IS INDEPENDENCE GOOD OR BAD FOR DEVELOPMENT IN SMALL ISLAND ECONOMIES? A LONG-RUN ANALYSIS

Geoffrey BERTRAM[*]

Abstract - *It is well established that sovereign independent small islands have lower incomes than politically affiliated islands. Many studies have argued that this is a causal relationship, with independence acting as a drag on development performance. Cross-section data from the past four decades has been viewed as evidence for this hypothesis, but longer-run time series data do not support it. This paper uses time series for GDP, infant mortality, life expectancy and international trade to check whether the emergence of the two modern convergence clubs (sovereign and affiliated) occurred before or after decolonisation. It appears that the two groups of island economies began to diverge about 1920, with separation largely complete by the time political status was assigned during decolonisation in the period 1950-1970. The causes of this early divergence remain unidentified.*

Keywords - DECOLONISATION, DEVELOPMENT, POLITICAL STATUS, SMALL ISLAND ECONOMIES, TIME SERIES.

JEL Classification - 011, 047, P51

---

[*] Institute for Governance and Policy Studies, Victoria University of Wellington, New Zealand, Geoff.Bertram@vuw.ac.nz.

1. INTRODUCTION

This paper presents some new results from research on the long-run economic development of small islands. The focus is on the relationship between relative economic performance and the political status (sovereign independence, or affiliation with a metropolitan patron state[1]) assigned to small islands during the decolonisation era 1945-1982. Island-by-island time series are assembled on four key indicators of material well-being – per capita income, infant mortality, life expectancy and import capacity – and examined to see whether they provide *prima facie* evidence for the proposition that islands that became sovereign independent states during decolonisation performed less well as a result of that decision, compared with islands that remained, or became, politically affiliated with a larger metropolitan nation.

It is well established that politically-affiliated islands currently have higher per capita incomes than sovereign ones. This discrepancy is clearly visible in Graph 1 which plots per capita income against population for sovereign and affiliated islands. A number of authors (Armstrong and Read 2000, 2002; Armstrong *et al.* 1998; Baldacchino 2004, 2006, 2010; Baldacchino and Bertram 2009; Baldacchino and Milne 2000, 2006, 2009; Bertram 1987, 1999, 2004, 2006, 2007, 2013, 2014; Bertram and Poirine 2007; Feyrer and Sacerdote 2009; McElroy 2014; McElroy and De Albuquerque 1995; McElroy and Parry 2012; McElroy and Pearce 2006) have argued that the superior performance of affiliated islands can be explained by their political status. This could be, for example, because affiliated economies have not been obliged to carry the potentially-deadweight burden of sovereign statehood, with its associated requirement to sustain a full-service government; or because close political association has meant lower barriers hindering migration and other transactions with the metropolitan power with which each island economy had historic links. Bertram (2004) described sovereign independence as a "tax". McElroy and Parry (2012) wrote of a "propensity for political affiliation" arising from the conscious recognition of economic benefits from holding onto affiliated status and resisting proposed switches to sovereign independence.

Drawing causal conclusions from cross-section data is, however, a risky procedure. With only one exception, statistical work on the link between political status and development performance has relied on cross-section or panel regressions, all of which have found a significant negative association between independence and income for periods after 1980 – that is, after the close of the main era of postwar decolonisation. However Sampson (2005) compared not levels but growth rates of per capita income between politically sovereign and politically affiliated island economies, and found no relationship – a result that raised immediately the question of when and how the modern income differential arose. If sovereign independent political status is negatively associated with

---

[1] "Affiliation" is a term that covers various decolonisation options including integration with a larger state, self-government in free association with a larger state, commonwealth status, and territory status.

present-day per capita income, but not with growth rates over the past few decades, this casts doubt on the hypothesis of a causal link whereby political sovereignty has held back the relative development of island economies since decolonisation. It might indicate instead the persistence of pre-decolonisation differentials, onto which political status was grafted during decolonisation. In that case, the issue of causality would have to be re-framed: why might poorer colonies have tended to end up independent while richer ones tended to remain nonsovereign?

Graph 1. Per capita GDP plotted against population for small island economies, 2012
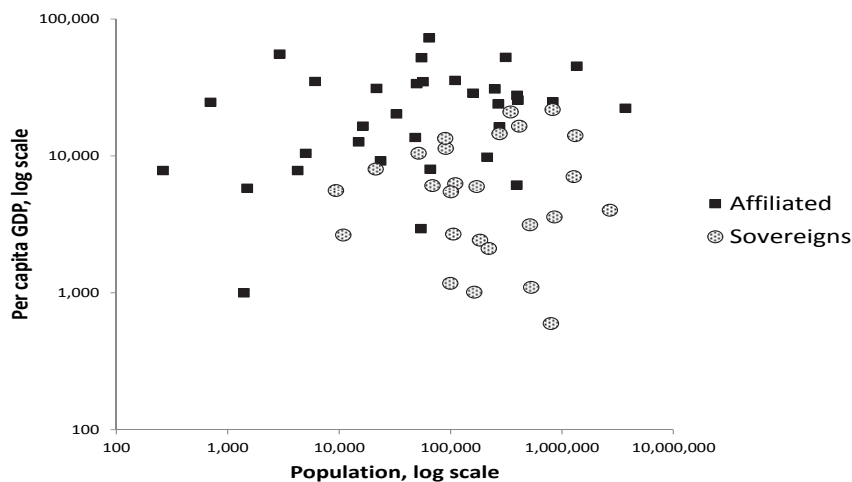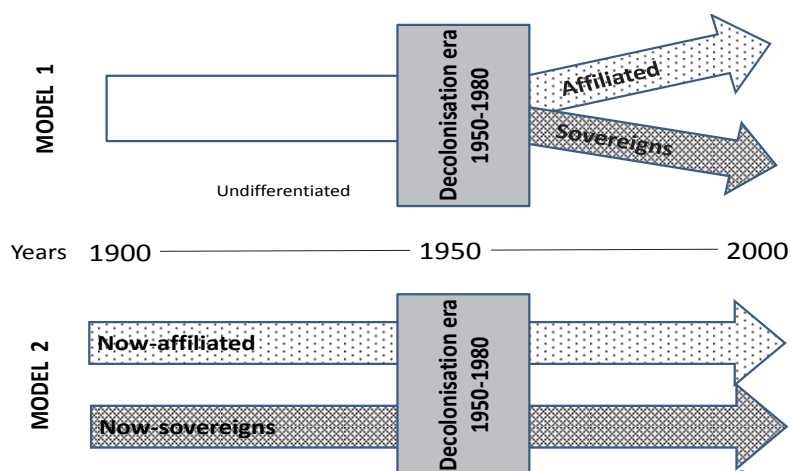

Source: The author.

To put the issue another way, suppose that all the island economies in Table 1 had become sovereign independent states during the decolonisation era, would they all have ended up at the same, relatively low, income levels as those which are actually sovereign? Or if all the island economies in the data set had become affiliated political entities after decolonisation, would they all have ended up at the same, relatively high, income levels as those that are actually affiliated? Has there been, in other words, any tendency for political status to cause the sorting of small islands into the two "convergence clubs" visible at the beginning of the twenty-first century?

Graph 2 shows the two competing models to be tested. Model 1 is the hypothesis that political status has caused differences in economic performance, so that the difference between sovereign and affiliated islands is the end product of a process of separation into two "convergence clubs", with all the small-island colonies starting out as an undifferentiated group at 1950 and then, after political status had been determined, sorting themselves into the two present-day clubs. Bertram (1999, 2004, 2013) argued in favour of this story, but had no direct evidence for years before 1980.

Model 2 is the opposing hypothesis, that causality may have run the other way. Prior to decolonisation, this hypothesis proposes, small-island colonies were already differentiated into two distinct clusters, and the decolonisation process imprinted this existing ranking onto post-colonial political status: more-developed colonies became affiliated, and less-developed ones became sovereign.

Graph 2. Two competing models of the origin of modern differences

Source: The author.

To test which of the two models has greater explanatory power, two questions are addressed in this paper using time-series data. First, is there evidence of divergence between the two groups during and after decolonisation? Second, is there evidence that the two modern convergence clubs existed prior to decolonisation, which would be inconsistent with the proposition that they were caused by it?

