

“Ōsaka Ports and Shipping - Institutions and Organisations from Ancient Times to the Meiji Restoration”

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ABSTRACT

The Ōsaka region has a rich maritime history of exchange and trade that is partially documented from the time that Suminoe was an international port for diplomatic missions before it was overshadowed by Naniwa Port when the capital was moved to there in the 8th Century. From Kamakura times (1185-1333) the regional warlords controlled trade and the turmoil of civil war encouraged piracy in domestic and international waters. Political stability with the unification of Japan in the Edo era (1603 – 1867) resulted in clear documentation on port activities with the importance of rice as a taxation commodity and the elevated national importance of Ōsaka port as a commercial hub. The questions we pose about Ōsaka ports from ancient times to the beginning of the Meiji Restoration are: what institutions and organisations were the dominant players in port administration at any point of time? Whose interests did the port serve? And how have these institutions and organisations changed over time, especially the change agents that triggered reform? To help answer these broad questions we draw on selected aspects of the “new institutional economics” (NIE) that have been recently applied to port administration and port labour markets.

The historical period covered in our analysis is from the Japanese ancient period to the Meiji restoration (1868) with its reform of government institutions along Western models. We use secondary data sources published in English and Japanese, and our general understanding of Japanese history that is supported by the details provided in the publication by Kodansha (1998). For a history of nearby Kōbe port (that together with modern day Ōsaka port today forms the modern day Hanshin Ports) see Yamasaki, Tanigawa and Ness (2010). We re-interpret the history of Ōsaka ports (Suminoe, Naniwa, Watanabe, Ishiyama Honganji, Sakai and Ōsaka) that correspond to the institutions or organisations that had the main responsibility for port affairs in slices of time from the earliest records. The historical landmarks in this broad expanse of time are: hierarchical control of land and sea resources by clans and tribes with the gradual centralisation of political power (The Emperor); the breakdown of central institutions with military governments, regional warlords and civil war; the rise of piracy in the Seto Inland sea both as an organisation then transforming into an institution - the “secondary state formation” by Toyotomi Hideyoshi at the end of the 16th Century; the extensive trade network of the religious and secular organisation of the Honganji with its port; the limited and restrictive policies of the Tokugawa military regime during the Edo period that ignored economic development such that business responses by the Ōsaka merchants (the lowest caste in Neo-Confucian Japan) developed the town and its port, including the rice trade through Dōjima; and finally Commodore Perry’s Black Ships that ultimately opened up Japan to international trade and triggered the restoration of the Emperor

as supreme Head of State and the modernisation of government administration during the Meiji Period. The conclusions reflect on the questions posed and discuss what institutions and organisations dominated and whose interest did they serve together with changes in port administration over time and the catalysts for change and comments on path dependency theory.

INTRODUCTION

The Japanese archipelago is a mountainous arc that includes four larger islands (Honshu, Hokkaido, Kyushu and Shikoku) and over 1000 smaller islands covering some 370,000 square kilometres of land (Sajima and Tachikawa, 2009, p.1). Water transport has been of great importance from ancient times with the discovery of primitive dugout canoes and other fishing artifacts at various archeological sites confirm a strong association with the sea from Jōmon times (10 000 BC – 300 BC) onwards. It is uncertain when Japanese ships explored further afield, nor are there descriptions of the seaports from where they embarked, but the first written evidence of a Japanese envoy visiting China (Schottenhammer, 2013) is recorded in the *Hou Hanshu* (57 AD): the Wa (倭) brought tribute to the Chinese Court (textiles, sapan wood, bows and arrows, slaves, and white pearls). In return, the Court sent back silk fabrics, gold objects, bronze mirrors, pearls, lead and cinnabar. The Kofun Period refers to the proto-historic period of Japan (from 250 to about 538, is characterised by the construction of large tomb mounds, where the discovery of Chinese bronze mirrors suggests that exchange, if not directly with mainland China, was certainly through the Korean peninsular across the short stretch of the East Sea (Korean name or the Sea of Japan via the islands of Ikki and Tsushima).

The evolution of Ōsaka ports (Suminoe, Naniwa, Watanabe, Ishiyama Honganji, Sakai and Ōsaka) in relation to politics and the functional role of these ports from the 5th Century to the modern day is admirably summarised by Sakaehara (2009). In contrast, this paper aims to make an original contribution to the history of *institutional* and *organisational* change of port “administration” based on a case study methodology of ports in the Ōsaka region of Japan from the earliest of documentation (Kojiki, 712 AD and the Nihon Shoki, 720 AD), through to the beginning of the Meiji era when Western models of port administration were introduced into Japan. A topic of port administration is familiar to transport researchers and to maritime historians: for example about one-quarter of the articles in the *International Journal of Maritime History* are classified as “port administration” (Tull, 2014). To the best of our knowledge the only applications of the new institutional economics (NIE) to port administration and governance is the research reported by Reveley and Tull (2012) and Pyvis and Tull (2015). The latter researchers used an institutional lens to examine the development of the port of Tauranga in five slices of time: ‘opportunity’, 1945-1964; ‘amalgamation’, 1965-1975; containerisation and the New Zealand Ports Authority, 1975-1977; decentralisation and waterfront reform, 1977-1989; and privatisation and the modern port, 1989-2012. Reveley and Tull (2012) have applied path dependency theory to analyses changes in New Zealand and Australian port labour markets and their regulation.

With particular reference to ports in the Ōsaka region, and drawing on the literature of the new institutional economics, the following four questions are posed:

1. Were institutions or organisations the dominant players at any point of historical time?
2. Whose interests did these institutions or organisations serve?
3. Who were the change agents, or what trigger events prompted, reform and change?
4. How have these institutions and organisations changed over time?

Before providing the historical evidence to help answer these questions, or at least to make plausible speculations on answers that are summarised in the conclusions to the paper, it is important to define the difference between an institution and an organisation (next section). At different periods of time in the long history of Ōsaka

ports have both institutions and organisations dominated port affairs and the story of the dynamics of change is told in the substantive historical sections of this paper.

