

How Big was Indonesia's "Real" Colonial Surplus in 1878–1941?

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ABSTRACT *Colonial surplus is usually taken to be the income transferred overseas from a colony measured through international exchange items in the balance of payments or the much less satisfactory export surplus. Those international exchange items for colonial Indonesia for 1878 to 1941 calculated at 23.5 billion guilders turn out to be much greater than in previous estimates. This article analyses non-international exchange items, such as incomes earned in the colony by foreigners but not transferred abroad and the very great amounts comprising the budget of the colonial government. If we add such items to the existing "normal" calculation of the colonial surplus the already large amounts become enormous. The views of the few observers who have reflected on Indonesia's colonial surplus and who have minimised it are assessed and rejected. One must then ask why most historians of Indonesia have ignored those amounts in assessing the impact of colonialism. That this "new" surplus is designated "real" does not mean other estimates are "unreal" but is used to indicate the size of amounts previously missed. This, real colonial surplus for Indonesia is in the region of 54 billion guilders or about US\$22 billion. Roughly in today's terms those amount to US\$398 billion or even as much as US\$5123 billion depending on the conversion rate used.*

KEY WORDS: Colonial surplus, Indonesia, colonial budget, exploitation, colonialism

Just how big was the colonial surplus that foreign capitalists and the Netherlands state took from the colony *Nederlandsch-Indië*, now Indonesia? Here we propose to investigate what we term the additional "Non-International Exchange" items of the colonial surplus for Indonesia which may in all probability add amounts at least as large again to the standard colonial surplus.

Our description of these new amounts as "real" does not mean that earlier calculations are necessarily "unreal" but is used as an indicator of how many things have been missed out. Actually, our own count here also misses out so much that it almost does not justify the title "real." So whilst we may reasonably claim this account to be "more real" than any previous account it will fall short of the "real thing."

Previously we analysed the "standard" international exchange parts of Indonesia's colonial surplus (Gordon, 2010a; Gordon, 2010b). There the colonial surplus was found to be very large; far greater than estimates by other authors. Mind you, it cannot be said that many researchers outside (former British) India have paid much

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attention to the problem of the colonial surplus in general. For the Netherlands East Indies, little has changed since van der Eng (1998: 4) wrote: “The importance of Indonesia for the Dutch economy after 1870 does not feature prominently in current Dutch economic historiography.” Even in this limited work, much of the effort was to establish the existence or non-existence of colonial surpluses although the effort made was simply to exorcise the colonial surplus by finding it unimportant or non-existent (see Berkhuysen, 1948; van der Eng, 1998; Taselaar, 1998). The “summing up” by Lindblad (2002) in an influential book covers less than one page and is of little help. He finishes by summarising van der Eng’s views and rather weakly finds that the matter “about the colonial surplus is not yet resolved” (Lindblad, 2002: 152).

We are not concerned here to prove the existence of colonial surpluses. If not self-evident then its existence has been re-proven recently (Bagchi, 2002; Gordon, 2004; Gordon, 2010a; Gordon, 2010b). First, we define the colonial surplus and outline the methods available to scholars of Indonesia of measuring the standard exchange part of it. The export surplus method is discussed and dismissed as unsuitable and, here at least, misleading. The second part involves a brief summary of the earlier analysis of the Indies balance of payments. Then, thirdly, we analyse at length other additional possibilities to colonial surplus, such as incomes earned by foreigners resident in Netherlands East Indies and whether parts or indeed all of the colonial budget should be included.

The balance of payments data go as far as 1939, whilst government budget data go up to 1940. The Dutch surrendered their colony to the Japanese in March 1942. Consequently we are obliged to calculate up to 1941 to cover the Dutch colonial surplus. For the international exchange colonial surplus we work with the data up to 1939 and add our estimates for the later years in the conclusion to the article. For the government budget data it is more convenient to include the estimates for 1941 in the analysis. How those estimates were arrived at is laid out in the Appendix.

The whole is not a matter of mere antiquarian interest because in today’s world developing countries have been piling up surpluses in metropolitan banks whilst appealing for foreign investment or even aid. This is analogous to those issues in colonial times.

The Concept of “Colonial Surplus”

The “colonial surplus” is an important way of investigating the effects of the relationship between colony and colonising power (metropolis). Its absence from so many textbooks and other academic publications is shocking, although perhaps not entirely unexpected on account of “the benign view of imperialism that has been developed in revisionist histories” (Vickers, 2004: 15).

The colonial surplus is a measure of the benefits in money terms gained from the colony by business, citizens and government of the metropolis. It describes and calculates part of their economic relationship. It includes the sum of the international trading and financial relationship between the two (and it covers gains made by other foreign national corporations and individuals operating in the colony). It is a measure of exploitation.

The part most commonly dealt with covers the international balance of trade and services. Included in this calculation would be items not only like private and

government dividends and profits transferred abroad but also pensions transferred abroad, travel expenses to and from the colony, other government expenditures overseas, changes in overseas bank balances and so on. Attention should be paid to profits made but not distributed and to investment out of those undistributed profits which may or may not be included in a colony's balance of payments.

