Bankers, Bandits, and a Folk Theorem

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Abstract

The Dominion of New England (1686-89) saw both the rise and fall of the first American bank. Both events resulted from appointed rulers' attempts to personally profit from the real estate sector. The first, *local* ruler established a nominally private land bank. The subsequent, *foreign* ruler invalidated all land titles and thus killed the bank. This unique natural experiment clarifies how economic development can be affected in different ways by different types of dictators. It also demonstrates the relevance of Mancur Olson's model of stationary and roving bandits, which is really a comparison between a repeated game and a one-shot game (Hillman 2004).

PRELIMINARY AND INCOMPLETE

1. Introduction

The relation between the form of government and economic development is one of the most important topics in economics. On the one hand it is argued that absolutism discourages investment because of its disrespect of property rights (North and Weingast 1989). On the other hand there are many reasons why dictators could promote growth better. Democracy's weak points include excessive red-tape, populist income redistribution, and inflationary finance which replaces unpopular explicit taxes and budget cuts (Cukierman 1992). Empirically, the negative effect dominates at low levels of political freedom but the positive effect dominates at moderate levels of political freedom. Examples of the positive effect are Augosto Pinochet in Chile, Alberto Fujimori in Peru, and Park Chung-Hee in South Korea, who have liberalized their economies and improved economic performance relative to the democracies they replaced (Barro 1996).

One intriguing mechanism by which dictatorship can promote growth is pointed out by Greif (1994) in the context of medieval Genoa: a large useful investment might take place only by a dictator who can obtain the required initial funds and then expropriate most of the profits. This mechanism seems to be in direct contradiction to North and Weingast. It is exactly because the dictator can expropriate that he can promote growth.

Such contradicting evidence leaves one wondering what determines the rulers' behavior in different cases. Throughout human history, most societies were ruled by dictators most of the time. Understanding dictators' behavior is therefore necessary for understanding economic history. The question also has relevance today. Can it be predicted whether a given dictator will end up promoting or discouraging economic growth? Will China grow faster if it democratize? Is India's democracy keeping it behind China?

This paper analyzes an unusual and largely unknown natural experiment that can bring us closer to answering such a question. This experiment on dictatorship happened in the least expected place – Massachusetts. From 1686 to 1689 it was the core of the royal Dominion of New England. Under the same absolutist constitution (imposed by England) and two consecutive rulers (also imposed by England), a land bank scheme rose – and then fell. Known as John Blackwell's bank, this private bank scheme rose dramatically while its local leaders also controlled the government. The appointment of a new, foreign head to that government completely reversed the bank's fortunes. That ruler invalidated all the land titles in the Dominion – the same land titles that were supposed to back the bank's notes. The bank was therefore aborted at an advanced stage. The long-run effect on financial development was disastrous. Private banks would not appear in America until Independence almost a century later.

To explain the difference between the bank's fate under the different rulers I apply Mancur Olson's conceptual model of stationary and roving bandits (Olson 1993, 2000). It has been translated into game theoretic terms by Hillman (2004) who showed that it was merely a folk theorem. Putting land at the heart of the problem, however, results in new complications in the analysis.

The case of the land bank is a natural experiment because it features opposite outcomes for the same financial venture under the same exogenous absolutist constitution. Moreover, the rulers' circumstances as local and foreign were entirely beyond their control not only regarding their past but, more importantly, regarding their future. I argue that these different exogenous circumstances made all the difference between them regarding their land policy. I will rule out an alternative explanation that the local ruler's patriotism made the difference.

This analysis allows us to go beyond the labels "absolutism" and "dictatorship" and differentiate between different types of such non-democratic regimes. It allows us to explain dictators' behavior in more insightful ways than saying they were good or bad, smart or stupid.

The paper proceeds as follows. Section 2 describes the bank's dramatic rise and fall while ignoring the leaders' background. Section 3 presents a variant of Olson's model with land and land banking. Section 4 returns to the facts and demonstrates how the model explains the bank's volatile fortunes. Section 5 concludes.

