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THE CONFLICTING REVENUE AND EXPENDITURE RECORD OF CROWN COLONY NEW ZEALAND 1840-1852

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The Conflicting Revenue and Expenditure Record of Crown Colony New Zealand 1840-1852

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ABSTRACT

An assessment is undertaken of New Zealand's revenue and expenditure data for the year's 1840 to 1852. Currently there exist multiple records, all different, and each purporting to be a valid fiscal record for Crown Colony New Zealand. This study employs a criterion test (Layton, 1980), to derive a valid and more certain record of Revenue and Expenditure for the study period 1840-52. In addition the work has explored the possible reasons for the existence of multiple revenue and expenditure records for Crown Colony New Zealand. The results of this study have implications for at least one international historical index and, for the authors of a few notable New Zealand reference works which contain statistical data on early New Zealand. Furthermore, scholars of this early period in New Zealand economic history should no longer be data challenged as this study has provided sound guidelines for the use of these quantitative datasets in the future.

JEL: N, Economic History

Key Words: Revenue and Expenditure; Statistics; Crown Colony; New Zealand

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1. INTRODUCTION

Our knowledge of New Zealand's early fiscal performance, the financial activities of the Crown colony Administration and of the general population, in terms of qualitative data relies, in part, on the officially published accounts. Those accounts are the public finance record of successive Colonial Administrations over the period (1840-52). They are readily accessible from several reputable sources and have a long history of use by scholars of early New Zealand. However, some caution is advisable when using published Crown Colony statistics. The principal concern is the multiplicity of conflicting records. And recent scholarship has noted this fact; "financial sources left for study are contradictory and inconsistent" (Cowie, 1994)². To date, no systematic attempt to understand or explain the issue, has been made.

Many early colonists and eminent contemporary researchers, such as Brodie (1845), Fox (1851), Thomson (1859), Pritchard (1970), Diamond (1986), Moon (1998 and 2000) and Hooper and Kearins (2003) have used these statistics, either selectively, or in their entirety, in their studies. One of their findings, namely, that the Crown Colony period in New Zealand economic history had moments of financial difficulty, is not in question. All the macroeconomic data presented in this discussion paper do, in selected years, record fiscal deficits. What is questionable about these multiple records is the veracity and validity of the figures they contain, and therefore their relevance to the larger economic picture is also questionable. Conclusions can be highly dependent on the user's choice of data set. If the appropriate data is not selected, then irrespective of how the data set or, selected numbers from within it are used, interpreting events that occurred one hundred and fifty years ago can become difficult.

Difficulty of interpretation was only one of the problems facing Cowie in 1994. He used only the expenditure data for the year 1844, and then provided only a singular figure from each (conflicting) record to support his qualitative argument. This discussion will not, at this stage, disagree with his analysis or critique his approach. Cowie's use of data is simply utilised as an example and to make a point on the misuse of old statistical data in history studies. Returning to the focus of this study, Cowie's interesting finding of multiple data sets. The four alternate sources of fiscal data that Cowie (1994) identifies are all different, and this chapter will indicate why, and, to do so, his sources will be labelled and numbered as per the following: Primary, official-secondary, secondary, and third-hand sources; numbered 1, 2, 3, and 4 respectively, those sources being. (1) The *Blue Book*, 1844; (2) *Minutes of the Legislative Council*, 1845; (3) *Statistics of Crown Colony New Zealand, 1840-52*, and (4) *The Story of New Zealand*.

Number (1), apparently, is the official record of 1844; number (2) is the official secondary source from that record, dated 1845; number (3) is the work of Simkin & Hardie (1954), and it is derived, apparently, from number (1), and other sources such as number (2). Number (4), is supposedly, derived from unknown official sources, and this fact is stated by Thomson (1859), the author of number (4). Thus, there really is only one source and that is the *Blue*

² Cowie (1994, P. 123), identifies four different sources of fiscal data for the years 1843-44.

Book. Therefore, this discussion paper will strongly support the view that, in addition to different methods of calculation, “there are also numerous other reasons” for inconsistent and contradictory data sets (Cowie, 1994, p. 123).

Furthermore, the problem with selecting and commenting on single datum points or, at best, two or three years (Cowie, 1994, and Hooper & Kearins, 2003), only compounds the difficulty for the commentators. Whether the subject is Fitzroy’s debentures, which are recorded as revenue for 1844 and 1845, or the continued collection of the income tax in 1846 and 1847 (Cowie, 1994), a long-run approach and informed overview is required³. This is something that Goldsmith (2008) ably demonstrates in his recent publication. Returning to Cowie’s work, the information pertaining to both debentures and tax collection is in the record, and all that is required is that researchers apply sound research techniques to the available quantitative and qualitative data⁴ to extract the information they are seeking. This thesis has not followed the account of Fitzroy’s debentures and clearly their story is as misunderstood as is Fitzroy’s approach to fiscal policy in 1844. However, as Fitzroy’s tax policy is the subject of this thesis, a comment is required in respect of the income tax. When the *Property Rate Ordinance* was repealed in 1845, the new ordinance made the arrears recoverable, and these show up in the record for 1846 and 1847.

Returning to the study at hand, New Zealand’s statistical record contains many long-term datasets which provide a clear overview of the relevant period. Many of these however lack credibility, and when real detail is required recourse should be to the original primary or the official secondary sources. However, aside from Pritchard (1970) quite often scholars take the easier route and select from notable secondary reference works which contain early New Zealand statistical data. The following reference works are all highly reputable and easily accessed from any University or major city library yet, the early Crown Colony data they contain are questionable. The relevant works of interest are: (1) The *New Zealand Official Year Book* (relevant years); (2) The *British Parliamentary Papers* (1835-52); (3) Bloomfield (1984), and (4) Mitchell (2003). They all have one thing in common; they are all in conflict with another subset of secondary reference works.

The other subset of secondary reference works is just as easily located and, as with the first group of reference works, are highly reputable. However, there is one key difference. The works mentioned here are all official secondary, or in the case of number (6) only, taken from the primary sources. The works in question are: (5) The *New Zealand Government Gazettes* (1840-49). (6) Simkin and Hardie (1954), and (7) the *Appendix to the Journals of the House of Representatives of New Zealand* (1888).

³ In fairness to Cowie (1994), his study records many excellent findings not the least of which is his explanation for the construction of past New Zealand economic history. History is written by winners and the power-shift which took place after the dismissal of Governor Fitzroy in 1845 allowed the winners to change the record and successive generations have perpetuated the myth surrounding much of early New Zealand’s past. I highly recommend his thesis to any student of early New Zealand history.

⁴ I might add that Goldsmith’s recent publication takes a very different approach to the use of statistics. His use of the past fiscal record is similar to that of the comparative tax history literature. Goldsmith does however use the incorrect, in my view, data set for the period 1840-52. However, given the extensive period his study covers, the necessity of finding an adequate and consistent long-run data series left him with little option other than *NZOYB*.

Without this clarification regarding the datasets in question, there is little else to guide a researcher seeking information for study purposes. Furthermore, even a very recent scholarly work in this area, Briggs (2003), does not contain a section on the public finances of the Crown Colony Administration. While *Statistics New Zealand* maintain a long-term data series (LTDS) for the period 1840-52, the record is incomplete (and derived from secondary sources), and there are sparse explanatory notes, or guidelines that might be helpful when it comes to selecting from the multiple reference sources that are available.

For analytical purposes, it is assumed that all of the conflicting records identified above⁵ could, potentially, be reconciled. Therefore, three alternative, but not mutually exclusive, hypotheses which could assist in the reconciliation are derived. First, differences in accounting methods explain the disparate data sets. Second, provincialisation⁶ is a possible explanation of the observed variance amongst the data sets. Third, some other political economy⁷ factors of the period, such as the discontent of a British Parliament; the return of British taxpayers' funds expended in New Zealand for defence; British opposition to the methods and attitudes of the ruling minority in New Zealand. In short, the politics of tax could have driven the publication of at least one of the revenue and expenditure records.

The discussion now proceeds to subject the conflicting records that were identified above and, some of their structural elements, to a criterion test. This is a method that is extensively commented upon by Layton (1980, p. 30), and conforms to one of his five possible analytical approaches for evaluating historical statistics. The other four methods are essentially statistical techniques which require additional statistical data, for example, population; GDP; price series; or exports/imports, data which are statistically, still open to question.

The focus of the discussion chapter is designed to do two things: First, keeping the earlier hypotheses in mind, it seeks to increase our understanding of the multiple records that are available. Second, it seeks to assist in deciding which data set is the appropriate choice for future research and why it is selected. To date, no published information has come to light which would suggest that anyone has made a thorough study of the fiscal data of Crown Colony New Zealand: Therefore, by undertaking such a study in this discussion paper, the work will make a real contribution knowledge.

The analysis sections of this discussion paper will examine the construction of what are multiple and conflicting records, all of which, purport to be facts. In the work of this discussion paper, those engaged in future study of the Crown Colony period may find the information which may help reinforce their qualitative research in this area. In addition, the study will also identify a valid long-run data series for further quantitative study of past New Zealand fiscal policy and of, the past process of governance.

⁵ It is worthwhile to consider, at this point in the thesis, that there may even be more data sets around than those which this thesis and the work of others has identified. For this thesis the search is conclude with the comment, "to the best of my knowledge", to date.

⁶ This term describes the separation of responsibilities and tasks among the Provincial Councils of New Zealand.

⁷ See Colignatus, (2005, p. 11) for an in depth explanation of this study's understanding of political economy.

The structure of what follows is: Section 2 introduces the method of analysis. Section 3 contains the data analysis, including identifying the multiple records and also discusses 'other' economic influences. The results of the testing process are presented in Section 4. Section 5 presents the preferred option for future research and contains a brief statistical summary of that option. This is followed by the conclusion in Section 6.

2. METHOD OF ANALYSIS

An uncomplicated criteria test of the available data sets and, of their fundamental elements, are the discussion paper's chosen method of analysis. There are six main criteria and they are: *assumptions*, *data set characteristics*, *accounting methods*, *series validity*, *data validity*, and *political economy considerations*. These main headings are further divided into fifteen sub-criteria which look closely at component parts of each criteria heading. After each analysis, each data set is given a grade of pass or fail - numerically, 1 being a pass, and 0 a fail: the highest possible score is fifteen.

2. 1. Individual Criterion

This subsection will provide a brief discussion on the six main criteria. At least a paragraph will be devoted to each. The discussion begins with the first of the six criteria; *Assumptions*.

(1) *Assumptions*: two assumptions will be investigated. The first assumption concerns the accounting period. If all time series are not alike in this respect (January to December), comparative analysis would be worthless. The second assumption is that all data sets adhere to a common public finance format. This second assumption subsumes that the method of accounting is an implicit, and a necessary, benchmark for analysis.

(2) *Data Set Characteristics*: Here, each data set is checked to see whether it is an unbroken compilation. Does the method of compilation change part way through the series? Consistency in method also relates to the source of the data. How many sources are each series compiled from?

There is a second aspect of this criterion which is of interest. Here is created a subheading entitled *Descriptive Analysis: Statistical and Graphical*. Do descriptive statistics indicate any reason for concern? Do they raise any early warning signs of inherent problems in a data series? When series are compared, does a data set stand apart from the others, and, if it does, what might be the basis for that difference? A data set should not contain an atypical pattern by comparison with its alternatives.

(3) *Accounting Method*: Under this heading a series of questions must be asked. Is the method decipherable and can the aggregate values be verified via primary sources? Are there any aggregate values which do not meet the standard? If so, why do they not meet the standard? Lastly, do any of the tables provide a foundation for an extended times series?