We may ask: what was the basic cause of the colonial surplus? A prominent colonial economist offered the opinion that it was "... *in the natural order of things* for the greater share of profits made by private industry to be drained from the Indies ..." (Gonggrijp, 1928: 6, emphasis added). The idea of colonialism being a natural phenomenon occurs also in Knight (1996) and is implied throughout van der Eng (1992, 1998, 2002). What, however, is natural about colonialism? It constituted the imposition by force of foreign rule over another country which does not enter our concept of "natural." We veer to the opinion that it was colonialism itself that was the cause of the surplus. Surely, the notion "colonial surplus" must imply the term and a concept of the "colonial."

International Exchange Items of Colonial Surplus

Our examination begins at the conventional end of the government-run Cultivation System in the year 1878 and the Indies balance of payments concludes in 1939. The Appendix shows our estimates for 1940 and 1941 which are added to the International Exchange items in the conclusion.

The International Exchange calculation of the colonial surplus has been discussed at considerable length in Gordon (2010a) and we do little more here than summarise those items as derived from the Indies balance of payments. However, because all those who have worked on the Indies colonial surplus (except for Derksen, 1946 and Gordon, 2010a) have used the export surplus method of calculation, we feel obliged to say a little about that matter. This is particularly the case when we realise that our final estimate of the International Exchange colonial surplus is far in excess of the export surplus sum. This anomaly we deal with by presenting the data and the explanation rules out the use of the export surplus as a method of analysing the Indies colonial surplus.

We do not use the export surplus method here. This is largely because a good balance of payments account exists but also because of other failings in the export surplus method, such as the colonial surplus may well exist whilst the export surplus is negative. This actually was the case in Indonesia from 1945 to 1949 when it is clear that, despite an export deficit, sums of money were still being taken out equivalent to 3.2% of Dutch GNP during 1947–49 and returned profits averaged 100 million guilders annually from 1950 to 1953 (van der Eng, 1998: 25).

It must be said that using the export surplus method is very much the more undemanding way. All that is required is a subtraction of imports from exports and the result is revealed. There is no need to fuss over many tables and read through reams of notes in a balance of payments account. One wonders why so many economic historians chose this easy and, ultimately, inaccurate method in assessing Indies export surplus. Choosing this method obliges one to speculate about rather than calculate the contents of the colonial surplus. It does not reveal, for example, how much went out in business profits or the size of leave abroad payments. The

Indies balance of payments does tell us that and tells us a lot more as well. It tells us also what was excluded from the data and hints at other omissions.

However we must note that Table 1 incorrectly suggests that the colonial surplus – as calculated from the current account totalling 12,285 million guilders – might have been borne by the export surplus of 14,556 million (even if we deduct the estimated 400 million for export duties included as exports). That suggestion, however, is faulty, as will appear in Table 2. This is because the balance of payments has no data for re-invested profits and excludes the profits of non-Dutch foreign corporations and, moreover, has a large item lurking in the capital account that will have to be counted as part of the colonial surplus. We clarify those anomalies by our analysis for Netherlands East Indies in the *Changing Economy in Indonesia Vol. 7: Balance of Payments 1822–1939*, well worked on and edited by Korthals Altes and, henceforth, referred to as Korthals Altes (1987).

Balance of Payments Problems

The balance of payments in general presents several problems of belief. In the Introduction to the Indies compilation, for example, Korthals Altes (1987: 21) cautions us:

A balance of payments statement rests partly on accounting fictions and that as such does not provide a precise survey of the money flows to and from other countries ... In the period under review, payments transactions between Indonesia and the rest of the world were not subject to precise registration ... and it is therefore a matter of chance if the total sums on the debit and credit sides match precisely.

Moreover, he notes that incomes going to foreign countries other than the Netherlands are not included for lack of evidence, although after 1910 they were considerable (Korthals Altes, 1987: 47). Further, undistributed profits are excluded for lack of data. Additionally, the item “Foreign Private Floating Balances” in the capital account is so extraordinary and so large that it requires some commentary and eventual admission as part of the colonial surplus.

Korthals Altes himself does not comment on the colonial surplus but from his data we have extracted from his annual totals the items commonly included in the surplus calculation (see Taselaar, 1998: 49). The item “remittances to relatives” will include small amounts of savings sent abroad by Chinese migrants. These will not alter the total to any significant extent. “Passage, Leave, Remittances and Pensions” (PLRP) are added and then divided in the estimated ratio of 1: 2 for private and public amounts. Public or government disbursements of those were recognised as being much higher than private ones although the precise amount is unknown.

Unsurprisingly, “Private Profits” were the largest item in the current account colonial surplus. This is despite the known fact that non-Dutch company profits are excluded regardless of the fact of inclusion in the balance of payments of substantial imports of British capital from 1910 onwards (Korthals Altes, 1987: 40, 46). Those items appear in Table 1.

