1089***
	(0.1464)	(0.1460)	(0.7113)	(0.6901)
Constant	-0.2148	0.1941	-3.6257**	-1.3492**
	(0.3015)	(0.1225)	(1.6369)	(0.0590)
R^2	0.1591	0.1420	0.1282[a]	0.1120[a]

Figures in parentheses are estimated standard errors.
* Significant at 10%; ** Significant at 5%; *** Significant at 1%.
[a] Pseudo-R^2.

Second, irrigating and non-irrigating farmers felt differently about the desirability of having eminent domain privileges. Those counties where irrigation was already occurring were less disposed to support the amendment. This suggests that in these counties, there was generally less concern about not having access to water supplies.

Third, the San Francisco delegates were strongly in favor of endowing irrigating and farming counties with eminent domain powers. This result is somewhat less straightforward to interpret. However, a number of histories speak of the stake that San Francisco bankers and tradespeople had in the success of the mining sector, which may explain their support for the amendment.

To shed further light on the patterns of support for the water article, I now turn to an examination of votes on two other proposed amendments as well as the vote on final passage of the water article. The two other amendments were proposed by delegate Waters and delegate Smith. The amendment proposed by Waters, who represented southern California and southern counties in the interior, would have amended proposed Section 1: "*The use of all water now appropriated, or that may hereafter be appropriated, for sale, rental, or distribution*," by adding the words "*to the public*." To many delegates, this amendment implied a weakening of public control of water development and supply, perhaps the last thing that delegates from San Francisco wanted. With the San Francisco delegates voting as a bloc against it, this amendment went down to defeat, 70-46.

The other amendment, proposed by delegate Smith of San Francisco, stated:

> *"Water for the use of any city or county, or city and county, or town, in this State… can only be appropriated by the lawfully constituted authorities of such city or county, etc. Any appropriation of water heretofore made by [anyone]… for the purpose of supplying [any city or town, etc.] not actually evidenced and carried into operation by the construction of waterworks, and the furnishing of water at the time of the adoption of this Constitution, shall be void."*

This amendment was a brazen attempt by the San Francisco delegates to expropriate the water supplies of Spring Valley Water Company. This tactic was called out by delegate Caples, of Sacramento, who argued that it assumed the power to simply declare a forfeiture of private property. This attack on vested property rights was too much for the delegates as a whole and it was soundly defeated 65-35, despite the delegates from San Francisco voting as a solid bloc for it, 26-0.

Table 2 reports the votes on the three amendments and the final vote on the water article, along with the votes by the San Francisco delegation. The vote totals reflect both the political strength of the San Francisco delegates, and the limits to that strength. On the one hand, the San Francisco delegates were able to fend off the Waters amendment by staunchly opposing it and eliciting sympathy for their cause from delegates from around the state. They also turned out to be the difference in the defeat of the Hitchcock amendment: if they had voted as a bloc, it would have passed. On the other hand, the San Francisco delegation did not achieve its most preferred outcome: expropriation of the water rights of the Spring Valley Water Company, a draconian maneuver that was simply beyond the pale for other delegates at the convention.

Table 2: Votes on proposed amendments to the water article, Final vote

	Hitchcock amendment	Waters amendment	Smith amendment	Final vote
Total	57-59	46-70	35-65	87-37
SF	21-8	2-27	26-0	26-2

All of this suggests two things. First, that the San Francisco delegates may be properly viewed as an interest group in the convention, with similar interests in a number of constitutional provisions. Indeed, on the water rights article, they were a remarkably unified and coherent interest group, particularly on certain issues in which they had a clear stake. The theory of public choice predicts that such groups, with relatively small political transaction costs, will tend to be politically successful. The delegates from San Francisco certainly were, at least on this one article. Second, as with all interest groups, there were limits to their influence. When they attempted to go too far, they were unsuccessful.

We can use the results of these other votes to help interpret the vote on the Hitchcock amendment. For this, Table 3 presents the results of a series of logit estimations where the same model is applied to explaining the pattern of other votes. First, it should be noted that the model, while yielding theoretically sensible results for the Hitchcock amendment, does a much worse job of explaining the votes on the other amendments. The only variable that is significant across the votes on the three amendments is D^{SF}, which is sensible because as we have seen, each amendment had direct implications for San Francisco. Furthermore, the signs of the coefficients on D^{SF} make sense given the interpretations previously discussed.