NEW INSTITUTIONAL ECONOMICS

Coined by Oliver Williamson in 1975, the new institutional economics has subsequently expanded such that in 1997 the International Society for New Institutional Economics was formed (<http://www.innoresource.org/international-society-for-new-institutional-economics-isnie/>). It is an interdisciplinary field of study that aims to understand the institutions of social, political and commercial life. Institutions consist of: formal rules (constitutions, laws, rules and regulations put in place by the government); the informal social norms that govern individual behaviour and structure social interactions (conventions, codes of conduct); and enforcement mechanisms. Organisations are groups of people and the governance arrangements they create to coordinate the group action against that of other organisations. As a result of the institutional framework that governs a society, organisations have bargaining power. Both have a crucial stake in perpetuating the system (North, 1992, p. 6). Dependency paths do get reversed but the dynamics of institutional and organisational change and the interplay between political and economic markets remain imperfectly understood.

At any slice of historical time, and focusing on ports and shipping as a specific economic activity, it is possible to distinguish between institutions and organisations. Government institutions are the "rules of the game" that consist of both the formal legal rules and the informal social norms that govern individual behaviour and give structure and meaning to social interactions. In modern day approaches to government policy reform a starting point is always to start with a description of institutional arrangements. Each institution can be defined and described under its institutional framework. By contrast, an organisation is a body of people outside of the civil sphere of government. The governance arrangements that these organisations create to coordinate their collective action – often in competition against other bodies also acting as organisations – are to gain economic or political advantage. This distinction between institutions and organisations follows the work of North (1992). However, some institutional frameworks are realities "nested" inside other, broader institutional frameworks, and any clear demarcation is always blurred in actual situations.

The interplay between economic and political markets is of interest to researchers of the new institutional economics as it holds the key to the dynamics of institutional change. There is always a high degree of inertia in changing government regulatory regimes, both in terms of institutions and governance, as the new institutional economics emphasises (Williamson, 2000). Similarly, organisations suffer their own equivalent kinds of inertia. Dependency paths do get reversed (the obvious transport analogue would be the ownership of the British Railway network). A study of the landmark events and agents of change is important. The new institutional economics (Joskow, 2003, p.3) proposes the analysis of basic underlying legal institutions necessary to support the behavioural assumptions and market structures (such as credible property rights, enforceable contracts, private ownership, well-functioning capital markets and corporate governance systems). Successful development policy entails an understanding of the key landmark events in the dynamics of economic change and policy reform: the "directors of change" (Nas, 2005); or the trigger events.

In the case of ports in the Ōsaka region from about the 1st Century onwards we can

ask whether institutions or organisations were the dominant players at any point of historical time, whose interests did these institutions or organisations serve and who were the change agents, or what were trigger events that prompted, reform and change? To provide a road map for the inevitably complex story that unfolds Table 1 attempts to summarise these three key questions on Ōsaka port administration and its evolution in three historical periods – pre-history, medieval (15th and 16th Centuries) and Edo (1603 – 1867) up to the Meiji restoration of the Emperor as Head of State. The dominant institutions and organisations, in temporal sequence, have been: powerful clans and emperor (institutions); local government - regional daimyō - and pirates (organisation); merchants and private shipping companies (organisations). The key change agents have been: the collapse of centralised political control under the Court to military governments and the chaos of civil war; the anti-piracy edicts of a powerful regional daimyō gaining national ascendancy; the unification of the country under the House of Tokugawa and the long period of stability with a hands-off approach to economic matters, the rise of the merchant class and national seclusion; and the opening-up of Japanese ports to foreign trade by Western powers and the implied use of military force that caused dissent amongst some of the daimyō leading to a coup with the re-instatement of the institution of Emperor.

Table 1. Ōsaka Region Ports – Organisations/Institutions, Dominant Players, Key Historical Landmarks and Interests Served

	Pre-history	Medieval
Port Administration	<i>Institution</i>	<i>Institution/Organisation</i>
Dominant Players	Wa clan chiefs; Emperor	Watanabe clan marine police; Regional daimyō; rennyo (abbots); Pirates
Key Landmarks	Diplomatic missions with China and Korea; Ritsuryo tax collection	Anti-piracy edicts; Toyotomi and secondary state formation
Interests Served	Imperial households and nobles	Warlords, pirates, merchants; Legal exchange with Ming and illegal coastal trade

Table 1 is intended only as a broad-brush introduction to an interpretation of port administration through the lens of the new institutional economics. After providing the historical evidence of ports and shipping in the Ōsaka region in the following section Table 2 in the interpretation section provides more detail than is contained in the above table.

EARLY INSTITUTIONAL HISTORY OF OSAKA PORTS

Geographical Context

The strategic importance of the Ōsaka delta region for seaports is obvious because the waterway systems southwards from Lake Biwa provided natural arteries for trade. Approximately 460 rivers of various sizes flow into Lake Biwa with a unique arrangement of attached lakes (most now filled for paddy fields) but only one outflow (the Seta River) that eventually empties into Ōsaka bay as the Yodo River. The Yamamoto River from Nara flows further to the south. The Lake Biwa region played an essential role in Japan's early political scene, as well as being the cradle of agriculture and commerce (Kawanabe, Nishino, and Maehata, 2012), and this

includes the capacity to organise an exchange of goods using river and coastal shipping. Excavations of mounds around modern day Osaka indicate a centre of maritime activity with the western parts of Japan during the Kofun period (3rd to 6th Century) and an even early exchange with China and the Korean peninsular.

Figure 1 shows the current shoreline of the modern port of Ōsaka and the extent of low tide and high tide during medieval times. It should be noted that the original course of the Yodo river flowed southwards along the narrow strip of land between the high and low water marks before entering into Ōsaka Bay just north of the mouth of the Yamato River. The direct route of the Yodo River into Ōsaka Bay is of more recent construction that by-passed the port at Naniwa in the 8th Century. The site of the headquarters of a religious and secular organisation of the Honganji and its temple complex at Ishiyama Honganji is to where the site of Ōsaka Castle stands today.