2. Rise and Fall of the Bank

The following account focuses on constitutional issues and the contrast between the bank's rise and fall. In Goldberg (*Journal of Economic History* 2011) I elaborate on how the bank was exactly supposed to operate and I prove the relation between the land policy of the foreign ruler and the bank's demise. Detailed references are available there.

In 1684 King Charles II revoked the charter of the Massachusetts Bay Company. In 1685 the new king James II devised a new form of government for Massachusetts. His views on the nature of government were clear when he controlled New York as his private colony since 1663. It was the only colony without an assembly for twenty years. Massachusetts became the core of the Dominion of New England, a new entity which consolidated all the small New England colonies and territories: Plymouth, Massachusetts, Rhode Island, Connecticut, New Hampshire and Maine. The limited democracy of Massachusetts, based historically on its corporate charter but later on church membership, was completely gone. The king appointed a president and council which had absolute authority on all legislative, executive and judicial matters. The president appointed was one Joseph Dudley. I will have much more on his background later, but for now I intentionally leave it aside. Dudley's commission stated that he was to lead the council only temporarily, until a permanent governor would be appointed. His own role at that later point was not yet specified.

Also in 1685 an old Puritan financier, Captain John Blackwell, moved from England to Massachusetts. His Cromwellian past gave him such credentials that he was nearly elected magistrate upon arrival. He happened to be involved in a failed land bank project in England in the early 1680s. The plan was for a bank to accept mortgages on people's lands and give in return a loan in banknotes issued by the bank itself. The Bank of England did not exist yet and this was supposed to relieve the shortage of silver coin. When Blackwell left to Massachusetts he took a copy of the plan with him. He probably knew that coin was far more rare in America while land was much more abundant. With less coin and more land, Massachusetts would have been the perfect place to launch a land bank. Moreover, a greater distance from the Stuart kings seemed beneficial to banking plans. From contemporaries to North and Weingast (1989), it has been the conventional wisdom that large scale banks could not rise in Stuart England because of the bad reputation of the Stuarts as gross violators of property rights. Notable examples were the confiscation of merchants' deposits at the Royal Mint (1640) and the huge default on government debt known as Stop of the Exchequer (1672).

The commission to Dudley arrived in May 1686 and he quickly established his council. Blackwell's bank scheme was suddenly launched as well and won exceptional progress. In June the council formed a large grand and standing committee of merchants, chaired by Blackwell, to discuss ways to end a recession. In July Blackwell proposed his bank scheme to the council, which referred it to Blackwell's own committee. The committee obviously wrote a positive report. In September the council approved the committee's report and promised to act in favor of the establishment of the bank. It even made the prospective banknotes legal tender for all payments, including taxes. It is highly unusual in monetary history, before and after 1686, to make private banknotes legal tender for debts and taxes. The Bank of England was approved by Parliament in the following decade only after its promoters gave up their demand that the banknotes would be legal tender (Horsefield 1966). More than a century would pass before they would get such status and by then the Bank of England was not really a regular private bank anymore.

As noted first by Lewis (1967), the bank's progress emanated from the personal involvement of the government leaders in the bank. In 1687 the bank's directors would be revealed as Blackwell, Dudley, William Stoughton, and Councilor Wait Winthrop. Stoughton was a friend and business partner of Dudley and was appointed as Dudley's deputy president by Dudley himself. Winthrop was one of the leading councilors. Two other bank officers, former colony treasurer James Russell and the richest man in Boston Councilor Samuel Shrimpton, were senior members in Blackwell's trade committee. Perhaps the bank was approved in 1686 because the government leaders had already had a stake in it, or the approval was implicitly conditional on the appointment of government leaders to key bank positions. Either way, as Lewis (1967, pp. 191-2) noted, there were symbiotic relations between the absolutist government, the advising trade committee, and the private bank.