Time-series data extending back to or before the decolonisation era are unfortunately scarce. Ideally, the Human Development Index or some similar measure of overall performance would be available back to 1900, enabling a straightforward analysis of convergence and divergence across the small-island economies. However neither the HDI, nor the national-accounts aggregates which are an important component in its calculation, extend back into the pre-decolonisation era. The official HDI series[2] start from 1980 and cover only sovereign independent island states.

Construction of an estimated HDI for affiliated island states, and for all islands over the period 1900-1980, is a task beyond the scope of the present paper. Such an exercise would require time series for GDP per capita, educational status (years of schooling), and health status (life expectancy). At present, comprehensive official UN national accounts data begin about 1970, after decoloni-

---

[2] https://data.undp.org/dataset/Table-2-Human-Development-Index-trends-1980-2013/y8j2-3vi9

sation, and there are only a few scattered unofficial GDP estimates for individual island economies for earlier years. Comparative education data for years before 1960 are similarly scarce, and have not been included in the research for this paper. Health statistics – infant mortality and life expectancy – are available back to 1950, and are utilised in the analysis to follow. Only international trade statistics are sufficiently comprehensive to enable comparison across a wide sample of small island economies over the past century, and these will provide the key indicator of convergence and divergence over time.

The number of identifiable small island economies is very large – Baldacchino (2010) lists 120 small island colonies in his appendix. Table 1 in the appendix to this paper lists 72 island economies which provide the initial sample for this paper, with summary present-day statistical profiles[3].

2. NATIONAL ACCOUNTS DATA

Take first the data on GDP per capita. Reasonably consistent long-run series for small island economies have begun to appear only recently, but four major sets of data are now available. First is the United Nations System of National Accounts database[4], which presents annual estimates of per capita GDP and GNI in US dollars at current prices, and real GDP at 2005 prices, from 1970 to 2012. From this source, per capita real GDP can be derived for 217 economies around the world, of which 41 are in the list of small and medium islands in Table 1. Second is the large Caribbean dataset compiled by Bulmer-Thomas (2012)[5], which includes per capita real GDP estimates for 18 islands, at 2000 prices, for the period 1960-2008. Third is the very-long-run data set (extending from AD1 to AD2010) for GDP and GNI per capita, produced by Angus Maddison and his colleagues[6] which has annual estimates of GDP per capita back to 1950, measured in 1990 Geary-Khamis dollars, for eight of the larger island economies listed in Table 1. Fourth is the Penn World Table version 8.0[7], which provides data back to the 1950s for several island economies.

In constructing per capita GDP of the small island world for this paper the United Nations SNA data for 41 island economies is used as the starting point because of its greater coverage than the other sources. Where earlier series were available from those other sources, they have been chain-linked to the UN series at 1970. (There are inevitable, but not fatal, risks in this procedure: the Bulmer-Thomas figures are on the same basis as the UN figures, but the Maddison and

---

[3] The inclusion of Puerto Rico and Jamaica in Table 1 goes beyond the usual idea of "smallness" in relation to islands. These two larger entities are reported because of data availability and because they provide a contrast between sovereignty and affiliation at medium population size. These two have been excluded from the population-weighted calculations later in the paper.

[4] http://unstats.un.org/unsd/snaama/dnlList.asp

[5] Online at http://www.cambridge.org/download_file/134497 for the A tables covering 1820-1900, http://www.cambridge.org/download_file/134483 for the C tables covering 1900-1960, and http://www.cambridge.org/download_file/134476 for the D tables covering 1960-2008.

[6] http://www.ggdc.net/maddison/maddison-project/data.htm

[7] http://www.rug.nl/research/ggdc/data/penn-world-table

Penn World Tables data are in purchasing-power-parity dollars.) Per capita GDP estimates from the Bulmer-Thomas dataset for Guadeloupe, Martinique and the US Virgin Islands, which are not covered by the UN data, have been added to the UN coverage[8], along with Bahrain, Cabo Verde, and Sao Tome & Principe from the Maddison dataset.

Results are shown in Graph 3. From 1970 on the chart traces the growth paths of 47 (31 sovereigns and 16 affiliated) of the 72 island economies listed in Table 1, a 65% sample which should be sufficient to reveal any general tendency for convergence or divergence between the two groups of islands, at least from 1970. Prior to 1970 the data covers mainly sovereigns, with only a few affiliated islands - all in the Caribbean and individually identified in Graph 3 – which is too few to draw any broad conclusions.

The immediate impression from Graph 1 is that neither convergence nor divergence is apparent over the 40 years from 1970. If there was a rapid post-decolonisation divergence in incomes, it would have had to be very sudden, and to have occurred in the years before 1970, by which date the now-affiliated island economies already exhibited higher incomes than the now-sovereign ones. The growth rates of the two groups over the forty-two years 1970-2012 are very similar apart from six conspicuously-lagging sovereign economies (Micronesia, Vanuatu, Kiribati, Solomon Islands, and Comoros) plus the spectacular decline of Nauru. (Not coincidentally, six of these seven weakly performing sovereigns are in the Pacific[9].)

Before 1970, GDP per capita is available for only seven affiliated islands, all in the Caribbean, which rules out any worldwide conclusions for that period. In the 1960s six affiliated Caribbean islands – Cayman Islands, British Virgin Islands, Montserrat, Puerto Rico[10], Guadeloupe and Martinique - can be seen in Graph 3 growing substantially more rapidly than the typical sovereigns (cf Bertram 2015 Graph 8), and almost all of these had settled their post-colonial political status by the early 1960s[11], which means that the hypothesis of a causal effect of political status on growth retains some plausibility for this sub-set of economies at this stage of the analysis.

---

[8] These figures were added at Bulmer-Thomas's 2000 prices rather than the 2005 prices used in all other series; any resulting errors are likely to be minor and are unlikely to upset the results of the comparative exercise.

[9] For discussion of a negative Pacific regional effect on growth see Gibson and Nero, 2008.

[10] Puerto Rico has been included in this study because of its long run of GDP data, though with a population of 3.7 million it is too large to count as a small island. The same applies to Jamaica with its 2.7 million.

[11] Puerto Rico had been a commonwealth of the USA since 1952. The Cayman Islands had separated from Jamaica in 1960 to avoid independence and retain their status as a British overseas territory; the British Virgin Islands similarly consolidated their territory status in 1960, gaining a degree of self-government in 1967. The French territories had been withdrawn by France from the United Nations' list of "non-self-governing territories" in 1947 and declared to be parts of France. Montserrat was less clear-cut but never moved towards sovereign independence.

**Graph 3. Per capita GDP (in US$ at 2005 prices) for small
island economies, 1950-2012**
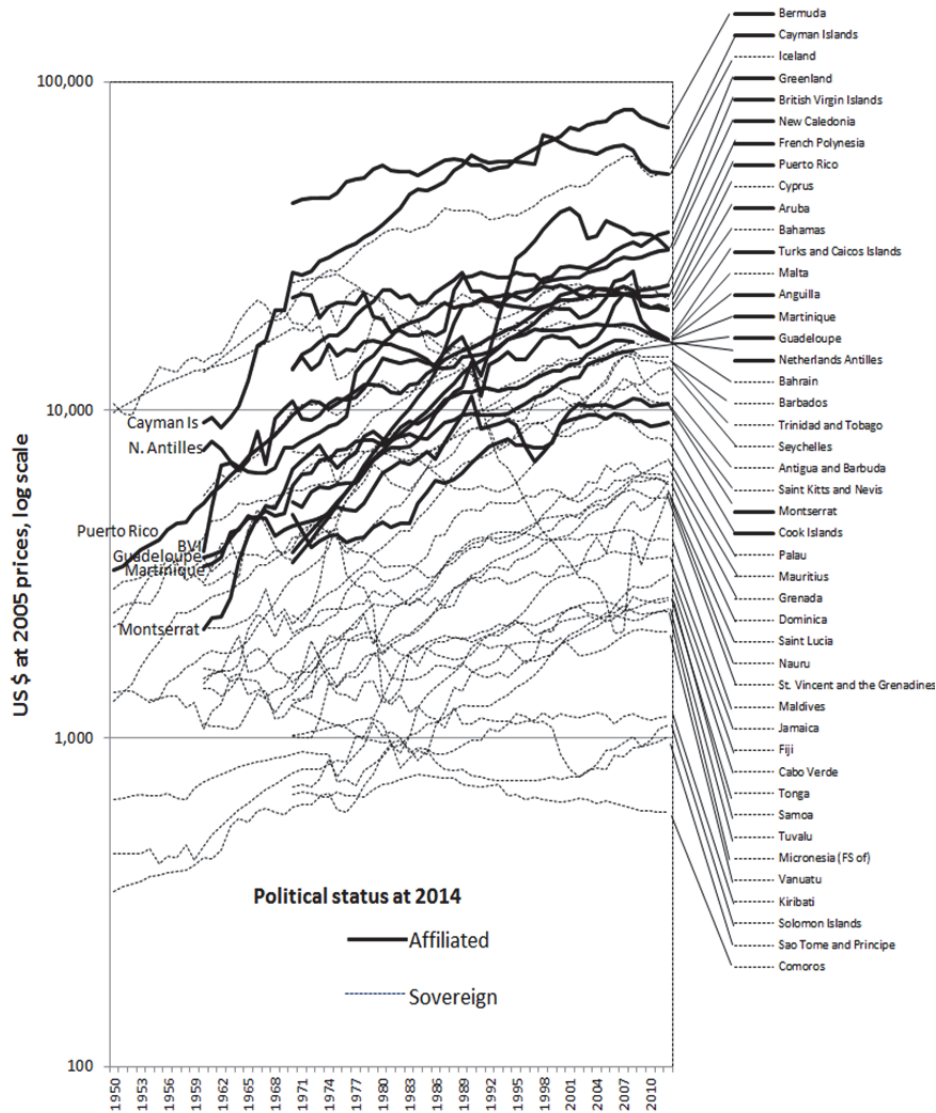
Note: The raw data can be obtained from the author upon request.
Source: The author.