(4) *Series Validity*: Under this heading there are three main concerns. The first concern relates to the references attached to the series. Second, is there a connection from this series to a primary source document? Finally, is each data set authenticated by a recognised early New Zealand government official?

(5) *Data Validity*: This criterion examines the issue of variability in the absolute datum values between series. Within each series the procedure will be, to check for major breaks (changes) in their compilation. Furthermore, the already observed major break in all the series is hypothesised as being related to provincialism. It is discussed from the view point of the early years, 1840-45 and thereafter 1846-52.

(6) *Political Economy Considerations*: This last criterion begins from the assumption that a data set should not contain an atypical pattern by comparison with its alternatives. If it does, are factors other than method required to further explain the anomalous characteristics? If this is the case, then what might be a plausible explanation for an atypical pattern? Analysis will check for the influence of the politics of tax has influenced the production of a particular series.

2. 2. Limitations and Qualifications

Before analysing the data sets, subject to the above, a few preliminary remarks are needed. A criterion test cannot tell us if the tables presented below are wrong or right. Nor can it clarify doubts over an absolute datum value. Is it right, wrong, or two decimal points out? On the basis of the preset benchmarks and clearly established criteria however, the reader can be told which (in this instance) table of data has met the most number of specified standards.

A major qualification about what follows should be noted at this point in the discussion. The public finance record of the Crown Colony provides a narrow view of the financial condition of the colony. Published public accounts do not reflect the contents of the complete ledger book and do not detail each and every transaction. Furthermore, published public accounts are not a record of all the economic activity in a nation and this last comment is an important point. Thus, it is assumed that none of the accounts examined in this chapter would reflect the full cost of establishing and maintaining the colony; this would be especially true if a part, or parts, of the economy were externally controlled and funded. This external control and funding would not be an unusual circumstance in British Crown Colonies. Further, the economic activity of the colony's private sector is not discussed in the chapter.

2. 3. Assessment and Conclusion

Subject to the above assessment, and mindful of the qualifications, the criteria test will determine the most appropriate data set for my current research purposes. It will be chosen on the basis that one or other of the disparate records has, after testing, satisfied at least most of the criteria discussed above. The stated criteria provide an elementary framework against which the data sets will be tested. Their findings will be commented upon in the Subsection 4.4, and the relevance of those findings in relation to the hypotheses, stated in the introduction, will be commented on in the conclusion to the paper.

3. DATA ANALYSES

The existence of mutually inconsistent data sets was recognised many years ago. In *New Zealand's Jubilee, 1840-1890* (1890, pp. 17-18) it was noted that the Audit Office and Registrar General's figures were in conflict with those of the *New Zealand Official Year Book (NZOYB)*. There was no explanation offered however for the apparent differences. After inspecting the record and taking note of comments in Cowie (1994, p. 123), the statement recorded in *New Zealand's Jubilee, 1840-1890*, cited above, was found to be correct, and the problem they highlighted is still worthy of consideration more than one hundred years later.

3. 1. Accounting Methodology: First Criterion

It is possible that, as suggested by Cowie (1994, p. 123), the disparate data sets may simply reflect their compilation, and thereafter a different purpose can lead to the construction of very dissimilar accounts. For example, a business may be intent on discerning its profit or loss while an official institution's only requirement might be to account for financial transactions. If such is the case before us then of course compilers would have utilised differing methods. Therefore, in order to understand nineteenth-century public accounts, some contextual knowledge is required of the then prevalent accounting methodologies.

3. 2. Public Accounts

This subsection begins by stating clearly that all data sets are posited as reflecting the activities of the period's official Administration. They are not the record of a business entity, and should adhere to the practice of public accounting familiar to the study period. Furthermore, the accounts which are subject to examination are simple records of total revenue and expenditure; they are not highly detailed ledger books (double entry accounting) and, on that basis, there is not expected to be, any great puzzlement about the period's accounts, or of their compiler's distinction between what was expenditure and what constituted revenue.

Assumption 1: In the nineteenth century various accounting methods were used but, there were two methods common to the period. The cash approach is colloquially known as the single-entry method and the double-entry system is referred to as the mercantile system⁸ (Edwards, et al (1997). Commercial or *private* accounts sought to recognise changes in wealth over a set period. Presented below, will be a series of tables, each of which purport to represent the public accounts of the period, namely, Table 1.1, Table 1.2, and Table 1.3. The tables presented are not expected to be examples of the commercial approach to account keeping.

In contrast, public accounts were primarily concerned with providing those responsible for *public* monies with a record of transactions: only receipts and payments were recorded. This cash accounting system was also subject to a nineteenth-century *Charge/Discharge* methodology traditionally utilised in estate management and public finance. When an

⁸ This accounting system must be distinguished from the system of economic thought or set of economic policies associated with merchants, and a system of accounting often associated with commerce.

administration received funds, from whatever source, they were duly acknowledged as revenue, and similarly when money was paid out, expenditure was recorded.

Integral to *Assumption 1* is the awareness that, in practice (such as in the early years of the Administration), there could be limited distinction between current and capital items in accounts; both would appear as parts of total revenue/expenditure⁹. For example, Receipts in Aid (a capital revenue item), would be recorded as they were received (current account) and were a *charge* against the revenue of the administration. Thus, as the colony's liability is *discharged* and there are outgoings of those monies, it is recorded in expenditure; however, one would not expect to see such a transaction recorded in a summary account as expenditure from Receipts in Aid, obviously. This system of record keeping, cash accounting subject to the *Charge/Discharge* approach is the method which is expected to determine the early administration's financial accounts.

3. 3. Accounting Period

The accounting period is the crucial piece of information required before analysis can begin. If all data series are not for the same period, then comparative analysis is worthless. Therefore the assumption does need to hold for all data sets examined.

Assumption 2: The accounts of the era (1840-52) do commonly contain, after the date period, phrases such as; *for the year/s* and *inclusive*. It is accepted that the accounts cover the calendar year (January-December). In the *Accounts of Colonial Receipt and Expenditure*, under the heading, *Instructions to Governors of Colonies*, Section 48 states: "The Year of Account is to be in all cases from the first of January to the 31st of December" (Edwards, et al, 1997, p. 297). These characteristics are found to hold for all data sets under consideration in this thesis.

3. 4. Data Set Characteristics: Second Criterion

Three data sets are presented below and they are presented as, Table 1.1, Table 1.2 and Table 1.3. All recorded values are in £ Sterling and the values are acknowledged to be in nominal form. As yet, there is no reliable price series established with which to deflate the nominal values.

⁹ For the years 1840-52, Simkin and Hardie (1954) do disaggregate their financial data into current and capital accounts. Their work is the exception among all of the three data sets presented in this chapter. Their contribution to Table 4.2 is limited to 1848-52 and their method is not found to be consistent with the companion sources. The difficulty of changing those sources is commented upon in the explanatory notes of *Appendix to the Journal of the House of Representatives* (1888). It has not been adopted as the method used when constructing the more detailed series presented in the penultimate section of this chapter (see Section 4.5).

3. 5. The Data Sets

Table 1.1 (below) is only a small part of a much longer time series, 1840-88. It is found in the *Appendices to the Journal of the House of Representatives of New Zealand* (1888, 1: B12). In his work, James Edward Fitzgerald, Controller and Auditor General, “endeavours...to tell in a brief and intelligible form the financial history of New Zealand...” up to that time (*AJHR*: 1888, 1: B12). Preceding the statistical information is found three pages of explanatory notes. While this publication is compiled from other official government primary sources¹⁰, it is actually a secondary source¹¹. There are problems with his series relating to consistency of method prior to 1845 and to the accounting periods after 1853.

Table 1.2 (see below) is a compilation of data from two primary sources and one secondary source. The data for the years 1840-45 are taken from Appendix E, in the 1846 edition of the *New Zealand Government Gazette*. The data values for the years 1846-47 are from the *New Zealand Government Gazette, Province of New Ulster* (1849). For the period 1848-52, data are from Simkin and Hardie (1954, pp. 66-75)¹², a highly disaggregated reference work. These three sources, while connected, are different data sets in their own right. Consequently, consistency of the three series is questionable. Further the entire series only extends for thirteen years.

The third data series, Table 1.3 (below), is from a publication that has a very creditable profile, the *New Zealand Official Year Book* (1893). The series is not difficult to locate and forms the basis of two internationally recognised reference works containing early New Zealand macroeconomic data. For the uninformed reader, Table 1.3, mentioned previously, is found in a fold-out Statistical Summary in the *New Zealand Official Year Book* (1893), and is available in successive years thereafter. It is not a primary source and there is doubt that it was originally compiled from a primary source. It is from Thomson (1859, Table, XI, p. 327)¹³, which, according to its author, is derived from official government sources and, in places, is only approximate. The series appears to be consistent, if the nearly-fourfold increase in the expenditure variable from 1845 onwards is ignored. Despite this anomaly, the series does extend unbroken for eighteen years.

¹⁰ Data that is published by the same organisation that collected it are called primary source data (Keller and Warrack, 1997, p. 158), viz. the Bluebooks belonging to the Colonial Administration of early New Zealand are a primary source.

¹¹ Secondary data refers to data that is published by an organisation different from that which originally collected and published it (Keller and Warrack, 1997, p. 158). Namely data that is not directly published by the early colonial administration is secondary data.

¹² The tables of Simkin and Hardie (1954, p. 70 and p.72) contain data summation errors with respect to Total Net Expenditure (1841) and Total Net Revenue (1843).

¹³ Dr. Arthur Saunders Thomson was attached to the 58th Regiment stationed in New Zealand during 1847-58. On completion of his tour of duty, he served in China. Thomson was in command of a force wintering at Tientsin (Tianjin) during the year 1860. Unwell for some time, he died there (probably on) 4 November 1860 (Belgrave, 2007). To my knowledge he completed a short series of published statistical papers on New Zealand, one natural history paper and one general economic history.

The Conflicting Record of Crown Colony New Zealand's Public Finances: 1840-52 (Inclusive)

Table 1.1
Revenue & Expenditure for the Crown Colony of
New Zealand, 1840-52

(AJHR)

£	Revenue	Expenditure
1840	20,857	21,740
1841	49,961	40,101
1842	49,331	51,697
1843	35,796	41,127
1844	45,698	38,627
1845	52,748	38,841
1846	61,525	48,587
1847	80,694	87,722
1848	101,589	89,500
1849	65,976	66,849
1850	67,509	64,991
1851	79,115	75,276
1852	90,480	88,737

(Appendix to the Journal of the House of Representatives of New Zealand, 1888).

Table 1.2
Revenue & Expenditure for the Crown Colony of
New Zealand, 1840-52

(NZ Government Gazette)

£	Revenue	Expenditure
1840	20,857	21,740
1841	49,961	40,101
1842	49,331	51,697
1843	35,798	41,137
1844	45,698	38,627
1845	52,746	38,841
1846	63,090	53,375
1847	81,017	88,644
1848	98,037	96,573
1849	84,000	85,819
1850	82,261	68,668
1851	81,528	79,863
1852	94,518	92,740

(1840-45: *New Zealand Government Gazette*, 1846),
(1846-47: *New Zealand Government Gazette*, 1849),
(1848-52: Simkin and Hardie, 1954).