North, Weingast and Wallis (2009) call this kind of symbiosis a 'dominant coalition.' They argue that this type of relations between political and economic elites was the rule in societies which were 'limited access orders.' In such societies – dictatorships and immature democracies – either the political leaders are personally involved in all large business ventures and will then provide various benefits that no truly private business can obtain, or they will sabotage the project. A profit calculation that ignores the government's direct involvement, for better or worse, is utterly useless for the entrepreneurs because it does not reflect any realistic scenario. Such a calculation is relevant only in 'open access orders,' namely modern Western democracies. Seventeenth century England, however, was a limited access order, and so were its young colonies.

In December 1686 the permanent governor, Sir Edmund Andros, took office. There was no substantive change in the form of government. Andros's commission was essentially the same as Dudley's commission. Dudley himself was demoted to councilor, Andros's deputy and chief judge (UK National Archives, PRO CO 5/904, p. 352). In May 1687 Andros forced land registrar Edward Randolph to lease his office to John West, an old friend of Andros. Andros then began attacking all land titles. He started informing land owners that all the land titles in the Dominion were defective and thus invalid. He had various arguments to support this claim: the lands reverted to the crown upon the charter's revocation, Native Americans were not eligible to sell land, towns were not incorporated and thus could not grant lands, and the grants were not sealed. Presumed land owners had to petition Andros for a survey of the land and title confirmation. This land policy was the key to a broader policy of disrespect of property rights. Andros forced a Puritan church to share its meeting house with the few local Anglicans; he gave Anglicans a foothold at the Puritan college (Harvard); he denied the towns' ownership of common lands; he confiscated treasures from shipwrecks; and he even confiscated oil-rich whales that were cast on public shores.

Andros was slow in implementing his wholesale repudiation of land titles, probably fearing a revolution or recall from the king. He started giving away some of the land to his cronies. This gave time to the bank partners to react. They understood that the appointments of Andros and West were a shock to the dominant coalition. There were two ways to deal with it: beat them or join them. One bank partner joined large landowners in lobbying in London against Andros and trying to get him recalled or have his policy changed. Dudley, however, understood that the shock required realignment of the privileges and rents within the newly expanded coalition (North, Wallis and Weingast 2009). He therefore probably tried to make Andros a partner in the bank. To the 100 original bank shares were added 12 shares, meant to be granted to someone very important whose name could not be disclosed at that point (Davis 1907).

It was in vain. In July 1688 Andros received a new commission from the Crown, which did not rebuke his land policy and even gave him New York and New Jersey. One week later, Andros launched an unprecedented legal attack, prosecuting some of the colony's elite for supposedly invading the king's land. The attack was prepared by another old friend of Andros, James Graham, who had just become the new attorney-general. Graham publicly promised that all the rich would be targeted for all their lands

(Whitmore 1868, vol. I, p. 93). Four days after the prosecution started Blackwell announced that the bank scheme was aborted because the partners wished to withdraw.

A few months later William III deposed James II in the Glorious Revolution. Hearing about it, the colonists quickly deposed Andros and his council. Andros, West, Graham, Dudley and others were imprisoned for almost a year before William III ordered to send them to trial in England. They were acquitted and returned to office in other colonies.

This sequence of events is puzzling. How could two dictators who received the same exogenous constitution from the English king treat the same financial venture in so drastically different ways within just two years? One joined and promoted the bank plan quickly and to exceedingly high levels. The other killed the asset that the bank was based on and refused to join the bank, similar to the infamous Stuart mischiefs back home. The next section will point a possible source for such starkly different policies.

3. Theory

3.1. Olson's Bandits

Mancur Olson (1993, 2000) used a parable of bandits to discuss the origins of government. In the beginning, according to Olson, bandits were *roving*, traveling from one village to another, pillaging and plundering and then moving on to the next victim. At some point the idea occurred to some of them that they might obtain more resources by staying in one place, protecting it from other bandits, allowing the inhabitants to produce and prosper, and making a living by taxing them (i.e, robbing them moderately but on a regular basis). These are the *stationary* bandits, and according to Olson's cynical account, bandits of that type put crowns on their heads, concocted some heroic or divine origins of their rule, and became respectable kings.

