**The Profitability of Dutch Business in Late-Colonial Indonesia**

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**Introduction**

An oft heard allegation against foreign private firms operating in colonial Indonesia is that these firms made excessive profits that only benefited overseas shareholders whilst failing to contribute in any substantial way to economy and society in the colony. A common counterargument maintains that profits pocketed by foreign firms represented an adequate compensation for the capital invested and the management and technology made accessible to operations in the colonial setting. There is little doubt that foreign companies did make a profit from their activities in colonial Indonesia; if not, such investment commitments would have been discontinued in due course. The issue is rather whether the profits made were excessive or not. This catapults the matter into an empirical, and on occasion rather technical examination of the available evidence. How do we properly measure the profitability of foreign investment in the colonial setting? Against what yardsticks are estimated rates of return to be assessed?

This contribution first reviews the historiography and methodology concerning the profitability of private Dutch investment in Indonesia during the late-colonial period, here defined as extending from the early twentieth century up to the end of effective Dutch colonial control over the entire archipelago in 1942. Subsequently, the paper presents the newest estimates and briefly discusses how to interpret these outcomes.

**Historiography**

The discourse on the importance for the of the economic interests vested in Indonesia was fuelled by the calculation by the later Nobel Laureate Jan Tinbergen and an associate demonstrating that 14 per cent of Dutch national income derived, directly or indirectly, from the colonial possession (Dirksen and Tinbergen 1945). This publication revived the old battle-cry ‘The Indies lost, calamity born’ (*Indië verloren, rampspoed geboren*), not long before the military Dutch intervention against the Indonesian Republic in 1947. In the shadow of commotion, the economist K.D. Bosch estimated returns pocketed by 40 Dutch-owned colonial companies, using dividend rates as cited in a compilation of publicly listed limited liability companies, the *Van Oss Effectenboek*. Average dividend rates were 18-20 per cent during the 1910s and 1920s but fell to 4 per cent in the 1930s (Bosch 1947: 605, 681-684). The dividend rate here served as a proxy for rate of return or profitability. This approach has since become accepted practice.

 Several years later, the historian J. á Campo was one of the first to explore the wealth of information in a comprehensive annual directory of firms operating in colonial Indonesia, entitled *Handboek voor Cultuur- en Handelsondernemingen in Nederlandsch-Indië*. He saw average dividend rates in the range of 5-7 per cent at the turn of the century, which was roughly the same as with investment in the Netherlands. Rates then climbing above 10 per cent over the years 1905-1913. Agricultural firms followed the general trend, whereas trading firms paid out far less on the capital invested. The sample gathered by A Campo eventually comprised 380 individual companies. Regrettably, his exploration of this source did not go beyond 1913 (A Campo 1996: 87-88).

Additional exploration of the *Handboek* source was done by myself, aided by diligent students of economic history at Leiden University. In 1930, as many as 670 firms in colonial Indonesia reported non-zero dividends. The average rate amounted to 11 per cent, which compared favourably with the standard 6 per cent generally expected by owners of stocks in the Netherlands. Firms with headquarters in the Netherlands paid out 12.4 per cent on average, twice as much as firms whose headquarters were located in colonial Indonesia. Total pay-out in 1930 neared 400 million guilders, corresponding to about 12 per nt of total accumulated equity of Dutch firms in the colony (Lindblad 1998: 78, 80).

 More recent processing of the *Handboek* source have generated improved estimates of rates of return, as reflected by dividends, for colonial Indonesia during the 1920s. Overall average rates were high at 21 per cent in both 1920 and 1925, but considerably lower at 12 per cent by 1930. Trading firms and other commercial services reported especially high dividend rates for 1920, but not for 1925 or 1930. Agricultural companies, however, paid out high, 25 per cent on average, in 1925, but much less in 1920 and 1930. Only one firm in four or five reported non-zero dividends in 1920 and 1925, and this percentage even fell below one in ten by 1930, which obviously signaled the onset of the worldwide economic depression (Lindblad 2014).