Table 1. Colonial surplus in Indies Balance of Payments current account, 1878–1939 (millions of guilders)

Item	1878–79	1880–89	1890–99	1900–09	1910–19	1920–29	1930–39	1878–1939
Passage; Leave & Hajj; Remittances to relatives;	35	168	211	281	522	1,361	882	3460
Pensions (PLRP)								
Personnel Private = $\frac{1}{3}$ PLRP	12	56	70	94	174	454	294	1153
Dividends & Trade Profits	8	106	178	371	1439	1868	677	4647
Management costs, bonuses outside Indies	5	30	40	72	290	510	187	1134
Private interest	0	6	29	57	124	226	137	579
Total private businessf	25	198	317	594	2027	3058	1295	7514
Personnel Indies government expenditure = $\frac{2}{3}$ PLRP	24	112	140	188	348	908	588	2306
Indies government debt interest	0	14	21	30	75	567	558	1265
Misc. expenditure by Indies government in Netherlands	20	82	104	103	289	369	232	1199
Total government sector	44	208	265	321	712	1843	1378	4770
Total current account surplus	69	406	582	915	2739	4901	2773	12,285
Export surplus	111	605	546	1275	3523	6222	2274	14,556

Source: Korthaals Altes (1987, table 1).

Table 2. Total International Exchange colonial surplus, 1878–1939 (millions of guilders)

Item	1878–79	1880–89	1890–99	1900–09	1910–19	1920–29	1930–39	Totals
Current account surplus	69	406	582	915	2739	4901	2773	12,285
Net increase private floating balances capital account	21	290	227	437	1655	1219	405	4254
<i>Colonial surplus from Balance of Payments</i>	90	696	809	1352	4394	6120	3178	16,539
Estimated retained profits	6	57	92	187	851	1560	549	3302
<i>Total colonial surplus derived from Balance of Payments</i>	95	753	901	1539	5246	7680	3727	19,841
Estimated non-Dutch profits	10	40	50	210	749	1536	932	3527
Total colonial surplus	106	793	951	1749	5994	9216	4659	23,368
Export surplus	111	605	546	1275	3523	6222	2274	14,556

Source: Korthals Altes (1987, table 1); Gordon (2010a).

Net Increase in Private Floating Balances

The complexity of Korthals Altes's Balance of Payments data is such that to comprehend his table of items properly recourse must be made to the original (Korthals Altes, 1987: 40–1) or at least to our earlier account (Gordon, 2010a). Here we can merely note that “changes in private floating balances abroad” appearing in the capital account show as an actual balancing item otherwise the current and capital sub-totals in his Balance of Payments would not balance. His explanation is,

For numerous Netherlands Indian enterprises are known to have held credit balances abroad . . . The fact that the average for the residual item throughout the period is positive could be taken as indicating the existence of a virtually permanent flow of liquid funds from the Netherlands Indies to the rest of the world . . . this would suggest the existence of a capital flow abroad not evident in the available data (Korthals Altes, 1987: 41).

We take this as permission to include “changes in private floating balances abroad” as part of the colonial surplus. And we would add further a supporting observation by the International Monetary Fund (IMF), “Omissions are rarely used, usually by governments to conceal transactions. They are often referred to as ‘balancing items’” (IMF, 2008: para 2.15) This does not add to our faith in the contents of supposed “balancing items.”

We present the net results in private floating balances abroad at 4.2 billion in Table 2. Adding this to the current account colonial surplus we find that this sub-total alone is well in excess of the export surplus. The inclusion of that item does raise the possibility that others might be considered that appear in the “Expenses” side of the capital account. For example, whilst the gross items of the redemption of loans would appear to have been covered by counterpart items in the “Receipts” side the items, “Purchases of securities abroad” and “Remittances of life insurance premiums and pension funds” appear as possible inclusions in the colonial surplus. However, although together they amount to one billion guilders, this sum is not thought sufficient to justify disturbing the capital account further and we do not include them here.

The Missing Retained and Non-Dutch Foreign Profits

Missing from Korthals Altes' Balance of Payments tables are profits re-invested in Indonesia, profits made by petroleum corporations and profits made by non-Dutch private business.

In his text Korthals Altes' retained profits are available in the text although he did not put them into practice in his tables. For 1910–26 he claims they were equivalent to 25.7% of total profits and 33% for 1928–39 (Korthals Altes, 1987: 46). For the earlier years we assume 25%, which is unlikely to be too high. We do not have at hand a complete run of the total profits except for 1921–39 from Polak (1979: 66). However, we do have the complete figures for private profits and bonuses transferred to the Netherlands in the balance of payments and if we utilise the ratio of total profits in the Polak study to transferred profits (1.69) for that period and apply it

throughout we may arrive at a rough picture of the total profits. Applying the percentages to total profits shown in the Polak study we gain for retained profits a sum of 2.9 billion guilders for 1878–1939.