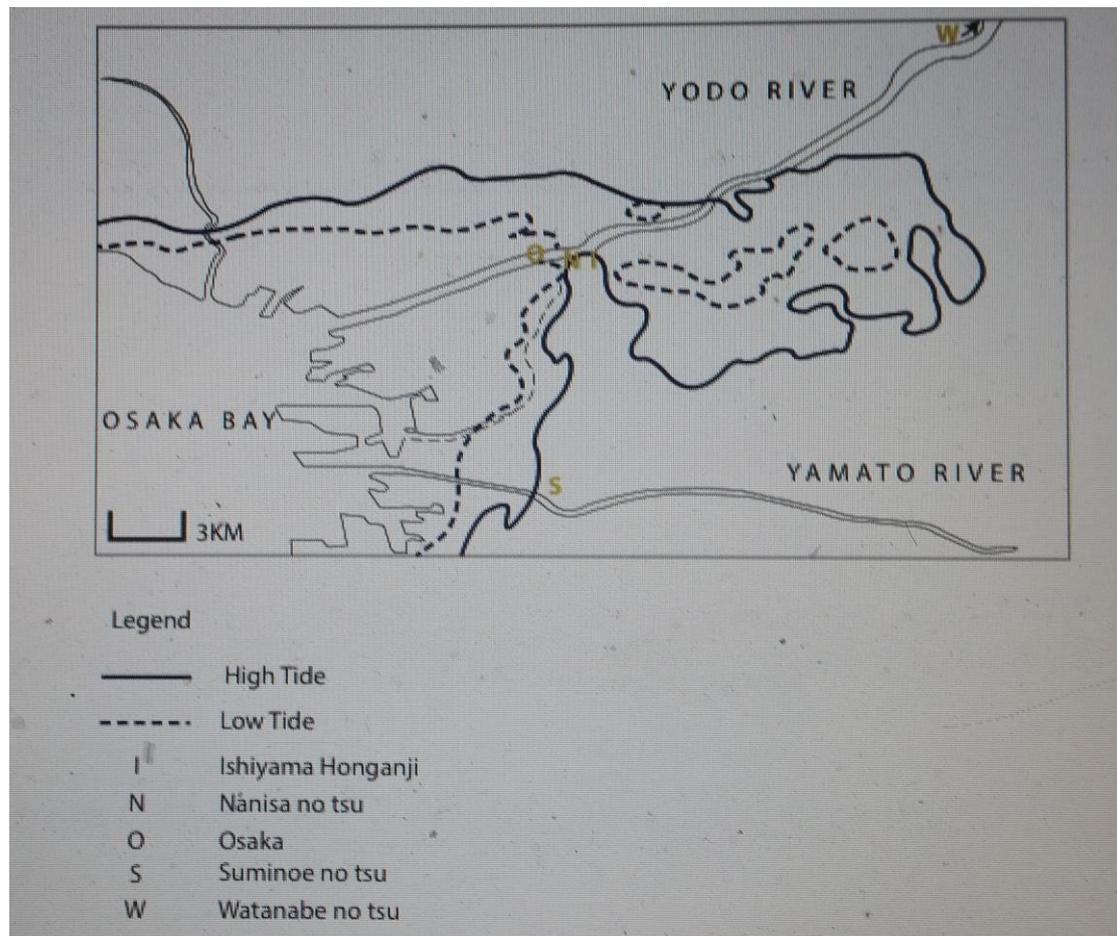


Figure 1. Ports in the Osaka Region Ancient and Modern Day Shorelines

(Source: Kawanabe, Nishino, and Maehata, 2012 for high and low tide lines)

Exchange with China and Suminoe no Tsu

The first written evidence of a Japanese envoy visiting China (Schottenhammer, 2013) is recorded in the Hou Hanshu (57 AD): the Wa (倭) brought tribute to the Chinese Court (textiles, sapan wood, bows and arrows, slaves, and white pearls). In return the Court sent silk fabrics, gold objects, bronze mirrors, pearls, lead and cinnabar. From the 1st Century AD Chinese records (wei zhi) mention the land of Wa

composed of a number of states that joined a league in around 180 AD under the headship of Himiko, Queen of Yamatai, who sent an envoy to the State of Wei (魏, 220–265) in 239 AD. Twice the Wei ruler sent embassies to Japan (238 and 247) and four Japanese embassies came to China. Therefore, the powerful clans ruling as an *institution* would have controlled the seaports. In ancient times, and mentioned in surviving records, there was an international port at Suminoe ((Suminoe no tsu, 住吉津), located just to the south of the modern Sumiyoshi Grand Shrine (containing the Gods of Seafarers) by the Yamato River from where the Japanese envoys and military flotilla assembled before departure.

Brown (1993) describes the institutional arrangements under the Yamato King control system (during the 5th Century) as one where chiefs of clan (uji) dominated the politics of ancient Japan. The system would have evolved from previous eras. The clan system, with family allegiances, would have exercised hierarchical control of the workforce of farmers and fishermen. It can be speculated, with a degree of plausibility, that from the earliest dates, port operations would have been handled under supervision by those who specialised in navigating the river and coastal waters, who knew where to land boats, and who acted as the wharfinger keeping account of the comings and goings of produce and other goods. Domestic and international exchange would have been facilitated through peasants' labour under the *institutional* control of the clan chief.