Table 1.3
Revenue & Expenditure for the Crown Colony of
New Zealand, 1840-52

(Dr. Thomson)

£	Revenue	Expenditure
1840	926	926
1841	37,390	81,541
1842	32,589	51,509
1843	21,398	39,053
1844	13,949	54,546
1845	12,899	212,899
1846	26,645	252,318
1847	43,265	234,055
1848	47,482	239,135
1849	50,408	221,863
1850	52,298	232,128
1851	67,049	197,649
1852	75,764	177,364

(*New Zealand Official Year Book*, 1893-1908)

Descriptive Statistics and Graphical Analysis of the Conflicting Records

Table 1.4
Descriptive Statistics for Table 4.1

	Revenue	Expenditure
Mean	61637	57984
Standard Error	6254	6221
Median	61525	51697
Standard Deviation	22549	22429
Minimum	20857	21740
Maximum	101589	89500
Sum	801279	753795
Count	13	13

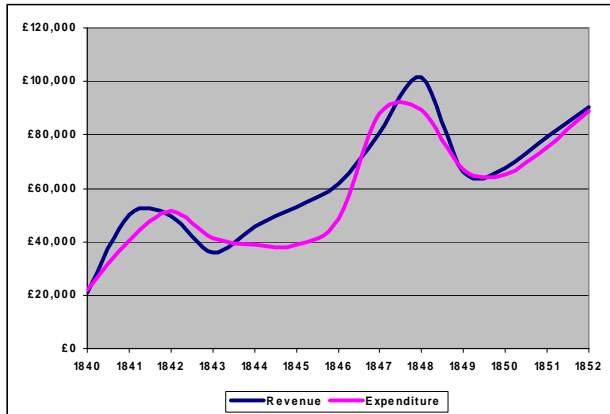
Table 1.5
Descriptive Statistics for Table 4.2

	Revenue	Expenditure
Mean	64526	61371
Standard Error	6674	6968
Median	63090	53375
Standard Deviation	24062	25124
Minimum	20857	21740
Maximum	98037	96573
Sum	838842	797825
Count	13	13

Table 1.6
Descriptive Statistics for Table 4.3

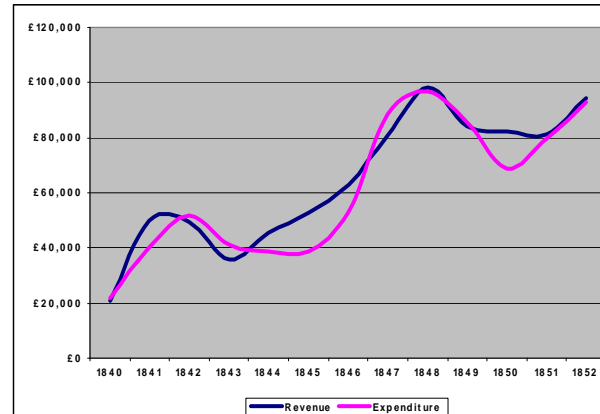
	Revenue	Expenditure
Mean	37082	153460
Standard Error	6072	25600
Median	37390	197649
Standard Deviation	21894	92304
Minimum	926	926
Maximum	75764	252318
Sum	482062	1994986
Count	13	13

Figure 1.1
Revenue & Expenditure for the Crown Colony,
1840-52: Table 1.1



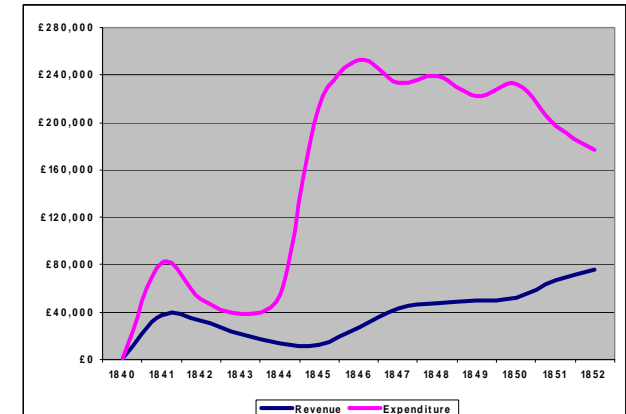
(Appendix to the Journal of the House of Representatives of New Zealand, 1888)

Figure 1.2
Revenue & Expenditure for the Crown Colony,
1840-52: Table 1.2



1840-45: *New Zealand Government Gazette*, 1846),
(1846-47: *New Zealand Government Gazette*, 1849),
(1848-52: Simkin and Hardie, 1954).

Figure 1.3
Revenue & Expenditure for the Crown Colony,
1840-52: Table 1.3



(*NZOYB*, 1893-1908)

3. 6. Descriptive Statistics

The descriptive statistics of the three data sets are appended below the data tables. When all of the tables are compared, the following issues are raised with respect to differences between them. The *mean* statistics for revenue and expenditure indicate that a large variance exists (two and a half times the average) between Table 1.6's value and the values for Table 1.4 and Table 1.5. The *standard error* and *standard deviation* for each series is interesting and the following comment concerning expenditure are made. Table 1.5 exhibits more variance than Table 1.4 and, Table 1.6 is markedly dissimilar to both of its companion tables.

The *minimum* values recorded for Table 1.6 are twenty times lower than those listed for Table 1.4 and Table 1.5. On the other hand, the *maximum* value for revenue in Table 1.6 is 34% lower than that in Table 1.4 and, 29% lower than that in Table 1.5. It is expenditure however that is of most concern. The *maximum* value of expenditure, in Table 1.6, is 2.8 times greater than in Table 1.4, and 2.6 times greater than in Table 1.5. Both Table 1.4 and Table 1.5 show a surplus of revenue over expenditure during the Crown Colony period, while Table 1.6 indicates the opposite, a large deficit.

3. 7. Graphical Analyses

When compared, Figures 1.1 and 1.2 do exhibit the expected similar pattern for the years 1840-45. After 1845, there is a discernible variation, which continues for the duration of the series. It covers a period of seven years, six of which encompass the initial period of provincialism.

Figure 1.3 displays a pattern similar to Figure 1.1 and Figure 1.2 for the years 1840-43. Expenditure in the years 1844-52 deviates radically from those seen in the other data series. Throughout the series shown in Figure 1.3, the revenue values appear consistently lower than those in Figure 1.1 and Figure 1.2. Expenditure in Figure 1.3 is considered uncharacteristic by comparison with the displayed alternative series. Recourse to the underlying data values in Figure 1.3 indicates that, for expenditure, the 1840 and 1841 values show extreme variance with their alternative series. There is also an increase in expenditure during 1844 in Figure 1.3, while the alternative series show a decrease. The pattern and values for expenditure in Figure 1.3 after 1844 are anomalous and atypical when compared to Figure 1.1 (see Table 1.1) and Figure 1.2 (see Table 1.2).

The summary rationale of the statistical and graphical analysis is to emphasise the significance of selecting one series over the other. Table 1.3, informs the reader of a state of fiscal affairs that is markedly different from that depicted in Table 1.2 and Table 1. 1. Table 1.2 also has a point of difference from Table 1.1 and it occurs at, and around, the time of provincial separation in New Zealand. Thereafter, the datum values show variation with the official central government values and this would need to be factored into any analysis. Selecting an appropriate data series therefore, is extremely important, and as suggested in the chapter's introduction, can influence any conclusion drawn.

3. 8. Accounting Method: Third Criterion

For the years 1840-45, the data of Table 1.1 and Table 1.2 are from the same primary source (*New Zealand Government Gazette*, 1846). Both data sets are found to comply with the posited assumptions with respect to the time period and to the methodology. The more disaggregated source data available for these early years (Simkin and Hardie, 1954; a data series compiled, in part, from primary source information) is also found to accord with *Instructions to Governors of Colonies* (Edwards, et al, 1997, p. 296). Table 1.3 is found to differ with respect to both revenue and expenditure; indeed, the difference is shown to be considerable when the revenue and expenditure figures are examined more closely. This examination will be undertaken in the next two subsections – Subsection 3.9 and Subsection 3.10.

3. 9. Expenditure

The expenditure figures of Table 1.3 contain values that are very different from alternative data series, and the expenditure totals of Table 1.3 are made up from data values that were not able to be identified by cross referencing to other official secondary sources. The main cause for concern is the outlay on military and naval defence: the Commissariat Chest. They should not appear in the colony's public account summaries as, technically, they are not a charge against the revenue of the colony. It is well known that the expenditure of the Mother Country in the colonies on the military, naval forces and the civil service¹⁴ was a charge against the taxation (revenue) of the Mother Country (Purdy, 1863, p. 359)¹⁵. New Zealand public servants, therefore, were not accountable for these monies. On that basis, they should not enter into the accounts of the colony in question.

There is mention of the Commissariat Chest in the primary sources used in Table 1.1 and Table 1.2 but the values given in these tables do not match the values recorded in Table 1.3. Items that relate to the Commissariat Chest were usually (with odd exceptions such as the New Zealand Fencibles'¹⁶ establishment¹⁷) for smaller sums. Those smaller sums, the Colonial Administration would meet in the short term and then draw back from the Imperial Chest. There is support for this having been the method adopted by the colonial administration and evidence of this is found in the archived Outwards letters to Naval and Military officers: 1847-54 (Archives New Zealand: ACHK 16588 G33/1).

¹⁴ There was a short period during the tenure of Governor Fitzroy (1844) when a part of the civil list became a charge on the revenue of the colony. This anomaly was corrected under Governor Grey.

¹⁵ It is possible that in the later years of the Crown Colony that there was a change in management and that the Commissariat Chest was either managed differently or that defence expenditure was the responsibility of the Colonial Administration however; as there is no matching expenditure in the competing tables I do have reason to doubt such an event did in fact occur it is however, possible.

¹⁶ The Royal New Zealand Fencibles was a body of veteran soldiers from the UK who were converted into military settlers in 1847. They were to provide protection for the southern frontier of the Auckland Settlement. As late as the 1860's a debate raged over who was going to pay for the Fencibles (Cowan, 1955).

¹⁷ Simkin and Hardie (1954, p. 70) records under the head 'Revenue on Capital Account' the income received from the Commissariat Chest on account of the Fencibles.

According to the *Accounts of Colonial Receipt and Expenditure*, under the heading *Instructions to Governors of Colonies*, Section 42 states:

In all cases where there are grants of Parliament in aid of colonial funds, the Accounts are to include all bills drawn, or any sums in any other manner received, (such as from the Commissariat Chest), on account of grants.

This is followed by Section 43:

In all cases of bills drawn, they are to be immediately handed over to the Treasurer or other chief Accountant, who is to enter them to their full amount as a receipt in his cash book on the day on which he receives them. (Edwards, et al, 1997, p. 296)

If, Table 1.1 and Table 1.2 do show that this was the procedure followed in early New Zealand accounts, then there does appear to be an anomaly. The parliamentary expenditure of Table 1.3, if legitimate, should in some manner be discernible in the revenue. In fact it does not appear to be, and therefore, this does throw some doubt on the authenticity of Table 1.3's expenditure values.

3. 10. Revenue

The revenue figures offer more scope for analysis because Table 1.3 separates this component by heading. In Table 1.1 and Table 1.2 there is a clear, decipherable, and verifiable method used in the construction of the revenue figures. The method used in to construct Table 1.3 is not easily deciphered and, even after considerable effort, this research has not been able to replicate them.

The revenue data in Table 1.1 and Table 1.2 are all total revenue figures and they sum the three primary headings. Total revenue is the sum of current revenue: customs, fees fines and other charges¹⁸ plus land sales¹⁹ and capital revenue. The capital revenue is derived from Receipts in Aid or Parliamentary Grants or Crown Colony Bills and Debentures. This is verifiable from the accounts in the *New Zealand Government Gazette* (1846) and in the tables of Simkin and Hardie (1974, pp. 65-75).

