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Colonial New Jersey's Provincial Fiscal Structure, 1709-1775: Spending Obligations, Revenue Sources, and Tax Burdens in War and in Peace

[5/1/15]

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The spending obligations and revenue sources of colonial New Jersey's provincial government for the years 1704 through 1775 are reconstituted using forensic accounting techniques from primary sources. Such has not been done previously for any British North American colony. These data are used to assess colonial New Jersey's provincial fiscal structure. The methods for raising revenue to meet normal peacetime and emergency wartime expenses are identified and analyzed. The provincial tax burdens imposed on New Jersey's subjects are calculated. How the British interfered with New Jersey's provincial fiscal structure is identified. What revenues and tax burdens would have been without this interference are estimated.

The Spending Obligations of Colonial New Jersey's Provincial Government

Colonial New Jersey's legislature had two primary spending obligations. The first was to pay for the "support of government," namely paying the salaries of provincial government officials and the other expenses incurred in running its administrative structure. The second was to pay for military expenses, i.e. soldiers' pay and military supplies, for the colony's participation in the wars of the British Empire.

Table 1 reports the yearly support-of-government expenses. These data are derived from a forensic accounting reconstruction of expenses listed in all surviving "support of government" acts passed by New Jersey's legislature. Support-of-government obligations were paid in other

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Table 1 **Typical Colonial New Jersey Provincial "Support of Government" Itemized Yearly Expenses, 1709-1775**

	1709	1710	1741-2	1743	1748-51	1752-9	1760-3	1764-5	1766-71	1772	1773	1774-5
Annual Salaries:	£$_{NJ}$	£$_{NJ}$	£$_{NJ}$	£$_{NJ}$	£$_{NJ}$	£$_{NJ}$	£$_{NJ}$	£$_{NJ}$	£$_{NJ}$	£$_{NJ}$	£$_{NJ}$	£$_{NJ}$
Governor	685.76	685.76	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	1,200.00	1,200.00	1,200.00	1,200.00	1,200.00
Governor's House Rent			60.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00
Lt. Governor	171.44	171.44										
Chief Justice	85.72	61.72	200.00	100.00	100.00[b]	0[d]	100.00	150.00	150.00	150.00		
Second Justice		24.00	30.00	30.00	25.00	25.00	25.00	50.00	50.00	75.00	100.00	150.00
Third Justice			30.00	30.00	25.00	25.00	25.00	50.00	50.00	50.00	100.00	150.00
Eastern Treasurer	42.86	42.86	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00
Western Treasurer			40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00
Attorney General			40.00	40.00	40.00[c]	30.00	30.00	30.00	30.00	30.00	30.00	40.00
First Clerk	51.43	51.43	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Second Clerk	34.88	34.88			20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00
Agent for the Colony to the British Court			80.00[a]	80.00	80.00	80.00	80.00	80.00	100.00	100.00	100.00	100.00
First Doorkeeper	12.86	12.86	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Second Doorkeeper	12.86	12.86										
Sergeant at Arms	12.86	12.86										
Salary Subtotal	1,110.67	1,110.67	1,560.00	1,460.00	1,470.00	1,360.00	1,460.00	1,760.00	1,780.00	1,805.00	1,730.00	1,840.00
Average Incidental Expenses	25.72	25.72	140.99	56.60	78.89	283.61	441.86	148.55	107.47	149.49	543.24	385.12
Estimated Per Diem Expenses	330.72	330.72	727.46	727.46	727.46	727.46	727.46	727.46	727.46	727.46	727.46	727.46
Totals	1,467.11	1,467.11	2,428.45	2,244.06	2,276.35	2,371.07	2,629.32	2,636.01	2,614.93	2,681.95	3,000.07	2,952.58

Sources: Bush (1977, pp. 45-9, 73-5, 541-5; 1980, pp. 65-70, 124-7, 168-72, 195-213, 234-51, 269-87, 327-44, 472-88, 581-97, 639-57; 1982, pp. 5-13, 107-111, 191-5, 273-6, 309-12, 427-31, 453-6, 505-8; 1986, pp. 25-8, 53-8, 115-21, 171-6, 301-6, 419-22); Grubb (2015).

Notes: £$_{NJ}$ = face value of New Jersey bills of credit (New Jersey pounds). Post-1723, at face value, 1.3275£$_{NJ}$ = 1£$_{S}$ (£$_{S}$ = pounds sterling). Incidental expenses are only for items connected with "support of governments", such as assembly printing costs, Sergeant-at-Arm expenses after 1740, assembly supplies, and so on. They exclude any military spending. Estimated per diem payments are amounts paid to assemblymen for every day attended and to judges for every day the court sat. Because the incidence of these payments are unknown these values are estimated. For the 1741-75 estimate, see Grubb (2015). The 1709-10 estimate subtracts the salary and incidental expenses from the taxes authorized to pay these expenses and assumes the remainder was used to cover per diem expenses. The 1709-10 values are converted to post-1723 values, see Grubb (2015).

[a] No amount was paid in 1742. [b] Paid only 20.83£$_{NJ}$ in 1751. [c] Paid only 30.00£$_{NJ}$ in 1749. [d] Paid 150.00£$_{NJ}$ in 1757.

years, but acts itemizing the obligations have not survived (Kemmerer 1940). Based on the evidence in Table 1, total non-war spending on the support of government from 1704 through 1775 was approximately 145,524.53£$_{NJ}$, or an average of 2,021.17£$_{NJ}$ per year. This estimate uses linear interpolated values between the nearest years with data. The following adjustments were also incorporated. The governor's salary was not paid in 1744, 1745, and 1746, nor were these salary arrears ever paid. The governor's salary was also not paid in 1751, however, this arrear appears to have been paid soon thereafter and so no adjustment is made for this 1751 salary nonpayment (Kemmerer 1940, pp. 180, 185-6, 229-30).

The assembly did not meet in 1712, 1715, 1717, 1720, 1724, 1726, 1729, 1731, 1732, 1734, 1735, 1736, 1737, 1739, and 1774 (McChesney 1851, pp. 20-3). In these years, most of the incidental and per diem obligations were not incurred. The courts met, thus some of the per diem obligations were incurred in these years. The incidental and per diem obligations were reduced by 75 percent (a best guess of the assembly's share) in the years the assembly did not meet from what their linear interpolated values would have been.

Total non-war spending on the support of government from 1704 through 1775 based on how actual revenues were spent was approximately 141,267.04£$_{NJ}$, or an average of 1,989.68£$_{NJ}$ per year (from Table 6 below). This estimate is biased low because of missing data on revenues from trade duties. The interpolation exercise using data from Table 1 most likely produces a biased high estimate. The two estimated amounts are relatively close. Given the opposing biases, this closeness gives confidence that the true total spending on the support of government from 1704 through 1775 was between 141,300£$_{NJ}$ and 145,500£$_{NJ}$.

New Jersey participated in three major wars of the British Empire, namely Queen Anne's War (1702-13), the War of Jenkin's Ear and King George's War (1739-48), and the Seven

Years—French and Indian War (1755-64). Britain expected New Jersey to participate in these wars and to pay for that participation. Participation entailed providing militia for expeditions against the enemy and providing war materials to support that militia as well as the regular British military. New Jersey spent 5,829£$_{NJ}$ on Queen Anne's War, 2,000£$_{NJ}$ in 1740 on the War of Jenkin's Ear, 17,850£$_{NJ}$ on King George's War, and 312,500£$_{NJ}$ on the Seven Years War (from Table 6 below). Overall, New Jersey's provincial government spent 334,465£$_{NJ}$ on war between 1704 and 1775, or 2.3 times total non-war spending in this period.

War accounted for 70 percent, whereas support of government accounted for 30 percent, of total spending by New Jersey's provincial government between 1704 and 1775. War spending was highly concentrated compared with support-of-government spending. When war came, spending obligations rose 6 to 22 times that of normal peacetime spending. War required revenue sources that were beyond historically acceptable and feasible contemporaneous tax levels.

Colonial governments faced standard budget constraints. Tax receipts (T_j) had to match government spending (G_j). When they didn't, colonial governments had to adjust their borrowing and asset positions. For the most part, colonial governments did not have asset positions, such as stocks of gold and land. External markets where colonial governments could borrow were not adequately developed or accessible. Thus, when war caused $G_j > T_j$, colonial governments had to move tax revenues through time to balance current budgets.

