THE ECONOMIC HISTROY OF HAWAI'I: A SHORT INTRODUCTION

by

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Abstract

This paper provides a short introduction to the economic history of Hawai‘i since 1778. References are provided for readers with interests in particular topics.

The Hawaiian Islands are a chain of 132 islands, shoals, and reefs extending over 1,523 miles in the Northeast Pacific Ocean. Eight islands—Hawai‘i, Maui, O‘ahu, Kaua‘i, Moloka‘i, Lāna‘i, Ni‘ihau, and Kaho‘olawe—possess 99 percent of the land area (6,435 square miles) and are noted for their volcanic landforms, unique flora and fauna, and diverse climates.

1. From Polynesian Settlement to Western Contact

The Islands were uninhabited until sometime before 400 and 500 AD when Polynesian voyagers sailing double-hulled canoes arrived from the Marquesas Islands (Kirch, 1985, p. 68). Since the settlers had no written language and virtually no contact with the Western world until 1778, our knowledge of Hawai‘i's pre-history comes primarily from archaeological investigations and oral legends. A relatively egalitarian society and subsistence economy were coupled with high population growth rates until about 1100 when continued population growth led to a major expansion of the areas of settlement and cultivation. Perhaps under pressures of increasing resource scarcity, a new, more hierarchical social structure emerged, characterized by chiefs (*ali‘i*) and subservient commoners (*maka‘āinana*). In the two centuries prior to Western contact, there is considerable evidence that ruling chiefs (*ali‘i nui*) competed to extend their lands by conquest and that this led to cycles of expansion and retrenchment.

Captain James Cook's ships reached Hawai‘i in 1778, thereby ending a long period of isolation for the Islands. Captain James King observed in 1779 that Hawaiians were generally "above the middle size" of Europeans, a rough indicator that Hawaiians generally had a diet superior to 18th century Europeans. At contact, Hawaiian social and political institutions were similar to those found in other Polynesian societies. Hawaiians were sharply divided into three main social classes: *ali‘i* (chiefs), *maka‘āinana* (commoners), and *kahuna* (priests). Oral legends tell us that the Islands were usually divided into six to eight small kingdoms consisting of an island or part of an island, each governed by an *ali‘i nui* (ruling chief). The *ali‘i nui* had extensive rights to all lands and material goods and the ability to confiscate or redistribute material wealth at any time. Redistribution usually occurred only when a new ruling chief took office or when lands were conquered or lost. The *ali‘i nui* gave temporary land grants to *ali‘i* who, in turn, gave temporary land grants to *konohiki* (managers), who then "contracted" with *maka‘ainana*, the great majority of the populace, to work the lands.

The Hawaiian society and economy has its roots in extended families (‘*ohana*) working cooperatively on an *ahupua‘a,* a land unit running from the mountains to the sea. Numerous tropical root, tuber, and tree crops were cultivated. Taro, a wetland crop, was cultivated primarily in windward areas, while sweet potatoes and yams, both dryland crops, were cultivated in drier leeward areas. The *maka‘ainana* apparently lived well above subsistence levels, with extensive time available for cultural activities, sports, and games. There were unquestionably periods of hardship, but these times tended to be associated with drought or other causes of poor harvest.

2. Unification of Hawai‘i and Population Decline

The long-prevailing political equilibrium began to disintegrate shortly after the introduction of guns and the spread of new diseases to the Islands. In 1784, the most powerful *ali‘i nui*, Kamehameha, began a war of conquest, and with his superior use of modern weapons and western advisors, he subdued all other chiefdoms, with the exception of Kaua‘i, by 1795. Each chief in his ruling coalition received the right to administer large areas of land, consisting of smaller strips on various islands. Sumner La Croix and James Roumasset (1984) have argued that the strip system conveyed durability to the newly unified kingdom (by making it more costly for an *ali'i* to accumulate a power base on one island) and facilitated monitoring of *ali'i* production by the new king. In 1810, Kamehameha reached a negotiated settlement with Kaumuali‘i, the ruling chief of Kaua‘i, which brought the island under his control, thereby bringing the entire island chain under a single monarchy.

