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SN 5435 - Statistics of Australian Public Debt and Capital Raised in London, 1842-1914

Study Documentation

AHDS History Note:

The purpose of this note is to alert the users of this material about two changes made while processing the material for this collection:

- 1) Each of the 18 worksheets found in the original data file 'StatsAustPDv3.xls' have been exported as tab delimited files using MSEXcel 2003. Users should refer to Table 1.1 where AHDS History has added one column with tab delimited file names to match these with the original worksheet names given by the depositor.
- 2) The information on start/End dates for the yearly statistics was originally placed in cell A1 in each worksheet. This information has been moved to the third column in Table 1.1., at the end of the tables' descriptions.

Bernard Attard

University of Leicester

This dataset publishes new statistics of Australian colonial and state debt, and of capital raised by all Australian public borrowers (including corporations) in London, until 1914. Current historical statistics do not distinguish between stocks of debt held locally or abroad. Moreover, the time series of new capital subscribed or received in London prepared by Butlin, Simon, Hall, and others often aggregate all colonial public borrowing, have different terminal dates, and are inconsistent with each other. The new statistics remedy these deficiencies. Three types of table are presented. The first disaggregates, and where necessary corrects, the official annual statistics of stocks of outstanding debt of each Australian colony, distinguishing between the place of original sale, long and short-term securities, and gross new issues (i.e. the nominal value of all securities sold) and repayments. The second shows the stocks of long and short term debt held in Australia and the United Kingdom. These are taken principally from *Statistical Registers*, and include debt (e.g. stock issued by Savings Banks) omitted from official statistics in the early years. The final type of table summarises the principal annual flows in London of capital created (including as a result of conversions and exchanges), subscribed, received, and amortized for each colonial government and for public corporations as a single group. It excludes flows arising from remittance of securities originally sold in the colonies, but includes transfers from London to colonial registers and purchases from sinking funds where known. The data is presented in 18 spreadsheets and are of seven separate borrowers: New South Wales (3 spreadsheets), Victoria (3), Queensland (3), South Australia (3), Tasmania (2), Western Australia (2), and public corporations (1).

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1. Introduction

This dataset publishes new statistics of Australian colonial and state debt, and of capital raised by all Australian public borrowers (including corporations) in London, to 1914. Throughout the period, governments were active participants in domestic capital formation and the most important recipients of overseas investment in Australia (Hall, 1963; Butlin, 1964). Commonwealth (i.e. federal) debt was still negligible, the only overseas liabilities being £3.5 million taken over from South Australia in 1911.

From the 1850s, colonial treasuries, auditors and statisticians published statements of loan receipts and statistics of public debt, although not always from the commencement of public borrowing. The most widely available time series of stocks of outstanding debt based on these sources were published in the *Historical Statistics* volume (Vamplew, 1987) of the *Australians Historical Library* bicentennial series. In addition, Butlin (1962), Hall (1963), Davis and Huttenbach (1985), and Stone (1999) have published annual estimates of capital raised by Australian public borrowers in London (the Butlin and Hall series have also been printed in *Historical Statistics*). Apart from Butlin, who used official publications, the main sources for these are the monthly statistics of British capital created and subscribed printed in the *Investor's Monthly Manual* from 1865. Both types of statistics – whether of stocks or estimates of capital subscribed – are subject to several limitations. The annual series of outstanding public debt of each colony in *Historical Statistics* do not distinguish between debt held overseas or locally, in part because until the 1890s most colonial treasuries themselves did not provide this information. Elsewhere in *Historical Statistics* the distinction is made, but only aggregate data (i.e. Commonwealth plus state debt) are provided from 1901 (table GF 394-401). Excepting Hall, and table 71 in Butlin (1964) (which presents statistics for New South Wales, Victoria, Queensland and South Australia), the estimates of British capital subscribed also aggregate colonial government borrowing; in the case of Butlin (1962), adding corporation loans. Moreover, although the periods covered by the alternative series overlap, they do not necessarily coincide; and, while the broad fluctuations and aggregate movements they reveal are similar, there are significant differences in the absolute totals recorded during the overlapping periods. Finally, no attempt has been made to relate annual raisings or amortizations to changes in stocks of outstanding debt.

The statistics published here remedy these deficiencies. Three types of table are presented (a full listing is given in table 1.1). The first ('DisaggNom') disaggregate, and where necessary correct, the official annual statistics of stocks of outstanding debt of all Australian colonies except Tasmania, distinguishing between the place of original sale, long and short-term securities, and nominal gross issues and repayments (Tasmania is excluded because, from as early as 1867, its Treasury published information of where the colony's debt was held). These statistics are given from the commencement of long-term public borrowing (i.e. short-term bank credits are excluded) to the year immediately before official sources first provide disaggregated statistics showing where debt was held. The second type of table ('DisaggStock') has been prepared for each government. It shows the stocks of long and short-term debt held in Australia and the United Kingdom. These are taken principally from colonial *Statistical Registers* and include debt (e.g. stock issued by Savings Banks) omitted from official statistics in early years. Only in Victoria's case have these statistics been adjusted to distinguish between long- and short-term debt;

otherwise, no changes have been made, even where there is an obvious lag in the inclusion of new debt or other minor inaccuracies have occurred. The final type of table ('CapitalRaisedLond') is presented for each of the six government borrowers, and for public corporations as a single group. This summarises the principal annual flows of capital created (including as a result of conversions and exchanges), subscribed, received, and amortized. It excludes flows arising from remittance of securities originally sold in the colonies, but includes transfers from London to colonial registers and purchases from sinking funds where they are known. The statistics in the 'DisaggNom' and 'DisaggStock' tables are presented for calendar or financial years,