Korthals Altes (1987: 46), citing a secret government report, states that “Royal Dutch Shell was able to finance its investments in Indonesia wholly out of retained profits.” He did not add those investments to the balance of payments. The Amsterdam stock exchange value of the Anglo-Dutch Shell part of petroleum investment in the Netherlands East Indies was around 400 million in 1929 and 700 million in December 1941 (Twentesche Bank, 1941: 2–3). Taselaar (1998: 550) has the nominal value of ordinary shares for all Indies petroleum companies as 154 million in 1913 and 545 million in 1939. The result is that it appears safe to assume that at around 400 million guilders of retained profits invested in that period was not included in the Indies balance of payments. If we add that to the foregoing we arrive at around 3.3 billion of retained profits, as seen in Table 2.

Korthals Altes pointed out that the Indies balance of payments did not include the profits transferred abroad by non-Dutch foreign corporations. Van Gelderen (1939: 66) made a reasonable estimate of foreign direct investment for 1937 (excluding the petroleum sector), suggesting that one-quarter of that foreign investment was in non-Dutch hands. If non-Dutch profits sent abroad were also a quarter for the 1930–39 period, one-fifth for the 1920s, one-seventh for the 1900s and pro forma entries for the nineteenth century, we arrive at a total of 3527 million guilders, as shown in Table 2.

Thus, our estimate of the International Exchange colonial surplus up to 1939 totals 23,468 million guilders, almost double the export surplus.

Claims of “Low” Returns and the Colonial Surplus

Since the estimates for the colonial surplus found in this paper may be described as “large,” a question that may arise is why do Taselaar (1998: 47–8) and van der Eng (1998; 2002) claim low returns on Dutch capital in the Indies? The simple reason for their conclusions is that they incorrectly use what they term “real” rates of return instead of “nominal” rates of return. The complexities of this simple but mistaken deviation were shown in Gordon (2010a: 438–9) and we need only note their mistake here. Consequently, the conclusions of Taselaar and van der Eng on low share yields from the Indies may be thrown aside.

One more pretty obvious answer to the insistence by Taselaar and van der Eng on low share yields is that they did not read Korthals Altes’ balance of payments study carefully enough. Consequently, neither observer ever finds the great amounts listed as “Net Increase in Private Floating Balances sent abroad.” Nor do they concern themselves with the missing retained profits and non-Dutch profits. No wonder they find returns are “low.” Indeed, their efforts suspiciously minimise the colonial surplus or the colonial returns to the Netherlands.

Non-international Transactions

We may now move to the nub of this paper’s contribution, the composition of the “real” colonial surplus.

Previous Analyses

First, we discuss a pioneering presentation of the calculation of international and non-international transactions by former colonial officer J. B. D. Derksen. He later became one of the twentieth century's leading national income statisticians and was an active member of the Editorial Committee of the series "Indonesia's Changing Economy" some of which is used here. His calculations concerning Indonesia are included in Derksen (1946). Derksen might be taken as a more scientific, updated and expanded version of the data found in the polemical pamphlet by the Jonkheer C. G. S. Sandberg (1914).

Derksen was calculating how much in terms of money and indirect gains, as well as benefits to employment, that the Netherlands made out of Indonesia. A moment's thought will show, this is not the same as the colonial surplus. Unfortunately, at the time of his writing he had access to only nine years of data. He included almost everything he could find in his figures for what the Netherlands gained. As an arm-chair protagonist in the battle to keep Indonesia a Dutch possession he felt he had to show how important Indonesia had been to the Netherlands. He additionally includes the incomes of Dutch residents in the Indies, the contribution to Dutch shipping, Dutch incomes made from trade in tropical products, and secondary Dutch incomes made from the Indies to his calculation of what the Netherlands gained from the Indies. Adding those to the balance of payments data would give an enormous "colonial surplus." If we were to add the colonial budget also (though Derksen does not), the total would be immense. His workings are set out in Table 3.

Derksen's total does not amount to a proper international exchange colonial surplus, although it does include several international exchange elements, largely because he is calculating the Netherlands' gain as a country not the surplus that came out of the Indies.

Derksen used the preliminary and incomplete balance of payments estimates compiled in the 1920s and 1930s. In Table 3, Items A1-4 and B1 and 4 represent "standard" balance of payments items and since we have already extracted or calculated more accurate figures than were available to Derksen we say no more of them. However, Item A5 – International shipping to and from Indonesia – represents something else. It is an additional gain that would not have gone to the Dutch but for the existence of the colony and the conditions favouring Dutch shipping to there, such as subsidised government mail contracts. Certainly, this was a gain to (some of) the Dutch but was it a loss to colonial Indonesia? It seems to be more a loss by the shipping of other nations partly excluded from the trade. If we assume that those other shipping lines were more efficient than the Dutch and assume that they would have passed their efficiency gains to the consumer then this would represent a loss to Indonesians. However, as to whether the assumptions are valid is just speculation.