A more centralised institution of the Emperor's Court emerged over time although this is unlikely to have altered port administration. In 587 Soga no Umako seized control of Japan's central government (Asuka Enlightenment) and made extensive use of Chinese techniques for expanding state power (Mitsusada with Brown, 1993). Japan adopted not only art and culture from China but, more or less, its complete administrative system. We know that the T'ang government set up Shi Bo Si (市舶), Oceangoing and Marketing Department, in many coastal ports for the administration foreign economy-related affairs by sea including the export of silk products to Japan (Chaffee, n.d.). Therefore, it is most probable that equivalent port-related functions were duplicated in Japan. Thus, we can be confident that an *institution of port administration* had evolved where the Emperor's Court was concerned primarily with ceremonial functions and powerful family elites, influential in early periods, controlled policies relating to the economy and trade.

Naniwa no Tsu

By the time that a port (Naniwa no tsu or Naniwazu, 難波津) was established at Naniwa a complex administrative system would have been in place. Sakaehara (2009, pp.4-7) traces the origins of a port at Naniwa sometime in the late 5th Century in the reign of Emperor Nintoku to the building of Naniwa no horie – a canal cut through the Uemachi Tablelands that acted both as a flood control barrier and a shortened route to the ocean from inland settlements via the Yodo and Yamato Rivers. He notes the construction - near to the probable location of the port - of large storehouses with a floor area of some 82-98 square metres - probably to keep war supplies because the Wa's traditional ally on the Korean peninsula, Paekche, was being invaded by the northern state of Koguryo. Naniwa became an important seat of government and international trading centre carrying Japanese envoys to China during the T'ang Dynasty and where military flotillas were assembled¹. In 645, Emperor Kōtoku built his palace, Naniwa-no-nagara-no-toyosaki-no-Miya (難波長柄豊碕宮 in Ōsaka, making this area the capital (Naniwa-kyō). Government facilities for diplomatic functions and residences for visiting diplomats were constructed (Sakaehara, 2009, pp. 7-8). The capital there was short-lived moving inland to Heijō-

kyo. Naniwa continued as a port of political, military, economic and transport importance serving the new inland capitals of various Emperors with palaces located in Nara and Kyōto.

The domestic port function of Naniwa is further clarified when the system of administrative laws (*ritsuryō*) issued from the capital Heijō-kyō is explained. (The importance of this explanation will become apparent when discussing later the Tokugawa political economy.) With the consolidation of the taxation system in the 8th Century, taxes from all parts of western Japan were shipped by sea to Naniwa before being transshipped along the river systems to the capital. These taxes were special products from different regions (*cho*), different products paid in lieu of labour tax (*yo*) and the fixed amount of rice supplied as a ration to different offices each year (*nenryō sho mai*). Many of the nobles, officials and clergy who were based in the capital also owned estates (*shō*) in parts of western Japan and around Naniwa and tributes from these estates were assembled in Naniwa.

Naniwa lost its political and diplomatic importance as a port when Heijō-kyō and its subordinate town of Naniwa-kyō were integrated into a new capital at Nagaoka-kyō in 784. A year later, a new canal connecting the Mikuni River (present-day Kanzaki River) and the Yodo River allowed ships from the Seto Inland Sea to by-pass Naniwa Port and dock at Nagaoka-kyō, Yamazaki no tsu or Yodo tsu. Although considerably downgraded in its port significance, trade continued because we know, for example, that a merchant Bunya no Miyatamaro amassed a fortune trading with Silla (Korea) during the mid-9th Century (Sakaehara, 2009, p. 9). The rise of the merchant in Japanese international commerce has important ramifications in a new model as to how ports were administered in later centuries.

Watanabe no Tsu

At the beginning of the 10th Century an imperial estate called Oe no Mikuriya was established in the provinces of Settsu and Kawachi. Watanabe no tsu, located on south bank of the Yodo River, was a relay point to transport foods to the Emperor in Heijō-kyō. Court nobility sailed to Watanabe-no-tsu then travelled on foot southwards to make pilgrimages to Shitennoji Temple, Koyasan and Kumano. The port also functioned as an auxiliary port for coastal shipping in the Seto Inland Sea in the 11th Century. Its administration was atypical because the samurai managers of the imperial estate, the Watanabe clan, with a powerful navy, were appointed chief of police (*kebiishi*) and exercised marine police authority in the port and river estuaries.

Coastal Shipping Regulations

We can be certain that the *institution* of Emperor (*tennō*: “Heavenly Sovereign”) was responsible for issuing regulations relating to shipping. It was considered inappropriate for the emperor to concern himself with the secular business of government so ruling elites (acting “on behalf” of the authority of the Emperor of Japan) introduced and reinforced the basic regulations on coastal and international shipping. Sets of maritime regulations (*kaisen shikimoku* or *kaisen taihō*) reveal information about seafaring practices in the medieval period.

The dates of maritime regulations that include articles on coastal trade ships, riverboats and port regulations are disputed because of their frequent recopying from documents dated 1223 AD (Damian, n.d., p. 2). Though few trade-related documents from the medieval period have survived the centuries, one set of port records provides much information about coastal shipping. The Records of Incoming Ships at the Hyōgo Northern Checkpoint (*hyōgo kitaseki irifune nōchō*) record data for over

1900 vessels that passed through the checkpoint at Hyōgo (today part of Kobe City), in 1445 and the first two months of 1446 (Hayashiya, 1981). Each dated entry notes the port of registry of the ship, the type and volume of cargoes carried, the taxes levied on the items and dates collected, the name of the ship's captain and the name of the warehouse manager that handled the incoming items. The records show the flow of goods from the provinces to Hyōgo, gateway to the central court region of Kyoto.

PIRACY AS AN ORGANISATION / INSTITUTION

Since the collapse of the Ashikaga shogunate in 1467, and the onset of Japan's warring states (Sengoku) period (1467 – 1568), no central authority had been able to exert real power over the archipelago's maritime fringes². Piracy (kaimin) underpinned the local coastal economies of Japan (Tamaki, 2014, p. 257), providing a reliable source of income to local warlords and employment to coastal communities³. "Piracy" represents a good example of the blurring between *institutions* and *organisations*. Japan's land-based warlords accepted the autonomy of "pirates" and competed to sponsor sea-lord brigands who could administer coastal estates, fight sea battles, protect shipping⁴, and carry trade. In turn, prominent sea-lord families expanded their *organisation* by shifting their locus of service among several patrons. Shapinsky (2014) points out that they "appropriated land-based rhetorics of (*institutional*) lordship, which forced authorities to recognise them as legitimate lords over sea-based domains." Furthermore, pirates often identified themselves not only with looting/pillaging associates but also with groups of wealthy merchants, often tied to the egoshu – the rich merchant associations of Sakai of which Notoya and Beniya were prominent examples⁵.