Table 1:1. Statistical tables

File_name	Original_worksheet_name	Description_content
nsw_dis_nom_1842_1895.tab	NSW_DisaggNominal_1842_1895	New South Wales, Government of New South Wales, Disaggregated Nominal Public Debt: Stocks and Flows, 1842-1895 – Start/End date: 31 December to 1894; 30 June 1895
nsw_dis_sto_1896_1914.tab	NSW_DisaggStock_1896_1914	New South Wales, Government of New South Wales, Disaggregated Stocks of Outstanding Public Debt, 1896-1914 – Start/End date: 30 June
nsw_cap_rai_lon_1856_1914.tab	NSW_CapitalRaisedLond_1856_1914	New South Wales, Government of New South Wales, Annual Capital Raised in London, 1856-1914 – Start/End date: Year to 31 Dec.
vic_dis_nom_1854_1885.tab	Vic_DisaggNominal_1854_1885	Victoria, Government of Victoria, Disaggregated Nominal Public Debt: Stocks and Flows, 1854-1885 – Start/End date: 31 December to 1873; 30 June afterwards
vic_dis_sto_1886_1914.tab	Vic_DisaggStock_1886_1914	Victoria, Government of Victoria, Disaggregated Stocks of Outstanding Public Debt, 1886-1914 – Start/End date: 30 June
vic_cap_rai_lon_1859_1914.tab	Vic_CapitalRaisedLond_1859_1914	Victoria, Government of Victoria, Annual Capital Raised in London, 1859-1914 – Start/End date: Year to 31 Dec.
qld_dis_nom_1861_1895.tab	Qld_DisaggNominal_1861_1895	Queensland, Government of Queensland, Disaggregated Nominal Public Debt: Stocks and Flows, 1861-1895 – Start/End date: 31 December
qld_dis_nom_1896_1914.tab	Qld_DisaggStock_1896_1914	Queensland, Government of Queensland, Disaggregated Stocks of Outstanding Public Debt, 1896-1914 – Start/End date: 31 December. The following comment regarding Start/End date was added in the original file: '30 June to 1905; 1904 interpolated.'
qld_cap_rai_lon_1864_1914	Qld_CapitalRaisedLond_1864_1914	Queensland, Government of Queensland,

_1914.tab		Annual Capital Raised in London, 1864-1914 – Start/End date: Year to 31 Dec
sa_nom_dis_1854_1895.tab	SA_DisaggNominal_1854_1895	South Australia, Government of South Australia, Disaggregated Nominal Public Debt: Stocks and Flows, 1854-1895 – Start/End date: 31 December
sa_dis_tot_1896_1914.tab	SA_DisaggStock_1896_1914	South Australia, Government of South Australia, Disaggregated Stocks of Outstanding Public Debt, 1896-1914 – Start/End date: 30 June 1896-1906; 1 July 1907-14
sa_cap_rai_lon_1854_1914.tab	SA_CapitalRaisedLond_1854_1914	South Australia, Government of South Australia, Annual Capital Raised in London, 1854-1914 – Start/End date: Year to 31 Dec.
tas_dis_sto_1855_1914.tab	Tas_DisaggStock_1855_1914	Tasmania, Government of Tasmania, Disaggregated Stocks of Outstanding Public Debt, 1855-1914 – Start/End date: 31 December, 1866 to 1874; 30 June from 1882. Other years, see notes
tas_cap_rai_lon_1867_1914.tab	Tas_CapitalRaisedLond_1867_1914	Tasmania, Government of Tasmania, Annual Capital Raised in London, 1867-1914 – Start/End date: Year to 31 Dec.
wa_dis_nom_1872_1899.tab	WA_DisaggNominal_1872_1899	Western Australia, Government of Western Australia, Disaggregated Nominal Public Debt: Stocks and Flows, 1872-1899 – Start/End date: 31 Dec. to 1892; 30 June afterwards
wa_dis_sto_1900_1914.tab	WA_DisaggStock_1900_1914	Western Australia, Government of Western Australia, Disaggregated Stocks of Outstanding Public Debt, 1900-1914 – Start/End date: 30 June
wa_cap_rai_lon_1879_1914.tab	WA_CapitalRaisedLond_1879_1914	Western Australia, Government of Western Australia, Annual Capital Raised in London, 1879-1914 – Start/End date: Year to 31 Dec.
au_co_cap_rai_lon_1864_1914.tab	AustCorp_CapitalRaisedLond_1864_1914	Australia, Municipal and Public Corporations, Annual Capital Raised in London, 1864-1914 – Start/End date: Year to 31 December

depending on the original source. The estimates in the ‘CapitalRaisedLond’ tables are for calendar years, except when indicated.