Besides D^{SF}, however, none of the variables does a good job of explaining variations in voting on the other amendments: their coefficients are unstable, and nearly all are completely insignificant at standard significance levels. These results confirm the interpretation that miners and farmers had a stake in the use of eminent domain, which they viewed as benefiting them in a predictable way. On the other hand, they had no such stake, or perception of a stake, in whether to specify that public control could be exercised over appropriated water for sale "to the public." Neither did they have a substantial interest in cities being permitted to expropriate water rights

from their suppliers. All of this suggests that the model is a reasonable one, and that the variables being used to capture the theoretical impacts are doing the job.

Table 3: Analysis of votes on Hitchcock, Waters, Smith amendments, Final vote on water article

	Hitchcock	Waters	Smith	Final
PCFarmvalue	0.0112*	0.0004	-0.0062	-0.0048
	(0.0061)	(0.0051)	(0.0116)	(0.0057)
(D^{IRRIG} X PCFarmvalue	-0.0171*	0.0112	-0.0039	-0.0058
	(0.0104)	(0.0082)	(0.0122)	(0.0057)
PCMinevalue	0.0420***	-0.0011	0.0109	-0.0168*
	(0.0173)	(0.0098)	(0.0182)	(0.0094)
ForPerkins	4.9956	4.0655	-7.6973*	-4.4160
	(3.2290)	(2.8489)	(4.6692)	(3.2056)
D^{SF}	2.0995***	-1.9967***	4.4792***	0.2837
	(0.7113)	(0.7382)	(1.2517)	(0.6966)
Constant	-3.6257**	-1.8431**	1.6208	3.2883**
	(1.6369)	(1.3577)	(2.1493)	(1.5330)
Pseudo R^2	0.1282	0.1361	0.4972	0.0805
Number of observations	114	112	98	124

Figures in parentheses are standard errors.
* Significant at 10%; ** Significant at 5%; *** Significant at 1%.

VI. Discussion and conclusions

I have argued that constituency interests can explain a great deal of what we observed at the 1879 constitutional convention in regard to the water rights article. In assessing eminent domain powers, individual stakes mattered in determining how delegates voted on a matter of importance to those they represented. Ideology may have mattered to some extent but was soundly dominated by economic interests: agricultural, mining, and urban. Delegates from San Francisco enjoyed disproportionate success in shaping the water rights article probably in part because they were highly unified on a single issue that mattered a great deal to their constituents. All of this confirms the potential importance of political considerations in shaping the application of eminent domain.

There is a complementary way to understand the behavior of delegates at the convention and the accompanying political outcomes. Convention delegates operated under legal norms imposed by existing doctrine. This was manifested not in being overruled by courts, as commonly occurs with legislation whose constitutionality may be subject to question. Rather, the floor debates reflected in part the delegates' own sense of what was and was not beyond the legal pale. Some things clearly were legally acceptable. Others, such as direct expropriation of water rights, were not even close to being acceptable, and though some delegates pushed the legal limits, most delegates were simply unwilling to go there. And then there were issues on which a case could be made on both sides, like public uses vs. private uses, which provoked sharp debate. All of this supports a view of the continuity of the common law, as has been stressed by various legal scholars [Scheiber(1975); Getzler(2004)].

We now know that in subsequent years, the California legislature took steps to address the issue of issue of opportunistic holdup. Less than ten years later, in 1887, the legislature

enacted the Wright Act, which created the statutory machinery for the creation of public irrigation districts. Under the Wright Act, irrigation districts were specifically empowered, among other things, to condemn water rights and rights-of-way to enable construction of irrigation facilities [Pisani(1984), pp. 253-54]. This sequence of events suggests that in the late 1870s, irrigating farmers were not yet sufficiently powerful politically to obtain eminent domain powers legislatively. However, this changed over roughly the next ten years as irrigation continued to spread throughout the state.

All of this suggests the following possible dynamic: early on, the spread of irrigation in California was delayed in part because irrigating farmers were politically impotent, perhaps precisely because of their small numbers. And it took a critical mass of irrigation activity to overcome political resistance. Put differently, irrigation development in California may have been subject to a path-dependent process in which it was hampered by its lack of political influence while still in its infant stages.[17] This situation was gradually rectified over time as irrigated farming grew in economic importance and gained political sway. Future research will develop this idea by taking a broader look at the legislative history of this period related to the development of irrigation.

[17] See also Libecap(2011) regarding this notion of path-dependence in irrigation development.

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