Merchant associations (*organisations*) administered the port of Sakai, about 8 km to the south of Ishiyama Hongangji. During the Ōnin Civil War (1467 - 1477) shipping movements in the Seto Inland Sea became increasingly dangerous and trade shifted to the port of Sakai – on Ōsaka Bay. Sakai was surrounded by a moat and prospered as an autonomous town administered by merchants (*naya-shu* and latter called *kaigo-shu*). They thrived on the trade with Ming dynasty China established in 1401 by the third Muromachi Shogun, Ashikaga Yoshimitsu, because they utilised the Kii Channel to the island of Nochi then sailed to southern Kyushu thereby avoiding piracy in the Seto Inland Sea (Osaka Toshi Kogaku Center, 1999, p. 18). However, ships were subject to more exposed and dangerous sailing conditions.

In other words, "pirates" as a collective label can be thought of as one *organisation* within a complex hierarchical society, noting of course the numerous groups with allegiance to the various warlords, who, in their domains, were akin to the *institution* of governance and administration, setting local rules and taxing the peasants on their lands⁴. This chaotic world of Sengoku Japan can be characterised by a "failed state" and endemic conflict fuelled by a proliferation of weapons and competing groups (Clulow, 2009). As explained by Wills (2001, p.147), "the daimyo had worked energetically since the late 1500s to devise political institutions that would strengthen their control of people and resources within their territories." In the unsettled years before and after 1600 this was done to strengthen the daimyō's fighting capacity so the habit of an iron control over society became the norm.

According to Shapinsky (2010, 2014), the "pirates," thought of themselves as sea lords. Over the course of time, they became maritime magnates who wielded increasing amounts of political and economic power by developing autonomous maritime domains that operated outside the auspices of state authority. Their

protection businesses, shipping organisations, and sea tenure practices spread their influence internationally, shaping commercial and diplomatic relations with Korea and China. Piracy continued to flourish within Japan until the late sixteenth century when Toyotomi Hideyoshi (1536/37–1598) gained hegemony over the Western warlords of Japan.

Toyotomi Hideyoshi built up a powerful military state (*institution*) using the resources gained by appropriating the trade profits and production resources that expanded so rapidly in an environment of rampant extra-legal, extra-national economic activity of maritime smuggling. He began to trade by way of *shuin sen* (ships used for foreign trade) with the formal permission of the Japanese authorities (Tamaki, 2014, p. 259). The campaign of the state against pirates consisted of three steps: identification; disarmament; and enforcement. The key moment was August 29, 1588, when Toyotomi Hideyoshi issued two decrees: the ‘sword-hunt’ edict; and an anti-piracy regulation, that combined to eradicate pirate organisations.

The anti-piracy edict specifically targeted coastal communities by ordering that “the sea captains and the fishermen of the provinces and the seashores, all those who go in ships to the sea, shall immediately be investigated” (de Bray, *et al*, 2002, p. 459). Once they were identified, these sea peoples were compelled to sign oaths declaring that they would no longer engage in piracy. The edict thus extended control over the maritime fringes of the archipelago, effectively moving the “marginal men”, who were so central to piracy, out of the margins and into the legal structures (Clulow, 2009) of *institutions*.

Thus, Japanese sea power was used as a centralising force during the 16th and 17th centuries, initially to assist in the subjugation of Oda Nobunaga’s opponents: using his large fleet in naval battle, as an instrument of intimidation or a visible sign of his prestige. More and more of the Japanese clans were subordinated to the will of the most powerful clan leader (transformation from individual *han* governance to a national institution). Toyotomi Hideyoshi’s campaign did not end piracy overnight. Isolated pirate attacks continued to be recorded well into the seventeenth century, but his efforts transformed piracy from an organisation that could be conducted with virtual impunity into a far more sporadic and marginal business that entailed great risks where smaller pirate organisations remained outside the pale. The ambitions, tactics, and technologies of the powerful sea-lord mercenary organisations proved integral to the naval dimensions of Japan’s sixteenth-century military revolution. Sea lords transferred their late medieval autonomy into positions of influence in early modern Japanese institutions and helped make control of the seas part of the ideological foundations of the Tokugawa state. Thus, over a few decades, *organisations*, once labelled as “pirates”, became embedded into state *institutions*.

THE RISE OF ŌSAKA PORT AT ISHIYAMA HONGANJI

From 1533 to 1580, the temple and town located at the estuary of the rivers Yodo and Yamato was the origins of the modern city of Ōsaka. It was the headquarters of a religious and secular *organisation* of the Honganji – a major branch of the Buddhist True Pure Land Sect (Jodo shinshu). The temple was founded in 1496 but grew into a large town within the temple complex all surrounded by moats and fortified walls. Ishiyama Honganji thus became a centre of religion and commerce that stretched across the province as a vast power structure described by Kodansha (1993, p. 633) as a “religious monarchy”.