The following section describes the general approach to the preparation of the ‘DisaggNom’, ‘DisaggStock’ and ‘CapitalRaisedLond’ tables. Tables 2.1, 2.2 and 2.3 explain the data in the generic rows in each type of table. Finally, separate sections discuss sources and specific methodological issues relating to each borrower. In the cases of New South Wales, Victoria, Queensland and South Australia, a commentary is also provided on the sources and reliability of Butlin’s statistics (1964: 338, table 71) of their net proceeds of overseas loan raisings, 1860-1900. The method used to compile these has been assumed to be the same as for the ‘Government borrowing’ series (table 251) in *Australian Domestic Product, Investment and Foreign Borrowing, 1861-1938/39* (1962).

Butlin explains there: ‘As far as possible, we have relied on the records of Auditors-General and Public Accounts, adjusting for costs of issue, discounts and premiums. Our series normally represent, therefore, raisings dated according to receipt of funds, not by time of original flotation’ (432-33).

2. Methodology and definitions of generic fields

All sums are expressed in current values. Until Australia’s departure from the gold standard in 1930, the unit of account, and its value, in Australia and the United Kingdom were the same.

2-1. Disaggregated Nominal Public Debt: Stocks and Flows

Official statements of public debt, which generally list all outstanding loans by each authorising Act of parliament, have been separated into the components sold locally and in London by using the official and unpublished sources discussed below, as well prospectuses and *The Times*’s money market reports, to identify all long- and short-term securities marketed in London. Official printed sources were also used to identify debt created as a result of the exchange of new securities for old. The data for long-term loans sold by public advertisement have been deposited at the UK Data Archive (Attard, 2005) and include further information about sources. Other statistics in public accounts and colonial *Statistical Registers* have been used as a cross-check on debt sold in the colonies. Stocks of public debt at dates before the first publication of official statistics have been calculated using information in public accounts, and separated into the components sold locally and in London in the same way. The tables also give annual data of securities sold and amortized.

Two points need to be noted. While it is safe to assume that most debt sold in London was also held in the United Kingdom, the remittance there of securities originally sold in the colonies, which was particularly significant during early years, means that the stock estimates of colonial debt by place of sale will not necessarily be identical to the stocks of colonial debt actually *held* locally and overseas. The former will have to be adjusted depending on the assumptions one wishes to make about the scale of remittance between the colonies and London. Similarly, debt amortizations are allocated according to where a loan was originally sold, not where it was ultimately redeemed.

The relatively simple exercise of disaggregating the official statistics has also highlighted their inaccuracies: annual totals of outstanding debt are affected by leads and lags (e.g. up to the mid-1860s, all NSW debt remitted for sale in London is included in the total even if not actually sold; subsequently, debt already sold is excluded if full sale details had not yet reached the colony); some debt is initially excluded that later appears (e.g. SA inscribed stock and Treasury Bills sold to cover revenue deficiencies during the late 1890s; inscribed stock of the Queensland government Savings Bank); information about Treasury Bills (e.g. NSW) can be confused. Time series of public debt compiled retrospectively (e.g. Western Australia) may also be inaccurate in their earliest years. The approach here has been to adjust the statistics to remedy these deficiencies, but also to include the official published totals (bearing in mind that these might vary from to source) separately.

Table 2:1. Disaggregated Nominal Public Debt: Generic Fields

Field	Comment
Debentures and Inscribed Stock sold locally	Nominal value of securities sold by the colonial government in the Australian colonies that year.
Maturities of Debentures and Inscribed Stock sold locally	Nominal value of maturities that year of securities originally sold in the Australian colonies.
Net change Debentures and Inscribed Stock sold locally	Nominal value of securities sold by the colonial government in the Australian colonies that year minus maturities that year of securities originally sold in the Australian colonies.

Table 2:1. Disaggregated Nominal Public Debt: Generic Fields (contd)

Field	Comment
Total Debentures and Inscribed Stock sold locally outstanding	Nominal value of total accumulated stock of outstanding securities sold by the colonial government in the Australian colonies.
Debentures and Inscribed Stock sold in London	Nominal value of securities sold by the colonial government in London that year.
Maturities of Debentures and Inscribed Stock sold in London	Nominal value of maturities that year of securities originally sold in London.
Net change Debentures and Inscribed Stock sold in London	Nominal value of securities sold by the colonial government in London that year minus maturities that year of securities originally sold in London.
Total Debentures and Inscribed Stock sold in London outstanding	Nominal value of total accumulated stock of outstanding securities sold by the colonial government in London.
Total Debentures and Inscribed Stock Outstanding	Nominal value of total accumulated stock of outstanding securities sold by the colonial government.
Treasury Bills sold locally	Nominal value of Treasury Bills sold by the colonial government in the Australian colonies that year.
Maturities of Treasury Bills sold locally	Nominal value of maturities that year of Treasury Bills originally sold in the Australian colonies.
Net change Treasury Bills sold locally	Nominal value of sales of Treasury Bills by the colonial government in the Australian colonies that year minus maturities that year of Treasury Bills originally sold in the Australian colonies.