The latter claim can obviously be disputed in specific cases, as some kings may have been genuine benevolent heroes to their peoples. Olson hints all too briefly at an analogous story where such controversy is impossible. It relates to the difference between a hunter and a rancher. Facing a group of wild fowl, people could either kill them and eat them, or put a fence around them and raise them as chicken. The latter step was, of course, the most important development in human history and the beginning of civilization, and probably did not emanate from any relationship of benevolence or admiration between chicken and rancher.

Olson used his parable to explain the behavior of dictators throughout human history. His story explains why dictators, who can kill their subjects and take all their propety, are not necessarily so destructive in practice. They might promote economic growth for purely egoistic reasons. Olson goes on to argue that dictators who are young and healthy, or at least have children, see a long time horizon and are thus more likely to be stationary bandits than old, childless dictators. Therefore, the most personal circumstances of the dictator can be critically important for economic development. Olson concludes, happily, that democracy is even more beneficial for long-run economic development.

3.2. A Formal Model

Hillman (2004) shows that Olson's insights can be formalized as a simple game, where the roving bandit plays a *one-shot* game with the population while the stationary bandit plays a *repeated* game. A standard folk theorem argument allows both bandit and population to be better off in the repeated game than in the one-shot game.

For the purposes of this paper I need to modify Hillman's model in two ways. First, in that model the dictator can confiscate in any period only the fruits of current labor, whereas in the Dominion story the land itself could be confiscated. This means that the game to be repeated might not be exactly the same in every period. Second, in that model the dictator either leaves the population alone or he confiscates. I need to add a third option, one of collaboration that increases the overall surplus from the land (i.e., the land bank).

Assume then an agricultural economy composed of a fixed immobile population of infinitely-lived farmers. The farmers own land which is the only production factor of output. Land is fixed at size K acres and is prone to depreciation in terms of its fertility. Farmers can prevent this depreciation with labor effort, which includes maintenance of fences that keep animals away and eliminating wild plants. A fertile land area of k acres yields a quantity ak of perishable consumption goods every period. An acre which is not maintained in any period loses its fertility forever with probability δ. The utility cost of maintenance is l per maintained acre. The periodic utility function from consumption and leisure is $U = C - lk$. The discount factor is β. The farmers also hold a large amount of money, m dollars, at an offshore location. It yields an interest payment rm every period, which the farmers can import in the form of goods. In a stationary equilibrium the farmers consume both domestic produce and imports and maintain both the land and money at fixed levels.

Enter a dictator. He has a periodic salary R that comes from external sources. He has the legal and physical ability to confiscate the farmers' resources. Confiscation is costly as it requires an administrative process. Due to prohibitively high costs he cannot confiscate either current fruits of the land or the farmers' offshore money. He can, however, confiscate all the land itself. The confiscation cost per acre is c.

Assumption 1: $m > \frac{(a-l)K}{r} > c$.

For simplicity I assume that if the dictator confiscates land at all then he confiscates all of it. He can collect fruits from confiscated land but he cannot maintain it like the farmers can.

3.2.1. One-shot game

To relate the model to the folk theorem on repeated games, I begin with Table 1 which describes the basic simultaneous move game between the farmers and the dictator. The dictator is supposed to leave after this one-shot game while the population is expected to stay forever and face no more dictators in the future. Since the dictator leaves the economy, he is not really interested in the land per se. Confiscation really means that he immediately sells the land back to the farmers. It is therefore equivalent to a large fee for confirming land titles. It is an indirect way to grab the money they have offshore and which he cannot confiscate directly. The price per acre is p. Let $v(k,m)$ be the value function of farmers holding k acres and m dollars. The game is described in Table 1.