Subject to the explanation above of total revenue and its compilation, consistent irregularity of method in Table 1.3's revenue data has been found. For example, the first and only revenue entry is direct taxation, made up of fees, fines and other charges (*British Parliamentary Papers*, 4: p. 49); its source states incorrectly that this entry is customs revenue. It is well documented that there was revenue provided for expenditure purposes, a repayable advance of capital from the colony of New South Wales to establish the Crown's

¹⁸ Alternatively, this was known as ordinary revenue, a term more familiar in compilations of later years.

¹⁹ This was recognised in later years as territorial revenue and it encompassed gold revenue and gold duty; this is why these items do not show up in the records of taxation or appear as itemised current revenue. For the year 1852, gold revenue does appear as taxation revenue in the current account (Simkin and Hardie, 1954).

administration in 1840 (Simkin and Hardie, 1974, p. 64). This sum (the repayable advance from New South Wales), and the transaction part of the aggregate value, are recorded in Table 1.1 and Table 1.2²⁰.

The second and third entries for revenue found in Table 1.3 are not consistent with the method used to derive the first entry. If they are meant to be total revenue figures, they are thousands of pounds short of the recorded values found elsewhere. The method of revenue calculation then appears to change again with the figures for 1843-45. They are similar to the figures reported in primary sources for current account revenue, as distinct from total revenue. The method (or methods used) in Table 1.3 are not clear; they are difficult to decipher; and they are not easily verified.

There is reason to suggest that the values of Table 1.3 have been derived from original material, such as can now be found in the *Parliamentary Papers* collection. It does appear however that the issue of discerning and distinguishing the actual revenue of the administration during the Crown Colony period was a challenging task for those outside of the official Administration even forty years later. “Sir Julius Vogel was asked if he could find his way through the tangle, but Sir Julius after spending several days over the matter, gave it up in hopeless perplexity” (*New Zealand’s Jubilee: 1840-1890*, 1890, p. 17). Unlike Vogel, the research conducted for this discussion paper has taken much longer than a few days.

3. 11. Series Validity: Fourth Criterion

The pedigree of a data set is usually verified by the name of the person responsible for their compilation; their office is also appended. It is usual also to find reasonable references attached to tables. For each of the tables presented, this is found to be the case. Therefore, each table requires a closer inspection of its pedigree.

3. 12. References and Sources

For Table 1.1 and Table 1.2, the early years of each series (1840-45) were compiled from the *New Zealand Government Gazettes* (1846 and 1849). These publications and the official statistical *Blue Books* are the early official record of the Crown Colony. The cited references (as is expected) bear a close relationship to the work of Simkin and Hardie (1954, pp. 65-75) which cite the following sources: the Colonial Secretary’s correspondence, the *Government Gazettes* and *Blue Books*²¹. Not by coincidence, data found in a home government periodical, “Her Majesty’s Colonial Land and Emigration Commissioners” *New Zealand Colonisation Circular* (1843, p. 44), and *New Zealand’s Jubilee: 1840-1890* (1890, p. 18), are consistent with Table 1.1 and Table 1.2. This conclusion is arrived at on the basis of material found in the *Appendix to the Journal of the House of Representatives* (1888, 1: B12), which is based on the material from the *Government Gazettes*, the Audit Office and the Registrar General.

²⁰ This transaction is an early example of both capital and current account confusion mentioned earlier in the chapter.

²¹ The *Blue Books* are the Statistical Summaries which were prepared at regular intervals by the administrations of British Colonies for the use of the Colonial Office and the home Government.

The source citation for Table 1.3 indicates that it was compiled indirectly from sources unknown and by a person outside of government. No substantive relationship to primary sources of the period is found for the material in Table 1.3. When considered in the light of its alternatives and their respective sources, the table lacks a sound pedigree; the figures in Table 1.3 match neither the published accounts for the period, nor those tabled in the Legislative Council which were sent as despatches to the Colonial Office. In addition, a similar impression of the colony's finances to that given in Table 1.3 is not obtained when reading Dr. Thomson's earlier statistical publications (Thomson, 1851a and 1851b).

3. 13. Authentication

The foundational data for Table 1.1 and Table 1.2 was, according to attached references, compiled by an official person charged with financial responsibility for the colony, normally the Colonial Secretary. Table 1.1's latter years were compiled by the Auditor General. On the basis of official authority, Table 1.1 and Table 1.2 have better support than Table 1.3, yet technically, all data sets were authenticated by the same person.

The entirety of Table 1.2 is assumed to have been authorised by the head of the colonial administration for the period 1846-52, Sir George Grey. The years 1840-45 were compiled for the Colonial Office by Sir George Grey, acting on his initial instructions (*British Parliamentary Papers*, 5: 231)²² to prepare financial statements and send them home as quickly as possible. The authentication attached to the Statistical Summary of the Colony of New Zealand (*New Zealand, Official Year Book*, 1893)²³, is unambiguously that of Sir George Grey's. It appears, therefore, that all series have official validity. This finding of dual authentication is, by assumption, considered to be the reason for common and, widespread use of the more readily accessible Table 1.3.

3. 14. Acceptance and Usage

As suggested above, the authentication of Sir George Grey may be what has promoted the use of Table 1.3. The vague title information and limited explanatory footnotes found in Thomson (1859, Table. XI, p. 327) have not fully informed scholars; further, the footnotes to the Statistical Summary in various *New Zealand Official Year Books* (1893-1908) have compounded the matter. Even the reference information contained in Simkin and Hardie (1954, p. 7, note. 18), Bloomfield (1984, p. 330, note. b and note c), and Mitchell (2003, p. 938, note. 58) are of little help.

The merit of selecting Table 1.1 in its entirety is, by comparison to Table 1.3, and the latter years of Table 1.2, extremely strong. While still a compilation and a secondary source, it was prepared for the *Appendix to the Journal of the House of Representatives*, a publication that can be considered in some circumstances almost a primary source in its own right. This section of the *Appendix to the Journal of the House of Representatives* was authorised by James Edward Fitzgerald, Controller and Auditor General. In the three pages of explanatory

²² "It will be your duty to transmit to me, as speedily as possible, a financial statement" (*British Parliamentary Papers* [Despatch No. 25] 5: 231).

²³ This is the reference work from which Table 1.3 is obtained.

information which form part of the statistical information, there are very clear notes on method, the source of the quantitative information, and on the limitations of the data presented. The presentation of the material can be considered detailed and complete for all years 1845-88. For the years 1840-1844 however, the detail is missing, and this does create some uncertainty.

3. 15. Data Validity and Variance, 1846-52: Fifth Criterion

This criterion examines the obvious variability in the absolute datum values between series. Each series is also checked for the presence of major differences in their compilation. Finally, the major break in all series, the move to provincialism, is discussed in detail.

The financial history of New Zealand might be divided into ... separate epoch[s]. The first extends from 1840 to 1847 inclusive, during which time New Zealand was one undivided colony. The second from 1848 to 1852, during which, under Lord Grey's Constitution Act of 1846, the colony was divided into two provinces²⁴, New Ulster and New Munster²⁵; each having its separate finance and separate accounts (Appendix to the Journal of the House of Representatives, 1888, 1: B.-12).

Table 1.3 has thus far been found to contain irregularities with respect to method and data values; therefore, Table 1.3 is left out of the discussion that follows. Let us now focus on Table 1.1 and 1.2; the early years, 1840-45 are known to be from the same primary source and are therefore identical. However, there is variation in the absolute values of the variables post-1845 and this difference is the focus of this subsection. The task therefore, is to offer a plausible explanation for the difference between Table 1.1 and Table 1.2's latter years.

3. 16. The Latter Years: 1846-52

Early documentation points out the difficulties of taking material "scattered throughout *Gazettes* and compiling an accurate record of the public finances". The difficulties are "often enhanced by misprints in the figures", and by "quarterly accounts escaping publication" (*Appendix to the Journal of the House of Representatives*, 1888, 1: B.-12). This source also pointedly noted the methodological difficulties of the provincial period.

To demonstrate the difficulties of data collection and collation, there is found in Thomson (1851b, p. 250) the following comments. "The returns are compiled from materials furnished by a general census taken in August 1848; and from those supplied for the ordinary Colonial

²⁴ Besides provincialism the period underwent four leadership changes and each leader brought in a new set of institutions. The sub periods are: 1840-42, Governor Hobson; 1842-43, (Acting) Governor Shortland; 1844-45; Governor Fitzroy; and 1846-52, Governor Grey.

²⁵ A third province was also legislated; namely, New Leinster, otherwise known as Stewart Island.

Blue Book at the end of each year. This will account for some discrepancies in the totals of different Returns respecting the same thing”²⁶.

In the *Statistics of New Zealand, for 1853, 1854, 1855, and 1856*, (*Statistics of New Zealand*, 1858) the difficulties of compiling statistical information are commented upon in the *Introductory Memorandum* (1858, p. iii). “The figures have been fixed after careful consideration.... [a]lthough not assumed to be absolutely accurate in every particular, [they] are believed to be sufficiently so for all practical purposes”.

Much difficulty obstructed the compilation of aggregate colonial accounts during the provincial period. Each province had its own means of finance and method of account, as did the central authority of the period, the Administration. One constraint was the separate and conjoint responsibilities; another was the troublesome collection and collation of statistics. Individual datum values and entire sections of a variable are the product of this competitive system; also important was the lack of a timely flow of accurate information (not just to the provincial authority but especially from the provinces to the central authority). This explains why data values can conflict between series and even within the same series, as over time the availability of improved/updated statistical information brought changes in absolute values.

3. 17. Political Economy Considerations: Sixth Criterion

Criterion 6 considers the anomalous characteristics and atypical patterns which testing thus far has not assisted in explaining. The discussion of the first criterion, *Data Characteristics*, raised the issues of variance among tables; one table (Table 1.3) stood out because of extreme variance with its alternatives. Further analysis, subject to the third criterion, *Accounting Method*, highlighted the fact that Table 1.3 did not meet the standard for either expenditure or revenue.

The lower revenue values of Table 1.3 have been discussed in subsection 3.10; and preliminary results indicated that Dr. Thomson may have had difficulty discerning the appropriate aggregate values. When this is considered in the context of provincialism, discussed in Subsection 3.16, it is likely that his difficulties were compounded. The other issue of concern, expenditure, was raised in Subsection 3.9.

“The Receipts in Aid according to the Audit Office, amount to £297,240, whereas in Thomson’s Tables they are set down as £1,517,967”, (*New Zealand’s Jubilee: 1840-1890*, 1890, p. 17). It has been demonstrated that part of this sum should not feature in the public finance record. According to documentation found at *Archives New Zealand* “During the early years of the Crown Colony the British taxpayer contributed largely to the civil expenditure in New Zealand...and this country [Britain] bore the whole of its [New Zealand] military charges” (AEBE 18507 LE1 33 1861/301, p16).

²⁶ As an aside, this statement by Thomson (1851b, p. 250) is word for word what is recorded in the *British Parliamentary Papers* (6: p. 158). The comments are from a memorandum entitled ‘*Statistics of New Munster, New Zealand, from 1841 to 1848*’.

Confusing the issue, Table 1.3 met the requirements of Criterion (4) *Series Validity*, on the basis of a sub heading, *Authentication* (Subsection 3.13). Table 1.3 is officially verified and that criterion test is unable to offer an adequate explanation for some of its variable values for expenditure. Therefore, it is necessary to have recourse to other factors.