The New Jersey legislature did this by issuing bills of credit (M), see equation (1). These bills were zero-coupon bonds that served as a legal-tender paper money in the local economy (Grubb 2014, 2015). When war spending in year "j" threw the budget into deficit, M_j was issued to make up for deficient T_j. M_j was directly spent by the legislature on soldiers' salaries and war supplies like it was current tax revenue. Budget surpluses in future years were designed to retire

M_j from circulation. New Jersey provincial taxes were paid in these bills, or their specie equivalence, at face value. New Jersey printed this specie equivalence for tax purposes on the face of each bill (Newman 2008, pp. 249-59).

$$(1) \qquad 0 < (G_j - T_j) = M_j = \sum_{t=j+1}^{N} (T_t - G_t) > 0$$

M = face value of new emissions of bills of credit
T = taxes paid in M or its specie equivalent at face value
G = government spending

Paper money creation was a credit-debt mechanism that matched budget deficits with budget surpluses over a multi-year horizon. The balanced budget requirement was cut loose from a strict time unit. It still had to be balanced, but now it could be balanced over a multi-year horizon. Paper money acts included tax legislation designed to redeem and thereby remove the bills from circulation. To maintain fiscal credibility and feasible annual tax levels, these taxes were spread over many years into the future.

By contrast, spending obligations for the support of government could be met each year out of current tax revenues. New Jersey's legislature, however, discovered another way to meet these support-of-government spending obligations. New Jersey subjects demanded New Jersey government bills of credit (M) as a preferred local medium of exchange. When war expenses were insufficient to support the legislature directly spending bills into circulation, the excess public demand for bills meant the legislature could loan them at interest to their subjects. This was done through a land bank mechanism. The legislature had bills printed and placed in the colony's treasury. Subjects could borrow them by pledging their lands as collateral. The annual interest subjects paid on their loans was a percentage point or two below the market rate. This incentivized subjects to borrow the bills and put them into circulation. Land-bank emissions were always fully loaned out (Grubb 2015).

Land-bank loans generated annual interest income (E_t) that the provincial government could use as a revenue source, see equation (2). Subjects paid their yearly interest either in bills or the bills' face-value specie equivalent. By spending E_t as revenue, the government kept the bills in circulation. This interest income could be used to reduce tax revenues, i.e. by substituting E_t for T_t in equation (1). Loan principals were paid to the treasury on a fixed schedule, thus removing the bills from circulation, see equation (3).

$$(2) \qquad E_t = [\sum_{t}^{N} (L_t)] * i$$

$$(3) \qquad M_j = \sum_{t=j+1}^{N} L_t$$

L = loan principal paid (retired) each year
E = interest earned by the government each year
i = yearly interest charged on loans of M

In summary, the New Jersey provincial government met its war-spending obligations primarily by printing and spending bills of credit (paper money). These bills were redeemed with future taxes over a lengthy span of years. The government met its normal yearly support-of-government spending obligations with either current tax revenues (T_t) or with interest income earnings (E_t) from loaning out paper money. Fiscal and monetary policy were intertwined. British interference with New Jersey's provincial fiscal structure was largely through delaying or disallowing land-bank paper-money acts, thus altering the province's flow of E_t revenue.

Colonial New Jersey's Provincial Government Revenue by Source

Table 2 shows New Jersey's provincial government yearly revenues by source. The amounts are adjusted for tax arrears and when those arrears were paid (Grubb 2015). There are five revenue sources: newly printed non-land-bank bills of credit, revenue property taxes, interest income earned on loans of paper money, duties on imports and exports, and cash transfers from

Table 2. New Jersey Provincial Government Revenue Sources, 1704-1775

Year	Newly Printed Bills of Credit[a] £NJ	Property Tax Collection[e] £NJ	Interest Income £NJ	Estimated Duty on Imported Slaves[d] £NJ	Crown Cash Transfers £NJ	Total Yearly Revenue in Hand £NJ	COUNTERFACTUALS[c] Interest Income £NJ	Property Tax Collection £NJ	Total Yearly Revenue in Hand £NJ
1704		0	0	0		0	0	0	0
1705		1,714.40	0	0		1,714.40	0	1,714.40	1,714.40
1706		1,714.40	0	0		1,714.40	0	1,714.40	1,714.40
1707		0	0	0		0	0	0	0
1708		0	0	0		0	0	0	0
1709	2,542.52	1,476.54	0	0		4,019.06	0	1,476.54	4,019.06
1710		0	0	0		0	0	0	0
1711	4,286.00	1,295.83	0	0		5,581.83	0	1,295.83	5,581.83
1712		1,525.31	0	0		1,525.31	0	1,525.31	1,525.31
1713		35.72	0	0		35.72	0	35.72	35.72
1714		1,765.72	0	0		1,765.72	0	1,765.72	1,765.72
1715		855.72	0	0		855.72	0	855.72	855.72
1716		35.72	0	0		35.72	0	35.72	35.72
1717	2,464.38	0	0	1,050		3,514.38	0	0	3,514.38
1718		0	0	1,050		1,050.00	0	0	1,050.00
1719		1,650.00	0	1,050		2,700.00	0	1,650.00	2,700.00
1720		836.00	0	1,050		1,886.00	0	836.00	1,886.00
1721		300.00	0	620		920.00	0	300.00	920.00
1722		1,392.08	0	620		2,012.08	0	1,392.08	2,012.08
1723		1,042.50	0	620		1,662.50	0	1,042.50	1,662.50
1724	3,886.80	695.00	0	0		4,581.80	0	695.00	4,581.80
1725		695.00	1,319.77	0		2,014.77	1,319.77	695.00	2,014.77
1726		1,089.35	1,166.77	0		2,256.12	1,166.77	1,089.35	2,256.12
1727		970.00	1,013.77	0		1,983.77	1,013.77	970.00	1,983.77

1728		970.00	1,100.27	0	2,070.27	1,100.27	970.00	2,070.27
1729		1,000.00	947.27	0	1,947.27	947.27	1,000.00	1,947.27
1730		968.85	794.27	0	1,763.12	794.27	968.85	1,763.12
1731		993.85	641.27	0	1,635.12	641.27	993.85	1,635.12
1732		993.85	488.27	0	1,482.12	1,427.43	0	1,427.43
1733		1,000.00	314.64	0	1,314.64	1,253.80	0	1,253.80
1734		1,000.00	1,100.80	0	2,100.80	1,100.80	0	1,100.80
1735		1,000.00	947.80	0	1,947.80	2,708.30	0	2,708.30
1736		0	812.80	0	812.80	2,573.30	0	2,573.30
1737		0	830.07	0	830.07	2,590.57	0	2,590.57
1738		0	2,590.57	0	2,590.57	2,590.57	0	2,590.57
1739		0	2,606.37	0	2,606.37	2,606.37	0	2,606.37
1740	2,000.00	0	2,606.37	0	4,606.37	2,606.37	0	4,606.37
1741		0	2,611.20	0	2,611.20	2,486.20	0	2,486.20
1742		0	2,611.20	0	2,611.20	2,361.20	0	2,361.20
1743		0	2,486.42	0	2,486.42	2,236.20	0	2,236.20
1744		0	2,361.20	0	2,361.20	1,861.20	0	1,861.20
1745		0	2,236.20	0	2,236.20	1,486.20	0	1,486.20
1746	16,850.00	0	2,111.20	0	18,961.20	1,111.20	0	17,961.20
1747	1,000.00	0	1,736.20	0	2,736.20	736.20	0	1,736.20
1748		0	1,361.20	0	1,361.20	510.39	0	510.39
1749		0	986.20	0	986.20	1,863.89	0	1,863.89
1750		0	760.39	0	760.39	1,761.89	0	1,761.89
1751		0	510.39	0	510.39	1,751.39	0	1,751.39
1752		7,994.00	260.39	0	8,254.39	1,751.39	4,942.97	6,694.36
1753		2,800.71	8.70	0	2,809.41	1,749.70	1,059.71	2,809.41
1754		2,197.70	0	0	2,197.70	1,751.50	446.20	2,197.70
1755	30,000.00	3,000.00	0	0	33,000.00	1,751.50	1,248.50	33,000.00

1756	27,500.00	3,000.00	0	0		30,500.00	1,751.50	1,248.50	30,500.00
1757	45,000.00	3,000.00	0	0		48,000.00	1,751.50	1,248.50	48,000.00
1758	60,000.00	3,000.00	0	0		63,000.00	1,501.50	739.50	62,241.00
1759	50,000.00	3,000.00	0	0		53,000.00	1,251.50	0	51,251.50
1760	45,000.00	0	0	0	63,046[b]	108,046.00	1,001.50	0	109,047.50
1761	25,000.00	0	0	0		25,000.00	751.50	0	25,751.50
1762	30,000.00	0	0	0		30,000.00	501.50	0	30,501.50
1763	10,000.00	0	0	416		10,416.00	251.50	0	10,667.50
1764	25,000.00	0	0	416		25,416.00	1.50	0	25,417.50
1765		0	0	416		416.00	0	0	416.00
1766		0	0	416		416.00	0	0	416.00
1767		0	0	1,040		1,040.00	0	0	1,040.00
1768		0	0	1,040		1,040.00	0	0	1,040.00
1769		0	0	1,040		1,040.00	0	0	1,040.00
1770		0	0	1,560		1,560.00	0	0	1,560.00
1771		0	0	2,070		2,070.00	4,360.50	0	6,430.50
1772		0	0	2,070		2,070.00	4,560.50	0	6,630.50
1773		3,569.96	151.76	2,070		5,791.72	4,712.26	0	6,782.26
1774		3,500.00	0	2,070		5,570.00	4,560.50	0	6,630.50
1775		3,500.00	0	2,070		5,570.00	4,560.50	0	6,630.50
1704-1775 Totals	380,529.70	65,578.21	39,473.73	22,754	63,046	571,381.64	83,128.71	33,955.87	583,414.28

Sources: Table 3; Bush (1977, 1980, 1982, 1986); Greene (1980, p. 98); Grubb (2015).