A 10-year war with Oda Nobunaga was lost: when the temple surrendered in 1580 it was burnt on the orders of the rennyo (abbot). Recognising its strategic location, Toyotomi Hideyoshi built Ōsaka castle (that stands today) on the same site and moved into this fortress in 1584. He restored Ōsaka's central place in Japanese trading affairs, as well as building up his maritime power and fortune initially in association with pirate trade before eradicating piracy, as explained above. Arnason (2010) describes in detail the rise of this region of Japan that became a "secondary state" (*institution*). After Toyotomi Hideyoshi gained hegemony and built his base in Ōsaka in 1583, the Ōsaka port (still as a river port) became a renewed centre of international and domestic trade. Many of the canals from rivers were excavated during his reign and that of his son. On Toyotomi Hideyoshi's death, his son, Toyotomi Hideyori, became daimyō of a large and prosperous domain centred on Ōsaka castle. However, in 1614, Tokugawa Ieyasu (the first Tokugawa shogun) found a pretext to denounce Toyotomi Hideyori (1593 – 1615) for subversive behaviour, defeating him in field battles until the castle finally surrendered in June 1615 and the domain was transferred into Tokugawa institutional control.

EDO ERA

Political Structure

The Edo Period (Deal, 2005, p.12) – marked by the unification of the country under the Tokugawa military government, or bakufu (overarching *national institution*) - is best described as a fiscal-military state (Tamaki, 2011). In the absence of wars, the ensuing peace for 250 years was achieved by strict regulatory control and political administration. Its prototype system was the political alliances established under Oda Nobunaga and Toyotomi Hideyoshi as the country became unified and reached its maturity under the third Tokugawa shogun (Hall, 1988, pp. 128-182). The overriding policy was to ensure the successful succession of the House of Tokugawa⁵ - not the formulation of coherent economic policies. The iron fist of national government policies on regulation of the Japanese economy reached its zenith during this period once the country of powerful independent fiefdoms of some 250 domains had been finally unified in the very late 16th Century. The Battle of Sekigahara (1600) confirmed the hegemony of Tokugawa Ieyasu who was appointed by the Emperor as Shogun in 1603. He set about building a castle and reconstructing the city that became Edo (Naito, 2003). Thus, the Edo period saw the immediate transfer of political and economic power away from the Kansai region to the Kantō region.

INTERPRETATION OF THE HISTORY OF PORT ADMINISTRATION

As mentioned earlier, the new institutional economics defines institutions as the "rules of the game" that consist of both the formal legal rules and the informal social norms that govern individual behaviour and give structure and meaning to social interactions of institutions and organisations. We can best think of an institution in terms of government. An organisation is a body of people, and the governance arrangements they create, to coordinate their collective action – often in competition against other bodies also acting as organisations - to gain economic or political advantage.

In the broad context of Ōsaka port, and its shipping and trade, we have described major historical themes from the proto-historical period onwards. We now interpret the findings in terms of: were institutions or organisations the dominant players at any point of historical time; whose interests did these institutions or organisations serve; who were the change agents, or what trigger events prompted, reform and change; and how have these institutions and organisations changed over time? Table 2

summarises the arguments presented in the earlier, substantive part of the paper by considering the six ports in the Ōsaka region in terms of whether the port administration was predominantly through an institution or an organisation, who were the dominant parties in port affairs, what were main landmark events that lead to the functioning of each port and who were the main agents of change from one historical period to another.

Table 2. Ōsaka Ports in History – Institutional and Organisational Analysis

Port (date)	Suminoe (< 5 th C)	Naniwa (5-11 th C)	Watanabe (11-16 th C)	Ishiyama Honganji (16 th C)	Sakai (16 th C)
Admin.	<i>Institution</i>	<i>Institution</i>	<i>Institution</i>	<i>Organisation</i>	<i>Organisation</i>
Dominant Party	Wa clans; Emperor	Emperor	Emperor; Daimyō	Buddhist Temple	Merchants
Landmark Events	Diplomacy with China Korea	Diplomacy; Taxation	Canal built on Yodo; Marine police	Land allocation to powerful elites	Trade with Ming; Piracy in Seto Inland Sea
Agents of Change	China	Canal building enhancing strategic location; capital at Naniwa	Canal building by-passing Naniwa to inland capital	Destroyed by war lord Toyotomi Hideyoshi	Commercial trading with Ming China; Shipping routes avoid pirates

From the early historical periods on record, Suminoe and Naniwa ports were *institutional* artifacts of a succession of the clan leaders, Kings of Wa and Emperors using primarily their diplomacy with China and Korea and their domestic movement of taxation rice and other products to the capital. Just as Naniwa had supplanted Suminoe as an international point of embarkation and disembarkation Naniwa declined with the construction of a canal on the Yodo River and the rise of Watanabe – a port up-river on imperial estates and closer to the capital. Acting on the authority of the Emperor samurai administered this port and formed a marine police force. With the usurping of political power from the Emperor early modern Japan had a predominantly unstable quasi-national institution of military governance (*bakufu*) where edicts and codes of behaviour defined the roles and responsibilities of the regional warlords (*daimyō*) on their domains (*han*) in a country that was yet to be unified nationally.

In the coastal fiefdoms, maritime piracy as an *organisation* was rife and the evidence strong alliances between pirates as “lords of the sea” and the warlords (*institutions*) support the proposition of the new institutional economics of the existence of nested institutions. In fact, one of the first unifiers of Japan, Toyotomi Hideyoshi, grew rich by participating in this illegal, international trade, destroyed the “religious monarchy” (*organisation*) at Ishiyama Honganji to secure the site of Ōsaka castle and its port, before issuing edicts to rid the country of piracy. (Additional alliances between Toyotomi Hideyoshi and the remaining pirate organisations were formed by coercing pirate shipping into the military state-sponsored invasion of Korea in the Imjin Wars of 1592-1598 thereby forming a secondary state within the overall *bakufu* system.) Much of “unlawful” activity of the piracy was sanctioned by regional *daimyō* – the equivalent of local government institutions. “Sea lords” transferred their autonomy into positions of influence in early modern Japanese *institutions* and helped make control of the seas part of the ideological foundations of the Tokugawa state during the Edo era.