Table 1

	Dictator does not confiscate	Dictator confiscates
Farmers work	$ak + rm - lk + \beta v(k,m)$, R	$ak + rm - lk + \beta v(0,m)$, $R - ck + pk$
Farmers rest	$ak + rm + \beta v(k(1-\delta),m)$, R	$ak + rm + \beta v(0,m)$, $R - ck + pk(1-\delta)$

If the dictator confiscates the land and the farmers do not buy it back, they expect $v(0,m) = \frac{rm}{1-\beta}$. If they buy their land back they work forever and expect $v(k,m) =$

$\frac{(a-l)k+r(m-pk)}{1-\beta}$ if they worked this period. Assume that the dictator has all the bargaining power so that if he confiscates the land and then sells it he extracts all the farmers' discounted lifetime surplus from the land so they are indifferent between buying the land and not buying it. The total land price is therefore $pk = \frac{(a-l)k}{r}$ if the farmers worked that period and slightly lower if they didn't. By Assumption 1 the farmers have enough money to pay that price. Table 1 can therefore be rewritten as Table 2.

Table 2

	Dictator does not confiscate	Dictator confiscates
Farmers work	$(a-l)k + rm + \beta\frac{(a-l)k+rm}{1-\beta}$, R	$(a-l)k + rm + \beta\frac{rm}{1-\beta}$, $R - ck + \frac{(a-l)k}{r}$
Farmers rest	$ak + rm + \beta\frac{(a-l)k(1-\delta)+rm}{1-\beta}$, R	$ak + rm + \beta\frac{rm}{1-\beta}$, $R - ck + \frac{(a-l)k(1-\delta)}{r}$

In this one-shot game the dictator confiscates if (but not only if) $R - ck + \frac{(a-l)k}{r} > R$, which holds by Assumption 1. Given this decision, the farmers rest.

3.2.2. Repeated game

If the dictator stays forever, then he can reach an implicit agreement with the farmers. The dictator will not confiscate the land. He will, however, tax the farmers. He will get every period a fraction t of their current fruits, so that every period, so long as he does not confiscate, he earns tak from the land while the farmers earn $(1-t)ak$ from the land. There is a cost τ to collecting taxes from every acre. The farmers on their part will maintain the land every period. The value to the dictator of not confiscating is $\frac{R+(ta-\tau)k}{1-\beta}$.

If he confiscates, the farmers never work again (whether they buy the land back or not) and the land loses fertility. To the dictator this has value $R-ck+\beta\left[\frac{R}{1-\beta}+\frac{ak}{1-\beta(1-\delta)}\right]$.

He will not confiscate iff $c+\frac{ta-\tau}{1-\beta}>\frac{\beta a}{1-\beta(1-\delta)}$. This is consistent with Assumption 1 for some parameter values.

3.2.3. Repeated game with a business collaboration

Suppose now that the dictator figures out a way of collaborating with the farmers in a way that increases the surplus from land. Specifically, the dictator opens a land bank, which nobody else can operate. Farmers can mortgage their land and get in return financial and monetary services that save them time in their (unmodeled) market activities. The bank gets from the farmers a commission *d* for providing such services per mortgaged acre. Assume for simplicity that if any land is mortgaged then all of it is mortgaged. The time saving for farmers who mortgage k acres yields a periodic extra utility from leisure *sk*. The dictator pays a periodic fixed cost *b* for operating the bank.

If the dictator opens a bank and the farmers mortgage their land and maintain it, then every period he earns $dk-b$ from the land while the farmers earn from the land $(a-l-d+s)k$. He prefers it to taxation iff $b<(d-ta+\tau)k$. If the farmers do not mortgage the land, the dictator will resort, at best, to taxation, in which case the farmers get from the land $(1-t)(a-l)k$ every period. They prefer to mortgage iff $s-d>-t(a-l)$. If their benefit *s* is large enough then they will mortgage.