[a] Bills printed to be loaned out to subjects are not counted. This column counts bills when they were available in the treasury, and not when they were actually spent.

[b] This amount was received in installments from 1760 through 1765. 51,321£$_S$ = 68,128.63£$_{NJ}$ (face value), see Greene (1980, p. 98). Fees and exchange costs reduced the spendable portion of this amount by approximately 7.46 percent (Bush 1982, pp. 10-13, 315-6), thus reducing the 68,128.63£$_{NJ}$ to 63,046£$_{NJ}$. See note c of Table 5.

[c] The counterfactual tax collection takes the difference between the counterfactual interest income and the actual interest income and reduces the property tax collection by that amount for that year. Any positive counterfactual interest income remaining after that subtraction is applied to prior or successive years to reduce tax collection to zero, as long as this movement did not exceed a 10-year contiguous span. The excess counterfactual interest income during 1771-5, after reducing the property tax collection to zero, is assumed to be applied to reducing tax collection after 1775. The counterfactual *Total Yearly Revenue in Hand* differs from the actual *Total Yearly Revenue in Hand*

by this multi-year shifting of excess interest income. The excess interest income generated in 1771-5 accounts for the difference in the *1704-1775 Totals* between the actual and the counterfactual *Total Yearly Revenue in Hand*.

[d] The estimate takes the black population for New Jersey from 1710 to 1780, with linear interpolated values between decadal benchmarks, from Carter (2006, v. 5, p. 653) as synonymous with the New Jersey slave population. For the years 1716 through 1723, the rate of natural increase of New Jersey's black population is assumed to be zero, thus all the growth in the black population was through slave imports. For the years 1763 through 1775, the rate of natural increase of New Jersey's black population is assumed to be 1 percent, with the residual growth in the black population being slave imports. The rate of natural increase is assumed to be about 0.5 percentage points lower in New Jersey than the average reported for all continental North America in Fogel (1989, p. 124) because of less frequent slave family groupings in New Jersey and because slaves brought in by settlers were not taxed. See Carter (2006, v. 5, p. 662) on gender and adult-child ratios of the black population in New Jersey. The duty per slave import was multiplied by these estimated numbers of slave imports for each year that the duty was operative.

[e] Includes only property and excise tax revenues not designated for bill redemption.

the Crown (British Parliament). The Crown transfers only came near the end of the Seven Years War and were to defray some of that war's expenses incurred by New Jersey.

Bills of credit loaned out through the land-bank mechanism are not counted as revenue as the legislature could not directly spend those bills. Land-bank emissions were 36,000£$_{NJ}$ in 1724, 20,000£$_{NJ}$ in 1733, and 40,000£$_{NJ}$ in 1737. The legislature earned interest income on loaning these bills, but they could not spend the principal because it was loaned out. All land-bank loans paid 5 percent interest annually on the outstanding principal. The rest of the new emissions of bills were a revenue source that the legislature could directly spend (Grubb 2015).

The tax revenues in Table 2 count only taxes that yield monies the legislature could spend. Taxes collected to redeem and retire non-land-bank bills of credit are not counted as a revenue source. The legislature could not turn around and spend those proceeds. Bill-redemption taxes are, in effect, counted as revenue in the newly printed bills-of-credit column.

The data in Table 2 comes from a forensic reconstitution of accounts using primary sources. Grubb (2015) lays out the data reconstruction exercise used to identify the newly printed bills that could be spent as revenue by the legislature. Table 3 shows how the data on interest income and counterfactual interest income were reconstituted from primary sources. Subtracting the interest income designated to pay for loan administration, and interest payment arrears, yields

Table 3. Interest Income (Spendable Revenue) from Land Bank Loans of Paper Money, 1704-1775

Year	(A) Interest Income From Land-Bank Loans as Executed	(B) Minus Pay to Loan Office Commissioners as Executed	(C) Minus Interest Payment Arrears	(D) Available for the General Support of Government	Counterfactual Outcomes: Without British Government Interference (A)	(B + C)	(D)
	£NJ	£NJ	£NJ	£NJ	£NJ	£NJ	£NJ
1704-1724	0	0	0	0	0	0	0
1725	1,800	479.00	1.23	1,319.77	1,800	480.23	1,319.77
1726	1,647	479.00	1.23	1,166.77	1,647	480.23	1,166.77
1727	1,494	479.00	1.23	1,013.77	1,494	480.23	1,013.77
1728	1,341	239.50	1.23	1,100.27	1,341	240.73	1,100.27
1729	1,188	239.50	1.23	947.27	1,188	240.73	947.27
1730	1,035	239.50	1.23	794.27	1,035	240.73	794.27
1731	882	239.50	1.23	641.27	882	240.73	641.27
1732	729	239.50	1.23	488.27	1,729	301.57	1,427.43
1733	576	239.50	21.86	314.64	1,576	322.20	1,253.80
1734	1,423	300.34	21.86	1,100.80	1,423	322.20	1,100.80
1735	1,270	300.34	21.86	947.80	3,270	561.70	2,708.30
1736	1,135	300.34	21.86	812.80	3,135	561.70	2,573.30
1737	1,000	149.19	20.74	830.07	3,000	409.43	2,590.57
1738	3,000	388.69	20.74	2,590.57	3,000	409.43	2,590.57
1739	3,000	388.69	4.94	2,606.37	3,000	393.63	2,606.37
1740	3,000	388.69	4.94	2,606.37	3,000	393.63	2,606.37
1741	3,000	388.69	0.11	2,611.20	2,875	388.80	2,486.20
1742	3,000	388.69	0.11	2,611.20	2,750	388.80	2,361.20
1743	2,875	388.69	0.11	2,486.42	2,625	388.80	2,236.20
1744	2,750	388.69	0.11	2,361.20	2,250	388.80	1,861.20
1745	2,625	388.69	0.11	2,236.20	1,875	388.80	1,486.20
1746	2,500	388.69	0.11	2,111.20	1,500	388.80	1,111.20

1747	2,125	388.69	0.11	1,736.20	1,125	388.80	736.20
1748	1,750	388.69	0.11	1,361.20	750	239.61	510.39
1749	1,375	388.69	0.11	986.20	2,500	636.11	1,863.89
1750	1,000	239.50	0.11	760.39	2,250	488.11	1,761.89
1751	750	239.50	0.11	510.39	2,000	248.61	1,751.39
1752	500	239.50	0.11	260.39	2,000	248.61	1,751.39
1753	250	239.50	1.80	8.70	2,000	250.30	1,749.70
1754					2,000	248.50	1,751.50
1755					2,000	248.50	1,751.50
1756					2,000	248.50	1,751.50
1757					2,000	248.50	1,751.50
1758					1,750	248.50	1,501.50
1759					1,500	248.50	1,251.50
1760					1,250	248.50	1,001.50
1761					1,000	248.50	751.50
1762					750	248.50	501.50
1763					500	248.50	251.50
1764					250	248.50	1.50
1765							
1766							
1767							
1768							
1769							
1770							
1771					5,000	639.50	4,360.50
1772					5,000	439.50	4,560.50
1773			+151.76[a]	151.76[a]	5,000	287.74	4,712.26
1774					5,000	439.50	4,560.50

1775					5,000	439.50	4,560.50
Totals	49,020	9,546.49	0	39,473.51	99,020	15,891.29	83,128.71

Sources: Bush (1977, 1980, 1982, 1986); Grubb (2015).
Notes: All values are face values with $1.3275£_{NJ} = 1£_{S}$. Counterfactual estimates assume no additional interest payment arrears.
[a] Year when the interest arrears were paid.

the net interest income available to the legislature for paying current government expenses.

British interference with New Jersey's fiscal structure came in the form of delaying the implementation of the second and third land-bank emissions, from 1730 to 1733 and from 1733 to 1737, respectively. British interference then took the form of disallowing the implementation of new land-bank acts passed in 1748 and 1769. The counterfactual calculation assumes these acts went into effect when passed, rather than when delayed by British oversight or cancelled by Crown disallowance. The exception is the land-bank act of 1774. This act was a resubmission of the disallowed act of 1769. The 1774 act was also disallowed. If the 1769 act had not been disallowed, then the 1774 act would not have been resubmitted (Grubb 2015).