Overall, however, the available GDP data are insufficient to sustain any strong general propositions pre-1970, and for 1970-2012 they demonstrate parallel growth with no sign of divergence. If indeed political status explains current income levels, the relevant events had all happened by 1970 and nothing since then suggests persistent growth advantages flowing from political affilia-

tion. (It might be argued that political affiliation has operated to sustain the pre-existing income gap, but this is not the issue addressed in this paper.)
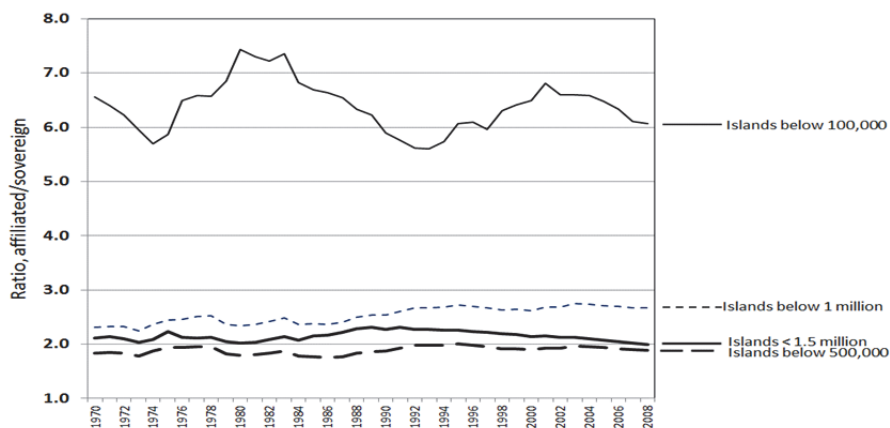
Graph 4. Population-weighted real per capita GDP for small island economies, 1970-2008
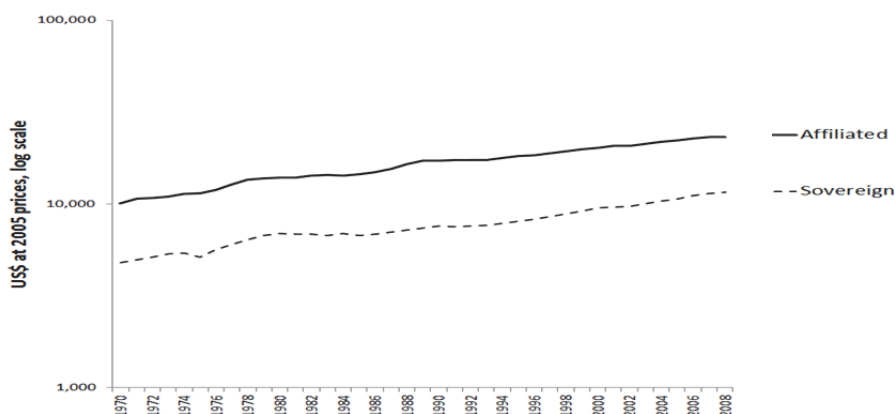
Islands < 1.5m population.
Source: The author.

Graph 5. Ratio of population-weighted real per capita GDP between affiliated and sovereign islands, 1970-2008

Ratio of population-weighted per capita GDP between affiliated and sovereign islands, below four population thresholds.
Source: The author.

Over the four decades since 1970, although the two sets of island economies have grown parallel over the long run, in the short run the tide of relative economic fortune has ebbed and flowed. To encapsulate this result in a simple chart, Graph 4 shows the population-weighted combined per capita GDPs of the two groups for all islands below 1.5 million population for which data is availa-

ble from 1970 to 2008. Graph 5 then shows the ratio of affiliated to sovereign population-weighted per capita GDP for four size categories as at 2012: islands below 1.5 million population, below 1 million, below 0.5 million, and below 100,000.

The result of this exercise is unequivocal with regard to the period 1970-2008: among small island economies with less than 1.5 million population, those that became affiliated during decolonisation already at 1970 enjoyed, collectively, double the per-capita income of those that became sovereign, and at the end of the forty-year period the ratio was basically the same. For the more restricted sample of islands below 100,000 population, affiliated islands had on average a far more dramatic advantage at the start (five to six times the per capita income of now-sovereign islands back in 1970) and retained that lead in 2008, although the ratio exhibits wide swings over the four decades.

Affiliated islands pulled ahead relative to the sovereigns during the 1970s, fell back in the 1980s (dramatically in the case of the <100,000 sample), gained again in the 1990s and then fell back in the 2000s. The precise timing of turning points differs depending which population-size sample is chosen, and the overall change from beginning to end of the four decades differs from sample to sample: in 2008 the <1.5 million sample had an income ratio of 1.9 times the sovereign group, compared to 2.1 in 1970; the <1 million sample had gone up from 2.3 to 2.7 times the sovereign group's income; the <500,000 sample had gone from 1.8 to 1.9; and the ratio for the <100,000 sample had fallen from 6.6 to 6.1. Long-run major divergence is not observed. The statistical evidence of higher incomes in affiliated islands in recent decades, summarised in the introduction to this paper, therefore represents not the end-product of divergence over the past half-century, but rather the persistence of a long-established gap between the two groups dating back at least to the 1960s - a dying echo of some original "big-bang" event either coincident with decolonisation or prior to it.

One other way of representing the national-accounts results is to show a series of snapshots of the GDP data (displayed in Graph 3) at ten-year intervals. These snapshots are set out in Graph 6. Again the pattern is one of persistent advantage to affiliated islands at all population sizes, but no overall tendency towards a widening gap.

The analysis in this section has been on a global scale, and several issues remain to be explored further in future research – in particular, regional differences.

The main limitation of the data on per capita GDP is that for years before 1970 only a few of the now-affiliated economies are covered. This leaves open the possibility that a rapid divergence between the two sets of economies might have occurred during the 1950s and 1960s, coincident with decolonisation but too early to be captured by the available national accounts data. As already noted, there is a hint of some such process in the Caribbean (see Graph 3), but no data at all for other regions. Some other indicators of material welfare must therefore be brought into the analysis.