**Methodology**

As all students of profitability in private firms readily admit, the dividend rate can only serve as a proxy for the rate of return because more complete information is lacking. Reinvested earnings are excluded altogether. Dividend policies may also reflect other priorities than serving as remuneration of shareholders, such as bolstering creditworthiness or creating hidden reserves in the company. Therefore, the dividend rate must not be seen as more than a rough indication of profitability. Except perhaps in certain family firms, shareholders are likely to sooner or later demand a return on their investment. Whether or not to use the dividend rate as a proxy for profitability is not at stake as the only alternative would be to scrutinize company accounts at the level of the individual firm. The real issue is how to interpret the stated dividend, information that is easily accessible for large numbers of private firms.

The matter of how to handle the dividend rate is highlighted by a somewhat obscure contemporary publication that only recently resurfaced. It was brought out in 1937 as a thin brochure by the bankers’ office of A.H. Keyser in Amsterdam and intended as an advice to presumptive investors with an interest in colonial business. Keyser’s analysis covered 60 firms listed at the Amsterdam Stock Exchange. Average dividend rates over the years 1906-1936 ranged from 10 per cent for rubber companies to about 30 per cent for Deli tobacco and Java sugar factories; oil and tin occupied an intermediary position with rates around 22 per cent (Figure 1). But this bankers’ office also calculated the average real gain over the years 1919-1936 by expressing dividends and other claims related to the share price at the time, i.e. the current value of equity. The recalculation resulted in significantly lower rates of return, at most 9.2 per cent in oil and 8.7 per cent for tin and Java sugar, with rubber again at the lower end, now at 6 per cent only. The latter result was, considering the long period of time under consideration, in the words of the bankers, ‘in itself far from unsatisfactory’ (Keyser 1937: 8-9).

Dividend is always paid out on the basis of nominal equity. Taken at face value, the dividend rate gives a misleading impression to the extent that the value of the equity has in the meantime changed. Such change is reflected in the movement of share prices since the preceding year. As an illustration, we refer to the *Deli Maatschappij* (Deli Company), the leading tobacco estate company in the plantation belt of Deli in North Sumatra (then East Coast of Sumatra). In 1925 nominal equity amounted to 30 million guilders. The board of directors proposed a dividend rate of 20 per cent, i.e. 6 million guilders were paid out. This share price of this firm’s equity was in 1925 four times as high as initially. The dividend, offset against the current value of equity, was therefore not 20 but 5 per cent. In most cases, adjusting the dividend rate on nominal equity to the current value of equity will result in a lower effective dividend rate of return.

But there is more. A shareholder will get a direct benefit in the form of dividend paid out. In addition, there is a potential gain due to rising share prices, or conversely, a potential loss if share prices have been falling. This gain or loss will, of course, only materialize when shares are being sold. Again, it is instructive to look at the *Deli Maatschappij*. Share prices for this firm was 5 per cent higher in 1925 than in the preceding year. This represented an additional return of another 5 per cent. The total gain then becomes 10 per cent rather than the original 20 per cent dividend rate or the 5 per cent adjusted dividend rate. If the stock market is doing well, incorporation of potential gains from the higher value of shares will raise the total rate of return for the investor, and vice versa.

The two types of gain for the investor may reinforce or offset one another. However, they remain fundamentally different with respect to the timing of realizing gains.

The method of adjusting dividend rates to changes in the value of equity has recently been applied by Frans Buelens and Ewout Frankema, using a small sample of 17 colonial firms listed at the Brussels Stock Exchange. They find an average annual adjusted dividend rate at 14.3 per cent for the years 1919-1928 and a sharp drop to an average of – 2.8 per cent over the period 1929-1938. They conclude that these colonial firms did better than the world average during the 1920s but comparatively worse during the 1930s (Buelens and Frankema 2016). It is worth noting that Buelens and Frankema apply a geometric rather than an arithmetic average in order to account for the cumulative effect of changes in adjacent years, i.e. annual returns are not conceived as independent of one another.

A major bottleneck in estimating average rates of return from dividends as reported by individual firms remains the effort involved in creating a sufficiently large sample. A shortcut avoiding firm-level examination was suggested by the economic historian Pierre van der Eng, who compared total dividend transmittances in the balance of the payments with spot estimates of total equity invested in colonial Indonesia. His overall rate of return came down to 10.6 per cent in 1917, falling to 5 per cent in 1922 and further to 1.5 per cent in 1930 (Van der Eng 2014). Yet, this method assumes that all dividends were transmitted, thus figuring in the balance of payments statistics for the Netherlands Indies, but this need not at all be the case. It would appear that such an approach is too crude to compete with examination of the evidence on the level of individual companies.