Administration of the port of Sakai can be interpreted as an “outlier” in the medieval period in as much that it was run by merchants. Pirates often identified themselves not only with looting/pillaging associates but also with groups of wealthy merchants, often tied to the *egoshu* – the rich merchant associations of Sakai. Merchant associations (*organisations*) administered the port of Sakai. During the Ōnin Civil War (1467 - 1477) shipping movements in the Seto Inland Sea became increasingly dangerous and trade shifted to the port of Sakai where it prospered in a town administered by merchants (called *nayashu* and later *kaigoshu*). They thrived on the trade with Ming dynasty China established by the third Muromachi Shogun, Ashikaga Yoshimitsu, because they followed the Kii Channel to southern Kyushu.

The third broad period interpreted is the Edo era (1603-1867) where *organisations* clearly dominated port and shipping functions. To fully understand the dynamics of Ōsaka port developments during the Edo era, it was necessary to describe the overarching institutional structure. Governance under the Tokugawa functioned in a complex way through a system of layered hierarchical spheres of authority, each of which retained some degree of autonomy. The shogunate's laws and taxes applied only land in Tokugawa ownership. Each daimyō - the shogunate's direct vassals – ruled its own domain (*han*). Buddhist temples, Shinto shrines, and certain other institutions, such as merchant guilds⁸ and certain other associations, were similarly self-governing. All of these *interlocking institutional spheres* enjoyed allowed a large degree of autonomy so long as they fulfilled their obligations to the relevant authorities directly above them in the hierarchy.

During peace and stability of the Edo period (1603-1867) there was always a high degree of inertia in maintaining regulatory regimes, both in terms of institutions and governance. By 1619, Ōsaka castle had been taken by the House of Tokugawa and its seaport theoretically was administered with broad oversight by the *machi bugyō* appointed by the shogunate (*national institution*) in the case of legal disputes arising. Neo-Confucianism as the state doctrine of a simple life producing no surplus (Deal, 2005, p. 121) meant that the shogunate had no real interest in formulating economic policies - with a few exceptions primarily relating to rice taxation. The overriding policy of the bakufu was fundamentally the perpetuation of the House of Tokugawa with its increased centralised political and financial aggrandisement at the expense of the regional daimyō. Despite the Ōsaka port being located on a Tokugawa domain its infrastructure development of river works, canal construction, land reclamation, bridge building and warehouses is the result of private interests (*organisations*). Much of this development was paid from merchant profits made from the transport and handling of rice (then the national currency).

However, dependency paths do get reversed as the case of the Ōsaka Rice Exchange demonstrates that over its three-century history as it variously served *private interests* before becoming an arm of the Japanese national government. First established in 1697 when it received a license from the bakufu it had a sophisticated trading mechanism and a national distribution network and the judicial system. The Tokugawa Shogunate chartered the Rice Exchange in 1730. After being dissolved because of claims that merchants were hoarding rice it later became officially sanctioned, sponsored and organised again by the bakufu in 1773. Following the collapse of the Tokugawa government, a new rice marketing system, the Ōsaka Dōjima Komesho Kaisho, was established then renamed in 1893 as the Ōsaka Dōjima Beikoku Torihikisho (Ōsaka Dōjima Rice Market Place).

CONCLUSIONS

We have analysed, in the context of six Ōsaka ports, and their shipping and trade, the following questions derived from the new institutional economics: were institutions or organisations the dominant players at any point of time; whose interests did these institutions or organisations serve; who were the change agents, or what trigger events prompted, reform and change; and how have these institutions and organisations changed over time? The new institutional economics proposes that the analysis of basic underlying legal institutions necessary to support the behavioural assumptions and market structures (such as credible property rights, enforceable contracts, private ownership, well-functioning capital markets and corporate governance systems) is an important field of study for historians and we have shown this certainly to be the case of Ōsaka ports. The administration of the port functions at Ōsaka during the Edo era (1603 – 1867) – with its hands off approach by the bakuhan system of governance – can be contrasted with the ancient history where the ports served the direct interests of the ruling elites. There was a return to a centralised *institution* with the modernisation of port administration from Meiji times onwards¹⁴.

The directions of major port developments require a broad understanding of the relative roles of national, provincial and local governments in port and shipping policy. For much of the time, local government (*han*) was of utmost relevance. The Formulary of Adjudications is the law code established by the Kamakura shogunate (1192-1333) to codify law of the relationship of vassal to shogun and the administration of warrior domains that remained in place until the mid-19th Century. Our sketch of the history of port administration in the Ōsaka region would suggest a temporal sequence highlighting the relative importance of institutions and organisations in the following sequence. Initially, there was the role of the Emperor and the ports of Suminoe, Naniwa and Watanabe. Then, there was a decline of centralised institutions of the court and the rise of military power of the regional daimyōs, with the chaos of civil war and the rise of piracy. Amidst this chaos was one opportunist, Toyotomi Hideyoshi, who built wealth through shipping alliances with pirates before attempting to forge a unified country that included the partial eradication and eventual incorporation of pirates into the state military navy. During the stability of the Edo era, private interests (merchants) took over port construction and trade development (taxation rice). Finally, the intervention of western powers, and the eventual collapse of the Tokugawa state, led to the restoration of the Emperor: the *institutional* administration of ports had come full circle from the 1st Century to the 20th Century.

The distinction between institutions and organisation is too simple a heuristic. Another way of looking at this is to think of “institutions”, such as the institution of Emperor, political institutions, educational institutions and banking institutions, as long-term permanent structures and within each it is aspects of the organisations that are subject to change and transformation. This was the distinction drawn by Black and Rimmer (1987) when writing on urban transport policy for members of the New South Wales Parliament. Transformation takes place through the actions of individuals. North (1991, p. 97) mentions that institutions are “humanly devised” twice in the first five sentences of his essays on institutions. The concept of “policy entrepreneurs” by David Banister and Geoff Dudley must be explored when interpreting the historical evolutions of ports and shipping. Finally, there are various theories to be examined on the transformation of organisations to provide more conceptual rigour that that contained in this paper.