To summarize, a temporary dictator can confiscate the land. A permanent dictator has alternatives. He can tax production every period or start a business collaboration that will benefit both sides. For some parameter values, the dictator will open the business and the farmers will cooperate with him.

4. Back to the Dominion

According to the model, a temporary dictator should be destructive while a permanent dictator could be beneficial for development. Recall that Dudley was appointed a temporary president while Andros was appointed a permanent governor. And yet it was Dudley who promoted the bank while Andros killed it. Is the model wrong? Not at all. Formally, from the narrow point of view of the Dominion's top leadership, Dudley was temporary and Andros was permanent. Overall, however, it was exactly the other way around. From a long run perspective, nobody was more of a permanent insider than Dudley and nobody was more of a temporary outsider than Andros.

4.1. Dudley as a stationary bandit

Joseph Dudley was born in Roxbury, Massachusetts.[1] He belonged to the small elite which led the colony through the generations. His father was Thomas Dudley, one of the top three men in the first twenty years of Massachusetts. Thomas founded Cambridge and was elected governor four times (one year each time). Thomas was 71 years old when his son Joseph was born and he died 6 years later. Perhaps this was the origin of Joseph's unusually lax patriotism. After graduating from Harvard and fighting in King Philip's War, Dudley was elected in 1676 as a magistrate in the Massachusetts General Court. This happened as a matter of course due to his father's stature.

In 1682 Dudley was elected to serve as an agent for the colony in London in order to defend the charter from revocation. It was a hopeless battle as Charles II launched a

[1] Kimball (1911) is the only book-length biography.

general attack on charters, domestic and colonial. 'If you can't beat them, join them,' thought Dudley, and not for the last time. He joined discussions with the colony's worst enemies in London, who recognized his greed and contrived with them the creation of the Dominion in which he would have a leading position. Upon his return he was not elected again as magistrate, which was an exceedingly unusual event. He faced much hatred from people in the streets but kept busy by accumulating land with his friend Stoughton (PRO CO 5/904, pp. 205-6).

Dudley was not surprised to find himself nominated as the Dominion's president. His appointment served the role of easing on the colonists the traumatic transition from independent, limited democracy to complete royal submission. The temporary nature of his appointment was therefore intentional. He certainly expected to remain in a leading position after the arrival of the permanent governor and indeed he became Andros's deputy and chief judge. His ability to use his political position to accumulate wealth was not supposed to be hurt even one bit. With no elections forthcoming any time soon, at the age of 39 he expected to be in such a position for decades. He was a stationary bandit.

For evaluating Dudley's options, alternative banditry careers should be considered. Could he have become a bandit, stationary or roving, anywhere else? There was no precedent for a native of one colony getting a leadership position in another colony. Some English-born colonial leaders did. Edward Winslow, a Plymouth founder and governor, became a commissioner for Cromwell in the 1655 raid on the West Indies. He might have become governor of Jamaica had he not died just before its occupation. John Winthrop Jr. settled first in Massachusetts, where his father was governor, and later led two of Massachusetts' offshoots (New Haven and Connecticut). The Dominion was created exactly to prevent such splitting of colonies and thus it was out of the question. If Dudley was to be in the leadership anywhere, it could be expected to be only in Massachusetts.[2] The other bank leaders, William Stoughton and Wait Winthrop, also descended from founding fathers of Massachusetts – Israel Stoughton and Governor John Winthrop. They could also expect to stay in a social and political leadership position in the Dominion, and only there, for many years.

4.2. Andros as a roving bandit

Edmund Andros belonged to the leading family of the Channel island of Guernsey.[3] The family name is a French version of 'Andrews.' The Androses served the royal family in Holland during the Interregnum. In 1660 the restored Charles II declared that the Andros family, including Edmund specifically, proved "inviolably faithful" to him. After serving the royal family in England and the military in the Caribbeans, Andros became in 1674 the governor of New York – James Stuart's private colony. Although he was knighted in 1678, James recalled him in 1680 due to corruption charges. Andros cleared his name but was not returned to office. In 1686, James – as King James II – appointed Andros again to be his most important man in America.