Exposure to Western diseases produced a massive decline in the native population of Hawai‘i from 1778 through 1900 (Table 1). Estimates of Hawai‘i's population at the time of contact vary wildly, from approximately 110,000 to 1,000,000 people (Bushnell, 1993; Dye,

Table 1: Population of Hawai‘i

Year	Total Population	Native Hawaiian Population
1778	110,000-1,000,000	110,000-1,000,000
1831-32	130,313	na
1853	73,137	71,019
1872	56,897	51,531
1890	89,990	40,622
1900	154,001	39,656
1920	255,881	41,750
1940	422,770	64,310
1960	632,772	102,403
1980	964,691	115,500
2000	1,211,537	239,655

Sources: Total population from http://www.hawaii.gov/dbedt/db99/index.html, Table 1.01, Dye (1994), and Bushnell (1993). Native Hawaiian population for 1853-1960 from Schmitt (1977),

p. 25. Data from the 2000 census includes people declaring “Native Hawaiian” as their only race or one of two races. See http://factfinder.census.gov/servlet/DTTable?_ts=18242084330 for the 2000 census population.

1994). The first missionary census in 1831-1832 counted 130,313 people. A substantial portion of the decline can be attributed to a series of epidemics beginning after contact, including measles, influenza, diarrhea, and whooping cough. The introduction of venereal diseases was a factor behind declining crude birth rates. The first accurate census conducted in the Islands revealed a population of 80,641 in 1849. The native Hawaiian population reached its lowest point in 1900 when the U.S. census revealed only 39,656 full or part Hawaiians.

3. The Rise and Fall of Sandalwood and Whaling

With the unification of the Islands came the opening of foreign trade. Trade in sandalwood, a wood in demand in China for ornamental uses and burning as incense, began in 1805. The trade was interrupted by the War of 1812 and then flourished from 1816 to the late 1820s before fading away in the 1830s and 1840s (Kuykendall, 1957, I, pp. 86-87). La Croix and Roumasset (1984) have argued that the centralized organization of the sandalwood trade under King Kamehameha provided the king with incentives to harvest sandalwood efficiently. The adoption of a decentralized production system by his successor (Liholiho) led to the sandalwood being treated by *ali'i* as a common property resource. The reallocation of resources from agricultural production to sandalwood production not only led to rapid exhaustion of the sandalwood resource but also to famine.

As the sandalwood industry declined, Hawai‘i became the base for the north-central Pacific whaling trade. The impetus for the new trade was the 1818 discovery of the "Offshore Ground" west of Peru and the 1820 discovery of rich sperm whale grounds off the coast of Japan.

The first whaling ship visited the Islands in 1820, and by the late 1820s over 150 whaling ships were stopping in Hawaiʻi annually. While ship visits declined somewhat during the 1830s, by 1843 over 350 whaling ships annually visited the two major ports of Honolulu and Lahaina. Through the 1850s over 500 whaling ships visited Hawaiʻi annually. The demise of the Pacific whaling fleet during the U.S. Civil War and the rapid rise of the petroleum industry led to steep declines in the number of ships visiting Hawaiʻi, and after 1870 only a trickle of ships continued to visit.

4. Missionaries and Land Tenure

In 1819, King Kamehameha's successor, Liholiho, abandoned the system of religious practices known as the *kapu* system and ordered temples (*heiau*) and images of the gods desecrated and burnt. In April 1820, missionaries from New England arrived and began filling the religious void with conversions to protestant Christianity. Over the next two decades as church attendance became widespread, the missionaries suppressed many traditional Hawaiian cultural practices, operated over 1,000 common schools, and instructed the *ali'i* in western political economy. The king promulgated a constitution with provisions for a Hawaiʻi legislature in 1840. It was followed, later in the decade, by laws establishing a cabinet, civil service, and judiciary. Under the 1852 constitution, male citizens received the right to vote in elections for a legislative lower house. Missionaries and other foreigners regularly served in cabinets through the end of the monarchy.

In 1844, the government began a 12-year program, known as the Great *Mahele* (Division), to dismantle the traditional system of land tenure. King Kauikeaouli gave up his interest in all island lands, retaining ownership only in selected estates. *Ali'i* had the right to take out fee simple title to lands held at the behest of the king. *Maka'āinana* had the right to claim fee simple title to small farms (*kuleana*). At the end of the claiming period, *maka'āinana* received less than ≈40,000 acres of land, while the government (≈1.5 million acres), the king (≈900,000 acres), and the *ali'i* (≈1.5 million acres) all received substantial shares. Foreigners were initially not allowed to own land in fee simple, but an 1850 law overturned this restriction. By the end of the 19th century, commoners and chiefs had sold, lost, or given up their lands, with foreigners and large estates owning most non-government lands.