A brief recapitulation of the various methods applied shows how the quest for a representation of profitability in colonial investment has been plagued by one of two shortcomings. Either stated dividends are interpreted without being linked to share price developments, or the sample of firms examined has been uncomfortably tiny. Either the method has not been sophisticated enough or it has been applied to too few firms. Ironically, the ‘best’ estimates, considering both the method applied and the size of the sample, may very well be those presented in an obscure publication by the bankers’ office of Keyser in 1937!

**New estimates**

Current research on the impact of foreign firms in Indonesia during the period between 1910 and the late 1950s offers a unique opportunity to properly interpret estimated rates of return for a large number of firms operating in the colonial economy between 1910 and 1940. This is done by a juxtaposition of data from two primary sources, the *Handboek* mentioned above and the share prices of all firms registered at the Amsterdam Stock Exchange.[[2]](#footnote-2) The study covered seven spot estimates at equal intervals, i.e. every five years between 1910 and 1940.[[3]](#footnote-3)

 The coverage of the estimation procedure here is constrained by both reporting in the *Handboek* and whether or not a firm was listed with a share price quotation at the Amsterdam Stock Exchange. Missing data on dividend rate in the *Handboek* may mean either that zero dividend was paid or that no information was submitted to the compilers of the directory. Our analysis only includes firms that reported a non-zero dividend. The share price refers to common stocks, leaving out preferential stock and other claims. On occasion, only the share price of the mother company was available; such was the case with the BPM (*Bataafsche Petroleum Maatschappij*) to which the published share price of Royal Dutch Shell was applied (Van Zanden 2007: 69-70).

A minority of Dutch firms listed in the *Handboek* stated a non-zero dividend rate (Table 1). On several occasions, in 1910, 1920, 1930 and 1940, these firms represented 15-20 per cent of all companies included in the *Handboek.* At other times, notably in 1925 and 1935, their proportion in the total was barely more than 10 per cent. Out of the Dutch firms reporting dividends in the first place, only between 18 and 29 per cent had a listing on the Amsterdam Stock Exchange. The highest proportion was in 1930 and the lowest one in 1910. Our selection procedure generates a sample of firms that varied considerably in size over time, ranging from only 38 firms in 1935 to 140 in 1930.

Our sample represents a skewed selection of colonial enterprises favouring firm size and substantial capital commitments. Average equity of the firms included in the sample neared 10 million guilders in 1915 and rose to about 16 million guilders by 1925. Their combined equity climbed above one billion guilders in 1925 and amounted to a staggering 1.5 billion guilders in both 1930 and 1940. Compared to their numbers, these firms represented a disproportionately large share of the corporate world of business in colonial Indonesia.

For various reasons, our exploration of rates of return focuses on Dutch-owned firms. Firms with headquarters in the Netherlands were generally larger than those managed from a head office in the colony. Dutch firms were the most likely to report dividends, whereas firms of a non-Dutch foreign nationality and Chinese firms rarely did so. Dutch firms were obviously also more likely to be listed on the Amsterdam Stock Exchange. In a wider context, we are in particular interested in the relationship between private profit and colonial rule, which again puts stress on the presence of Dutch companies in colonial Indonesia.

A preliminary step in our exploration is to calculate crude dividend rates based on the nominal value of equity. This can be done for the entire population of Dutch-owned firms reporting non-zero dividends. The average rate was around 14 per cent in 1910 and 1915, then rose to about 18 per cent in 1920, 1925 and 1930, whilst falling to a level of some 10 per cent in 1935 and 1940. The pattern observed for all dividend-reporting Dutch firms is by and large replicated in the smaller sample of firms that were also listed on the Amsterdam stock exchange. The average rate in the sample climbed from about 12 per cent in 1910 and 1915 to 18 per cent in 1920, 1925 and 1930, and a final drop to 9 per cent in 1935 and 1940. These are impressive averages considering the expected standard return of 6 per cent on common stock. Yet, although they neatly portray the changing business cycles during the 1910s, 1920s and 1930s, they are misleadingly high. The calculation leaves out all firms failing to pay out a dividend in the first place and these rates of return are not adjusted for changes in equity value.