Graph 6. **Scatter plots of population against per capita GDP, 1950-2008**
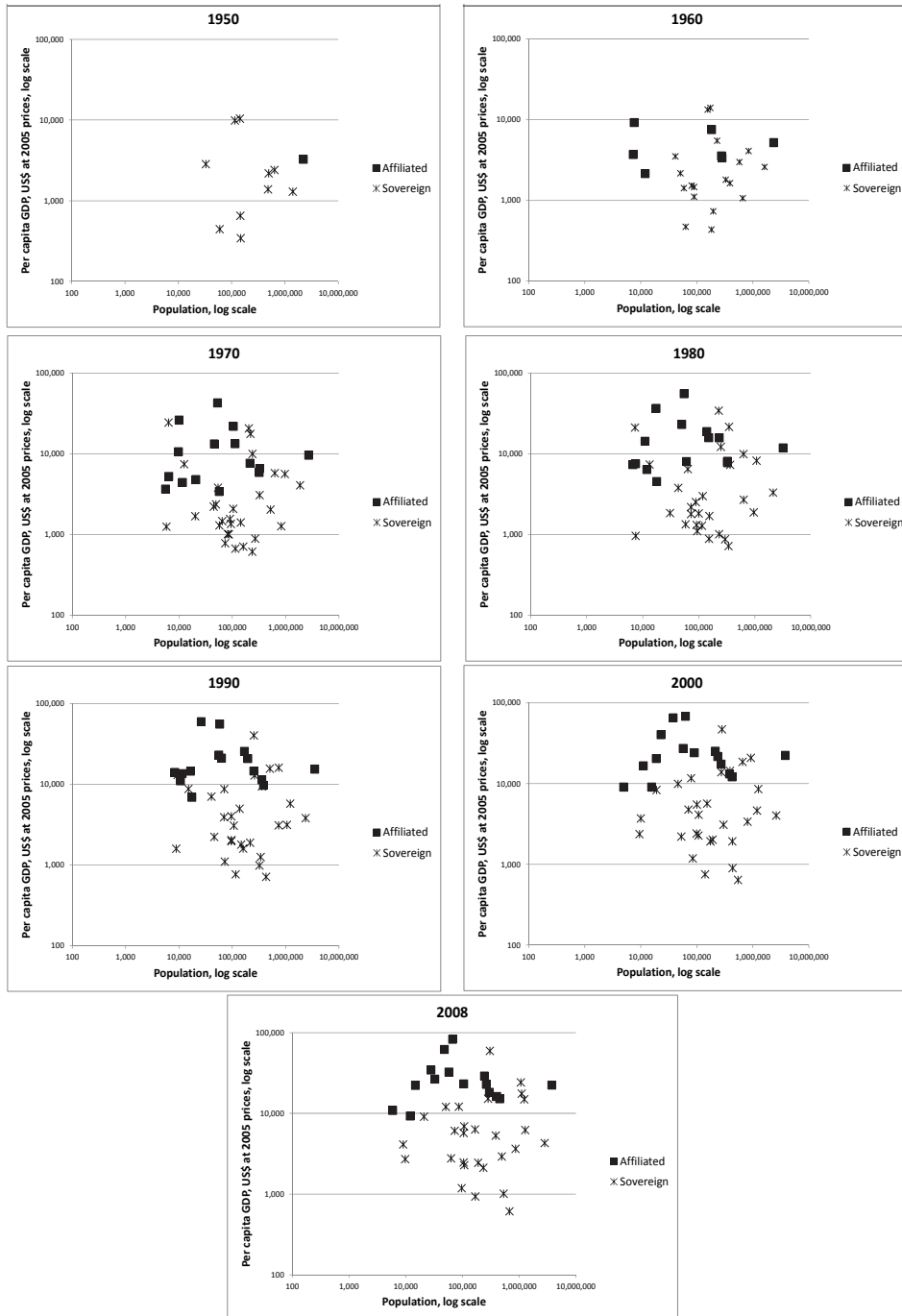
Source: The author.

3. INFANT MORTALITY AND LIFE EXPECTANCY

Whereas national accounting estimates of GDP per capita for small islands are very scarce before 1970, and virtually non-existent before 1960, demographic indicators of the health status of island populations are now available back to 1950, at the beginning of the decolonisation era. The 2015 revision of the United Nations' *World Population Prospects*[12] has tables covering 1950-2015 for infant mortality[13] and life expectancy at birth[14] for 37 of the island economies in Table 1. The World Bank's *World Development Indicators* has a table showing infant mortality for 50 of the island economies in Table 1 back to 1960[15], and also carries its series up to 2015.

Take first infant mortality. Combining the UN and World Bank data, adding Hawaii 1950-2013 (for which data is available from Schmitt 1977 Table 2.5, updated from the Hawaiian Government's *Health Trends in Hawaii* website)[16], and filling gaps using data from the US Census Bureau database[17], the results are obtained for 62 island economies of which 59 have data back to 1990, 44 back to 1980, and 38 back to 1950. Of the 38 economies for which full data is available 1950-2015, 25 are sovereign and 13 are affiliated. The resulting sample is less representative of affiliated islands than would be ideal, but enables at least a preliminary enquiry as to whether there is any evidence of convergent or divergent paths for the two groups starting from 1950.

The results are plotted in Graph 7 (the full dataset) and Graph 8 (simple un-weighted averages for affiliated and sovereign islands). Three immediate conclusions can be drawn. First, all of the island economies have experienced rapidly falling rates of infant mortality, with only a couple of setbacks (St Vincent briefly in the 1950s, Mauritius briefly in the 1960s). Second, consistent with the GDP picture, at the end of the process in 2010-2015 the affiliated islands are clustered at lower rates of infant mortality (indicative of a higher standard of living) than the sovereign islands. By 2015 only two of the 32 affiliated islands (Cook Islands and St Helena) had rates over 15 per 1000, whereas 16 of the 32 sovereign islands were at or above 15, with rates ranging up to 47 in Kiribati and 58 in the Comoros. In terms of simple averages, affiliated islands currently have infant mortality of 7.8 per thousand live births compared with the average of 18.2 for sovereign islands.

Third, although the 1950 sample is much thinner, the figures suggest a general tendency for islands on their way to affiliated status to have started off at 1950 with lower infant mortality rates than those on their way to sovereign status. The 13 affiliated islands for which data is available had average infant mortality of 83.6 per thousand live births in the early 1950s, compared with the average of 112.1 for 25 now-sovereign islands. Graphs 7 and 8 do not support

---

[12] http://esa.un.org/wpp/

[13] http://esa.un.org/wpp/Excel-Data/EXCEL_FILES/3_Mortality/WPP2012_MORT_F01_1_IMR_BOTH_SEXES.XLS

[14] http://esa.un.org/wpp/Excel-Data/EXCEL_FILES/3_Mortality/WPP2012_MORT_F07_1_LIFE_EXPECTANCY_0_BOTH_SEXES.XLS

[15] http://data.worldbank.org/indicator/SP.DYN.IMRT.IN/countries?display=default

[16] http://www.healthtrends.org/DataTable.aspx?ChartID=HS-15

[17] http://www.census.gov/population/international/data/idb/informationGateway.php

the Model 1 hypothesis, that at the outset of decolonisation health status was randomly distributed across the small-island world and that the lower infant mortality rates in affiliated islands today emerged only in the past half-century. (This does not, of course, rule out the possibility that an initial advantage possessed by today's affiliated islands may have been reinforced during the decolonisation era by their emerging political status. In other words, a possible causal link from political status to health status is not necessarily rejected, but it could have been only a marginal effect if any.) The substantial gap between the two groups of islands had already opened up before decolonisation occurred and cannot be attributed to it.

Graph 7. Infant mortality for small island economies, 1950-2015
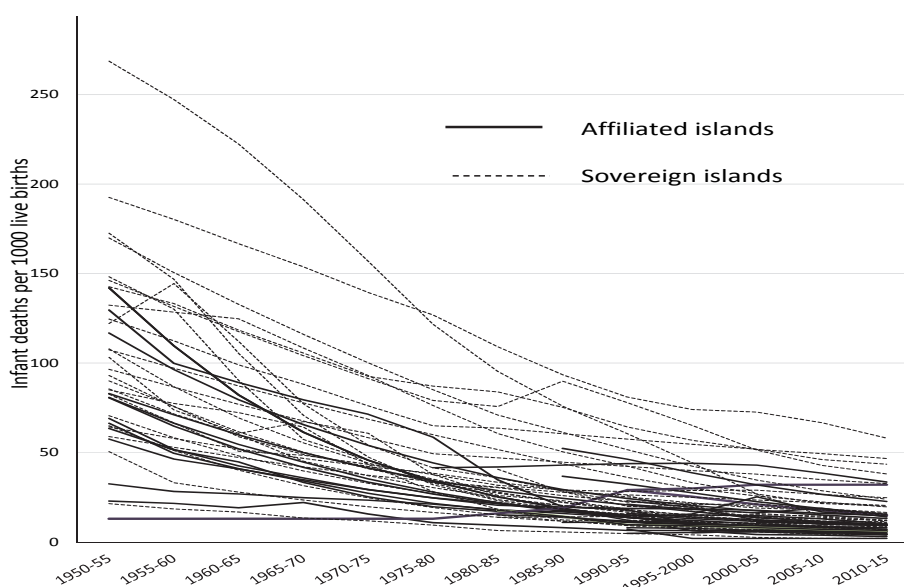
Note: The raw data can be obtained from the author upon request.
Source: The author.