Lilikala Kame'eleihiwa (1992) found the origins of the *Mahele* in the traditional duty of a king to undertake a redistribution of land and the difficulty of such an undertaking during the initial years of missionary influence. By contrast, La Croix and Roumasset (1990) found the origins of the *Mahele* in the rising value of Hawaii land in sugar cultivation, with fee simple title facilitating investment in the land, irrigation facilities, and processing factories.

5. Sugar, Immigration, and Population Increase

The first commercially-viable sugar plantation, Ladd and Co., was started on Kaua'i in 1835, and the sugar industry achieved moderate growth through the 1850s. Hawai'i's sugar exports to California soared during the U.S. Civil War, but the end of hostilities in 1865 also meant the end of the sugar boom. The U.S. tariff on sugar posed a major obstacle to expanding sugar production in Hawai'i during peacetime, as the high tariff, ranging from 20 to 42 percent between 1850 and 1870, limited the extent of profitable sugar cultivation in the islands. Sugar interests helped elect King Kalākaua to the Hawaiian throne over the British-leaning Queen Emma in February 1874, and Kalākaua immediately sought a trade agreement with the United States. The 1876 reciprocity treaty between Hawai'i and the United States allowed duty-free sales of Hawai‘i sugar and other selected agricultural products in the United States as well as duty-free sales of most U.S. manufactured goods in Hawai‘i. Sugar exports from Hawai‘i to the United States soared after the treaty's promulgation, rising from 21 million pounds in 1876 to 114 million pounds in 1883 to 224.5 million pounds in 1890 (see Table 2).

Table 2: Hawai‘i Sugar Production (1000 short tons)

Year	Exports	Year	Production	Year	Profuction
1850	.4	1900	289.5	1950	961
1860	.7	1910	529.9	1960	935.7
1870	9.4	1920	560.4	1970	1162.1
1880	31.8	1930	939.3	1990	819.6
1890	129.9	1940	976.7	1999	367.5

Sources: Data for 1850-1970 are from Schmitt (1977), pp. 418-420. Data for 1990 and 1999 are from http://www.hawaii.gov/dbedt/db99/index.html, Table 22.09. Data for 1850-1880 are exports. Data for 1910-1990 are converted to 96° raw value.

The reciprocity treaty set the tone for Hawai‘i's economy and society over the next 80 years by establishing the sugar industry as the Hawai‘i's leading industry and altering the demographic composition of the Islands via the industry's labor demands. Rapid expansion of the sugar industry after reciprocity sharply increased its demand for labor: Plantation employment rose from 3,921 in 1872 to 10,243 in 1882 to 20,536 in 1892. The increase in labor demand occurred while the native Hawaiian population continued its precipitous decline, and the Hawai‘i government responded to labor shortages by allowing sugar planters to bring in overseas contract laborers bound to serve at fixed wages for 3-5 year periods. The enormous increase in the plantation workforce consisted of first Chinese, then Japanese, then Portuguese contract laborers.

The extensive investment in sugar industry lands and irrigations systems coupled with the rapid influx of overseas contract laborers changed the bargaining positions of Hawai‘i and the United States when the reciprocity treaty was due for renegotiation in 1883. La Croix and Christopher Grandy (1997) argued that the profitability of the planters' new investment was dependent on access to the U.S. market, and this improved the bargaining position of the United States. As a condition for renewal of the treaty, the United States demanded access to Pearl Bay [now Pearl Harbor]. King Kalākaua opposed this demand, and in July 1887, opponents of the government forced the king to accept a new constitution and cabinet. With the election of a new pro-American government in September 1887, the king signed an extension of the reciprocity treaty in October 1887 that granted access rights to Pearl Bay to the United States for the life of the treaty.

6. Annexation and the Sugar Economy

In 1890, the U.S. Congress enacted the McKinley Tariff, which allowed raw sugar to enter the United States free of duty and established a two-cent per pound bounty for domestic producers. The overall effect of the McKinley Tariff was to completely erase the advantages that the reciprocity treaty had provided to Hawaiian sugar producers over other foreign sugar producers selling in the U.S. market. The value of Hawaiian merchandise exports plunged from $13 million in 1890 to $10 million in 1891 to a low point of $8 million in 1892.