Dividend rates in our selection of Dutch colonial firms by and large generally lower when adjusted for changes in the value of equity (Figure 2). The average rate dropped from a level at 8-11 per cent in 1910 and 1915 to scarcely more than 7 per cent in 1920 and 1925. High nominal returns were offset by rising share prices in the booming stock market during the immediate aftermath of the First World War and most of the 1920s. A weaker stock market at the inception of the worldwide depression resulted in less adjustment of the nominal rate; as a result the unadjusted average in 1930 was strikingly high at nearly 13 per cent. The worldwide depression brought a steep fall in share prices and by 1935 the adjusted dividend rates barely differed from the unadjusted one. Recovery in both stock markets and the real economy during the late 1930s fostered a return to the situation in which adjusted rates were substantially lower than the nominal ones.

**Interpretation**

When interpreting the observed trend in nominal and adjusted dividend rates, it is again instructive to compare outcomes with the 6 per cent dividend rate considered normal by standards prevailing among investors in the Netherlands. In six out of the seven years examined, not only the nominal but also the adjusted rate exceeded the widely expected return in the Netherlands, albeit only by one single percentage point as during the boom years of 1920 and 1925. The sole exception to the rule was the year 1940 when a gradual economic recovery had been coinciding with cautious dividend policies that reduced nominal dividend rates even to 1935 in the midst of the economic depression.

High dividend rates applied to nominal values of equity resulted on occasion in substantial aggregate flows of dividends payouts (Table 2). The largest flow, amounting to a quarter of a billion guilders, was observed for 1930, the year when our sample of firms reached its largest size. The increase in aggregate payout since the 1910s can be ascribed to both the larger number of firms listed at the stock exchange and successive increases of equity in individual companies. The low point in 1935 reflects common business strategies of reducing or withholding dividends during a recession. The large volume calculated for 1940 signals a hesitant return to profitability whilst total nominal equity seems to have been only marginally affected in the companies listed at the stock exchange.

Dividend rates have here been adjusted by changes in share prices. This brings us to additional potential returns from investment in colonial business accruing to shareholders due to rising prices in the stock market. As mentioned above, the immediate gain in the form of dividends payout is accompanied by gains or losses that will only materialize when shares are being traded. It is instructive to review the adjusted dividend rate in conjunction with the share value gain. The rate of total gain may be conceived as the sum of direct cash gain from dividends and potential gains from annual changes in share value.

The rate of share value gain is inferred from the rate of change in share prices since the preceding year (Table 2). The share prices of the sample selected here shows extreme variations over time, including steep increases in some years (1915, 1925, 1940) and a steep decline on occasions (1920 and 1930). As may be expected, the rate of total gain was extraordinarily high for the years 1915, 1925 and 1940. Surprisingly, this also applied to 1935, presumably as a result of a beginning recovery of share prices from the nadir of depression. By contrast, the rate of total gain was disappointingly low over 1920 and 1930, but shareholders would indeed only be directly affected if forced to sell stock. The sole year with a positive rate of total gain at the same order of magnitude as dividend rates was 1910 when the buildup of colonial stock was still in its infancy.

Earlier estimates of unadjusted dividend rates have highlighted the considerable variation across sectors and branches of industry. With the use of adjusted dividend rates, the possibilities of calculating sensible average are curtailed by the far smaller size of the sample. It seems logical to assume that an average rate needs to be based on data for at least four individual firms in order to offer some measure of representativeness of the branch in question. Similarly, meaningful comparisons over time would need to embrace at least four of the seven years of observation figuring in our analysis. Applying these restrictions in terms of calculating averages generated methodologically acceptable outcomes for ten important branches of economic activity in colonial Indonesia.