Similar conclusions flow from inspection of the data on life expectancy at birth, arrayed in Graphs 9 and 10. The data again come mainly from the United Nation's *World Population Prospects* for 1950-55 to 2010-15[18], supplemented by figures for Hawai'i from Schmitt (1977 Table 2.6), and two websites[19]. US Census Bureau data[20] has again provided figures, starting at later dates than 1950, for another 26 islands not covered by the UN data. The final database covers 59 islands back to 1990, 45 islands back to 1980, and 38 back to 1950.

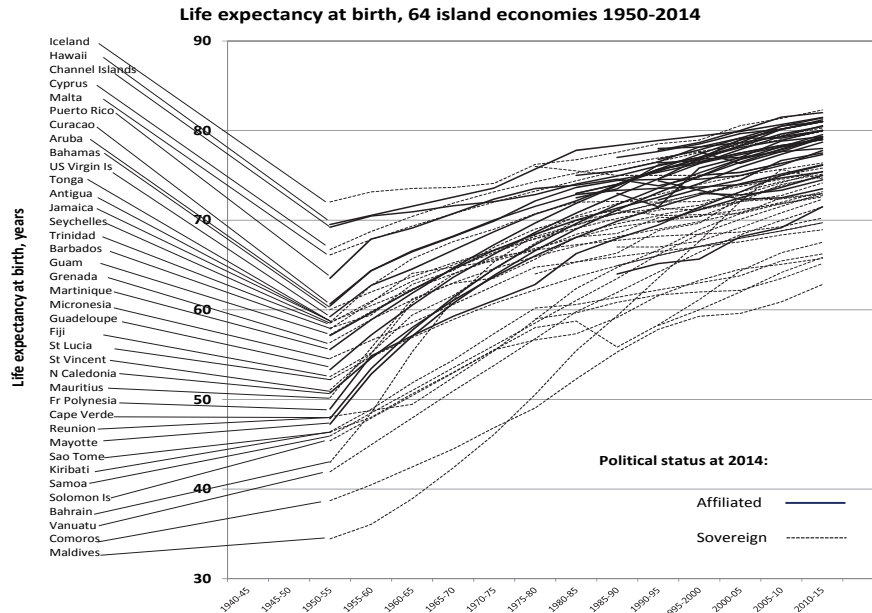**Graph 8. Unweighted average infant mortality rates for affiliated and sovereign islands**
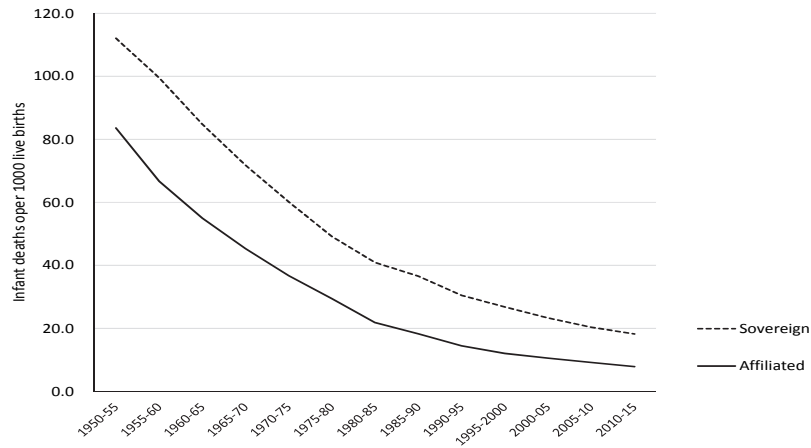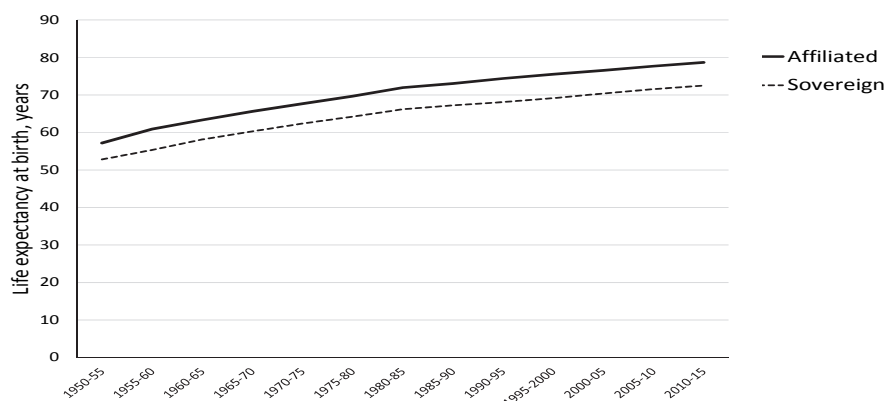

Source: The author.

Graph 9. Life expectancy at birth for small island economies, 1950-2014

Note: The raw data can be obtained from the author upon request.
Source: The author.

Graph 10. Unweighted average life expectancy for affiliated and sovereign islands, 1950-2014

The situation at 1950 again seems to show some initial advantage for later-affiliated islands over later-sovereign ones, though this time the initial overlap between the two groups is greater than for infant mortality. There was a clear tendency for the affiliated group to raise life expectancy faster than the sovereign group during the 1950s and 1960s, consolidating a clear lead by the 1980s (though Greenland and Montserrat remain laggards among the affiliated).

The evidence here is at least consistent with the proposition that a growing lead for affiliated islands may have coincided with the decolonisation era of the 1950s and 1960s, but again the origins of this lead date back before 1950, leaving the issue of causality unclear.

Summing up, the demographic/health evidence suggests that political status may have followed after superior economic performance, rather than preceding it. The gap between now-affiliated and now-sovereign small island economies had opened up before the decolonisation process got under way.

4. TRADE DATA

While national-accounts data are hard to come by prior to 1970, and infant mortality and life expectancy data for small islands are unavailable on any authoritative basis prior to 1950, merchandise trade data has been collected for most economies since the nineteenth century. This section therefore analyses figures on merchandise imports per capita since 1900 for 51 small island economies. Because island economies are very open and commonly rely upon imports for a wide range of consumption items, there is a clear link between material consumption levels in each island economy and the availability of imports, with causality running both ways: the ability to finance imports places a constraint on achievable levels of consumption, while at times when the import capacity constraint does not bind, consumption levels will "cause" imports. Whichever direction causality runs in, a relationship is to be expected between the material welfare of islander populations and the volume of import trade.

The scatter plot in Graph 11 shows this tight relationship between merchandise imports per capita and GDP per capita, using cross-section data for 1970. Using real merchandise imports as a proxy for real income for earlier periods seems reasonable on the basis of these charts.

Graph 11. The relationship of merchandise imports per capita with GDP per capita, 1970
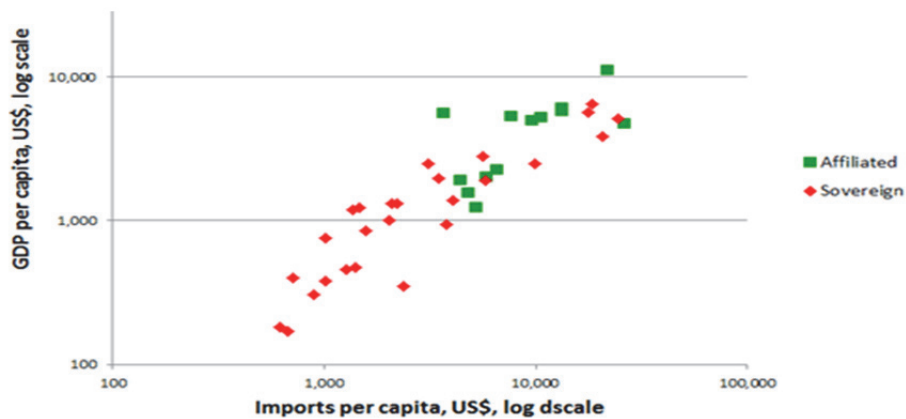
Source: The author.