Assistance in understanding what these other factors might be is sought from a nineteenth-century Australian periodical which tells us that: “In forming a correct notion of the state of the colony of New Zealand, it is necessary to guard against the impressions that different interested parties seek to convey” (*The Weekly Register of Politics, Facts, and General Literature*, 1845, pp. 160-170). The question then becomes, was the author of Table 4.3 an interested party and what might he have been intending to convey? This can be termed the interaction of political economy with fiscal reality.

3. 18. Dr. Thomson’s Data

Although the research conducted for this chapter has been unable to locate the source of Thomson’s Military and Naval Expenditure values, there is an interesting article in the *Southern Cross* (February 8th, 1850, p. 3). It suggested that Governor Grey’s expenditure on these items for a single year was between £100,000 and £150,000. The evidence for this claim came via a reprinting of parts of a letter reported as originating from the London *Daily News* (September 20th, 1849). It is cited as being written by an ex-Legislative Council member. The basis of the *Southern Cross* article is assumed to be a letter which raises the issue of the actions of the Administration of Governor Grey. The *Southern Cross* article is found repeated in the official secondary sources (*British Parliamentary Papers*, 6: 119-129). The record suggests that the letter was written by a Mr. William Brown²⁷. In reply, Governor Grey sent a despatch to Earl Grey of the Colonial Office, decrying the attack on his Administration and denying the uninformed financial estimations (*British Parliamentary Papers*, 6: 119-129).

This was not the only instance of a public attitude that was decidedly opposed to the Administration. A Mr William Fox²⁸, in 1852, despatched a lengthy document to the Colonial

²⁷ Mr. William Brown (1809-1898) was a merchant, who, by 1855, had become the wealthiest man in Auckland. Although an opponent to the Administration, Mr Brown was called upon to become an appointed unofficial member of Governor Fitzroy’s Legislative Council. He resigned in 1844 after encouraging fiscal reforms which benefited his political associates. But he returned to serve in the Council during the tenure of Governor Grey before resigning again in 1847. He was also, firstly with the assistance of John Logan Campbell, and later in his own right, the proprietor of an anti-government newspaper in the *Southern Cross*, a newspaper that was very pro “free trade” and pro Fitzroy during the lead up to the repeal of customs duties and the imposition of the Property Rate in 1844 (Stone, 1990).

²⁸ Mr. William Fox (1812-1893) was an enthusiastic disciple of Edward Gibbon Wakefield. In 1843 he supplemented his income by writing for the *New Zealand Gazette and Wellington Spectator*, eventually becoming its editor. He was opposed to the Administration; he was openly a New Zealand Company man. In 1848 Fox became the principal agent of the New Zealand Company and continued the battle against the establishment, mounting a relentless attack on Governor Grey, who he considered had thwarted the settlers’ hopes for self-government. He denounced Grey’s nominee councils, the Colonial Office, the inefficient and incompetent Administration in New Zealand and the ignorant and untrained magistracy. Fox published *The Six Colonies of New Zealand* (1851) and in the final section of his book he exposed the failings and inadequacies of the Grey administration and the inherent injustice of the Crown colony system of government (Dalziel and Sinclair, 1990).

Office. Among the items listed numerically, by him, in paragraph VIII (*British Parliamentary Papers*, 8: 8), is the military and naval cost associated with New Zealand: £200,000 a year²⁹. He also mentioned a sum in excess of £160,000 for two line regiments, a naval presence, and the construction of barracks. It is difficult to avoid entertaining the hypothesis that politics and asymmetric information may be partly responsible for the content and publication of Thomson's statistical tables in 1859.

3. 19. Dr. Thomson's Level of Fiscal Knowledge (Table 4.3)

On the basis of Dr. Thomson's published works, he was reasonably well informed on fiscal matters and close to the Crown Administration³⁰. His studies are recorded in the parliamentary papers (*British Parliamentary Papers*, 7: 51-55, and 9: 7-11)³¹ and his worth is commented upon therein. In Thomson (1851a, p. 231) he references a primary source from which the early years of Table 1.1 and Table 1.2 are compiled: the *New Zealand Government Gazette* (1849). In the footnote of Subsection 1.3.16, the evidence of Dr. Thomson accessing information from other official documents is provided: *Statistics of New Munster, New Zealand, 1841 to 1848*.

That Thomson had access to some official information is also evidenced by his statistical publications (Thomson, 1851a and 1851b). Yet his revenue and expenditure figures are at odds with the national aggregates shown in Table 1.1 and Table 1.2. To examine why this might be the case, the discussion turns to one of Thomson's statistical publications.

In Thomson (1851a, p. 234), the education expenditure³² matches the total found in *Appendix to the Journal of the House of Representatives* (1888, 1: B-12). In the Appendix (Thomson, 1851a, p. 248) land revenue for the year 1848 matches that of the *Appendix to the Journal of the House of Representatives* (1888, 1: B-12)³³. The reason why Thomson's totals match national totals in these examples is covered below in footnotes 32, 33, and 34. Many other totals in his appendix, however, do not match; this could well be because his figures relate only to the Auckland province (New Ulster); his figures are subtotals only of national aggregates.

In addition, there is an interesting comment recorded in Thomson's work: "The people of Wellington consider Auckland [to be] a town existing and flourishing on the military expenditure" (Thomson, 1851a, p. 232). When we turn to the Appendix we find that all that is recorded for military expenditure is £113. This would leave, according to Thomson's values

²⁹ Fox does not state the specific year, the quote above is as I found it in the record (*GBPP* 8: 8).

³⁰ "The *Story of New Zealand*, the country's first major written history, appears to have been largely completed when Thomson left for England in 1858. The book was based on the already voluminous literature on the colony, archival material, and discussions with many of the actors involved. For Maori material, Thomson called on the assistance of the following: the Colonial Secretary, Andrew Sinclair; the commissioner of Crown Lands, Walter Mantell; and Chief Land Purchase Commissioner, Donald McLean" (Belgrave, 2007).

³¹ There are four entries but our entry (*British Parliamentary Papers*, 7: 51-55) is repeated in *British Parliamentary Papers* (10: 290-297), and in *British Parliamentary Papers* (11: 254-261).

³² While the article records the statistics of New Ulster only, it is assumed that this total would be similar to the Administration's total in that year. On the basis of Thomson's statement, that all was spent on the natives (Maori) who were predominately located in the North Island. I conclude that the two figures are the same.

³³ Again, this can be related to northern economic activity rather than the colony as a whole.

(Thomson, 1859, Table, XI, p. 327) some £155,540 to spend in New Munster³⁴. While Thomson had some information that others do not appear to have had, clearly he did not have access to all public finance information. It also is possible that Dr. Thomson did not have full knowledge of his topic. Despite this, he might still have had a reasonable understanding of local events.

For information relating to local events, contextual advice is sort in the work of Belgrave (1997). Belgrave informs us that when considering the colonial period “to understand the enduring political and cultural events of the early colonial period, we need to explore contexts, decisions and processes which are peculiarly located” in that period (Belgrave, 1997, p.25). Consideration is given in the section that follows to possible other factors of the period which may have contributed to the content of Dr. Thomson’s publication (Thomson, 1859).

3. 20. Military and Constitutional Aspects of Economic New Zealand

From 1853 onwards, the Mother Country’s Treasury placed much pressure on New Zealand to pay something towards defence costs. External defence costs were not the issue; it was an internal enemy which filled the consciousness of settlers’ and inflated the cost of maintaining the colony during the middle decades of the nineteenth century. Protection from Maori, who were “increasingly marginalised politically after 1853” (McLintock, 1958, p. 388), was a major concern of the European settler population. Regardless of whether Maori were integral to the colony’s economic development or not, the settlers’ felt that they consistently faced “the ever present fear of a general uprising in the North Island” (McLintock, 1958, p.391).

New Zealand, however, also had many other pressing fiscal issues to confront. For example, there was the competitive nature of the provincial council system (McIntyre and Gardiner, 1971). The first General Assembly did not sit until 1854 (McLintock, 1958, p. 378) and the issue of responsible government³⁵ was not decided until 1856 (Belich, 1986, p. 77). Quite simply, the early Colonial Governments suffered from the same problem that successive Administrations had: they lacked sufficient revenue. Belich (1986, p. 77), writing in respect of the Maori wars, comments that the Colonial Administration “had little in the way of military or financial resources.... [t]he settlers may have had the motives, but they didn’t have the means”.

³⁴ Spending this large a sum in New Munster is not unreasonable since there was conflict with Maori in that province, 1847-48 (Ryan and Parham, 1986, pp. 33-37). Yet the war in the north only ceased in 1846, and the military presence in Auckland did not stop at that date. The first sum of £113 may represent local Commissariat Chest expenditure; the second figure of £155,540 may be the sum of Imperial defence expenditure and the local Commissariat Chest expenditure.

³⁵ Under the *Constitution Act, 1852*, many functions of government were retained by the Crown (Governor). For example, responsibility for administration and auditing of customs was retained until 1856 (McIntyre and Gardiner, 1971, p. 99) and responsibility for Native Affairs was retained until 1863 (McIntyre and Gardiner, 1971, p. 99). The Constitution Act 1852 was also responsible for the division of colonial revenue among the provinces and the central authority. This issue of financial responsibility was settled on a temporary basis by the Compact of 1856 and finally resolved in 1874. McIntock (1958, p. 374) provides a summary of the financial arrangements that resulted from the enactment of the Constitution Act, 1852.

In the *Appendix to the Journal of the House of Representatives* (1854, 1: A-2), New Zealand's fiscal position in 1853 is clear. There was approximately £120,000³⁶ of outstanding public debt and an unsettled financial arrangement of £180,000 to be paid to the New Zealand Company. This financial burden the New Zealanders initially could not pay. Nor did they feel willing or able to increase or implement new taxes to do so. Recourse would be made in 1856 to a loan of £500,000 from the Imperial Parliament.

Thomson (1859) wrote his book during a period of major economic change in New Zealand. By the time his work was published the issue of New Zealand paying its way, especially in respect of colonial defence, was assuming greater significance (*AJHR*, 1858, 1: A-3, p. 2-11). Both past and future military expenditure in the colonies had become a focus of imperial concern by the end of the 1850s and this, it is perceived is fully reflected in Thompson's work.

In the year Thomson wrote his economic history of New Zealand (1859), there was an interdepartmental committee established in London to report on the expense of military defences in the colonies (Schuyler, 1922, p. 30). By 1861 the pressure to get the colonies to contribute towards their own defence and protection was mounting. In respect of New Zealand, an agreement on this matter had been reached as early as 1855.

Agreement or not, from the questions and answers that can be found in the *Evidence Taken before the Select Committee of the House of Representatives on Colonial Military Expenditure, 22nd April 1861* (Archives New Zealand: AEBE 18507 LE1 33 1861/301) two things are clear. (1) The New Zealand Government, and its predecessor, the Crown Administration did not contribute a thrupence to imperial military expenditure in the colony. In fact, they had tied up the Crown for six years (1855-61) in correspondence and debate over the issue. (2) At the sitting of the Select Committee in 1861, New Zealand had still not delivered on its agreement to contribute financially to the Imperial Government on account of defence expenditure in the colony.