La Croix and Grandy (1997) argued that the McKinley Tariff threatened the wealth of the planters and induced important changes in Hawai‘i's domestic politics. King Kalākaua died in January 1891, and his sister succeeded him. After Queen Lili‘uokalani proposed to declare a new constitution in January 1893, a group of U.S. residents, with the incautious assistance of the

U.S. Minister and troops from a U.S. warship, overthrew the monarchy. The new government, dominated by the white minority, offered Hawaiʻi for annexation by the United States from 1893. Annexation was first opposed by U.S. President Cleveland, and then, during U.S. President McKinley's term, failed to obtain Congressional approval. The advent of the Spanish-American War and the ensuing hostilities in the Philippines raised Hawaiʻi's strategic value to the United States, and Hawaiʻi was annexed by a joint resolution of Congress in July 1898. Hawaiʻi became a U.S. territory with the passage of the Organic Act on June 14, 1900.

7. Integration with the United States

In 1900 annexation by the United States eliminated bound labor contracts and freed the existing labor force from their contracts. After annexation, the sugar planters and the Hawaii government recruited workers from Japan, Korea, the Philippines, Spain, Portugal, Puerto Rico, England, Germany, and Russia. The ensuing flood of immigrants swelled the population of the Hawaiian Islands from 109,020 people in 1896 to 232,856 people in 1915. The growth in the plantation labor force was one factor behind the expansion of sugar production from 289,500 short tons in 1900 to 939,300 short tons in 1930. Pineapple production also expanded, from just 2,000 cases of canned fruit in 1903 to 12,808,000 cases in 1931.

La Croix and Price Fishback (2000) established that European and American workers on sugar plantations were paid job-specific wage premiums relative to Asian workers and that the premium paid for unskilled American workers fell by one third between 1901 and 1915 and for European workers by 50 percent or more over the same period. While similar wage gaps disappeared during this period on the U.S. West Coast, Hawaiʻi plantations were able to maintain a portion of the wage gaps because they constantly found new low-wage immigrants to work in the Hawai‘i market. Immigrant workers from Asia failed, however, to climb many rungs up the job ladder on Hawai‘i sugar plantations, and this was a major factor behind labor unrest in the sugar industry. Edward Beechert (1985) concluded that large-scale strikes on sugar plantations during 1909 and 1920 improved the welfare of sugar plantation workers but did not lead to recognition of labor unions. Between 1900 and 1941, many sugar workers responded to limited advancement and wage prospects on the sugar plantation by leaving the plantations for jobs in Hawai‘i's growing urban areas.

The rise of the sugar industry and the massive inflow of immigrant workers into Hawaii was accompanied by a decline in the Native Hawaiian population and its overall welfare (La Croix and Rose, 1999). Native Hawaiians and their political representatives argued that government lands should be made available for homesteading to enable Hawaiians to resettle in rural areas and to return to farming occupations. The U.S. Congress enacted legislation in 1921 to reserve specified rural and urban lands for a new Hawaiian Homes Program. La Croix and Louis Rose have argued that the Hawaiian Homes Program has functioned poorly, providing benefits for only a small portion of the Hawaiian population over the course of the 20th century.

Five firms—Castle & Cooke, Alexander & Baldwin, C. Brewer & Co., Theo. Davies & Co., and American Factors—came to dominate the sugar industry. Originally established to provide financial, labor recruiting, transportation, and marketing services to plantations, they gradually acquired the plantations and also gained control over other vital industries such as banking, insurance, retailing, and shipping. By 1933, their plantations produced 96 percent of the sugar crop. The “Big Five's” dominance would continue until the rise of the tourism industry and statehood induced U.S. and foreign firms to enter Hawai‘i's markets.

The Great Depression hit Hawai‘i hard, as employment in the sugar and pineapple industries declined during the early 1930s. In December 1936, about one-quarter of Hawai‘i's labor force was unemployed. Full recovery would not occur until the military began a buildup in the mid-1930s in reaction to Japan's occupation of Manchuria. With the Japanese invasion of China in 1937, the number of U.S. military personnel in Hawai‘i increased to 48,000 by September 1940.

8. World War II and its Aftermath

The Japanese attack on the American Pacific fleet at Pearl Harbor on December 7, 1941 led to a declaration of martial law, a state that continued until October 24, 1944. The war was accompanied by a massive increase in American armed service personnel in Hawai‘i, with numbers increasing from 28,000 in 1940 to 378,000 in 1944. The total population increased from 429,000 in 1940 to 858,000 in 1944, thereby substantially increasing the demand for retail, restaurant, and other consumer services. An enormous construction program to house the new personnel was undertaken in 1941 and 1942. The wartime interruption of commercial shipping reduced the tonnage of civilian cargo arriving in Hawai‘i by more than 50 percent. Employees working in designated high priority organizations, including sugar plantations, had their jobs and wages frozen in place by General Order 18 which also suspended union activity.