Immediately upon taking office Andros started bringing cronies from New York. John West and James Graham had first arrived to New York with Andros in 1678, when he was back from his knighting visit to London. They arrived as factors of English merchants and later entered public life. West was secretary of the New York government

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[2] Dudley himself created the precedent of a colonist leading another jurisdiction. In the 1690s he was president of the New York council and later governor of Isle of Wight.

[3] This paragraph is based on Whitmore (1868), vol. I, pp. ix-xxiii.

while Graham became its attorney general (Ritchie 1977). Another New Yorker, Francis Nicholson, was named deputy governor in the 1688 commission instead of Dudley. Another New Yorker, John Palmer, would be imported as chief judge instead of Dudley shortly after the bank was aborted. The Puritans complained bitterly about this group of 'foreigners,' namely Anglicans with no property in Massachusetts. They added to this group the first attorney general George Farewell and High Sheriff James Sherlock, whose origins are unknown to us.[4]

Andros and this group could not expect to stay for long. The median tenure of a Stuart-appointed colonial governor after the Restoration was four years. The average was about five years, depending on how it is measured (see Table 1). Andros could recall his own experience in New York and what he saw first-hand in the Caribbeans. Andros was therefore a roving bandit.

Did Andros have alternative banditry options? He could choose to settle in the Dominion like any English subject, but this would not have turned him from a roving bandit to a stationary bandit. He would have been discharged from office within a few years like the other governors. His options in the Dominion were therefore living there as a stationary *non*-bandit or as a roving bandit. His cronies had just proved their mobility and willingness to go wherever he could generate rents for them.

It is now clear why Dudley failed in getting Andros on board the bank. Such realignment of the coalition's rents would not have helped someone as temporary as Andros, and he had much better uses for the land. This is why the realignment had to be

[4] Sewall, pp. 167, 186, 216-8, Whitmore (1868), vol. I, pp. 74, 149. Farewell was in Massachusetts at least since the beginning of Dudley's presidency (Konig 1979, pp. 163-4).

more drastic – undermining the land titles of older members of the coalition, and, probably inadvertently, undermining the bank as well. The commission of 1688 implied royal approval of Andros's realignment. Together with the arrival of Graham, Nicholson and Palmer, it shocked the dominant coalition more seriously and resulted in the bank's immediate collapse. The shock was too severe and united all colonists against Andros. With the pretext and encouragement of the Glorious Revolution, the result was the easy revolution of 19 April 1689 which drove him out of power and dismantled the Dominion. Private banking never got another chance in colonial Massachusetts. After the government itself started issuing money in 1690 it resisted competition and later Parliament sabotaged banking (Davis 1901, vol. II).

5. Conclusion

Under the same absolutist constitution of the Dominion of New England, its two leaders had opposite approaches to property and thus opposite outcomes regarding financial development. Their land policies were determined solely by their personal circumstances. In Olson's terms, Dudley was a stationary bandit while Andros was a roving bandit.

Dudley was 100% a local man. He was already heavily invested in his colony and was one of the main land speculators. Blackwell's bank was a great opportunity for him to turn that land into cash, especially when he and his partners also controlled the absolutist government. Dudley's land holdings and financial ties to the community made it unthinkable for him to invalidate all titles even if he had not been one of the bank's leaders.

Andros and company had no land holdings in the Dominion. For them the irregularities of land titles were an opportunity to grab others' lands or at least get very high fees for confirming the ownership of lands (Whitmore 1868, vol. I, pp. 92, 98-100, 143, 205). The fees could be seen as a mafia's protection in the sense described by Olson (2000, ch. 1). The refusal of the population to pay them led – as Olson expected – to (legal) violence. A bank based on existing titles would not have helped Andros. His lack of good faith with regard to land ownership is proven by the fact that he unnecessarily invalidated all the titles, even though most of them had surely gone undisputed for decades. Also, while he was secretely instructed by the king to buy land from Natives, he told the colonists that Native purchases cannot be valid. As he did in New York, he only wanted to extort as much wealth as he could from his temporary subjects (Ritchie 1977, ch. 5).