To summarise the contents of Subsection 3.20, it is appropriate to begin by suggesting that at the time Thomson was writing his book there was immense financial pressure applied to New Zealand. Much of that financial pressure related to past expenditure by the Crown on internal defence for the settlers, assuming responsibility for the debts of successive Administrations and also the cost associated with rescuing the New Zealand Company. The New Zealand colonists could not and would not pay, and, that Thomson, in association with the Administration (the senior representative of the Crown; Governor Grey) are both implicated in the publication of the revenue and expenditure figures which do not accurately record previous Administrations' experience, but, are, nonetheless, quite possibly the very real cost of defending the settlers against Maori resistance to colonial rule. Hypothetically, if New Zealanders wanted to be independent and, to pursue policies which were not the interest of Parliament (or, I might add, Maori), then they would inevitably have to pay for those policies themselves, and furthermore, that Thomson, in association with Grey, was making the

³⁶ "The Colonial debt is the sum of liabilities to; the Union Bank, on deposit accounts, New Zealand Company fourths, balances due to provinces, outstanding liabilities for native land purchases, surveys, old debentures. Amounting in other matters to above £100,000" (*British Parliamentary Papers*, 10: 147).

colonists aware of that fact. Therefore on the basis of the Criterion (6) the other political economy factors do appear to have a connection to the publication of Thomson (1859); something intimately connected to the colony’s early struggles with the politics of tax.

This section has completed the core analysis of the paper; the discussion now turns to a consideration of the results from the criteria assessment. The format adopted is pursuant to the description provided in the introduction to Section 1.2. Below is found a simple table of results and a brief discussion of those results follows.

4. RESULTS OF CRITERIA ASSESSMENT

As previously stated, in Subsection 2.2, a criterion test does not indicate whether a table or data value is right or wrong. On the basis of preset principles, we can establish which table of data has met the most number of specified standards. The findings of the criteria assessment are displayed below (Table 1.7).

It can be seen from the presentation of results that the table of data which has met the most number of specified standards is Table 1.1. The data series of Table 1.1 scored twelve out of a possible fifteen. Table 1.2 however was not greatly dissimilar, scoring eleven out of fifteen; Table 1.3 met the least number of standards, scoring five out of the possible fifteen. The full results are presented (as mentioned above) in tabular form below (Table 1.7). To further inform the reader, a commentary on those results is appended in Subsection 4.1.

**Table 1.7:
Criteria Test Results**

Criteria			Table 4.1	Table 4.2	Table 4.3
1) Assumptions					
Time period	Calendar Year		•	•	•
Accounting Methodology	Public Finance		•	•	•
2) Data Set Characteristics	Single Series				•
	A Consistent Series				•
	Primary Source				
	Time Series		•		
Descriptive Analysis	Statistics		•	•	
	Graph		•	•	
3) Accounting Method	Expenditure		•	•	
	Revenue		•	•	
4) Series Validity	References		•	•	
	Authentication		•	•	•
5) Data Validity	Early Years, 1840-45		•	•	
	Latter Years, 1846-52		•	•	
6) Political Economy	Other Factors		•	•	
Score	Out of 15		12	11	5

• indicates the amount of a single point (1)

4. 1. Synopsis of Results

(1) *Assumptions:* For all series, the period of account was assumed to be Jan-Dec, and subsequent analysis found this to be the case. The second assumption that all data sets adhered to a public finance form, was an implicit and necessary benchmark. All data sets are assumed to have met this standard, for the study period, prior to analysis being undertaken³⁷ and summarily gifted a first point. Thus, all these tables meet the two assumptive standards.

(2a) *Data Set Characteristics:* Only Table 1.3 is an unbroken series (if the large expenditure variation from 1844 onwards is not considered). Table 1.1 does have a discontinuity between the period 1840-45 and the period 1846-52 (this relates to the disaggregation of the revenue variable in the earlier period). Nevertheless, for practical purposes it can be considered a single series. Table 1.2 is a compilation of three different sources. Thus, there are questions over consistency of method for all data sets. Table 1.1 is from a secondary source. Table 1.2 is from two primary sources and one secondary source and Table 1.3 is from unknown sources. On two counts, Table 1.3 alone met the required standards. The time period from which Table 1.1 is drawn is forty-eight years; the corresponding period for Table 1.2 is thirteen years and that for Table 1.3 is seventeen years. Table 1.1 alone meets the time series standard because the extended series does provide the opportunity for future time series analysis.

(2b) *Descriptive Analysis:* The statistical results for revenue compared to expenditure in Table 1.3 stood out. Thus, focus could be directed toward this incongruity when other criteria were deployed in the study. Simple comparison of the statistical results between tables did not raise any issues relating to Table 1.1 or Table 1.2 but Table 1.3 did stand apart from its alternatives. Graphical analysis again highlighted that Table 1.3 stood apart from its alternatives and, by comparison, could be said to contain an atypical pattern for both revenue and expenditure. Table 1.1 and Table 1.2 met the standard; Table 1.3 did not.

(3) *Accounting Method:* For Table 1.1 and Table 1.2 the accounting method is decipherable and aggregate values can be verified via primary sources. Table 1.3 fails on both counts. The revenue and expenditure data values do not accord with values found elsewhere; they could not be easily replicated either. The expenditure values for Table 1.3 are found to be inconsistent with Crown Colony Public Accounts. Table 1.1 and Table 1.2 did meet the standard; Table 1.3 did not.

(4) *Series Validity:* Table 1.1 and Table 1.2 were well referenced and clearly authenticated. Table 1.3 was less well referenced but did meet the standard for authentication. All tables met the standard for authentication but only Table 1.1 and Table 1.2 meet the referencing standard.

(5) *Data Validity:* The early years of Table 1.1 and Table 1.2 are from the same primary source; they are identical. The difference between the series in the latter years was considered acceptable because the timely flow of accurate information necessary to construct accounts

³⁷ It is important to note that the extended time series of the *AJHR* series, from which the core of Table 1.1 is obtained, does not meet this qualification for all of its forty-eight years.

was constrained by, and explained by, the fiscally separate nature of provincialism. Thus, Table 1.1 and Table 1.2 met the standard. All the data values of Table 1.3 were seen to require further investigation. Table 1.3 did not meet the standard irrespective of time period.

(6) *Political Economy Considerations*: Table 1.1 and Table 1.2 did not contain an atypical pattern for revenue and expenditure and therefore did not require the consideration of other factors, however, Table 1.3 did. Analysis of method, as an approach, was also found adequate for the analysis of Table 1.1 and Table 1.2 but not for Table 1.3. The anomalous characteristics of Table 1.3 necessitated recourse to “other” political economy factors. Thereafter a plausible explanation for the discrepancy was discussed and the conclusion was that the publication and content of Table 1.3 owed much to the colony’s early politics of tax. Thus, Table 1.1 and Table 1.2 met the standard, Table 1.3 did not.

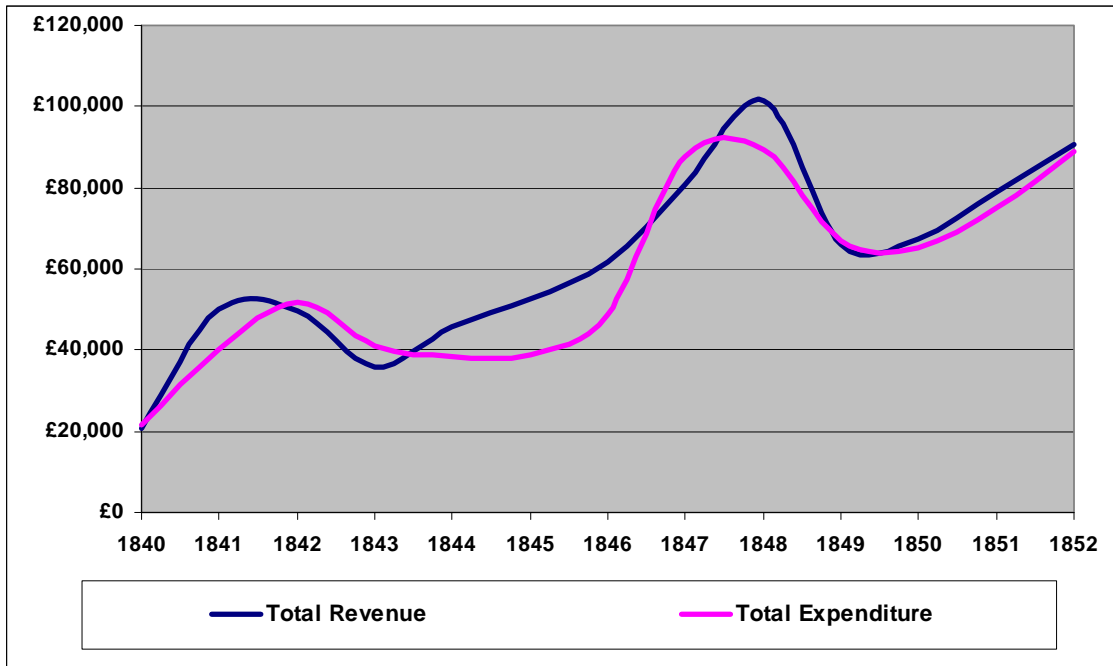
4. 2. Scoring Method for Results

The measurement of the criteria results is given as a score out of fifteen. Having met a standard, the data set in question was awarded a single point. It was given zero if it did not meet the standard. As I mentioned in the section introduction, Table 1.1 received twelve points. Table 1.2 was awarded, in total, eleven points. Table 1.3 was considerably behind receiving only five points. Given these results, testing has shown that Table 1.1 has met more standards than either Table 1.2 or Table 1.3. Therefore, Table 1.1 is selected as the most appropriate choice for any future research which requires quantitative data of the early Crown Colony period.

5. A STATISTICAL SUMMARY FOR THE CROWN COLONY PERIOD

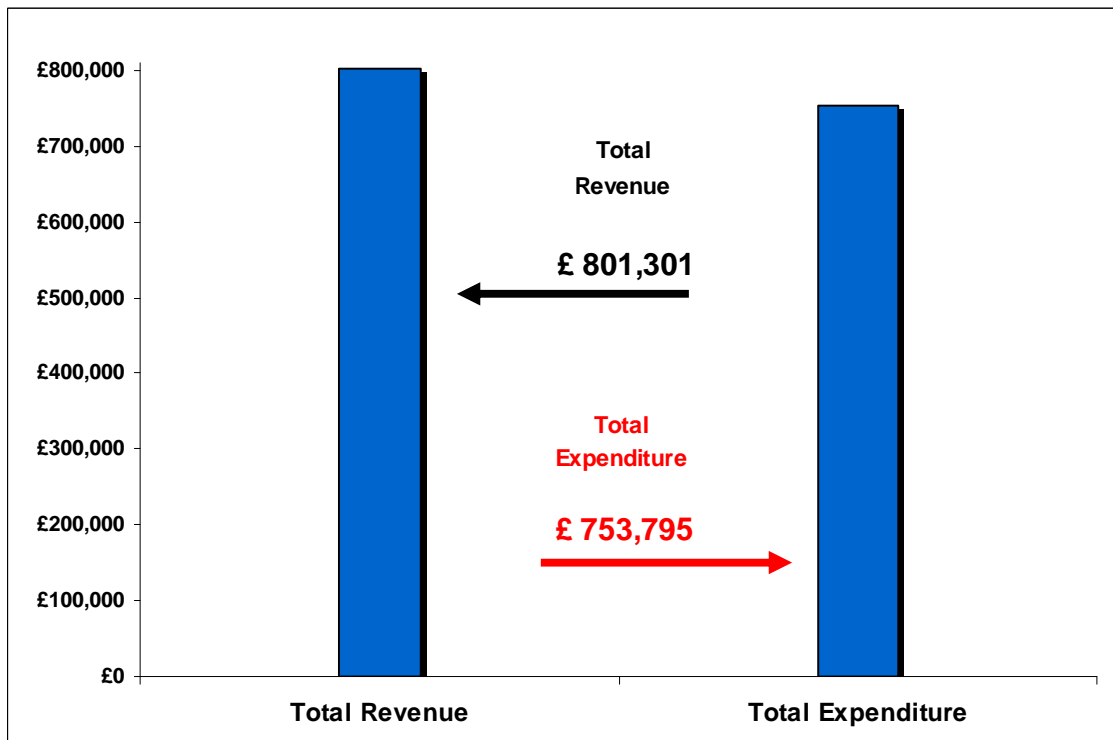
Descriptive analysis has been undertaken for Table 1.1 (displayed as Table 1.4 and Figure 1.1, Subsection 1.3.7). Figure 1.1 is repeated below (Figure 1.4). For aggregate revenue and expenditure (over the thirteen years) correlation is high, at 0.95. Both public heads of account are positively sloped over time. The degree of variability of the two series is high, but marginally more so for expenditure. The average yearly revenue was £61,662 and the average expenditure was £57,984. There was a fiscal surplus in seven out of thirteen years. Taken as an aggregate for the entire period, the administration received £801,301 and accounted for £753,795 by way of expenditure (see Figure 4.5).