In item A6 – Dutch exports to Indonesia – 75% of total value derives from the assumption that, if Indonesia had been some other country's colony, Dutch exports there would have lost that amount. But this confuses the issue in that, in this case, it involves taking an imagined part of the colonial surplus going to other countries. The amount also rests on the qualitative assessment of estimating 75% instead of, say, 40% or 90% that might be just as valid and we feel obliged to reject this on

Table 3. Derksen's estimates of the contribution of Indonesia to Dutch national income (annual averages), 1926–38 (millions of guilders)

	1926–29	1932–35	1938
A. Dutch primary income from Indonesia			
1 Dividends and interest	257	76	155
2 Management costs, pensions, etc.	49	21	29
3 Pensions public servants, furlough payments, etc.	26	27	26
4 Private remittances	12	5	5
5 International shipping to and from Indonesia	85	35	63
6 Dutch exports to Indonesia, 75% of total value	115	26	75
7 Trade in tropical products and other items (rough approximation)	60	25	35
Total A = Netherlands primary income dependent on Indonesia	604	215	388
Annual average	151	54	388
B. Netherlands East Indies contribution to Dutch national income			
1 Retained Dutch profits in Indies (approximation)	50	0	4
2 Secondary income dependent on Indonesia (70% of Primary)	422	150	272
3 Income of Dutch nationals in Indies (approx.)	300	150	175
4 National debt repayment	31	42	36
Totals A + B	1407	557	875
Annual average	352	139	875

Source: Adapted and simplified from Derksen (1946: 374, as translated in van der Eng (1998: 25).

those grounds. Thus, whilst this item could be regarded as a gain to the Netherlands we feel a reciprocal loss to Indonesia is not indicated.

The benefits accrued from re-exporting and trading in Item A7 in Indonesian produce would hardly have existed for the Netherlands had Indonesia not been its colony. And in view of the paucity of data on Dutch profits from the colony at that time, justifies Derksen in including it. However, with the data now at our disposal we feel double counting would be involved were we to include it in the colonial surplus. We regard it now as an indicator of the identity of groups in Dutch society that benefited from the colonial connection. Derksen's items A1-4 in Table 3 do form part of the colonial surplus and were already included in our Table 1.

Now for items B1 and 4, Retained Profits and Indies National Debt Repayment. These also form part of the colonial surplus and have been included in our calculations. Item B2 represents gains from employment and other activities in the Netherlands itself and, while it represents a gain through colonial possession, did not come directly or indirectly from the colony. Many Netherlanders gained employment through and/or income by involvement in, for example, building ships for the Indies trade, by making manufactured goods for the plantations that would otherwise not been possible. But they did not do so at the expense of Indonesians. Therefore, we exclude it from the colonial surplus.

Table 4. Net private income of Europeans in Netherlands East Indies, 1878–1941 (millions of guilders)

Item	1878–89	1880–89	1890–99	1900–09	1910–19	1920–29	1930–39	Total 1939	1940–41	Total 1941
European private income ^a	80	421	600	1000	2769	4945	3808	13,543	820	14,363
<i>Minus already counted:</i>										
– Remittances to Netherlands ^b	8	38	41	68	176	382	202	915	18	933
– Income tax ^c	1	6	7	23	170	900	397	1504	97	1601
Net European private incomes	71	377	552	909	2423	3672	3309	11,313	705	12,018

Source: ^aPolak (1979: 70, table 15.1), ^bKorthals Altes (1987: table 1), ^cMellegers (2005b). Estimates for 1940 and 1941 are the author's (see text).

There remains item B3, the Income of Dutch Nationals in the Indies. Clearly, this is a gain made in the colony itself and has to be included as part of the colonial surplus. We shall do this later, although with rather different and better data, unavailable to Derksen at the time of his writing. In other words, we are to add only one of Derksen's categories as we have either already included them or have rejected the others.

For several reasons, we have been obliged to discuss Derksen's data largely in principle. First, he presents merely a selection of years and, second, and more importantly, some of his data are imperfect. His PLRP, government gains and private profits are all lower than the figures given in the Indies balance of payments and his estimates for retained profits are well below ours. However, his piece ought to be regarded as inspired writing at the time, which is able still to stimulate.

For example, van der Eng is motivated to remark on Derksen in what must be described as the former's apparent wish to see colonial Indonesia's contribution to the Dutch economy minimised. He is obliged to respond to the challenge to him inherent in Derksen. That is, he has to reduce the amounts implied for the colonial surplus but nowhere does he state quantitatively what he thought the colonial surplus or Dutch gains amounted to. We are thus not favourably impressed either by his statistical efforts (van der Eng, 1998: 24–7, 34) or by his stated case (van der Eng, 2002). There are several reasons for this.

First, while van der Eng (1998: 24) notes that Derksen's overall findings "retain authority in Dutch historiography ... [although] this is not the place to comment extensively on the assumptions and estimating procedures which underpin these data," he then proceeds to do just that. He fumes the most general disapproval by inserting his own views where he finds Derksen's estimates "gross" rather than "net" (that is, larger than his own estimates.), uses the national accounts of the Netherlands which are unsound on colonial data, and gives a mysterious and unsupported version of what Korthals Altes is supposed to have found (van der Eng, 1998: 24–6). This seems to us a far more "gross" procedure than anything to be found in Derksen. All of van der Eng's quantitative data are summarised in percentage terms of gains to the Netherlands' national income in his figure 1 as a table in the form of a graph (van der Eng, 1998: 34.) This graph is presented on a scale which is too small for a reader to make out accurately the quantities shown in it.