To collect trade data in current US dollars for as many island economies as possible from 1900 to 2013, a range of sources was drawn upon, starting with the World Trade Organization's online database[21] and the Bulmer-Thomas Caribbean dataset[22], and filling gaps using Mitchell's historical statistics collections (Mitchell 2005, 2007), early data for the Cook Islands, Niue and Tokelau culled from administrators' reports to the New Zealand Government, and several other miscellaneous sources. Figures in other currencies were converted to US dollars at current exchange rates. Each US dollar import series was then divided through by population, and deflated using the US consumer price index[23]. The results of this exercise are in Graph 12.

Graph 12 finally reveals the timing of a clear divergence between those islands destined for affiliated status and those headed for sovereignty. The visual dividing line is around 1940 – before decolonisation moved to the top of the UN agenda in 1946. From 1900 to 1920 the two groups of islands followed a common trajectory; by 1940 on they were on diverging paths, and since the 1970s

---

[21] World Trade Organisation database in US$, current price, data for 1950-2013. http://stat.wto.org/StatisticalProgram/WsdbExportZip.aspx?Language=E

[22] http://www.cambridge.org/download_file/134483, Table C.18 Merchandise Imports 1900-1960, and http://www.cambridge.org/download_file/134476, Table D.11 Merchandise Imports 1960-2008.

[23] Price index for 1900-1912 from :

http://www.minneapolisfed.org/community_education/teacher/calc/hist1800.cfm

Index for 1913-2014 from : http://www.usinflationcalculator.com/inflation/consumer-price-index-and-annual-percent-changes-from-1913-to-2008/

the clustering of affiliated islands at the top of the chart has been locked in at an unchanging relativity to the sovereign group.

Graph 12. Real merchandise imports per capita for 52 small island economies, 1900-2013
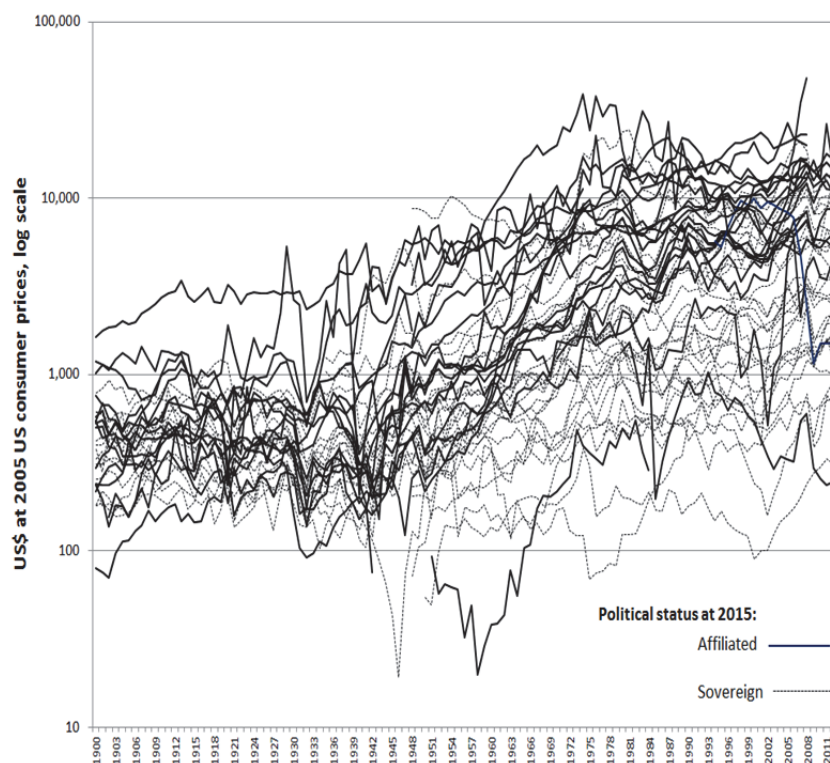
Note: The raw data can be obtained from the author upon request.
Source: The author.

The emergence of the now-affiliated islands' lead over the sovereigns therefore began before decolonisation got underway, and proceeded through the first decade or so of decolonisation. This is consistent with Model 2 (divergence preceded decolonisation) but potentially also with a third hypothesis – that political status and relative economic performance were jointly determined by some third cause during the period 1920-1960. One way to frame this third hypothesis is that the colonial powers, at some time in the mid-twentieth century, whether deliberately or by accident, set some of their colonies on the path to affiliation and greater wealth, and others on the path to sovereignty and lower wealth. This suggests a need to know more about what may have been in the minds of metropolitan statesmen at the time (see, e.g., Heinlein 2002).

To explore more closely the timing of divergence, Graph 13 aggregates the total imports and population of all affiliated and sovereign islands for which complete import data is available 1900-2008, and calculates the collective per

capita real imports of the two groups on a population-weighted basis. The exercise is conducted for four samples: 24 islands with 2012 populations below 1.5 million (12 sovereign and 12 affiliated); 22 islands with population below 1 million (10 sovereigns and 12 affiliated); 21 islands with population below 500,000 (nine sovereigns, 12 affiliated); and nine islands with 2012 populations below 100,000 (three sovereigns, six affiliated). The representativeness of the samples is driven by data availability rather than more directly-relevant criteria, and the results need to be read with corresponding caution.

Graph 13. Ratio of population-weighted imports per capita (2005 US$) for 24 small islands, 1900-2008
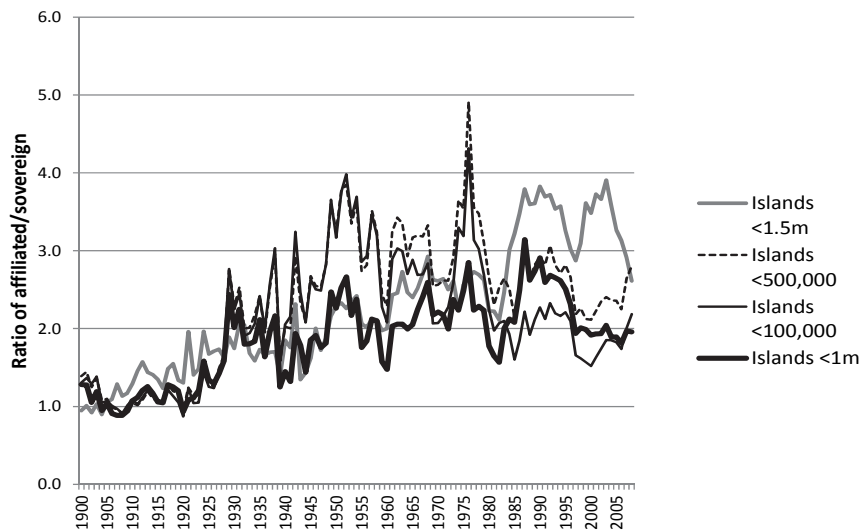
Source: The author.

The pattern shown in Graph 13 is nevertheless very striking. The population-weighted ratio between now-affiliated and now-sovereign small islands was unity at 1900 (that is, the two groups of islands were essentially identical) and had shifted to two by the 1930s, well before political decolonisation. For eight decades from 1930 to 2008 the ratio fluctuated around a long-run average of two for the <1 million sample of 22 islands. The two smaller-population samples (<500,000 and <100,000) both saw their ratios surge up above three in the first half of the 1950s, then stabilise until about 1980, then fall steadily through to 2008. One reading of Graph 13 is that these smallest islands actually had a secularly-declining trend in their affiliated/sovereign ratio from 1965 on, broken by a short-lived spike coinciding with the oil shocks of the 1970s and the global debt-crisis recession of the early 1980s. Only when islands with 2012 populations between one million and 1.5 million are added to the sample does there emerge any upward trend in the ratio throughout the period of decolonisation and the following half-century. The fact that this change arises from adding to the dataset just two relatively weak sovereign economies (Cyprus, and Trinidad and Tobago) makes the result very suspect, but it is the closest that Graph 13

comes to support for the Model 1 hypothesis of economic divergence driven by decolonisation rather than preceding it. The remainder of the chart supports the Model 2 story in which divergence was underway well before the allocation of political status.