Total Treasury Bills sold locally outstanding	Nominal value of total accumulated stock of outstanding Treasury Bills sold by the colonial government in the Australian colonies.
Treasury Bills sold London	Nominal value of Treasury Bills sold by the colonial government in London that year.
Maturities of Treasury Bills sold London	Nominal value of maturities that year of Treasury Bills originally sold in London.
Net change Treasury Bills sold London	Nominal value of Treasury Bills sold by the colonial government in London that year minus maturities that year of Treasury Bills originally sold in London.
Total Treasury Bills sold London outstanding	Nominal value of total accumulated stock of outstanding Treasury Bills sold by the colonial government in London.

Table 2:1. Disaggregated Nominal Public Debt: Generic Fields (contd)

Field	Comment
Total Treasury Bills outstanding	Nominal value of total accumulated stock of outstanding Treasury Bills sold by the colonial government.
Total Public Debt	Nominal value of accumulated stock of all outstanding securities sold by the colonial government.
Official	Published official total of nominal value of outstanding public debt.

2-2. Disaggregated Stocks of Outstanding Public Debt

Data has been collected from the sources described below. Series omitted in early years (or referred to in notes) – e.g. Western Australian ‘contingent liabilities’; Queensland savings bank debentures – have been included separately. Adjustments to Victorian and Tasmanian statistics are discussed below.

Table 2:2. Disaggregated Stocks of Outstanding Public Debt: Generic Fields

Field	Comment
Total Debentures and Inscribed Stock held locally outstanding	Total nominal value of securities held in the Australian colonies.
Total Debentures and Inscribed Stock held London outstanding	Total nominal value of securities held in the United Kingdom.
Total Debentures and Inscribed Stock outstanding	Total nominal value of securities.
Total Treasury Bills held locally outstanding	Total nominal value of securities held in the Australian colonies.
Total Treasury Bills held London outstanding	Total nominal value of securities held in the United Kingdom.
Total Treasury Bills outstanding	Total nominal value.

Total Public Debt

Total nominal value of all outstanding securities.

Official

Published official total of public debt.

2-3. Annual Capital Raised in London

The sources for London sales briefly summarised in 2-1 above and explained in greater detail below have been used to create annual estimates of the following: gross nominal value of securities sold in London (or subscribed to as part of an exchange operation), including issues to repay holders of maturing debt; gross British capital subscribed (including 'old' securities subject to exchange valued at par); gross British capital received (gross capital received less issue expenses), and the nominal value all maturities of debt issued in London. Separate series of each type have been prepared, where appropriate, of flows arising from sales and amortizations of long-term debt (debentures and inscribed stock treated as a single category) and of Treasury Bills. 'Conversion' loans to finance maturities have not been identified separately because of the leads and lags sometimes associated with the actual flotation of these loans, and because the proceeds of apparently 'new' issues were sometimes used to pay off maturing debt. The respective 'new' and 'funding' components of mixed issues are also sometimes not clearly specified. Attard (2005) includes this information where known.

Capital subscribed and received have been recorded in the year in which payments were actually received on the basis of information about instalment dates in loan prospectuses. The only deduction that has been made when calculating 'capital subscribed' is the total 'discount' or bonus (not to be confused with the 'discount' when a loan is sold below par value) allowed to investors from the late 1870s for early payment of instalments. As far as possible, when calculating capital received, only expenses incurred in London have been included (i.e. commission, brokerage, underwriting fees, stamp duties and composition fees, advertising and sundries). When instalments of the same loan are received during different calendar years, the discount has been deducted from receipts during the first year, and expenses from receipts during the second year. Increasingly, loan statements also included an item for 'accrued interest' (i.e. interest payable at the first coupon date, which generally started to accrue before the actual receipt of subscriptions), which colonial treasuries and auditors deducted in their final estimate of net receipts, largely for the purpose of calculating different types of yield. No deduction has been made here, although the information is included in Attard (2005), so that the series record the sums actually paid into colonial accounts in London and available for all the services of a colony, whether interest payments, expenditure on account of public works, or the repayment outstanding short-term credits.

Finally, as already noted, transfers from London to colonial registers and purchases from sinking funds are included when these are known. Unlike the other series, however, this information is only available for financial, rather than calendar, years.

Table 2:3. Annual Capital Raised in London: Generic Fields

Field	Comment
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Nominal Gross Debentures and Inscribed Stock	Nominal value of all long-term securities sold in London that year. New securities issued in exchange for old are included at par value.
Gross Capital Subscribed Debentures and Inscribed Stock	Amounts actually paid for long-term securities sold in London that year, excluding discounts but including accrued interest. New securities received in exchange for old are valued at par.
Gross Capital Received Debentures and Inscribed Stock	Gross Capital Subscribed less expenses.
Maturities Debentures and Inscribed Stock	Nominal value of maturities that year of securities originally sold in London. Securities of maturing securities received in exchange valued at par.
Drawings Debentures	Nominal value of maturities that year of securities originally sold in London subject to repayment by annual drawing
Nominal Gross Treasury Bills	Nominal value of Treasury Bills sold that year.
Gross Capital Subscribed Treasury Bills	Amounts actually paid for Treasury Bills that year, including accrued interest.
Gross Capital Received Treasury Bills	Gross Capital Subscribed less expenses.
Maturities Treasury Bills	Nominal value of maturities that year.