In March 1943, the National Labor Relations Board was allowed to resume operations, and the International Longshoreman's Union (ILWU) organized 34 of Hawai‘i's 35 sugar plantations, the pineapple plantations, and the longshoremen by November 1945. The passage of the Hawai‘i Employment Relations Act in 1945 facilitated union organizing by providing agricultural workers with the same union organizing rights as industrial workers.

After the War, Hawai‘i's economy stagnated, as demobilized armed services personnel left Hawai‘i for the U.S. mainland. With the decline in population, real per capita personal income declined at an annual rate of 5.7 percent between 1945 and 1949 (Schmitt, 1976, pp. 148, 167). During this period, Hawai‘i's newly formed unions embarked on a series of disruptive strikes covering West Coast and Hawai‘i longshoremen (1946-1949); the sugar industry (1946); and the pineapple industry (1947, 1951). The economy began a nine-year period of moderate expansion in 1949, with the annual growth rate of real personal income averaging 2.3 percent. The expansion of propeller-driven commercial air service sent visitor numbers soaring, from 15,000 in 1946 to 171,367 in 1958, and induced construction of new hotels and other tourism facilities and infrastructure. The onset of the Korean War increased the number of armed service personnel stationed in Hawai‘i from 21,000 in 1950 to 50,000 in 1958. Pineapple production and canning also displayed substantial increases over the decade, increasing from 13,697,000 cases in 1949 to 18,613,000 cases in 1956.

9. Integration and Growth

In 1959, Hawai‘i became the fiftieth state. The transition from territorial to statehood status was one factor behind the 1958-1973 boom, in which real per capita personal income increased at an annual rate of 4 percent. The most important factor behind the long expansion was the introduction of commercial jet service in 1959, as the jet plane dramatically reduced the money and time costs of traveling to Hawai‘i. Also fueled by rapidly rising real incomes in the United States and Japan, the tourism industry would continue its rapid growth through 1990. Visitor arrivals (see

Table 3: Visitor Arrivals to Hawai‘i

Year	Visitor Arrivals	Year	Visitor Arrivals

1930	18,651	1970	1,745,904
1940	25,373	1980	3,928,789
1950	46,593	1990	6,723,531
1960	296,249	2000	6,975,866

Source: Hawai'i Tourism Authority, http://www.hawaii.gov/dbedt/monthly/historical-r.xls at Table 5 and http://www.state.hi.us/dbedt/monthly/index2k.html.

Table 3) increased from 171,367 in 1958 to 6,723,531 in 1990. Growth in visitor arrivals was once again accompanied by growth in the construction industry, particularly from 1965 to 1975. The military build-up during the Vietnam War also affected contributed to the boom by increasing defense expenditures in Hawai'i by 3.9 percent annually from 1958 to 1973 (Schmitt, 1977, pp. 148, 668).

From 1973 to 1990, growth in real per capita personal income slowed to 1.1 percent annually. The defense and agriculture sectors stagnated, with most growth generated by the relentless increase in visitor arrivals. Japan's persistently high rates of economic growth during the 1970s and 1980s spilled over to Hawai'i in the form of huge increases in the numbers of Japanese tourists and in the value of Japanese foreign investment in Hawai'i. At the end of the 1980s, the Hawai'i unemployment rate was just 2-3 percent, employment had been steadily growing since 1983, and prospects looked good for continued expansion of both tourism and the overall economy.

10. The Malaise of the 1990s

From 1991 to 1998, Hawai'i's economy was hit by several negative shocks. The 1990-1991 recession in the United States, the closure of California military bases and defense plants, and uncertainty over the safety of air travel during the 1991 Gulf War combined to reduce visitor arrivals from the United States in the early and mid-1990s. Volatile and slow growth in Japan throughout the 1990s led to declines in Japanese visitor arrivals in the late 1990s. The ongoing decline in sugar and pineapple production gathered steam in the 1990s, with only a handful of plantations still in business by 2001. The cumulative impact of these adverse shocks was severe; real per capita personal income did not change between 1991 and 1998.

A general recovery in the Hawai‘i economy began in 1999, driven primarily by increased visitor arrivals from the United States. The recovery continued through summer 2001 despite a slowing U.S. economy. It came to an abrupt halt with the terrorism attack of September 11, 2001, as domestic and foreign tourism declined sharply due to concerns about air travel safety.

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