The property-tax acts to retire bills of credit spent by the legislature and to pay support-of-government expenses had the same structure. These acts began with a statement of the amount to be raised each year covered by the act. The acts then listed the items to be taxed and their tax amounts per unit measured (the rateables). The items taxed typically included land; servants and slaves; cattle, horses, and sheep; coaches and wheel chaises; merchant, shopkeeper, ferry, boat-haulage, mill, furnace and forge, distiller, and public-house (tavern) businesses; single men who worked for hire; the non-propertied poor; and nonresident peddlers. These acts placed taxes on most real and personal property, along with a head tax.[2]

[2] See Bush (1977, pp. 11-5, 45-9. 63-6, 73-5, 89-96, 103-13, 117-25, 213-43, 277-84, 301-19, 340-50, 403-7, 453-7, 498-502, 541-5, 581-5; 1980, pp. 65-70, 124-7, 168-72, 195-213, 219-233, 234-51, 269-87, 307-19, 327-44, 345-55, 373-82, 393-409, 413-25, 455-71, 472-88, 495-502, 517-29, 539-55, 563-78, 581-97, 621-57, 663-79; 1982, pp. 5-

The acts apportioned total taxes among the counties. Assessors and collectors for townships, districts, and counties were appointed. Every subject was required to give a list of their estates that were rateable by the acts to their local assessor, typically by early May. The county assessors met, typically between mid-August and early October, to compute the tax on each rateable item to raise the sum assigned to their county. Subjects had to pay their assessed tax to their local collectors, typically by mid-October. The collectors had to deliver their taxes to the county collector who then had to deliver the county's taxes to the colony's treasury, typically between late November and early January. These acts also listed the penalties for non-performance of each stage.

Some additional taxes were periodically imposed to raise revenue on the provincial level. A few of these taxes can have their revenues estimated, but most cannot. A five year excise tax on liquor from 1718 through 1722 was farmed out for 350£$_{NJ}$ per year (Bush 1977, pp. 193-5; Grubb 2015). These sums are included in the Property Tax Collection column in Table 2. The other taxes are reported in Table 4. They are mostly duties on imports and exports. Most of these taxes appear to be relatively trivial, given the small tax rate, the list of exceptions to their application, the short number of years covered, and the lack of evidence in the treasury reports on their collection.[3]

The exception is the import tax on slaves. Its revenue is estimated in Tables 2 and 4. The non-slave taxes in Table 4 will be ignored. Being currently not measurable, there seems little that can be done except to note that the overall revenue estimates are biased low. The surviving treasury reports do not itemize revenues by the item taxed. They only itemize revenues by

13, 73-89, 107-11, 125-40, 191-5, 207-21, 273-6, 289-306, 309-12, 385-8, 427-31, 453-6, 505-8; 1986, pp. 25-8, 53-8, 115-9, 171-6, 301-6, 328-31, 379-81, 385-8, 419-22); Grubb (2015).

[3] See *Documents Relating to the Colonial History of the State of New Jersey* (v. 14, pp. 51-3, 119-27, 303-7, 375-81, 439-49, 491-7; 15, pp. 68-78, 122-3, 173-82, 258-63, 305-7, 361-7, 621-6; v. 16, pp. 35-6, 420-6, 469-73; v. 17, pp. 257-65, 398-403; v. 18, pp. 57-62, 77-82, 207-9, 222-5, 319-21, 409-11, 493-9, 553-7).

Table 4. Specialty New Jersey Provincial Taxes Used as Revenue for the Support of Government

Tax	Time Coverage	Tax Rate	Exceptions	Estimate Revenue
Duty on Imported Slaves	1716-1723	10£$_{NJ}$ per slave	slaves accompanying new immigrant settlers are exempt in all years 1716-1775	6,060£$_{NJ}$
	1763-1766	2£$_{NJ}$ per slave for Eastern Counties; 6£$_{NJ}$ per slave for Western Counties		1,664£$_{NJ}$
	1767-1769	10£$_{NJ}$ per slave		3,120£$_{NJ}$
	1770-1775	15£$_{NJ}$ per slave		11,910£$_{NJ}$
Tax on Wheat Exports	1714-1717	0.05£$_{NJ}$ per bushel	only on exports to other North American colonies	??
	1726-1735	0.05£$_{NJ}$ per bushel		??
Tax on Timber or Staves Exports	1714-1725	1.5-1£$_{NJ}$ per 1,000 staves	only for export from Eastern Counties to other North American colonies; Western Counties included after 1744	??
	1726-1735	2-1£$_{NJ}$ per 1,000 staves		??
	1744-1748			??
	1751-????			??
Duty on Imported Convicts	1732	Disallowed by the Crown in 1732		??
Tax on Copper Ore Exports	1734-1738	2£$_{NJ}$ per ton of ore	only on exports to other North American colonies	??
Duty on Liquor & Rum Imports	1744-1748		only on drink not directly imported from the British West Indies	??
	1751-????			
Subsidy on Flax, Hemp, and Mulberry Production	1766-1772	money spent on subsidies		??

Sources: Table 2; Bush (1977, pp. 130-1, 131-3, 163-4, 207, 331-2, 423-7, 453-7, 524-6, 575-8, 579-8; 1980, pp. 75-6; 1982, pp. 171-5, 323-6, 336-8, 435-6, 479, 510-2; 1986, pp. 38-41).
Notes: The revenues gathered from the tax on peddlers and the tax on dogs, while province-wide, were used on the county level to pay for county infrastructure projects, to compensate for damages done by dogs, and as revenue for the local overseers of the poor to use. It was not revenue available to the provincial legislature to spend.

county, with rare exceptions noting some bit of revenue received for a specific activity.[4]

The counterfactual revenues in Table 2 are from the counterfactual interest income in Table 3. Holding total revenue constant, this counterfactual interest income entails adjusting revenues extracted from other sources. The assumption here is that property taxes collected for the support of government would be reduced by the extra amount of counterfactual interest

[4] E.g. see *Documents Relating to the Colonial History of the State of New Jersey* (v. 14, pp. 120, 380, 440-1; v. 18, pp. 61, 494-7).

income. This adjustment was chosen because the primary expenses paid by both revenue taxes on property and interest income were the same.[5]

Figure 1 illustrates the tradeoff between property tax and interest income revenues. With the first land bank in 1724, the legislature initially thought they had to use the interest to redeem and retire the paper money. They soon learned that repayment of the principal was enough to retire all the bills loaned, and so the interest income could be spent on other obligations. By the late 1730s this realization allowed for a full substitution of interest income for property taxes.

As the interest income from the third land bank, which started in 1737, waned by 1750, New Jersey enacted a fourth land bank in 1748. This land-bank act was disallowed by the Crown. Thus, after 1749, New Jersey had to revert to property taxes to cover support-of-government expenses. In the half-decade after the Seven Years War, New Jersey used leftover bills of credit printed in the last two years of that war, bills that with the end of the war were not needed to cover further military expenses, to pay for the support of government. When that revenue source was exhausted in 1771, the legislature wanted to use interest income from a new land bank to cover support-of-government expenses. This act, passed at the end of 1769, was disallowed by the Crown (Grubb 2015). Thus, New Jersey had to shift once again to revenue property taxes to cover support-of-government expenses.

Colonial New Jersey's Provincial Taxes

Total provincial taxes imposed on New Jersey subjects are different from taxes collected as a revenue source for the legislature to spend. This is caused by provincial monetary policy's effect on fiscal policy. Taxes collected for supporting current spending on the support of government are the same as shown in Table 2. The duties in Tables 2 and 4 are not counted as

[5] See Bush (1977, pp. 341-20, 379-81, 498-502, 541-5, 581-5; 1980, pp. 65-70, 124-7; 1986, pp. 419-22); Kemmerer (1940, pp. 131, 145).