Further research is needed. The long-term evolution of the port of Ōsaka, at least from the Edo period to the modern day, conforms, with minor modifications, to Bird's conceptual model. Bird (1971) generalised the various stages of port expansion from its original site by suggesting that in most cases a recognisable spatial pattern can be detected. The typical response of a port that is subject to pressures on facilities from increasing cargo tonnage and larger vessels is to develop the port downstream - away from its original urban node - but with earlier facilities continuing to occupy a place in port activity. With the impact of containerisation and bulk handling a further stage in this process occurs with the construction of new port facilities often on reclaimed land. This conforms to the potted history of port of Ōsaka from the Meiji period onwards. Therefore, one obvious direction of further research is to continue the institutional and organisational analysis of Ōsaka port from the Meiji Restoration, especially the aftermath of Japan's defeat in the Pacific War, to the recent administration arrangements of the Hanshin Ports. One speculation is that, in the long-term, Japanese ports may be privatised. Further research is required to unearth descriptions of how early Japanese ports really functioned from an administrative perspective by following some of the Japanese references cited in the footnotes to Sakaehara's chapter and other archival research on medieval cities in Japan at Osaka City University (<http://ucrc.lit.osaka-cu.ac.jp/niki/en/osaka-library.html>).

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FOOTNOTES

¹ The accepted chronology of Japanese history (Kodansha, 1993, pp. 1808-9) documents contact with main land China in the pre-history period. Furthermore, Kodansha (1993, p. 1467) details the embassies sent to Sui and T'ang China from 600 AD to 840 AD: 5 missions during the Sui dynasty (last in 614) and 18 missions during the T'ang dynasty (the last successful mission was in 838 because Ambassador Sugawara no Michizane's mission was abandoned in 894).

² *Goseibai shikimoku* (The Formulary of Adjudications) is the law code established by the Kamakura shogunate (1192-1333) to codify warrior house law (the relationship of vassal to shogun and the administration of warrior domains) that remained in place (together with the periodic promulgation of supplementary articles, *suika*) until the mid-19th Century.

³ During the sixteenth century, *daimyō* on the outlying western islands began to appropriate the title of *nihonkokuō shi* (Japan's official diplomatic emissaries). Lacking the military power to prevent fraudulent use of that title, the central government was helpless to prevent regional rulers from pursuing foreign trade and diplomatic relations. Far from taking steps to prevent their domains from becoming bases for illegal trade or piracy, the lords of Japan's western most provinces (including the Sō of Tsushima, the Ōuchi near the western tip Honshū, and the Ōtomo, Matsuura, and Shimazu of Kyūshū) were eager to pocket a share of the profits (Murai, n.d.).

⁴ In 1586, the Jesuit Vice provincial Coehlo travelled from Bungo in Kyushu and was invited by the Corsair, Xixima Dono, a man who owned many vessels and to whom merchants were paying tribute, for safe passage. Safe conduct took the form of a silk flag with his insignia as warranty of protection. From a Jesuit Christian perspective, the "pirates" were equivalent to powerful sea merchants.

⁵ This is best illustrated by consulting the Tokugawa family genealogy (Kodansha, 1993, p. 1577) with its fifteen Tokugawa Shoguns who were supported by the *gosanke* (Three Successor Houses) – *daimyō* families from the domains of Mito, Owari and Kii – who were expected to supply the shogun with military forces against any daimyo challengers and to enable successors in the event a shogun who died without a male issue.

⁶ Tokugawa Shogunate power in first fifty years was to control the provinces with the active allocation and withdrawal of domains. 172 new *daimyōs* were created and 206 were given fief increases for notable service; there were 281 occasions that *daimyōs* were transferred from one domain to another with the quality of the new fief in proportion to service rendered; and 213 *daimyōs* lost all or part of their estates in punishment (Kodansha, 1993, p. 1580). The principal officials of the Tokugawa shogunate were held by the *fudai* (hereditary vassal) *daimyōs* with other lesser offices held by the *hatamoto* and *gokenin* (liege vassals) such that governance was in the hands of the most powerful "warlords". This *bakuhau* system of governance is the name given by modern Japanese scholars to the political structure established by the Tokugawa house in the early part of the 17th Century.

⁷ Guilds, abolished under Oda Nobunaga, were reinstated over the course of the Edo period, with merchants paying a small fee for membership in organisations that enjoyed monopoly privileges at the marketplaces.

⁸ A reconstruction of a Tokugawa control point can be seen today on the old *tōkaidō* at Hakone, southwest of Tokyo.

⁹ The 397-volume *dai nihon shi* condemns the old aristocratic institutions as decadent whilst extolling the moral virtues of military governance (Kodansha, 1993, p. 544).

¹⁰ *bugyō* is a term from the Heian Period (794 - 1185) meaning "to carry out orders received from a superior." Civil and judicial administration was rationalised by the Tokugawa shogunate and *bugyōs* were middle-ranking administrators with well-defined duties.

¹¹ In Japanese, "808" is a metaphor for a very large number.

¹² As storage and shipping agents in rural areas began to compete against those located in the more major cities, merchant shippers turned away from the urban *tonya*, to rely more heavily on those in smaller towns charging lower fees.

¹³ In the first years of the 1730s, as the result of poor harvests and trade issues, the price of rice plummeted. Speculators and various conspiracies within the brokers' community played games with the

system, keeping vast stores of rice in the warehouses, which ensured low prices. The samurai, whose stipends were paid in rice, panicked over the exchange rate into coin. The *bakufu* set a price floor in 1735. Over the fifteen years or so, until roughly 1750, the government stepped in on a number of occasions to attempt to stabilise or control the economy. Eventually, the Rice Exchange was reintroduced in 1773, under *bakufu* sponsorship, regulation, and organisation because the government finally understood the economic power of the Rice Exchange in supporting the national economy, determining exchange rates, and even creating paper money.

¹⁴ Kamibayashi (2009) documents the civil engineering works in Japan, including the flood control of the Yodogawa, by Johannis de Rijke (1842-1913) and others.