Among the colony’s top three export products, rubber appears to have been the most profitable one, judging from dividend rates over time as adjusted for changes in the value of equity (Figure 3). The average for seven years observed was 8.3 per cent, with spectacular peaks of 13 per cent in 1915 and 15 per cent in 1930. Sugar ranked second with an average at 6.95 per cent calculated over six years (except 1935). The best years were 1925 and 1930 with adjusted dividend rates at 9.5 and 11.3 per cent respectively. Oil, following in succession sugar, displayed a stable pattern over time with an average at 6.1 per cent, barely more than what shareholders at large would expect in the Netherlands. The drop below 4 per cent in 1935 was obviously caused by the worldwide depression.

Of the three other leading crops in export agriculture, coffee offered higher rates of return than tobacco or tea (Figure 4). The average calculated over four years between 1925 and 1940 neared 11 per cent, conditioned in particular by a spectacular peak in 1930. The average for tobacco and tea was 7 per cent, slightly above the ‘normal’ standard dividend rate of 6 per cent, with an outlier at 10 per cent in 1930 for both. More detailed comparisons are impaired by the fact that there was only a sufficient number of individual firms to calculate a meaningful average for tobacco in the years from 1910 to 1930 but between 1925 and 1940 in the case of tea.

In the services sector, banking was clearly the most profitable branch of activity (Figure 5). The adjusted dividend rate reached an extraordinarily high level in 1915 and 1930, and averaged 17 per cent over the four years for which it could meaningfully be calculated. Land transport, such as railways and steam trams, ranked second at an average of 9.5 per cent over the years between 1910 and 1930; the ‘best’ year was 1930. Trading companies were in the third rank, averaging nearly 8 per cent over five years scattered throughout the period under observation. Despite impressive results in 1920 and 1930, the average rate for shipping differed only marginally from the 6 per cent expected by shareholders in the Netherlands.

The ten average dividend rates by branch presented here convey an impression of a reasonable profitability but not one fitting stereotyped extremes. Nevertheless, there were individual firms reporting dividend rates that also after correction for changes in equity value remain striking. One famous example is the *Preanger Landbouw Maatschappij* (Preanger Cultivation Company), ranking among the top three firms with the highest rates in all years except two; the adjusted dividend rate was 121 per cent in 1930. Another example is the *Madoera Stoomtram Maatschappij* (Madura Steam Tram), which on three occasions figured among the top three, including a 70 per cent adjusted dividend rate in 1930. The Poerwokerto sugar factory and the *Banda Crediet- en Handelsvereeniging* (Banda Credit and Trading Association) both ranked among the top three on more than one occasion, Poerwokerto registering a rate of 22 per cent in 1920 and Banda lavishly paying out 117 per cent in 1935 (both after adjustment).

**Conclusion**

Investment by private Dutch companies in Indonesia in colonial times continues to stir up controversy and emotions among historians. Were the profits made by these firms exorbitantly high or not? This paper offers a brief digression on that topic, reviewing the historiography and methodological pitfalls as well as presenting new results.

The survey of the historiography makes clear that explorations so far have generally been of a tentative nature, primarily because of the difficulty in finding and interpreting the appropriate source material. The discussion of methodological matters reaffirms the necessity not to take dividend rates at face value but to adjust such rates for simultaneous changes in the value of equity upon which the dividends are based. A major difficulty is to construct a large enough sample that lends itself for adjustment of stated dividend rates. This difficulty is overcome here by a juxtaposition of two primary sources: the *Handboek* directory of incorporated firms in colonial Indonesia and listings for some colonial companies at the Amsterdam Stock Exchange.

Results show dividend rates, adjusted for changes in equity value, at an overall average of 9.3 per cent calculated over seven years of observation at five-year intervals between 1910 and 1940. This figure displayed a considerable variation by branch of industry. Among the top export commodities, rubber scored better than sugar and oil, whereas coffee took the lead above tobacco and tea in other parts of export agriculture. Among services, banking scored far better than shipping, trading or land transport. However, it must be noted that the calculation of averages by branch are haunted by data limitations.

For a full appreciation of the gains from investment by private firms in colonial Indonesia, it would be necessary to incorporate also evidence on the spectacular ups and downs in the value of stocks. These were potential gains or losses that would only materialize when the shareholder sold stock.