5. CONCLUSION

This paper has addressed the issue of whether the positive association of affiliated political status with favourable income and health statistics in the world's small island economies is the outcome of a process of divergence driven by the politics of decolonisation, in which the political status to which islands were allocated in the mid-twentieth century "caused" subsequent economic performance; or whether the modern divergence dates back before decolonisation, which case causality may have run from relative economic performance to post-colonial political status.

The evidence collected to date does not support the hypothesis that the form of decolonisation caused subsequent differences in economic prosperity. It does provide support for the alternative hypothesis that the economic divergence was well established prior to decolonisation. Trade data indicates that divergence between the two groups of island economies became apparent during the 1920s and 1930s and was well entrenched by the time decolonisation got underway in the 1950s.

The data assembled for this paper provide now the basis for more sophisticated research using tools of statistical analysis to test the competing causality hypotheses more carefully and to take account of various factors that undoubtedly conditioned the outcomes for particular islands. Regional differences may be important, as may the identity of the colonial power (a theme explored in Bertram 2004 and in Feyrer and Sacerdote 2011). Demographic factors such as age structure and migration flows may have played a role. Finally, island populations and local authorities may themselves have adopted divergent attitudes and policy initiatives in the decades leading to decolonisation, leading to mutually-reinforcing divergent political and economic outcomes – a theme which would resonate with the recently-growing literature on the "resourcefulness of jurisdiction" (Baldacchino 2006, Baldacchino and Greenwood 1998, Bertram and Poirine 2007).

REFERENCES

Armstrong H., Read R., 2000, "Comparing the economic performance of dependent territories and sovereign micro-states", *Economic Development and Cultural Change*, 48(2), 285-306.

Armstrong H.W., Read R., 2002, "The phantom of liberty? Economic growth and the vulnerability of small states", *Journal of international development*, 14(3), 435-458.

Armstrong, H., De Kervenoael R.J., Li X., Read R., 1998, "A comparison of the economic performance of different microstates and between microstates and larger countries", *World Development*, 26(4), 639-656.

Baldacchino G., 2004, "Autonomous but not sovereign? A review of island sub-nationalism", *Canadian Review of Studies in Nationalism*, 31(1-2), 77-90.

Baldacchino G., 2006, "Innovative development strategies from non-sovereign island jurisdictions? A global review of economic policy and governance practices", *World development*, 34(5), 852-867.

Baldachino G., 2010, *Island Enclaves: Offshoring strategies, creative governance, and subnational island jurisdictions*, Montreal: McGill-Queen's University Press.

Baldacchino G., Bertram G., 2009, "The beak of the finch: insights into the economic development of small, often island, economies", *The Round Table*, 98(401), 141-160.

Baldacchino G., Greenwood R., 1998, *Competing Strategies of socio-economic development for small islands*, Charlottetown, PEI: Institute of Island Studies, University of Prince Edward Island.

Baldacchino G., Milne D. (eds), 2000, *Lessons from the political economy of small islands: the resourcefulness of jurisdiction.* Basingstoke: Macmillan.

Baldacchino G., Milne D., 2006, "Exploring sub-national island jurisdictions", *The Round Table*, 95(386), 487-502.

Baldacchino G., Milne D. (eds), 2009, *The case for non-sovereignty: lessons from sub-national island jurisdictions*, London: Routledge.

Bertram G., 1987, "Decolonisation and Nationhood in Small South Pacific Societies", in A. Hooper, S. Britton, R. Crocombe, J. Hunstman, and C. Macpherson (eds), *Class and Culture in the South Pacific*, 16-31. Auckland: Centre for Pacific Studies, University of Auckland, and Suva: Institute of Pacific Studies.

Bertram G., 1993, "Sustainability, aid, and material welfare in small South Pacific island economies, 1900-1990", *World Development*, 21(2), 247-258.

Bertram G., 1999, "Economy", Chapter 28 in M. Rapaport (ed) *The Pacific Islands: Environment and Society*, Honolulu: Bess Press.

Bertram G., 2004, "On the convergence of small island economies with their metropolitan patrons", *World Development*, 32(2), 343-364.

Bertram G. 2006, "Introduction: the MIRAB model in the twenty-first century", *Asia Pacific Viewpoint,* 47(1), 1-14.

Bertram G., 2007, "Reappraising the Legacy of Colonialism: A Response to Feyrer and Sacerdote", *Island Studies Journal*, 2(2), 239-254, November.

Bertram G., 2011, "Assessing the Structure of Small Welfare States", *Commonwealth Secretariat and UNRISD, Social Policies in Small States Series*, n°4, 2011.

Bertram G., 2013, "Pacific Island economies", Chapter 27 in Moshe Rapaport (ed) *The Pacific Islands: Environment and Society*, revised edition, Honolulu: University of Hawai'i Press, 325-340.

Bertram G., 2014, "A response to McElroy and Lucas", *Island Studies Journal*, 9(2), 377-382, November.

Bertram G., Poirine B., 2007, "Island Political Economy", Chapter 10 in G. Baldacchino (ed.) *A World of Islands.* Charlottetown: Institute of Island Studies, University of Prince Edward Island, 325-377.

Bertram G., 2015, forthcoming. "Sovereignty and material welfare in small island jurisdictions", in A. Holz, M. Kowasch, M. and O. Hasenkamp (eds), *Eine region im wandel: Politik & macht in den pazifischen inselstaaten,* Saarbrücken: Saarland University *Press*

Briguglio L., 1995, "Small island developing states and their vulnerabilities", *World Development*, 23(9), 1615-1632.

Briguglio L., Kisanga E.J. (eds), 2004, *Economic vulnerability and resilience of small states,* Malta: Formatek.

Bulmer-Thomas V., 2001, The wider Caribbean in the twentieth century: a long run development perspective, *Integration and Trade Journal* 5, 5-56, reprinted as Chapter 13 in in Denis Pantin (ed) *The Caribbean economy: a reader*, Kingston and Miami: Ian Randle Publishers, 2005.

Drezner D., 2001, "Sovereignty for Sale", *Foreign Policy*, 126, 76-77, September.

Easterly W., Kraay A., 2002, "Small states, small problems? Income, growth, and volatility in small states", *World Development*, 28(11), 2013-2027, November.

Feyrer J., Sacerdote B., 2009, "Colonialism and Modern Income: Islands as Natural Experiments", *Review of Economics and Statistics*, 91(2), 245-262, May.

Gibson J., Nero K., 2008, "Why don't Pacific economies grow faster?", in A. Bisley (ed) *Pacific interactions: Pasifika in New Zealand, New Zealand in Pasifika*, Wellington: Institute for Policy Studies e-book.
http://igps.victoria.ac.nz/publications/files/1fb71b51d69.pdf.

Heinlein F., 2002, *British Government policy and decolonisation 1945-1963: scrutinising the official mind*, London: Frank Cass.

McElroy J.L., 2014, "A note on the significance of geographic location in island studies", *Island Studies Journal*, 9(2), 363-366, November.

McElroy J. L., de Albuquerque K., 1995, "The social and economic propensity for political dependence in the insular Caribbean", *Social and Economic Studies,* 44(1), 167-193.

McElroy J.L., Parry C.E., 2012, "The long-term propensity for political affiliation in island Microstates", *Commonwealth and Comparative Politics,* 50(4), 403-421.

McElroy J.L., Pearce K., 2006, "The advantage of political affiliation: dependent and independent small island profiles", *The Round Table: Commonwealth Journal of International Affairs,* 95(386), 529-539.

Mitchell B.R., 2005, I*nternational Historical Statistics: Africa, Asia and Oceania 1750-2005*, 5 ed, Palgrave.

Mitchell B.R., 2007, *International Historical Statistics: The Americas, 1750-2005,* 6 ed, Palgrave Macmillan.

Sampson T., 2005, *Notes on the economic performance of small states 1995–2003,* Working Paper n°2, Asian Development Bank-Commonwealth Secretariat Joint Report to the Pacific Islands Forum Secretariat. Suva: Forum Secretariat. http://www.adb.org/Documents/Reports/Pacific-Regionalism/vol3/wp02.pdf

Schmitt Robert C., *Historical Statistics of Hawai'i,* Honolulu: University of Hawai'I Press.