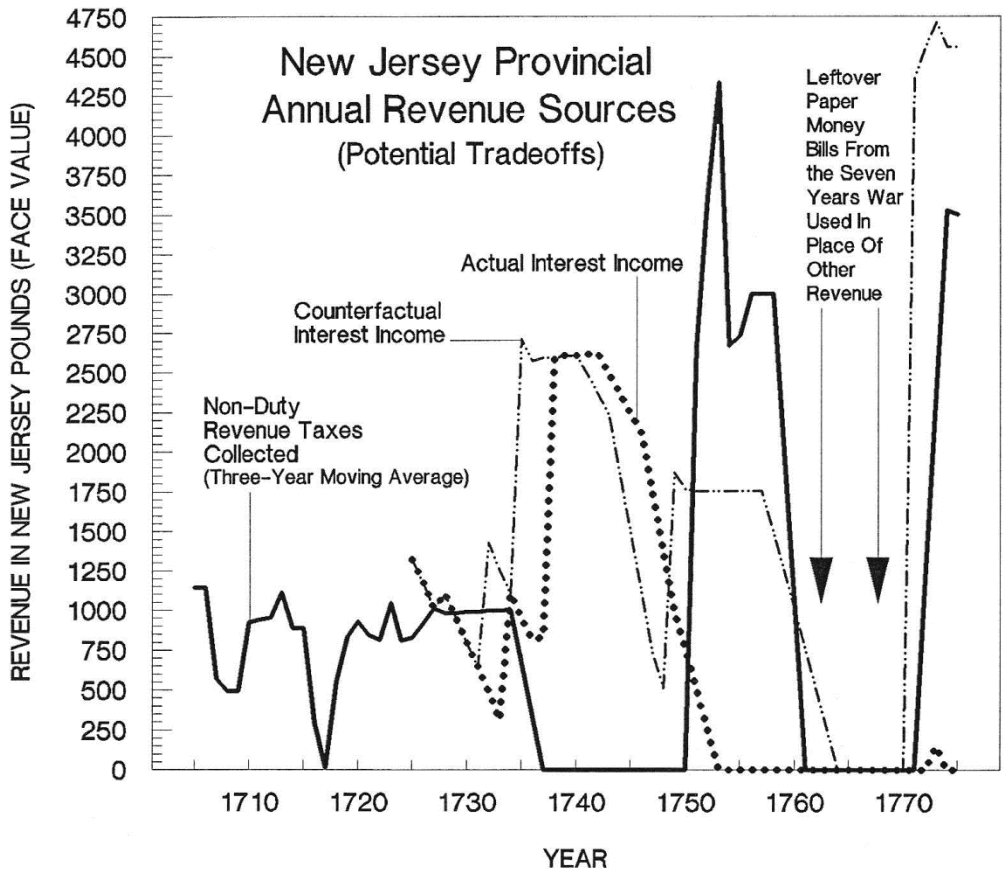

Figure 1. New Jersey Provincial Revenue Sources: Tradeoffs between Property Tax Revenues and Interest Income, 1704-1775

Sources: Table 2; Grubb (2015).

part of provincial tax burdens. Besides their amounts being largely unknown, they were also escapable, i.e. a subject did not have to import a slave. Monetary policy, however, imposed additional taxes that were not a current revenue source for the legislature.

Paper money emitted as direct spending by the legislature were in the form of zero-coupon bonds that had legislated maturity dates when the bonds would be redeemed at face value and retired from circulation. They were redeemed through property taxes imposed explicitly for this purpose. These tax laws were embedded in the paper money acts or in contemporaneous ancillary revenue acts passed by the legislature. Subjects had to pay these taxes in bills at their face value or in their face value equivalent in specie (Grubb 2015). The tax structure was the

same for taxes to redeem bills and taxes to pay for the support of government. Table 5 shows the yearly tax take from these two taxing sources, adjusted for when tax arrears were paid, as well as the total tax burden per white capita in Spanish silver dollars.

Not included in Table 5 are the provincial militia acts which imposed an in-kind tax on men between the ages of 16 and 50 in New Jersey.[6] These men were required to muster fully equipped with personal military gear at their expense two or three times a year. Failure to comply resulted in cash fines. A crude measure of the value of this in-kind tax uses the cash penalties for not appearing at muster as its shadow cost. If the cash penalty for absence from muster was designed to dissuade non-compliance, then it overstates the true cost of this tax.

The fine for non-appearance multiplied by the number of required musters per year is converted into Spanish silver dollars, then multiplied by 0.26 to get an approximate tax-in-kind value extracted per white capita per year. The 0.26 factor is used because the militia acts taxed only males between the ages of 16 and 50, which comprised only 26 percent of the white population in New Jersey (Carter 2006, v. 5, pp. 652, 662). Thus, the militia acts' tax take per white capita per year amounted to $0.38 for 1704-23, $0.45 for 1724-9, $0.31 for 1730-45, $0.36 for 1746-56, and $0.80 for 1757-75. These sums can be added to the tax burden in Table 5 to get a biased-high estimate of the total provincial tax burden when including militia-act taxes-in-kind.

Some provincial government expenses were funded on a fee-for-service basis and not a tax basis, and so are not counted as part of the tax burden. Fees-for-service included: two shillings and six pence per warrant served, one shilling per warrant issued, seven pence per sheet of deposition taken, nine shillings for a marriage license, seven pence for entering a deed on record for every sheet with fifteen lines to a sheet and six words to the line, and so

[6] Bush (1977, pp. 15-21, 49-51, 96, 133-5, 289-93, 410-13, 509-10; 1980, pp. 5-12, 48-9, 141-2, 161, 254-5, 412-3, 502-7; 1982, pp. 232, 341-2, 395-6; 1986, pp. 5, 58-9, 459).

Table 5. New Jersey Assembly Provincial Taxes Imposed on New Jersey Subjects, 1704-1775

Year	Taxes Collected for the Purpose of Bill Retirement £NJ	Taxes Collected for Current Spending on the Support of Government £NJ	Total Tax Burden Per White Capita in Spanish Silver $	Year	Taxes Collected for the Purpose of Bill Retirement £NJ	Taxes Collected for Current Spending on the Support of Government £NJ	Total Tax Burden Per White Capita in Spanish Silver $
1704	0	0	0.0000	1740	0	0	0.0000
1705	0	1,714.40	0.3701	1741	0	0	0.0000
1706	0	1,714.40	0.3581	1742	0	0	0.0000
1707	0	0	0.0000	1743	0	0	0.0000
1708	0	0	0.0000	1744	0	0	0.0000
1709	0	1,476.54	0.2807	1745	0	0	0.0000
1710	307.00	0	0.0568	1746	0	0	0.0000
1711	559.88	1,295.83	0.3269	1747	0	0	0.0000
1712	1,110.08	1,525.31	0.4440	1748	0	0	0.0000
1713	857.20	35.72	0.1441	1749	0	0	0.0000
1714	741.80	1,765.72	0.3886	1750	0	0	0.0000
1715	857.20	855.72	0.2551	1751	0	0[a]	0.0000
1716	857.20	35.72	0.1280	1752	0	7,994.00[ad]	0.3893
1717	1,423.84	0	0.1969	1753	0	2,800.71[ad]	0.1325
1718	1,608.46	0	0.2147	1754	1,530.20	2,197.70[a]	0.1712
1719	891.53	1,650.00	0.3276	1755	1,530.20	3,000.00[a]	0.2023
1720	0	836.00	0.1044	1756	1,530.20	3,000.00[a]	0.1969
1721	0	300.00	0.0366	1757	6,530.20	3,000.00[a]	0.4033
1722	0	1,392.08[d]	0.1654	1758	11,530.20	3,000.00[a]	0.5995
1723	0	1,042.50	0.1208	1759	11,530.20	3,000.00[a]	0.5844
1724	0	695.00	0.0787	1760	16,530.20	0[b]	0.6488
1725	1,000.00	695.00	0.1873	1761	2,770.64[c]	0[b]	0.1061
1726	1,000.00	1,089.35	0.2260	1762	0[c]	0[b]	0.0000

1727	1,000.00	970.00	0.2081	1763	0[c]	0[b]	0.0000
1728	1,000.00	970.00	0.2037	1764	0[c]	0[b]	0.0000
1729	0	1,000.00	0.1013	1765	6,273.73[c]	0[b]	0.2187
1730	0	968.85[d]	0.0962	1766	12,500.00	0[b]	0.4262
1731	0	993.85[d]	0.0952	1767	12,500.00	0[b]	0.4170
1732	0	993.85[d]	0.0921	1768	12,500.00	0[b]	0.4084
1733	0	1,000.00	0.0894	1769	12,500.00	0[b]	0.3999
1734	0	1,000.00	0.0866	1770	12,500.00	0[b]	0.3920
1735	0	1,000.00	0.0839	1771	12,500.00	0[b]	0.3848
1736	0	0	0.0000	1772	12,500.00	0	0.3780
1737	0	0	0.0000	1773	13,006.03	3,569.96[d]	0.4926
1738	0	0	0.0000	1774	15,000.00	3,500.00	0.5406
1739	0	0	0.0000	1775	15,000.00	3,500.00	0.5313

Sources: Bush (1977, 1980, 1982, 1986); Greene (1980, pp. 98, 104-5); Grubb (2015). Population estimates are from Carter (2006, v. 5, p. 652) with linear interpolations between decadal benchmarks.
Notes: $ = Spanish silver dollars. Post-1723, $1 = 0.22£$_S$ = 0.2921£$_{NJ}$ at face value (McCusker, 1978, p. 10). Thus, 1£$_{NJ}$ = $3.4235.

[a] Expenses were priced in £$_{NJ}$ "as it now passes in the Western part of the colony," but tax amounts were listed in £$_{NJ}$ at face value, see Grubb (2015). Bergen County was required to pay 197.70£$_{NJ}$ of tax arrears owed for 1753 in 1754 along with its full 1754 tax assessment.

[b] Salaries for the support of government were paid with leftover war-spending bills in the treasury. This action did not change the tax redemption structure for redeeming and removing these bills.