3. Borrowers, sources and special comments

3-1. New South Wales

Particulars of public debt before 1856 are taken from the annual 'Abstracts of Receipts and Appropriations/Disbursements' ('Public Accounts' from 1857). Thereafter, an annual statement of public debt (at 31 December up to 1892; 1 January, 1894-95; 30 June afterwards) is included in the same source. Adjustments were made to the 1894-95 totals to bring them forward to 31 December of the previous years.

Statements of the results of London sales of debentures and inscribed stock are also printed in Public Accounts from their commencement in 1856. These have been used for details of the proceeds of private sales by the Bank of New South Wales during 1856, and for details of the proceeds of all public sales from 1866. The statements of sales by the Oriental Bank Corporation between 1858 and 1867 refer to twelve-month periods ending in October each year. An annual series of sales during each calendar year in the same period has been derived from the Auditor's 'Vouchers to Receipts' in NSW State Archives. This has been reconciled with the printed statements just referred to and used in preference to them. Details of Treasury Bills have been taken from the Public

Accounts, the NSW *Statistical Register*, and 'Finance Memoranda' in NSW State Archives (sales 1892 to 1904). Estimates of London sales of Treasury Bills during 1865-66 are based on Holder (1970, 322, 324) and Public Accounts.

The *Statistical Register* provides statistics of outstanding public debt by place of original sale and current place of registration (i.e. where repayable) from 31 December 1892 and 1 January 1895 (30 June in subsequent years) respectively. Until 1900, however, the former are unreliable. Debt originally sold locally is listed as sold in London and, in some instances, the place of sale changes from one year to the next. Because of this, the data has not been used and the official statements of public debt have been disaggregated until 31 December 1895.

Where identified, the sources of the NSW statistics in Butlin (1964, 338, table 71) are the statements of London sales included in Public Accounts. These refer to loans placed privately or floated during the financial year, but with one exception do not purport to provide information about when receipts were actually paid into the colony's London account. No source has been found for the proceeds recorded in 1874 and 1880, which are both erroneous. Until 1872, gross receipts have been used instead of net. An allowance appears to have been made for the conversion element of a loan in 1891, but this is too low. The receipts recorded during 1895 were entirely for maturities and the funding of Treasury Bills. Receipts 1892 and 1899/1900 were for Treasury Bills rather than long-term debt. Finally, because of the presentation of the loan statements in Public Accounts, in only one instance has allowance been made for loan instalments received during different calendar years. With the exception of receipts during 1891 and 1897/98, no adjustments have been made for maturities.

3-2. Victoria

Details of receipts and expenses of London sales of debentures, inscribed stock and Treasury Bills from 1879 are taken from the Treasurer's annual Finance Statements. Results 1866-76, are from the Treasurer's Statement for the year 1876/77, adjusted using the sources indicated in Attard (2005). Results 1859-62 are from the accounts of the Associated Banks and supplementary material listed in the sources fields of the relevant records in Attard (2005). Statistics of the stock of outstanding debt are from *Statistics of the Colony/Statistical Register*. From 1861, the statistician identified where debt was sold. From 1877, a table ('Interest on Public Debt') was added showing where interest was payable for each loan issue and, from 1886, a further table ('Loans ... redeemable as under') provided aggregate totals of debt payable in Melbourne and London. Finally, during the 1890s statistics were included of 'floating' debt, comprising local Treasury Bills and advances from trust funds.

Disaggregated annual statistics of new and outstanding nominal debt by place of sale have been prepared to 1885. Subsequently, the statistics of debt by place held have been taken from the *Statistical Register*. The following should be noted:

- The two 'Gabrielli loans' of 1854 – which were strictly municipal debt but secured on, and repaid from, government revenue – have been included in the colonial government's local sales (the *Statistical Register* also lists these under its 'loans redeemed').
- The debentures of the Melbourne and Hobson's Bay Railway Co. (MHBR Co.), which were taken over in 1885, have been included as a separate item in both the

DisaggNom and DisaggStock tables.

- £457,000 debentures payable in London, but invested in local trust funds, created in 1878/79 have been included in Melbourne debt: the *Statistical Register*'s total of London debt from 1886 has therefore been reduced accordingly.
- Of £1,000,000 Treasury Bills sold in Melbourne to the New Zealand Loan & Mercantile Agency Co. in 1892, £720,363 was received in London and the entire amount was redeemable there. The entire nominal debt is shown as created in London during 1892, but only £720,363 is recorded as capital subscribed/received.
- A deduction of £750,000 Treasury Bills has been made from the 1893 total of Melbourne funded debt because these were subsequently included in the that year's statistics of floating debt .
- The *Statistical Register*'s figure of funded debt payable in London has been disaggregated to distinguish between long-term debt (inscribed stock and debentures) and Treasury Bills. 'Other loans' refer to advances from other States.