Andros's disregard of property rights is similar to the behavior of the Stuarts in the infamous cases mentioned earlier. What made Charles I in 1640 and Charles II in 1672 act like roving bandits and confiscate property on a massive scale was not their recent Scottish ancestry but the fact that these events happened *during wars*. A king who fears that he would lose a war and his throne thinks of himself temporarily as a roving bandit, at least probabilistically, and he acts accordingly (Olson 1993).

North and Weingast (1989) and Greif (1994) showed cases of dictatorship changing into a democracy or the other way around. Neither was a test of one type of dictator against another, and of course they analyzed very different times and places from each other. Comparisons between dictators to test Olson's model are inherently difficult because we need to have everything else equal. Usually dictators can decide on their form of government and how absolutist it would be. By definition they can make it more or less absolutist as they wish, and they can even make a full transition to democracy and leave our sample of dictators. It is hard to find two dictators who are on the same point on the spectrum between totalitarianism and democracy. The problem is therefore one of endogeneity. In addition, personal life events, such as the birth of a child, can suddenly turn a roving bandit into a stationary one. Expectations of such events can change dictators' behavior even if the event is not realized and lead again to different behaviors which are difficult to compare.

The special thing about the Dominion is that there was a super-dictator in England who inadvertently conducted a controlled experiment. He kept the form of government constant and varied only the dictators' personal circumstance. Another special feature of the Dominion episode is that dictators can affect the economy in so many different ways, with much of the good and bad cancelling out when one looks at measures of GDP. The Dominion experiment allows us to focus on what was literally the only bank in town.

Table 1: Tenure of Stuart-appointed Colonial Governors, 1660-1687

Barbados: F. Willoughby 3, W. Willoughby 6, Atkins 6, Dutton 5.
Jamaica: Doyley 1, Windsor 1, Modyford 7, Vaughan 4, Carlisle 2, Lynch 3.
Leeward Islands: Wheeler 1, Stapleton 14, Johnson 1+.
New Hampshire: Cutt 2, Cranfield 3.
New York: Nicolls 4, Lovelace 5, Andros 6, Dongan 4+.
Virginia: Berkeley 17, Culpeper 6, Howard 3+.

Statistics:
Average for all governors: 4.72.
Average for those whose tenures have ended by 1687: 5.05.
Median (in both cases): 4.
Standard deviation: 3.98.
Average minus all outliers (smaller than 2, larger than 10): 4.31
Average minus the Stuarts' own proprietary colonies: 4.75.

Notes:
- The list displays the last name of each governor and his number of years in office. Tenure of governors who were still in office in 1687 is marked with "+".
- The list includes people appointed by Charles II and James II, 1660-1687. Appointments during the Interregnum were irrelevant, and appointments of Charles I probably too distant to be either remembered or relevant (Andros was born in 1637). The end year 1687 is the time when Andros started his attack on land titles.
- The list includes appointees in the Stuarts' own proprietary colonies (Barbados 1663-1673, New York 1664-1685).
- The list does not include deputy-governors and lieutenant-governors who became caretakers upon the death or recall of a governor.
- The tenure is the number of years in which the governor could effectively profit from his office. It usually runs from appointment to recall or death, even if the governor was absent part of the time. The only exception is Culpeper in Virginia. He was appointed in 1675 and didn't bother going there to discharge Berkeley. Berkeley was fired in 1677, Culpeper arrived in 1680 and was fired himself in 1683.
- Bermuda's corporate governor continued after the company's charter was revoked in 1684. The first royal governor was appointed in 1687.

Sources:
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