[c] The 1761 bill redemption tax of 14,030.20£$_{NJ}$ was reduced by the amount of sterling received in 1760 from the British Crown as war-spending compensation for 1758, and applied to the following year's bill redemption taxes. The amount received, reduced by fees and costs, was 8,481.78£$_S$ which equaled 11,259.56£$_{NJ}$ in face value. This sum was exchanged for New Jersey bills at the colony's treasuries in 1761 with the bills received being sunk (destroyed) and the redemption taxes imposed on the colony's subjects reduced by that amount for that year (Bush 1982, pp. 10-13, 315-6; Greene 1980, pp. 98, 104-5). The rest of the Crown's reimbursements were received from 1761 into 1765. They were used to reduce bill redemption taxes and are spread over the years 1762 through 1765.

[d] In 1771 the tax accounts of the counties were audited and tax arrears assessed (Bush 1986, pp. 64-8). Tax arrears were 18.92£$_{NJ}$ in 1722, 31.15£$_{NJ}$ in 1730, 6.15£$_{NJ}$ in 1731 and again in 1732, 6£$_{NJ}$ in 1752, and 1.59£$_{NJ}$ in 1753. These amounts were subtracted from the taxes imposed in those years. These arrears, totaling 69.96£$_{NJ}$, were to be paid in 1773. This amount was added to the taxes imposed in 1773.

on.[7] The incidence of these fees and the revenues raised per capita is unknown. Due to this, and

[7] Bush (1977, pp. 168-77, 203-7, 458-74; 1980, pp. 83-94; 1982, pp. 28-34, 468, 564-70; 1986, pp. 63, 90-3, 311-2, 336-7, 425-34).

the fact that these fees were somewhat escapable, they are not counted here as part of the provincial tax burden nor as provincial revenue.

Finally, only provincial level revenues and taxes are considered. Substantial taxes were imposed on the township and county level with the revenues generated spent on those levels. Such taxes and expenditures involved county or township poor relief; bridge, wharf, dam, waterworks, and road building and repair; jail, workhouse, and courthouse construction; and so on.[8] Because the incidence and amount of these local taxes could not be discerned, they are not counted. This means that the total tax burden, considering all levels of New Jersey government, is understated by looking only at the provincial level tax burden. Any comparisons of tax burdens, e.g. residents of New Jersey versus residents of Britain, must keep the differential in these missing lower level political unit tax burdens in mind.

Balancing the Budget: Peace versus War

Table 6 shows how revenues from each source were applied to cover war versus non-war spending during both periods of war and periods of peace. It shows the dominance of using newly printed bills of credit to pay for war, and property taxes and interest income to pay for non-war expenses. For the most part, property taxes and interest income were current revenues used to cover current spending. Non-land-bank bills of credit, however, were current spending that would be balanced in the budget against future revenues. This pattern created a timing difference in budget balancing between peace-year spending and war-year spending.

Figure 2 shows how colonial New Jersey balanced its provincial budget for normal (non-war) support of government spending obligations. The average yearly expenses for the support of

[8] Bush (1977, pp. 23-6, 55-6, 57-9, 149-51, 196-201, 260-1, 381-5, 413-5, 504-5, 533-6, 550-2, 586-8; 1980, pp. 55-8, 130-6, 142-6, 178-80, 255-8, 288-92, 599-615; 1982, pp. pp. 19-24, 36-49, 60-6, 113-4, 146-9, 166-71, 230-1, 238-43, 350-69, 389-93, 401-23, 440-2, 484-93, 515-22, 590-9; 1986, pp. 19-22, 87-96, 158-62, 178-95, 252-93, 314-20, 340-5).

Table 6. New Jersey Provincial Revenue and Spending: War Years versus Peace Years

	Revenue Sources							
	Newly Printed Bills of Credit		Property Tax Collection[a]		Interest Income		Crown Cash Transfers	
How Revenues Were Spent	Amount £NJ	Row %	Amount £NJ	Row %	Amount £NJ	Row %	Amount £NJ	Row %
War: 1704-1713								
War Spending	5,828.52	100.00	0	0.00	0	0.00	0	0.00
Non-War Spending	0	0.00	7,762.20	100.00	0	0.00	0	0.00
Peace: 1714-1738	7,351.18	18.07	19,253.65	47.34	14,068.34	34.59	0	0.00
War: 1739-1748								
War Spending	8,746.22	54.20	0	0.00	7,389.87	45.80	0	0.00
Non-War Spending	1,253.78	6.91	0	0.00	16,877.56	93.09	0	0.00
Peace: 1749-1754	0	0.00	12,992.41	92.94	986.20	7.06	0	0.00
War: 1755-1764								
War Spending	312,500.00	83.21	0	0.00	0	0.00	63,046.23	16.79
Non-War Spending	7,312.66	32.77	15,000.00	67.23	0	0.00	0	0.00
Peace: 1765-1775	27,687.34	72.09	10,569.96	27.52	151.76	0.40	0	0.00
Overall								
War Spending	327,074.74	82.28	0	0.00	7,389.87	1.86	63,046.23	15.86
Non-War Spending	43,604.96	30.87	65,578.22	46.42	32,083.86	22.71	0	0.00

Sources: Tables 2 and 3; Bush (1977, 1980, 1982, 1986); Grubb (2015).
Notes: By definition, peace years involve only non-war spending. Revenues from trade duties are not included.
[a] Includes only property and excise tax revenues not slated for bill redemption.

government derived from Table 1 were largely met with property revenue taxes, slave import duties, and interest income. Deficiencies in this revenue source that created arrears were often made up by surpluses in subsequent years. In two periods, deficiencies in this revenue source were covered by bills of credit either printed with this payment intended, i.e. the late 1710s using bills issued in the mid-1720s to cover these arrears or, by chance, with leftover bills from unspent Seven-Years-War allocations in the 1760s.

The taxes for redeeming bills issued to pay for wars were spread over future post-war years. Table 5 shows these war-expense taxes lasting some six years after Queen Anne's War,

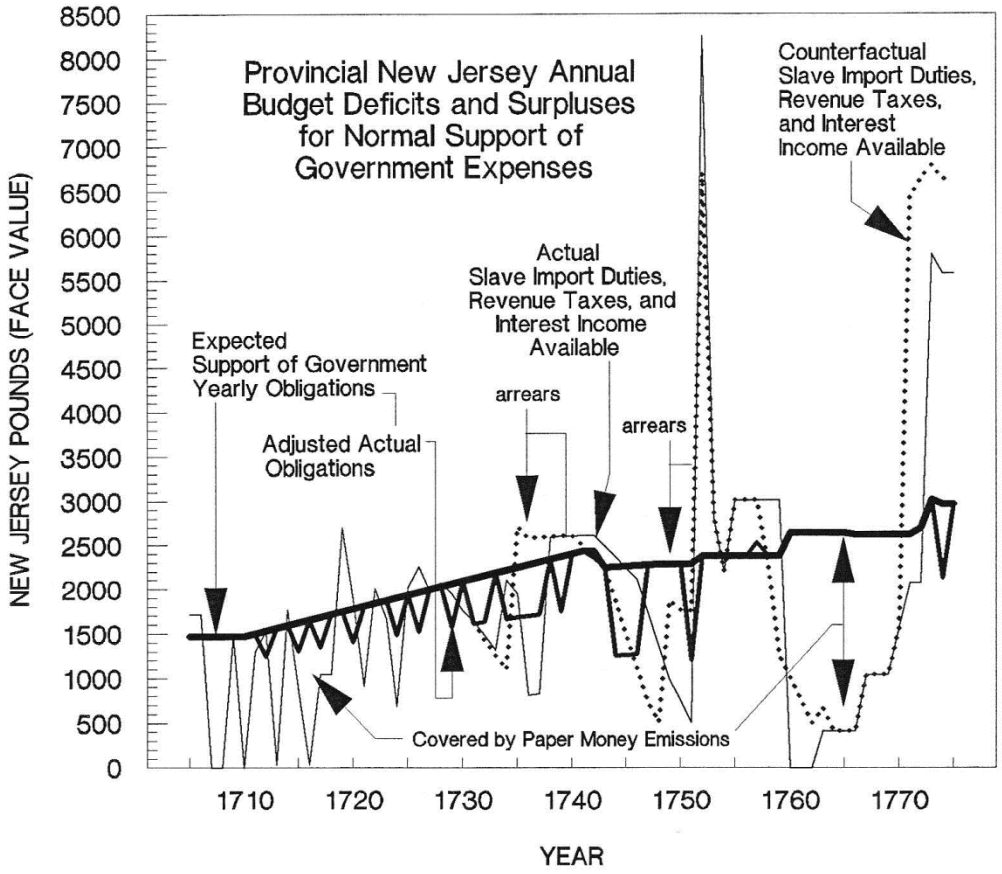

Figure 2. Provincial New Jersey Annual Budget Deficits and Surpluses for the Normal Support of Government Expenses, 1705-1775

Sources: Tables 1, 2, 4, and 5; Grubb (2015).
Notes: Adjusted obligations remove per diem obligations for years when the assembly did not meet and the governor's salary in years when he was not paid.

and some 12 years after King George's War. Taxes to redeem bills issued to pay for the Seven Years War ran through 1783 (Grubb 2015). Balancing the budget to meet war expenses involved an inter-temporal exercise of balancing deficits against surpluses over a multi-year horizon. This process is shown in Table 7, where annual per white capita tax burdens from Table 5 are grouped by war versus immediate post-war years. Tax burdens rise in the first five years after each war.