Allowing for what is probably a transcription error, the source of the statistics of net proceeds of Victorian government loans from 1874 in Butlin (1964, 338, table 71) is the annual Finance Statement. As in the NSW case, these do not purport to provide information about when loan receipts were actually paid into the colony's London account. The sources of the statistics in earlier years are not clear, although those of proceeds 1866-70 may be from data in the Treasurer's Statement for 1877-78 (see above). In each instance, however, Butlin's statistics are broadly correct. No loan proceeds raised for the redemption of maturing securities (which occurred during 1883, 1884, 1885, 1891, 1893, 1899/1900) have been excluded; nor has allowance been made for instalments received during different calendar years.

3-3. Queensland

All details of receipts and expenses are from 'Account sales of debentures, inscribed stock and treasury bills' in Queensland State Archives, cross-referenced with the Auditor-General's annual reports, which provide similar information from 1870. Both sources also identify the place of sale. From 1864, the *Statistical Register of Queensland* prints statistics of the stock of outstanding public debt at 31 December. From 1869, it provides a more detailed tabular 'Return of the Public Debt'. Both, however, are misleading. Until 1885, the column headed 'When Incurred' refers to year in which a loan authority was enacted rather than the one in which the securities authorised by the act were actually sold. Until 1882, the small amount of capital repaid must also be netted off from the total 'Capital Debt on 31 December'. With the exception of the Treasury Bills issued during 1866-72, unfunded and other public debt (e.g. inscribed stock of the Government Savings Bank) is excluded until 1905. Before 1905, data about these have been taken from 'Account sales' (dates of sale of Treasury Bills) and the Auditor-General's reports (Treasury Bills and other public debt; Government Savings Bank Inscribed Stock, at 30 June until 1903). Government Savings Bank Inscribed Stock in 1904 has been interpolated by taking the average of the amounts outstanding in 1903 and 1905. Minor discrepancies between the 'Return' and other sources have been disregarded.

From 1896, the *Statistical Register* includes an additional table distinguishing between debt held locally and in London at 31 December. Differences between these totals and the disaggregated estimates of stocks of outstanding debt by place of sale are accounted for almost exclusively by remittance of debentures originally sold in the colonies. Changes in London debt between 1896 and 1914 are consistent with the data of new issues and repayments in Attard (2005), with the exception of a £2 million loan floated during November 1912 that has not been included in that year's Return. Other disparities can only be accounted for by remittance of debentures from London to Queensland. Debentures and Treasury Bills not presented for repayment have been added to the respective amounts held locally.

The main source of Butlin's Queensland statistics (1964, 338, table 71) is the *Statistical Register* but he has been led astray by its presentation of the data (see above). The source of two departures in 1874 and 1876 seem to be the Auditor's reports; but clearly, given the many errors, the latter were only used sparingly. The total for 1898/1899 probably comes from the Auditor's report for that year, which actually refers to sales that occurred during 1897 and 1898. Butlin assumes, incorrectly, that all Queensland debt was sold in London. No adjustment is made for maturities during 1884-85, 1891 and 1896. Because of these errors, the only reliable Queensland statistics in his series are for 1877 and 1886-90.

3-4. South Australia

3-4a. Loan proceeds

Sessional paper no. 79 of 1860 reports quarterly bond sales by place and loan authority from their commencement in 1855 to January 1860. Receipts are probably net of accrued interest and expenses. These have been allocated pro rata with no further deduction of expenses. Paper no. 173 of 1870-71 provides the date, amount and price of all London sales between October 1858 and January 1870. Unfortunately, the acts authorising each parcel of securities placed are not identified. These can nevertheless be established with reasonable certainty using the sources discussed below. Where no. 173 of 1870-71 overlaps with the period covered by no. 79 of 1860, it is inconsistent. The Agent-General, Francis Dutton, described it as 'a return ... of the sale of all the South Australian Government Bonds, since the date of the *first* sale on 2nd October 1858' (my emphasis), suggesting that his office's records were already incomplete. The paper has, therefore, only been used as the source of information about London sales from the second quarter of 1860. From 1875, the Auditor-General started to provide details. Between 1870 and 1874, loan prospectuses have generally been used. All sources, and the methods used to estimate receipts when specific information is lacking, are explained in Attard (2005).

3-4b. Stocks

Annual statistics of the stock of outstanding public debt have been taken from sessional paper no. 79 of 1860 (1854-58, at 31 December); the *Statistical Register* (1859-1895, 31 December; 1907-1914, 1 July), and the annual reports of the Audit Commissioner (1896-1906, 1 July). Until 1907, the *Statistical Register* excluded inscribed stock and Treasury Bills sold in aid-of-revenue. Between 1890 and 1907, and from 1911, it also omitted current debt originally raised for public works on account of

expenditure in the Northern Territory. At the beginning of 1911, the Commonwealth assumed liability for this, as well as for debt contracted for the construction of the Port Augusta-Oodnadatta Railway, although the Auditor continued to include both in the State's total. Statistics of outstanding securities taken over by the Federal Government come from the Commonwealth *Year Book* and are included as a separate item in the years 1912-14.