Figure 1.4
Crown Colony Revenue and Expenditure: 1840-52



Sources: for the years 1840-45: *New Zealand Government Gazette, 1846*; for the years 1846-47: *New Zealand Government Gazette, 1849*; for the years 1848-52: Simkin and Hardie, (1954); for the years 1840-52: the *Appendix to the Journal of the House of Representatives of New Zealand, 1888*.

Figure 1.5
Crown Colony New Zealand and Aggregate Revenue and Expenditure: 1840-52



Sources: for the years 1840-45: *New Zealand Government Gazette, 1846*; for the years 1846-47: *New Zealand Government Gazette, 1849*; for the years 1848-52: Simkin and Hardie, (1954); for the years 1840-52: the *Appendix to the Journal of the House of Representatives of New Zealand, 1888*.

5. 1. Extensions to Table 1.1

Establishing a foundational series with which to work is only a starting point for analysis. The second step is a detailed (disaggregated) series for the years 1840-52. The third step is the requirement of a consistent and much longer time series. Only one of the tables examined came close to meeting these requirements: Table 1.1. However, the selection of Table 1.1, with respect to the thesis's study period (1843-46), does raise the issue of its limitations subject to the requirements identified above.

Table 1.1 lacks much detail for the years 1840-45, revenue being separated into Ordinary and Lands only. However, this issue provides an opportunity to utilise the complementary nature of an alternative data set: Table 1.2. In essence this may be viewed as a reconciliation of the two top contenders, something commented on earlier in the chapter. The data set of table 1.2 is from an official secondary source, the *New Zealand Gazette* (1846). Further, its subsequent champion, the highly detailed work of Simkin and Hardie (1954) has been used to disaggregate the data for the early years of Table 1.1. Apart from the extended separation among already existing heads, there are two extra variables added to revenue: the Property Rate and Debentures. In all cases, the other data values (if affected) have been altered accordingly. Subject to this, additions to the material found in Table 1.1 were made and thereafter the completed tables are appended below as, Table 1.8 and Table 1.9. This is the logical extension and the preferred option for future research.

5. 2. Descriptive Statistics Table 1.8 and Table 1.9

Table 1.8 and Table 1.9 below, are constructed from the available data shown previously. The graphs which follow the detailed data of Table 1.8 and Table 1.9 are labelled Figure 1.6 through to Figure 1.9. The graphs are merely a preliminary exercise and hereafter, will only comment briefly on what it is that they depict. Let me begin by commenting separately on revenue and expenditure. For revenue, 52.2% was derived domestically, mostly from indirect taxation. 37% came from Parliamentary Grants, Receipts in Aid or from Debentures (6%); the balance came from lesser items. The major item of aggregate expenditure was, the Civil Service, it accounted for 45% of all expenditure. Public Works accounted for another 20% and Miscellaneous received 10% of the funds. The remaining 25% was expended under eleven different heads and in decreasingly, smaller percentages.

A Statistical Summary of the Public Finances for Crown Colony New Zealand: 1840-1852 (Inclusive)^a

Table 1.8 Revenue

Year	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	1850	1851	1852
£													
Customs Revenue	0	3,073	10,370	13,733	11,905	8,770	21,321	36,474	43,383	35,242	40,548	49,207	49,975
Postal, Fees, Fines, Licenses, Other	2,857	9,252	14,777	8,316	^a 3,285	4,296	3,358	5,571	5,463	6,067	6,940	8,382	10,725
Property Rate					973	797	27	5					
Land Revenue	0	29,136	10,611	4,185	1,077	936	1,173	897	3,492	3,600	8,560	12,325	14,241
Debentures					18,384	28,586							
Parliamentary Grant, Receipts in Aid	18,000	8,500	13,971	9,562	10,094	10,159	35,673	37,752	49,250	21,067	11,500	9,200	15,538
^b Total Revenue	20,857	49,961	49,729	35,697	45,697	52,747	61,525	80,694	101,588	65,976	67,548	79,114	90,479

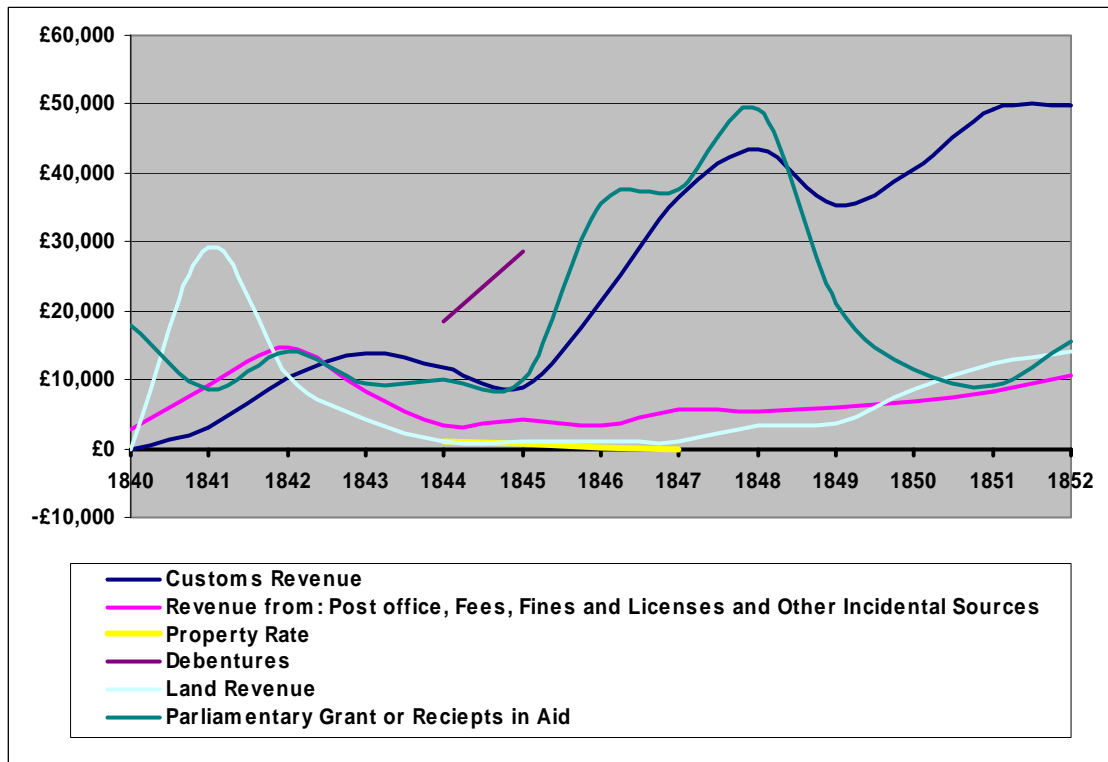
Table 1.9 Expenditure

Year	1840	1841	1842	1843	1844	1845	1846	1847	1848	1849	1850	1851	1852
£													
Civil service	6,551	13,822	22,742	20,896	21,024	17,953	27,773	31,634	36,522	25,045	30,161	35,915	41,862
Native lands	1,152	5,509	8,845	5,594	5,657	2,734	2,008	5,048	4,559	3,134	3,125	2,998	2,231
Native land purchase	1,028	977	1,307	1,972	2,161	2,017	1,569	1,276	1,193	736	1,150	1,590	2,812
Public works	1,152	1,510	1,454	112	1,045	0	470	305	1,402	1,486	1,369	1,060	3,227
Education	4,004	12,123	7,629	2,917	3,467	2,808	2,537	32,381	30,292	18,387	8,794	12,715	15,604
Miscellaneous	68	209	700	200	200	875	1,253	1,100	3,466	3,722	4,400	2,574	3,614
Immigration	7,783	5,547	5,089	7,698	4,204	4,032	127	1,806	7,411	6,762	5,470	6,988	11,057
Military			3,928	173									193
New Zealand Company					866	7,108	10,256	10,828	705	4,308	7,053	5,568	1,248
Interest						1,311	323						
legislative							2,012	2,915	2,982	2,151	2,282	2,691	2,533
Postal							252			433	764	658	
Marine								426		589	357	1,474	1,810
^b Total Expenditure	21,740	40,101	51,697	41,127	38,627	38,841	48,587	87,722	89,500	66,849	64,991	75,276	88,737

^aThe raw data are from *Appendix to the Journal of the House of Representatives of New Zealand* (1888); and the early years have been cross referenced to the; *New Zealand Government Gazettes* (1846 and 49) and Simkin and Hardie (1954).

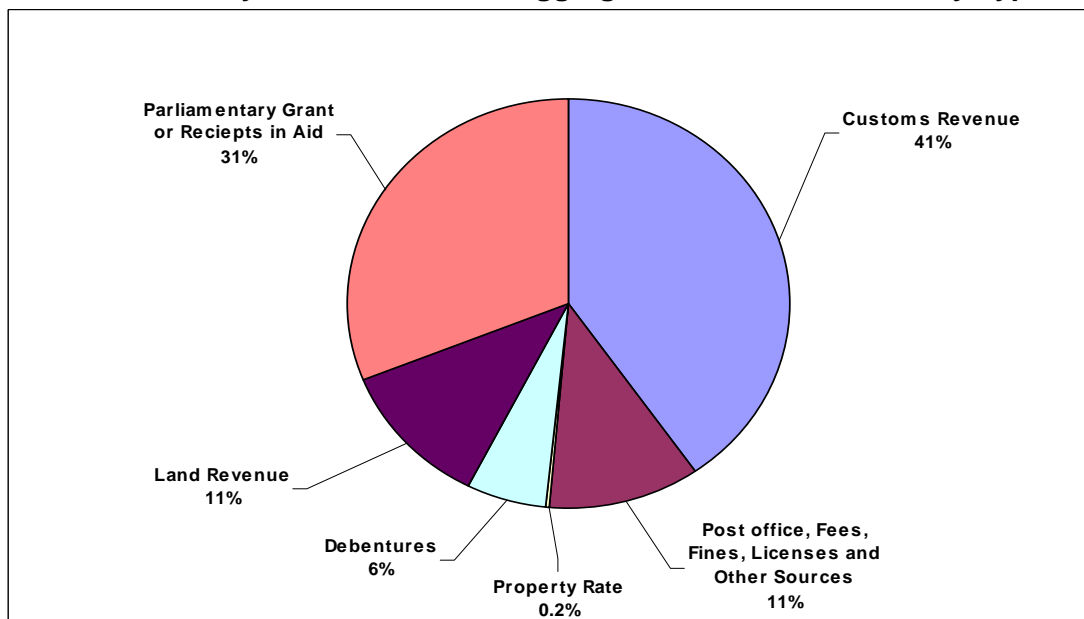
^bDiscrepancies which occur in the totals figures are as a result of counting only pounds and ignoring the shillings and pence.