Foreign Incomes

Like Derksen, we would include private incomes of foreigners in the colonial surplus. We exclude Chinese and Arab incomes because these income earners were mainly resident in the Indies. Unlike Derksen we have the benefit of J. J. Polak's (1979) pioneering national income calculations for 1921–39, shown in our Table 4.

To avoid double counting here we must deduct the data for remittances to relatives. They do form part of private incomes but have already been included in our Table 1 of the International Exchanges section. We also deduct income tax because foreigners did not receive those amounts and it is included under the heading Government Revenue in the next section and shown in Table 4.

A much harder task was to calculate the incomes earlier than 1921. Our very rough calculations depend on Maddison's (1987: 664–5) Appendix table B.1, which means disentangling data from constant prices of 1928 and bridging the gap between his years and those of Polak. Until we gain access to better data they may be taken with a grain of salt but not too large a pinch. The net foreigners' estimated income comes to 11.1 billion guilders up to 1939 and 11.8 billion up to 1941.

The Colonial Budget

Do we include all, part or none of the budget of the colony, the Netherlands East Indies, in our calculations? The function of any country's general budget is to serve the aims of the particular state by collecting taxation and spending it without too high a long-term deficit. A colonial state is in a special position by having to serve the aims of the colonising power rather than serving the wishes of the population or the ruling class of a native state.

In this case we have to figure out how much tax largesse did not fall to the Indies population and found its way into supporting colonial purposes. If we begin with the neutral proposition that government revenue and expenditure are collected and spent in accordance with the functions and aims of the particular state, in our case these must be the maintenance and furtherance of the colony itself including its defence from foreign powers outside and from native "rebels" inside. The colonial government revenues from the Indies did serve the colonial government. For the colonial Indies then we are obliged to consider, at the very least, a share of the expenditure as part of the colonial surplus.

Expenditure by the Indies Departments of War and the Navy (which accounted for 50% in 1870 and in 1940 one-quarter of the total budget) is a clear case in point. Their function was to secure the colony from other imperialist powers, to secure the colony to the Dutch from the native inhabitants themselves (an endeavour that failed in the end) and to carry out acts of further conquest (for example, Aceh was temporarily "conquered" by 1903, Bali was not finally and completely conquered until 1908, and so on). One looks in vain for items of any significance for the welfare of Indonesians in government spending (see Mellegers, 2005a).

Items under the Department of Education and Religion are scornfully low. Possible entries from the Department of Justice are likewise small. Do we consider that the considerable expenditure by the Department of Government Factories on opium production was a welfare service? Consequently, on principle, we would be inclined to include all the colonial budget. Revenue rather than expenditure is chosen to represent what the colonial state received from the colony.

However, double counting has to be avoided, which means that Indies government expenditures in the Netherlands that we have counted in our International Exchange estimate of the colonial surplus must be deducted (see Table 5).

A further less important problem is whether to utilise the Indies government's own arithmetic or the revision of the total revenue undertaken by later researchers, such as Mellegers (2005a; 2005b), when neither is complete. Sometimes the annual difference between the two is sizeable but, taken over each decade, normally there is comparatively little difference. The re-calculation of the total is usually marginally higher except in the final decade when it exceeds the older government estimate by over 4%.

Table 5. Netherlands East Indies government revenue, 1878–1941 (millions of guilders)

Item	1878–79	1880–89	1890–99	1900–09	1910–19	1920–29	1930–39	Sub-total	1940–41	Total 1878–1941
Budget revenue ^a	288	1383	1343	1665	3298	7704	6080	21,761	1577	23,338
Minus already counted ^b	46	215	279	355	843	2416	1864	6018	290	6308
Net Indies budget revenue	242	1168	1064	1310	2455	5288	4216	15,743	1287	17,030

Source: ^aMellegers (2005b); ^bfrom Table 1 items "Current Account Expenditure in the Netherlands," "Capital Account Pensions & Securities; Redemption Indies Debt.

For most of the nineteenth century the Indies budget contribution to the Real Colonial Surplus was greater than International Exchange items and European Incomes combined (see Table 5). Up to 1939 the net colonial budget came to 17 billion guilders and, including 1940 and 1941, estimates to 18.6 billion.

Real Colonial Surplus in 2011 Terms

Table 6 shows the real colonial surplus in its estimated actual size of 53,940 million guilders (or 54 billion) and in its component parts during the period 1878 to 1941. The guilder has not been in existence since 2002, when it was replaced by the euro, and we convert it here to the US dollar, a better known currency, that was also in being during the entire period under consideration in this paper. The exchange rates of these two currencies varied considerably in the period but we have chosen as the arithmetic mean the rate of 2.4 guilders to US\$1. Rounding the conversion we arrive at approximately US\$22 billion. However, although these figures are appreciable they give a poor impression of how large this total is in today's terms given the amount of inflation that has occurred during the interim.