3-4c. Place of sale

Sessional paper no. 122 of 1872 (supplemented by no. 113 of 1875) provides repayment details of all bonds outstanding on 15 June 1872 by date, place and loan authority. This has been used as the basis for disaggregating the annual stock of outstanding debt from that date. Before then, the small size of the colony's debt, high annual rates of amortization, and uncertainty about the level remittance between the colonies and London, make it impossible to provide a plausible estimate of the net amount of British capital invested annually in South Australian securities, or of annual changes in the nominal value of South Australian debt held in the United Kingdom.

From 1896, the Audit Commissioner reported the amounts of inscribed stock registered in London and Adelaide (except 1902). He also reported the total nominal value of bonds (i.e. debentures) outstanding, on 1 July. Paper no. 122 of 1872 (above) has been used to divide the latter into the amounts held locally and overseas. The place of registration of inscribed stock outstanding in June 1902 has also been identified. Finally, from 1907, the *Statistical Register* indicated where all South Australian debt was payable. By the beginning of the twentieth century, the Treasurer's annual financial statement also included an appendix with information about the place of sale of all securities from June 1873. This has been used as a cross-check on other sources and for information about the results of conversions in which holders were invited to exchange old securities for new.

3-4d. Treasury Bills

Information is taken from the appendix to the Treasurer's financial statement, Auditor's reports, and *Statistical Register*. The former makes it clear that all Treasury Bills were originally sold in Adelaide, but the two other sources also suggest that a significant proportion were paid for and held in London, e.g. in his 1889/90 report, the Auditor noted that proceeds of Treasury Bills included £138,149 7s. 6d., 'received in London to 1st July [1890]' (p. vi). Unfortunately, this information is not provided consistently. Receipts from sales of Treasury Bills have, therefore, been excluded from the South Australian estimates of capital subscribed and received in London.

3-4e. Butlin estimates

The main source of the South Australian series in Butlin (1964, 338, Table 71), is the colony's *Statistical Register*. The Auditor's report appears to be the source of 'net receipts' in 1898/99. No source for the 1899/1900 figure has been located. For the reasons explained below, the actual volumes of the *Statistical Register* Butlin used can be identified with some certainty: allowing for rounding and what appears to be a calculation error in the 1863 total, loan raisings up to 1878 are taken from a volume published c. 1880; later receipts come from one or more of the volumes published during the 1890s. This is clear because each volume only reports the nominal value of

outstanding debt, not the amount originally sold. Because of the high annual rate of amortization of debt sold during the 1860s, early volumes must be consulted for accurate information about sales during that decade. Only the *Statistical Registers* published around 1880 yield the figures reported in the Butlin series to 1878. It should also be emphasised that these are nominal values rather than ‘net proceeds’. Moreover, the following must also be noted: (a) the *Statistical Register’s* ‘year of issue’ is not necessarily the same as the year of sale, particularly during the early period; (b) no distinction is made between bonds sold locally or in London; (c) from 1890, debt raised for works in the Northern Territory is excluded; and (d) during the late 1890s, securities sold in aid-of-revenue are also omitted. Except possibly in 1899, the Butlin series also makes no adjustment for repayments, which were substantial during 1894, 1896 and 1899.

As an illustration of the inaccuracies caused by reliance on later volumes of the *Statistical Register*, Butlin records £17,000 ‘net receipts’ for South Australian bonds sold in London during 1860. In fact, the total nominal value of the colony’s bonds sold that year was £60,000, of which £57,300 were placed in London. Gross capital received as a result of the latter, after deducting costs of sale, was £59,699. The nominal value of all South Australian maturities that year was £8,000, giving approximate net proceeds of London sales of between £52,000 and £60,000, depending on the assumptions one makes about the proportion of maturing bonds that were held in London.

3-5. Tasmania

Although the first Tasmanian government debentures were sold in January 1855, official statements of outstanding public debt were only published irregularly between 1855 and 1865, as summarised in table 3:5-1 below.

Table 3:5-1. Statements of Tasmanian public debt, 1855-65

Public debt outstanding at	Sessional paper
25 April 1857	No. 42 of 1863
30 September 1858	No. 67 of 1858
27 August 1859	No. 77 of 1859
1 August 1861	No. 43 of 1863
31 December 1862	No. 42 of 1863
17 January 1863	No. 43 of 1863
12 July 1864	No. 34 of 1864

From 1866, statistics of stocks of outstanding debt have been taken from *Statistics of Tasmania* (1866-1874, at 31 December; and 1904-14, at 30 June), and the annual sessional papers ‘Loans of the Government/Finance Papers’ (1882-1903, at 30 June; for earlier dates, see table 3:5-2). These distinguish between debt payable locally and in London in every year except 1866 (where it has been possible to estimate the respective amounts).¹ The statistics of Tasmanian debt held in London, therefore, include the

¹ *Statistics* 1875-1883 does not identify the place where debt was held.

amounts remitted from the colonies.