The relatively small bills-of-credit borrowing in support of Queen Anne's War were paid soon after that war with tax burdens falling thereafter. The bills-of-credit borrowing in support of King George's War was more substantial and was spread well into the next war period. This

Table 7. Average Yearly New Jersey Provincial Tax Burdens: War Years versus Peace Years

Average Yearly Tax Burden per White Capita for New Jersey Provincial Taxes in Spanish Silver Dollars	Table 5 Actual Burden $	Counterfactual Burden from Table 8 $	Row Reduction from Actual %	Counterfactual Burden from Table 9 $	Row Reduction from Actual %
Queen Anne's War (1705-1713)	0.2201	0.2201	0.00	0.1667	24.26
Post-War Peace					
1714-1718 (next 5 years)	0.2367	0.2367	0.00	0.1551	34.47
1714-1738 (until the next war)	0.1395	0.1254	10.11	0.1087	22.08
King George'S War (1739-1748)	0.0000	0.0000	0.00	0.0000	0.00
Post-War Peace					
1749-1753 (next 5 years)	0.1044	0.0582	44.25	0.0000	100.00
1749-1754 (until the next war)	0.1155	0.0636	44.94	0.0024	97.92
Seven Years War (1755-1764)	0.2741	0.2299	16.13	0.0476	82.63
Post-War Peace					
1765-1770 (next 5 years)	0.3740	0.3739	0.03	0.0000	100.00
1765-1775 (until the next war)	0.4172	0.3891	6.74	0.0000	100.00
Average Increase Between War Years and the Next 5 Peace Years	0.0736	0.0729	0.95	-0.0197	------

Sources: Tables 5, 8, and 9.
Notes: King George'S War includes the War of Jenkin's Ear; Seven Years War includes the French and Indian War.

caused a relatively small tax burden in the 1740s and early 1750s, but a relatively high tax burden in the late 1750s. The bills-of-credit borrowing in support of the Seven Years War was relatively large and its tax burden was spread over the years 1765 to 1783. It caused tax burdens to remain relatively high from 1765 to the Revolution.

Annual Provincial Tax Burdens per White Capita: Actual versus Counterfactual

Table 5 shows the actual yearly provincial tax burden for New Jersey subjects per white capita. Table 8 shows the counterfactual yearly provincial tax burden per white capita removing British interference with New Jersey provincial monetary policy. Because removing British interference would increase, as well as alter the timing, of the interest income earned by the legislature from loaning out paper money, it offsets some of the tax burden shown in Table 5.

Table 8. Counterfactual New Jersey Provincial Taxes Imposed on New Jersey Subjects, 1704-1775, with No British Interference with New Jersey Assembly Land-Bank Acts

Year	Taxes Collected for the Purpose of Bill Retirement £$_{NJ}$	Taxes Collected for Current Spending on the Support of Government £$_{NJ}$	Total Tax Burden Per White Capita in Spanish Silver $	Year	Taxes Collected for the Purpose of Bill Retirement £$_{NJ}$	Taxes Collected for Current Spending on the Support of Government £$_{NJ}$	Total Tax Burden Per White Capita in Spanish Silver $
1704	0	0	0.0000	1740	0	0	0.0000
1705	0	1,714.40	0.3701	1741	0	0	0.0000
1706	0	1,714.40	0.3581	1742	0	0	0.0000
1707	0	0	0.0000	1743	0	0	0.0000
1708	0	0	0.0000	1744	0	0	0.0000
1709	0	1,476.54	0.2807	1745	0	0	0.0000
1710	307.00	0	0.0568	1746	0	0	0.0000
1711	559.88	1,295.83	0.3269	1747	0	0	0.0000
1712	1,110.08	1,525.31	0.4440	1748	0	0	0.0000
1713	857.20	35.72	0.1441	1749	0	0	0.0000
1714	741.80	1,765.72	0.3886	1750	0	0	0.0000
1715	857.20	855.72	0.2551	1751	0	0	0.0000
1716	857.20	35.72	0.1280	1752	0	4,942.97	0.2408
1717	1,423.84	0	0.1969	1753	0	1,059.71	0.0501
1718	1,608.46	0	0.2147	1754	1,530.20	446.20	0.0908
1719	891.53	1,650.00	0.3276	1755	1,530.20	1,248.50	0.1241
1720	0	836.00	0.1044	1756	1,530.20	1,248.50	0.1208
1721	0	300.00	0.0366	1757	6,530.20	1,248.50	0.3292
1722	0	1,392.08	0.1654	1758	11,530.20	739.50	0.5061
1723	0	1,042.50	0.1208	1759	11,530.20	0	0.4637
1724	0	695.00	0.0787	1760	16,530.20	0	0.6488
1725	1,000.00	695.00	0.1873	1761	2,770.64	0	0.1061
1726	1,000.00	1,089.35	0.2260	1762	0	0	0.0000

1727	1,000.00	970.00	0.2081	1763	0	0	0.0000
1728	1,000.00	970.00	0.2037	1764	0	0	0.0000
1729	0	1,000.00	0.1013	1765	6,253.29	0	0.2181
1730	0	968.85	0.0962	1766	12,500.00	0	0.4262
1731	0	993.85	0.0952	1767	12,500.00	0	0.4170
1732	0	0	0.0000	1768	12,500.00	0	0.4084
1733	0	0	0.0000	1769	12,500.00	0	0.3999
1734	0	0	0.0000	1770	12,500.00	0	0.3920
1735	0	0	0.0000	1771	12,500.00	0	0.3848
1736	0	0	0.0000	1772	12,500.00	0	0.3780
1737	0	0	0.0000	1773	13,006.03	0	0.3865
1738	0	0	0.0000	1774	15,000.00	0	0.4382
1739	0	0	0.0000	1775	15,000.00	0	0.4308

Sources: Tables 2 and 5.

Table 8 holds total revenue constant over a short window of years. Thus, added interest income lowers the tax burden, because interest income is not a tax.

The primary adjustments in Table 8 occur in three periods. First, the altered timing of the counterfactual interest income from the second and third land banks eliminated the need for revenue property taxes between 1732 and 1735. Second, from 1752 through 1759, new counterfactual interest income from the fourth land bank reduced the amount of revenue property taxes required. Finally, the new counterfactual interest income earned after 1770 from the fifth land bank was more than enough to reduce revenue property taxes collected for the support of government to zero from 1770 through 1775. The excess interest income, above that needed to fund support-of-government expenses in these years, is assumed to have been used after 1775.

Table 7 groups the Table 8 counterfactual tax burdens by war versus immediate post-war

years and compares them with the actual tax burdens so grouped. Annual tax burdens per white capita would have been 10 percent lower from 1714 through 1738, 45 percent lower from 1749 through 1754, 16 percent lower from 1755 through 1764, and 7 percent lower from 1765 through 1775 with no British interference with New Jersey's provincial monetary policy. These are not trivial reductions from the viewpoint of New Jersey taxpayers. Resentment over this British interference may have contributed to revolutionary sentiment.

Table 9 shows the counterfactual yearly provincial tax burdens per white capita for New Jersey subjects, with no British interference with New Jersey provincial monetary policy and with no participation in British colonial wars. More exactly, it is assumes that the British, French, Spanish, and Americans maintained harmonious relations throughout this period. The counterfactual calculations in Table 9 require a number of assumptions about how revenues were adjusted when war spending was not required. What follows keeps these assumptions to a minimum by making the least change from the actual as possible.

Table 9 removes or redirects war revenues from Table 8. First, newly printed bills of credit that were spent on war are assumed not to have been emitted. This also removes all the property taxes imposed to retire these war-spending bills. Newly printed bills that were spent on non-war activities are retained where they originally appeared. The property taxes collected to retire newly printed bills used to pay for non-war activities are adjusted to remove only these bills in the years when they were originally designated to be removed.