Consequently it is necessary to find a way of converting past values to today's terms. However, this is not easy. Several statistical methods exist to adapt past money amounts to more up-to-date times. Officer (2011: 1–2) makes the following observations:

There is no single “correct” measure, and economic historians use one or more different indicators depending on the context of the question ... That measure is usually taken to be the ... “consumer price index” (CPI) ... It is a fair statement that the CPI is used far too often without consideration of its consequences ... GDP, the economy's total output of goods and services in money terms, is the best measure for large-scale projects or expenditures, such as the construction of a bridge or government expenditure on health care.

To date, for the Netherlands, we have found for historical times a CPI but because it covers only consumer items and excludes large items like agricultural output, industrial output and most services, the results it gives for large sums of money, such as the colonial surplus, are likely to be underestimates. It is possible that the Gross Domestic Product (GDP), the GDP per capita or the GDP Deflator methods would give better results but none of these appears to exist for the Netherlands except for modern times. However, as a statistician of the Organisation for Economic Co-operation and Development (OECD) pointed out for the Netherlands, “The figures presented [for 1980–93] suggest that differences between the broadest measure of product prices (the GDP deflator) and the CPI tend to average out to relatively small numbers over time in most cases” (Edey, 1994: 120). If this holds for 100 years earlier, using the DGP Deflator in our case would not be helpful.

Consequently, and because it is the only method available, we use the Historical Netherlands Consumer Price Index Compatibility Mode. This runs from 1450 to 2006 and from it we gain a range of annual conversion factors for 2006 for the years in question, as shown in Table 7. We have taken the unweighted arithmetic mean for the years 1910–39, in which most of the real colonial surplus arose, which is 16.16,

Table 6. Estimated real colonial surplus of Indonesia, 1878–1941 (millions of guilders)

Item	1878–89	1880–89	1890–99	1900–09	1910–19	1920–29	1930–39	Total 1939	1940–41	Total 1941
International Exchange colonial surplus	106	793	951	1749	5994	9216	4659	23,368	1524 ^a	24,892
Net European private incomes	71	377	552	909	2423	3672	3309	11,313	705	12,018
Net Indies budget revenue	242	1168	1064	1310	2455	5288	4216	15,743	1287	17,030
Real colonial surplus	419	2338	2567	3968	10,872	18,176	12,184	50,424	3516	53,940

Source: ^aOur estimate (see Appendix). For other data, see Tables 1–5.

Table 7. Conversion factors real/CPI, 1878–1941 (millions of guilders)

Item	1878–89	1880–89	1890–99	1900–09	1910–19	1920–29	1930–39	Total 1939	1940–41	Total 1941
Real colonial surplus	419	2338	2567	3968	10,872	18,176	12,184	50,424	3516	53,940
2006 Average CPI factor of conversion	20	23	24	23	17.42	13.65	17.51		14.35	

Source: CPI Netherlands (2006).

and used it as the conversion for those years up to 2006 (CPI Netherlands, 2006). Thus, the result for the real colonial surplus approximates to 871,670 million guilders. Then, taking the Contemporary Netherlands CPI, Compatibility Mode (CPI Netherlands, 2011), we allow for the compound inflation rate between 2006 and 2011 and arrive at 955,122 million guilders or about US\$398 billion in today's terms. This is larger than the sum promised by the European Commission, IMF and European Central Bank to the debt-ridden Greek government at the end of 2011. Nevertheless, it is still likely to be a large underestimate.

Let us consider a historical real life example of the Empire State Building of New York in 1931 that cost US\$41 million, given by the authors of the Measuring Worth Website (Officer and Williamson, 2010). They have calculated that measured by the CPI the value would have been US\$578 million in 2010, whereas the GNP method¹ gives US\$7.6 billion for that year. Those totals are not directly relevant to our problem but the *ratio* of the GNP total to the CPI total is and comes to 13.1.

Now, if we are to make a leap in belief and assume that that ratio might apply to our period in the Netherlands we should multiply our CPI findings for 2011 (955 billion guilders) by this ratio of 13.1. This results in approximations of 12,511 billion guilders or US\$5213 billion.

Thus, we have estimated that the real colonial surplus in terms of today's values might range from about US\$398 billion to US\$5213 billion! Whilst those numbers are rough approximations we must show them to indicate how large the real colonial surplus was. All in all, whether "standard" or "real," the colonial surplus of Indonesia was huge. Most of it poured into the coffers of business in the Netherlands for further investment outside Indonesia – a process that we shall analyse in a forthcoming article in this journal.