Table 3:5-2. Stocks of Tasmanian public debt, dates outstanding 1875- 81

18 May 1875
18 May 1876
31 March 1877
8 July 1878
5 August 1879
9 August 1880
30 May 1881

The colony did not raise capital in London until 1867, but £231,100 was already payable there at end of 1866. Between 1867 and 1871, official statistics are misleading because of a plan to consolidate all the securities then held in London. A ‘consolidation’ loan of £700,000 was authorised in 1867 to cover: the existing London debt; some securities that had not yet been sold; loans maturing in Hobart during 1868, and £300,000 new London borrowing. In fact, the ‘consolidation’ never took place and only £454,500 of debt authorised by the consolidation act was sold. Nevertheless, between 1867-71, the colonial Treasury’s statistics showed the entire £700,000 as outstanding, including the debt covered by the original scheme, without allowance for whether new debentures had actually been sold. This led to a considerable exaggeration of the actual amount owed in London in those years. Official statistics have therefore been adjusted to show actual maturities and sales in London. It has not been possible, however, to identify the year of sale of £1,700, which has been included in the amount outstanding on 31 December 1867. Finally, Treasury statistics often subtracted maturing debt due to be repaid from the proceeds of recent loans, and added authorised debt not yet sold. Where necessary, adjustments have been made so that the totals presented are of all debt actually sold and still outstanding on the date given.

Details of receipts and expenses are taken from sessional papers relating to individual loan transactions, statements of sales of government securities, and finance papers. For further details, see Attard (2005). Because of the relatively small amounts involved, and a lack of information about original purchasers and receipts, debt sold in Hobart after 1867, but payable in London, has not been included in the statistics of capital received in London.

Statistics of Treasury Bills payable in London, including those originally sold in both Hobart, have been taken from the same sources as for long-term debt. Details of sales are from the annual sessional paper: ‘Return of Debentures and Treasury Bills sold in the Colony’, which during the 1890s also included a return of London sales. I have assumed that the receipts for Treasury Bills payable in London were also received there and have included them in the statistics of capital subscribed in London. The £777,000 ‘Treasury Bills’ payable in London, which *Statistics* records as outstanding on 30 June 1912, have been excluded from the statistics of annual capital raised. They actually represent the balance of £900,000 advanced by the London County & Westminster Bank to retire

debentures maturing in July 1911, and only £580,000 was unpaid at the time.²

3-6. *Western Australia*

Details of receipts and expenses are taken from the records of the Crown Agents (CAOG 9/21) and Public Accounts. Statistics of outstanding public debt are from reports of the Auditor-General (1881-1885) and Public Accounts (1886-1914). The totals for the years 1872-80 are calculated using information from loan advertisements in CAOG 9/21. The results vary slightly from the series in the *Western Australian Yearbook, 1902-4* [sic], Statistical Appendix, Table 3, but have been preferred for reasons of consistency. As the debt is negligible at this stage, the differences are not significant. Public Accounts first distinguish between debt repayable in London and Australia in the return for 30 June 1900. A change in the way in which the return is presented, however, means it is impossible to distinguish between changes in London debt arising from the ongoing conversions of debentures into inscribed stock, or repayment of maturing debentures (all the loans issued by the Crown Agents were repaid by annual instalments from a sinking fund). A conversion rate of par has therefore been assumed, and maturities are presented as net of new conversion stock.

From 1898, the colony also acquired 'contingent liabilities' on account of securities issued under the 'Agricultural Lands Purchase Act', 'Agricultural Bank Act', and 'Land Drainage Act'. These were secured on Trust funds, from which interest was also paid. From 1901, these were relegated to a footnote in the annual return of the State's public debt but have been included in the *DisaggNom* and *DisaggStock* spreadsheets under the heading 'Contingent Liabilities', and added to the total of Outstanding Public Debt. In 1912, only one debenture (£25,473, due 1923), issued for the purchase of the Throssell estate under the 'Agricultural Lands Purchase Act', was payable in London.

Finally, from 1882, statistics of the colony's cumulative sinking fund can be found in the Year Book, Auditor's reports and public accounts. These have been included as a separate item and used to calculate net public debt.

3-7. *Australian Municipalities and Public Utilities*

This category covers London borrowing by twenty-one municipal bodies and four Victorian public utilities. Information about stocks of outstanding listed public debt has been taken from the London *Stock Exchange Year-book*, cross-referenced with the summaries of new British capital raised published in the *Investor's Monthly Manual*. The latter was also used to check the 'municipal' series in Hall (1963) and Stone (1999). Prospectuses and reports of the results of new issues published in *The Times* were used to estimate annual nominal new debt, gross receipts and maturities. Further details of issues by the Victorian public utilities were taken from the *Statistical Register of Victoria, 1902*. These suggest that between 1883 and 1891 flotation expenses of public tenders were roughly 1.2 per cent. Differences between Hall (1963) and the new series of gross receipts in the years 1889 and 1891 can largely be accounted for by the misidentification of private companies as public utilities, and the inclusion of a failed municipal issue. Other unexplained discrepancies between Hall (1963) and Stone (1999), and the new series and are treated as errors. Finally, neither Hall nor Stone allow for amortizations.

² Tasmania, *Journals and Printed Papers*, lxvii (1912), no. 5, Financial Statement, p. 10.

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