Second, the interest income used to retire war-spending bills emitted in 1740 and 1746-7 is assumed to now be free to cover non-war expenses. This interest income, so freed, was 7,389.87$£_{NJ}$. It is assumed to be used to retire the 1,253.78$£_{NJ}$ of new bills used in 1748 for non-war expenditures, and then used to reduce the property taxes collected for the support of

Table 9. Counterfactual New Jersey Provincial Taxes Imposed on New Jersey Subjects, 1704-1775: With No British Interference with New Jersey Assembly Land-Bank Acts and No Wars

Year	Taxes Collected for the Purpose of Bill Retirement £$_{NJ}$	Taxes Collected for Current Spending on the Support of Government £$_{NJ}$	Total Tax Burden Per White Capita in Spanish Silver $	Year	Taxes Collected for the Purpose of Bill Retirement £$_{NJ}$	Taxes Collected for Current Spending on the Support of Government £$_{NJ}$	Total Tax Burden Per White Capita in Spanish Silver $
1704	0	0	0.0000	1740	0	0	0.0000
1705	0	1,714.40	0.3701	1741	0	0	0.0000
1706	0	1,714.40	0.3581	1742	0	0	0.0000
1707	0	0	0.0000	1743	0	0	0.0000
1708	0	0	0.0000	1744	0	0	0.0000
1709	0	1,476.54	0.2807	1745	0	0	0.0000
1710	0	0	0.0000	1746	0	0	0.0000
1711	0	1,295.83	0.2283	1747	0	0	0.0000
1712	0	1,525.31	0.2571	1748	0	0	0.0000
1713	0	35.72	0.0058	1749	0	0	0.0000
1714	0	1,765.72	0.2735	1750	0	0	0.0000
1715	499.83	855.72	0.2020	1751	0	0	0.0000
1716	499.83	35.72	0.0768	1752	0	0	0.0000
1717	821.55	0	0.1137	1753	0	0	0.0000
1718	821.55	0	0.1096	1754	0	312.79	0.0144
1719	821.55	1,650.00	0.3187	1755	0	1,248.50	0.0558
1720	0	836.00	0.1044	1756	0	1,248.50	0.0544
1721	0	300.00	0.0366	1757	0	1,248.50	0.0527
1722	0	1,392.08	0.1654	1758	0	1,248.50	0.0515
1723	0	1,042.50	0.1208	1759	0	1,498.50	0.0603
1724	0	695.00	0.0787	1760	0	1,748.50	0.0686
1725	1,000.00	695.00	0.1873	1761	0	1,998.50	0.0765
1726	1,000.00	1,089.35	0.2260	1762	0	1,494.00	0.0558

1727	1,000.00	970.00	0.2081	1763	0	0	0.0000
1728	1,000.00	970.00	0.2037	1764	0	0	0.0000
1729	0	1,000.00	0.1013	1765	0	0	0.0000
1730	0	968.85	0.0962	1766	0	0	0.0000
1731	0	993.85	0.0952	1767	0	0	0.0000
1732	0	0	0.0000	1768	0	0	0.0000
1733	0	0	0.0000	1769	0	0	0.0000
1734	0	0	0.0000	1770	0	0	0.0000
1735	0	0	0.0000	1771	0	0	0.0000
1736	0	0	0.0000	1772	0	0	0.0000
1737	0	0	0.0000	1773	0	0	0.0000
1738	0	0	0.0000	1774	0	0	0.0000
1739	0	0	0.0000	1775	0	0	0.0000

Sources: Tables 2, 5, and 8.

government in 1752, 1753, and into 1754.

Third, being a reimbursement for war expenses, the Crown cash transfer in 1760 is removed. Having removed this, property tax collection was increased in 1758 through 1762 to augment the interest income earned to meet peacetime revenue requirements. Fourth, the new bills emitted in 1763 and 1764 used to cover non-war expenditures are assumed to still be emitted and so used. Taxes to retire these bills were originally set to be collected in 1782 and 1783. It is assumed that this remained true, and so the tax burdens for these bills do not show up before 1775. The extra 754.50$£_{NJ}$ counterfactual interest income in 1762 through 1764 is assumed to be used to reduce the property taxes needed for the support of government in 1762.

Table 7 groups the Table 9 counterfactual tax burdens by war versus immediate post-war years and compares them with the actual tax burdens so grouped. Annual tax burdens per white

capita would have been 22 to 34 percent lower from 1714 through 1738, and 83 to 100 percent lower from 1749 through 1775 without British interference with New Jersey's provincial monetary policy and with no participation in the wars of the British Empire. War costs, especially after 1748, overwhelmed everything else.

The actual and the two counterfactual yearly provincial tax burdens per white capita for New Jersey subjects are shown in Figure 3. Annual tax burdens were relatively large and highly variable before 1720. Most of these taxes were for support-of-government obligations. Queen Anne's War expenses added some, but did not dominate tax burdens in these years. After 1725, New Jersey learned how to fund support-of-government obligations out of interest income from land-bank loans of paper money. This allowed New Jersey to substantially reduce provincial tax burdens from pre-1725 levels, until they were zero from 1736 through 1751. Post-1751, paying the cost of colonial wars swamped everything and drove New Jersey provincial tax burdens to unprecedented heights. The prospect of the British adding imperial taxes to these unprecedentedly high provincial tax burdens after 1764 would have fostered serious concern and resentment by New Jersey subjects and so contributed to revolutionary sentiment.

Conclusions

New Jersey's provincial legislature developed innovative and efficient ways to fund its non-war spending obligations. They were able to drive tax burdens to zero by funding these expenses with interest income earned by creating and loaning out government paper money to their subjects. This paper money provided a needed local medium of exchange and so made local transacting more efficient. In the absence of British interference with New Jersey's provincial monetary policy and New Jersey's participation in the wars of the British Empire, New Jersey could have funded its government largely without taxing its subjects.

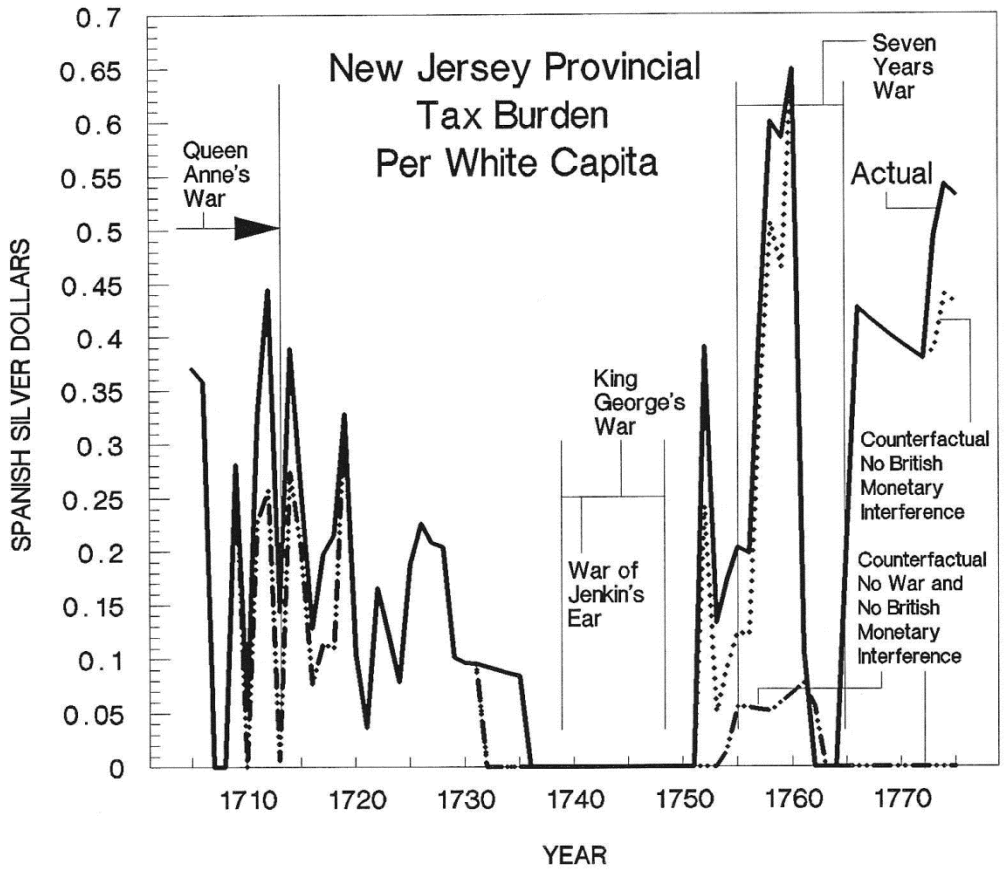

Figure 3. New Jersey Provincial Tax Burden per White Capita, 1705-1775: Actual Versus Counterfactual in Spanish Silver Dollars

Sources: Tables 5, 8, and 9.

New Jersey's legislature also engaged in innovative ways to fund its war-spending obligations. They issued bills of credit that functioned as zero-coupon bonds. This allowed tax burdens to be spread over multiple years into the future, and so allowed more spending on wars than what could be sustained with current tax revenues alone. Spending on King George's War and the Seven Years War, however, was so large that it swamped all other considerations. Provincial tax burdens peaked in the late 1750s and the early 1770s. British interference with New Jersey's provincial fiscal/monetary structure, and the required participation in the war of the British Empire, were costly to New Jersey subjects in the quarter century before the Revolution.

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