Returning to the initial question: Were rates of return, as indicated by adjusted dividend rates, exorbitant? The average cited, 9.3 per cent over the period 1910-1940, is higher than the 6 per cent that shareholders normally would expect as a direct cash return on stocks. Yet, the difference appears too small to warrant an assertion that rates of return were in any way exorbitant. Colonial business was perhaps more profitable than other investment, but not that much more so.

*Table 1. Coverage of firms reporting non-zero dividends and carrying a listing on the Amsterdam Stock Exchange, 1910-1940.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | All firms | Dutch firms reporting non-zero dividends | Of which listed on Amsterdam Stock Exchange | Average nominal equity (mill. gld.) |
| 1910 | 2059 | 420 |  74 |  6.2 |
| 1915 | 3008 | 403 |  75 |  9.2 |
| 1920 | 3736 | 552 |  93 |  10.1 |
| 1925 | 3497 | 391 | 102 |  10.4 |
| 1930 | 2854 | 487 | 140 |  16.7 |
| 1935 | 1884 | 196 |  38 |  15.7 |
| 1940 | 2156 | 356 |  98 |  15.6 |

Sources: *Handboek* 1910-1940; Stichting Capital Amsterdam: ‘Prijs-couranten’ 1910-1940.

*Table 2. Aggregate dividend payout and potential total gain from Dutch business in colonial Indonesia, 1910-1940.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Total dividend payout (mill.gld.) | Adjusted dividend rate (%) | Rate of share value gain (%) | Rate of total gain (%) |
| 1910 |  51.5 |  7.9 |  4.7 |  12.6 |
| 1915 |  80.2 | 10.9 |  30.8 |  41.7 |
| 1920 | 203.5 |  7.1 | -22.3 | -15.2 |
| 1925 | 159.8 |  7.1 |  39.4 |  46.5 |
| 1930 | 252.2 | 12.7 | -30.0 | -17.3 |
| 1935 |  45.0 |  9.5 |  12.8 |  22.4 |
| 1940 | 154.2 |  5.8 |  25.9 |  31.7 |

Sources: *Handboek* 1910-1940; Stichting Capital Amsterdam: ‘Prijs-couranten’ 1910-1940.

*Figure 1.* *Average dividend rates and real gain in Dutch colonial firms over 1906-1936.*

 Source: Keyser 1937: 8-9.*Figure 2. Average dividend rates of selected Dutch colonial firms, 1910-1940.*

Sources: *Handboek* 1910-1940; Stichting Capital Amsterdam: ‘Prijs-couranten’ 1910-1940.

*Figure 3. Average adjusted dividend rates at Dutch firms in the top export branches of the economy in colonial Indonesia , 1910-1940.*

Sources: *Handboek* 1910-1940; Stichting Capital Amsterdam: ‘Prijs-couranten’ 1910-1940.

Note: Averages apply to at least four individual companies per branch in any given year.

 *Figure 4. Average adjusted dividend rates at Dutch firms in selected branches of estate agriculture in colonial Indonesia, 1910-1940.*

Sources: *Handboek* 1910-1940; Stichting Capital Amsterdam: ‘Prijs-couranten’ 1910-1940.

Note: Averages apply to at least four individual companies per branch in any given year.

*Figure 5. Average adjusted dividend rates at Dutch firms in selected branches of the services sector in colonial Indonesia , 1910-1940.*

Sources: *Handboek* 1910-1940; Stichting Capital Amsterdam: ‘Prijs-couranten’ 1910-1940.

Note: Averages apply to at least four individual companies per branch in any given year.

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2. The database with information from the *Handboek* will be made accessible through the website colonialbusinessindonesia.nl, whereas share price data may be found at the website of the Foundation Capital Amsterdam (www.capitalamsterdam.com). I gladly acknowledge the contributions by Thomas de Greeve and Jelmer Puylaert in constructing the *Handboek* database and by Jasper van der Schoot in processing the Capital Amsterdam data. [↑](#footnote-ref-2)
3. Use of spot estimates separated by intervals of five years implies that the situation in any given year may be considered an independent event. Therefore, it is logical to apply arithmetic rather than a geometric averages. [↑](#footnote-ref-3)