Shaxson N., 2011, *Treasure islands: uncovering the damage of offshore banking and tax* havens, New York: Palgrave Macmillan.

Streeten P.P., 1993, "The special problems of small countries", *World Development*, 21(2), 197-202.

United Nations Department of Economic and Social Affairs 2013, *World Population Prospects: the 2012 revision* June, http://esa.un.org/wpp/

ANNEX 1.

Table 1. Current data for 72 island economies

Islands	Metropoli-tan power	Political Status at 2015	Population 2010	GDP per capita US$	Infant mortality per 1000 live births	Life expec-tancy at birth	Merchan-dise imports per capita us$
American Samoa	USA	Affiliated	66,000	8,000	9.3	74.4	
Anguilla	UK	Affiliated	16,373	16,469	3.0	81.0	16,619
Antigua and Barbuda	UK	Sovereign	90,801	11,301	9.1	75.6	7,847
Ascension Island	UK	Affiliated	702	24,595			
Bahamas	UK	Sovereign	346,900	20,895	9.1	71.4	9,999
Bahrain		Sovereign	1,314,000	16,765	6.9	78.2	8,745
Barbados	UK	Sovereign	276,302	14,483	9.6	74.6	5,671
Bermuda	UK	Affiliated	64,566	72,683	2.0	81.0	11,095
British Virgin Islands	UK	Affiliated	21,689	31,077	14.0	78.0	22,888
Cape Verde	Portugal	Sovereign	517,831	3,132	20.1	71.0	1,242
Cayman Islands	UK	Affiliated	54,878	52,112	6.3	81.0	19,956
Channel Islands	UK	Affiliated	159.518		8.0	79.5	
Cocos (Keeling) Islands	Australia	Affiliated	600				
Comoros	France	Sovereign	798,000	595	58.1	62.6	316
Cook Islands	New Zealand	Affiliated	23,600	9,174	15.0	74.8	8,644
Cyprus	UK	Sovereign	827,697	21,703	4.2	78.0	5,453
Dominica	UK	Sovereign	69,017	6,052	12.2	76.2	2,469
Faeroe Islands	Denmark	Affiliated	49703	33,700	6.0	80.0	16,526
Falkland Islands	UK	Affiliated	2932	55,400			
Fiji	UK	Sovereign	857,000	3,573	16.0	71.6	2,153
French Polynesia	France	Affiliated	268,500	23,928	6.9	76.3	5,276
Greenland	Denmark	Affiliated	56,534	34,771	9.7	71.4	12,623
Grenada	UK	Sovereign	110,821	6,261	9.6	73.4	2,663
Guadeloupe	France	Affiliated	401,784	25,479	5.8	79.4	7,483
Guam	USA	Affiliated	159,600	28,700	9.7	78.6	245
Hawaii	USA	Affiliated	1,360,301	45,112	5.1	81.5	
Iceland	Denmark	Sovereign	313,000	52,361	2.0	81.0	12,969
Isle of Man	UK	Affiliated	87.0	53,800	4.0	81.0	
Jamaica	UK	Sovereign	2,702,310	4,010	15.0	73.0	1,938
Kiribati	UK	Sovereign	100,000	1,169	46.7	64.6	905
Maldives	UK	Sovereign	394,000	6,106	9.0	74.6	679
Malta	UK	Sovereign	415,275	16,452	4.8	80.0	13,688
Marshall Islands	USA	Affiliated	54,305	2,938	22.7	72.0	182

Islands	Metropoli-tan power	Political Status at 2015	Population 2010	GDP per capita US$	Infant mortality per 1000 live births	Life expec-tancy at birth	Merchan-dise imports per capita us$
Martinique	France	Affiliated	396,308	27,688	6.4	80.1	8,400
Mauritius	UK	Sovereign	1,280,924	7,041	12.0	74.6	3,468
Mayotte	France	Affiliated	212,645	9,766	4.2	77.9	
Micronesia, Federat-ed States	USA	Sovereign	107,839	2,467	32.7	71.8	1,725
Montserrat	UK	Affiliated	5,020	10,438	14.5	73.4	6,285
Nauru	Australia	Sovereign	9,378	5,573	8.5	65.6	12,796
Netherlands Antilles	Nether-lands	Affiliated	275,077	16,247		14,699	
Aruba	Nether-lands	Affiliated	101,860	20,099	14.8	76.0	20,036
Bonaire	Nether-lands	Affiliated	14,006			77.6	
Curacao	Nether-lands	Affiliated	152,760		10.3		
Sint Maarten	Nether-lands	Affiliated	917		9.3	77.4	
Saba	Nether-lands	Affiliated	1,991				
Sint Eustacius	Nether-lands	Affiliated	3,543				
New Caledonia	France	Affiliated	250,040	30,836	13.1	77.0	10,616
Niue	New Zealand	Affiliated	1,496	5,800			4,537
Northern Marianas	USA	Affiliated	48,317	13,600	5.8	77.2	1,501
Palau	USA	Sovereign	21,388	7,984	11.8	72.2	5,748
Pitcairn	UK	Affiliated	58				
Puerto Rico	USA	Affiliated	3,721,208	22,259	6.3	79.0	13,012
Rapanui (Easter Island)	Chile	Affiliated	5,761				
Reunion	France	Affiliated	828,054	24,765	4.2	78.2	5,158
Samoa	New Zealand	Sovereign	184,032	2,423	19.7	72.6	1,515
Sao Tome and Principe	Portugal	Sovereign	163,783	1,010	43.5	63.4	
Seychelles	UK	Sovereign	89,770	13,392	10.2	73.8	10,116
Solomon Islands	UK	Sovereign	530,669	1,095	38.0	74.4	727
St Barthelemy	France	Affiliated	9,035	27,700	6.5		
St Helena	UK	Affiliated	4,250	7,800	15.5	79.0	
St Kitts & Nevis	UK	Sovereign	51,970	10,420	9.3	74.8	3,763
St Lucia	UK	Sovereign	172,370	5,958	10.9	77.0	3,382
St Martin	France	Affiliated	77,741	15,400	6.5		
St Vincent and the Grenadines	UK	Sovereign	100,892	5,451	16.5	74.4	2,921
St. Pierre and Miquelon	France	Affiliated	6,080	34,900	7.2	80.0	14,422

Islands	Metropolitan power	Political Status at 2015	Population 2010	GDP per capita US$	Infant mortality per 1000 live births	Life expectancy at birth	Merchandise imports per capita us$
Tokelau	New Zealand	Affiliated	1,400	1,000			
Tonga	UK but never a colony	Sovereign	106,000	2,677	20.4	75.4	1,598
Trinidad and Tobago	UK	Sovereign	1,317,714	14,023	24.8	71.6	6,290
Turks and Caicos	UK		32,664	20,215	11.5	79.2	16,419
Tristan da Cunha	UK	Affiliated	263	7,800			
Tuvalu	UK	Sovereign	10,924	2,640	33.5	65.0	2,320
US Virgin Islands	USA	Affiliated	110,000	35,500	9.4	79.4	
Vanuatu	France and UK	Sovereign	221,417	2,100	23.9	72.0	985
Wallis and Futuna	France	Affiliated	15,000	12,640	4.7	79.0	

Source: The author.

LE STATUT D'INDÉPENDANCE EST-IL BÉNÉFIQUE POUR LE DÉVELOPPEMENT DES PETITES ÉCONOMIES INSULAIRES ? UNE ANALYSE SUR LONGUE PÉRIODE

Résumé - *Un consensus se dégage aujourd'hui sur le fait que les petites économies insulaires indépendantes présentent des niveaux de revenus plus faibles que leurs homologues « affiliés ». Une certaine relation de causalité apparaît alors entre statut politique et performance économique dans le sens où l'indépendance serait un frein au développement économique. Toutefois, même si les études en coupe transversale semblent confirmer cette hypothèse, l'analyse présente, mobilisant des séries temporelles sur longue période pour plusieurs indicateurs clés de développement, tend à la rejeter. Il est montré que le processus de divergence en cours entre les deux groupes (économies indépendantes et économies affiliées) a débuté bien avant la décolonisation (vers 1920). Le statut politique ne peut donc être considéré tout au plus que comme un facteur aggravant, les vraies causes de la divergence restant à identifier.*