Conclusion

What is the significance of the "real" colonial surplus? We may ask: is there a further point to displaying simply how large colonial exploitation would have been? The international exchange element in, for example, Gordon (2010a) might have been considered big enough on its own not to require further reinforcement. After all, the international exchange element did go abroad to be used but the foreign income and the net colonial budget items stayed in Indonesia and were not used, at least not in the same way. Is not their presence here just laying on criticism of the colonial regime rather too thickly? Does not the addition of foreigners' incomes and, in particular, the budget represent statistical overkill?

We think not. The relationship between those three items is crucial. Without it the other two would have dwindled into insignificance. High foreign incomes and the international exchange form part of the real colonial surplus. Without the power of the colonial state through its budget which provided the means to coerce and persuade Indonesians to do what was required of them by the colonialists, profits would have dwindled into insignificance and foreign incomes lapsed to the level of those of Indonesians. In other words the colonial state used the budget to mobilise the forces necessary to sustain the surplus. It represents the public subsidy to help create the profits in the International Exchange colonial surplus. This subsidy was forthcoming not at the expense of institutions in both parts of the Kingdom of the

Netherlands (metropolis and colony) but solely at the expense of colonial Indonesia. It was, in one sense, an example of a fairly typical public subsidy to private and government business. We may regard it as a form of public investment to provide the basic underlying framework necessary to secure the overall activities of business. In other words, the colonial surplus is not only the direct exploitation of Indonesians shown in the international exchange element but is also constituted by the government effort necessary to bring it about.

To a lesser extent the incomes of foreigners in Indonesia were similarly used. This was not only to provide foreign nationals with a standard of living far higher than they could have obtained at home but simply to supply them with the subsistence of living (colonial style) whilst they were creating directly or indirectly the colonial surplus. Therefore, it seems absolutely essential to retain the “Real” colonial surplus in a proper assessment of the exploitation impact of colonialism on the Netherlands East Indies, now Indonesia.

The apparently large size of the colonial surplus shown above and the role of the colonial budget in creating it give rise to a further important question. Why, then, have almost no historians of Indonesia (and they have been mainly foreigners who have examined the question) commented on their colonial surplus? Could it be a post-colonial example of their continuing to carry the colonialist’s White Man’s Burden?

Note

- ¹ The authors of *Measuring Worth* (2011) use GNP which is not, of course, identical to the GDP. The difference is not relevant in our case always provided we know which one is being used.

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Appendix: Calculation of the Years 1940 and 1941

Calculations for estimates for the years 1940 and 1941 are different from those for 1878–1939 in that Korthals Altes' (1987) data do not extend. For 1940 we use Korthals Altes (1991) on trade and the budget data in Mellegers' collections (2005a; 2005b). For 1941 we estimate in relation to 1940.

International Exchange

The Netherlands had been occupied by Nazi Germany in May 1940 and after the fall of British Singapore the Dutch colonial authorities in the Netherlands East Indies surrendered to the Japanese in March 1942. Despite the paucity of data for 1940 and 1941 there was ample time for exports to be sent out of the colony. Imports had begun to tail off noticeably in 1940 and presumably continued to do so.

The value of exports had risen from 760 million in 1939 to 883 million in 1940 (Korthals Altes, 1991: 163) and the export surplus was about 450 million guilders in 1940. We have only provisional trade data for half of 1941 (Broek, 1942: 113). The estimated export surplus for 1941 of about 500 million guilders is taken partly on the basis of the volume of exports of rubber rising from 545,000 tons in 1940 to 650,000 tons in 1941 (Sumardiko et al., 1979: 42). The annual average export surplus for those two years is rather more than twice that of the export surplus from balance of payments for 1930–39 at 227 million guilders (a ratio of 2.09). Applying this ratio to the annual average colonial surplus for 1930–39 (466 million) gives an annual average for each of 1940 and 1941 of some 974 million. Their total at 1948 million guilders is the international exchange colonial surplus for those two years.

Non-international Transactions

Net foreigners' income. For 1940, the data come from Mellegers (2005a; 2005b). For 1941, total income and income tax are estimated to be somewhat higher than in 1940. Remittances to the Netherlands are assumed to be zero in 1941 as the Netherlands were occupied by Germany. The two years total 705 million guilders.

Colonial budget. For 1940, the total figures are given as in Mellegers (2005a), namely 777 million guilders. For 1941, we assume a somewhat higher expenditure of 800 million. Interestingly 145 million guilders of the 1939 figure is the supposed expenditure of the Indies government in the Netherlands although the Netherlands had been occupied by Germany in May 1940. Surely sums were not still sent to the occupied Netherlands. If it covered only up to April then a very large annual increase would be indicated. Or does the sum include later amounts sent to the Dutch government in its London exile? Presumably, in 1941 quite sizeable sums must have been sent to London for the Japanese did not take over the Indies until March 1942. These would have been for the Dutch government in exile and because since after May 1940 the Indies had become part of the Sterling Area. No data appear to be available for 1941 to allow for sums paid to the Netherlands government-in-exile we have assumed that the total remained the same as for 1940. For the two years the remaining colonial surplus appears at 1287 million guilders. Those estimates are very approximate but still meaningful.

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