Figure 1.6
Crown Colony Revenue, 1840-52: By Type



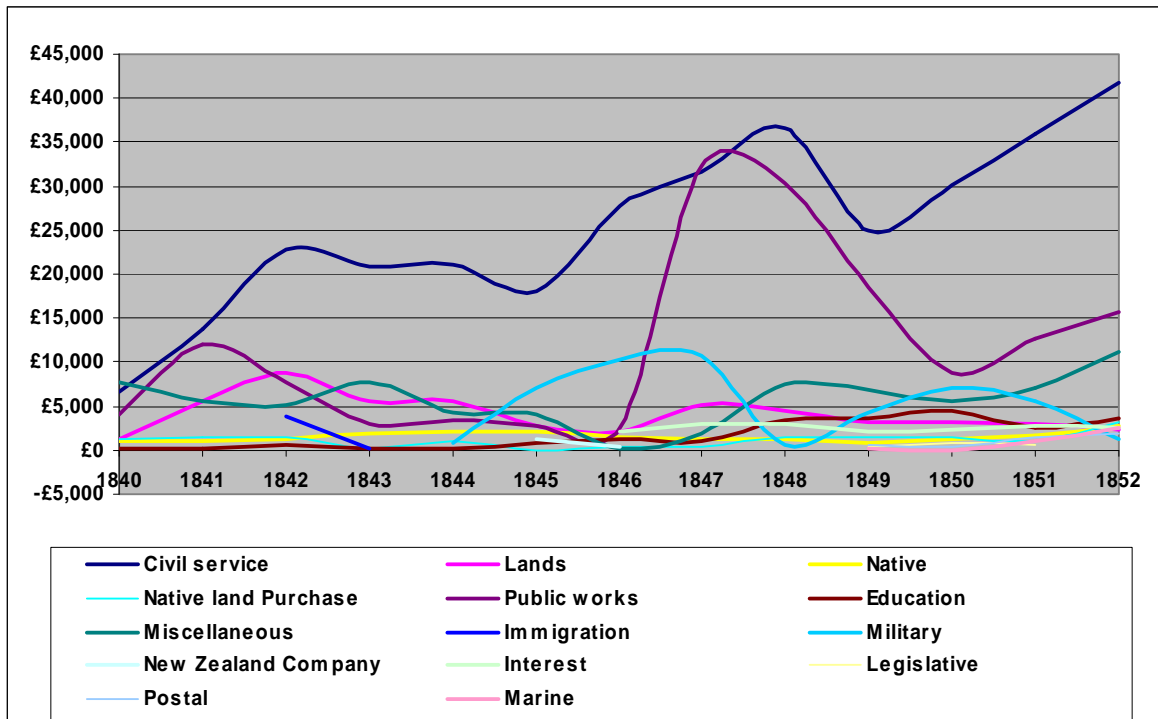
Sources: for the years 1840-45: *New Zealand Government Gazette, 1846*; for the years 1846-47: *New Zealand Government Gazette, 1849*; for the years 1848-52: Simkin and Hardie, (1954); for the years 1840-52: the *Appendix to the Journal of the House of Representatives of New Zealand, 1888*.

Figure 1.7
Crown Colony New Zealand and Aggregate Revenue, 1840-52: By Type



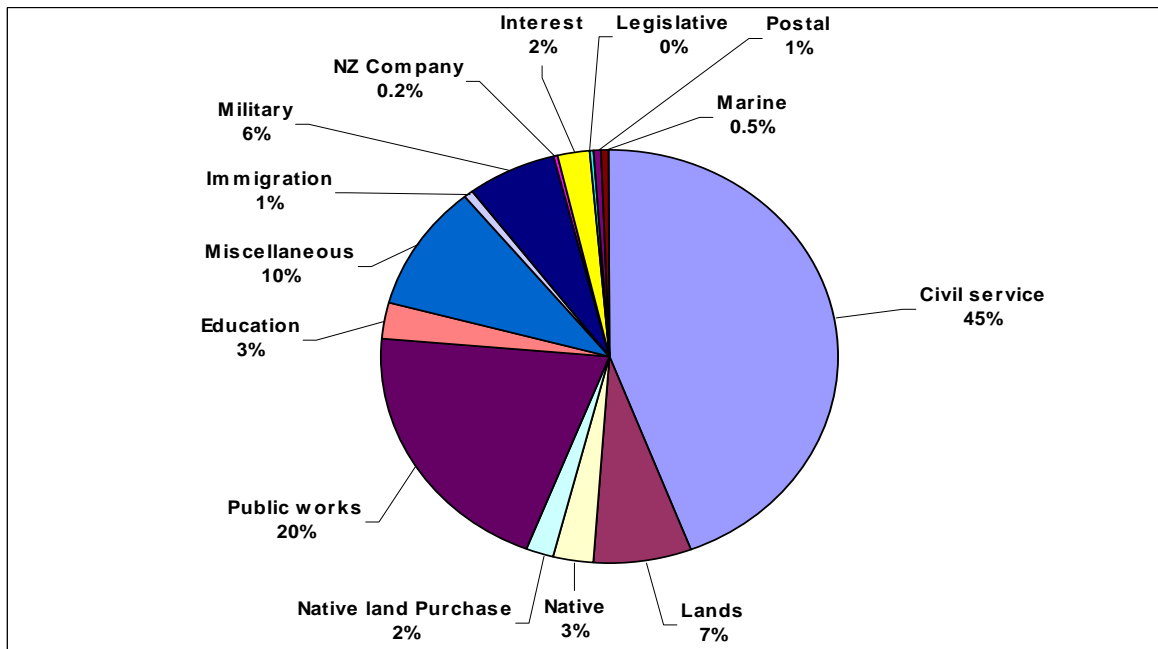
Sources: for the years 1840-45: *New Zealand Government Gazette, 1846*; for the years 1846-47: *New Zealand Government Gazette, 1849*; for the years 1848-52: Simkin and Hardie, (1954); for the years 1840-52: the *Appendix to the Journal of the House of Representatives of New Zealand, 1888*.

Figure 1.8
Crown Colony Expenditure, 1840-52: By Type



Sources: for the years 1840-45: *New Zealand Government Gazette, 1846*; for the years 1846-47: *New Zealand Government Gazette, 1849*; for the years 1848-52: Simkin and Hardie, (1954); for the years 1840-52: the *Appendix to the Journal of the House of Representatives of New Zealand, 1888*.

Figure 1.9
Crown Colony New Zealand and Aggregate Expenditure, 1840-52: By Type



Sources: for the years 1840-45: *New Zealand Government Gazette, 1846*; for the years 1846-47: *New Zealand Government Gazette, 1849*; for the years 1848-52: Simkin and Hardie, (1954); for the years 1840-52: the *Appendix to the Journal of the House of Representatives of New Zealand, 1888*.

6. CONCLUSION

The intention of this study was to critically examine the existence of multiple and conflicting records. That objective has been, via the assistance of the analytical approach adopted from Layton (1951), well and truly met. As a result, a more certain public finance record for early New Zealand has been established. The rigorous analysis of multiple records and the ultimate selection of Table 1.1 for future research purposes plus, the appended detailed extensions to Table 1.1, have more than achieved the singular aim of this paper.

Three identified records were subjected to a simple method of analysis: a criteria test. The strengths and weaknesses of each series were ascertained according to the set benchmarks and standards. This approach highlighted the strength of Table 1.1, the comparative value of Table 1.2 and, did also bring Table 1.3's deficiencies to the fore. This conclusion will comment on Table 1.3 first before proceeding to comment on the preferred choice for future research, Table 1.1.

The main issues of concern with Table 1.3 were extreme values: the consistently low revenue figures and the high numbers recorded for expenditure after 1844. The existence of Table 1.3 was verified by Governor Grey in the late 1850's and therefore, finding myself unable to authenticate or replicate the values contained in table 1.3, analysis looked closely at the political economy of the period for assistance. After detailed consideration the conclusion was that Dr. Thomson's publication, dated 1859, was written during New Zealand's first troubled decade of self government. There is a strong argument for suggesting that Dr. Thomson did, most likely record, what was an important financial matter for government at the time; the existence of a potentially large financial liability to the British government for expenditure on defence during the crown colony period. This finding is an early indication that in matters of fiscal policy, and taxation, it is quite plausible to consider that political economy plays a large role; this is the politics of tax.

From the analysis undertaken, by a narrow margin, Table 1.1 was found to be the best data set for future research purposes. The material from which Table 1.1 is derived contains a great deal of detail and this is presented in Table 1.8 and Table 1.9. Only one of the alternative records investigated, Table 1.2, was found, in any substantial way, to be complementary to the material of Table 1.1. Thus, an implicit assumption, mentioned in the introduction to the paper was that analysis may find some way to reconcile all of the data sets. The implicit assumption is found to hold for Table 1.1 and Table 1.2 but not for Table 1.3.

The alternative hypotheses of the paper were not considered to be mutually exclusive and this is found to be the case. Testing has found three things: One, differences in accounting method does assist in explaining the disparate data sets. Two, provincialism is a simple and acceptable explanation of the above variance between Table 1.1 and Table 1.2 after 1846; this does not hold for Table 1.3 irrespective of time period. Three, political economy factors (such as those hypothesised as being associated with Table 1.3) may well connect to the perception of some sections of colonial New Zealand and the Empire, that New Zealand had a large

financial liability. That New Zealand was obliged to pay this financial liability is a less than complete argument but, a plausible case has been made for the existence of Table 1.3.

The paper has also established grounds for contesting the worth of including some early New Zealand data in historical research. It has raised issues concerning data selection which scholars of early New Zealand history may find helpful. One of those issues considers the validity of statistical information which is easily located in reputable sources: *British Parliamentary Papers* (1835-55)³⁸, *New Zealand Official Year Book* (various years), Bloomfield (1984) and Mitchell (2003). There are alternatives and these were presented in this chapter.

The alternative series, selected for possible further research, Table 1.1, does not conflict with the key official secondary source (the *New Zealand Government Gazettes*, 1840-49). Nor does Table 1.1 conflict with the highly detailed work of Simkin and Hardie (1954), two authors whose sources are well documented, verifiable and all from primary or official secondary sources that originated with the Crown Colony Administration. Future scholars might now have some guidance when choosing a data set to complement their qualitative material. Table 1.1, has a degree of certainty, subject to qualifications, that none of the easily locatable and reputable sources have. It is only with a valid statistical base that the qualitative commentators can build a sound superstructure for their research.

³⁸ The *British Parliamentary Papers* (1835-55), are a special case. While it is not a focus of this chapter and being mindful that these volumes have been used extensively, caution is still required. When using the *British Parliamentary Papers* a reasonable knowledge of the period, including circumstances not recorded in multiple volumes is thought a prerequisite. From the examples utilised in earlier sections of this chapter, it can be seen how the statistical information recorded is taken from material that resembles unsubstantiated media reports and some information should be treated with caution. It records snapshots in time and, often in a disjointed fashion, records parts only of the many wider economic issues.

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