

Funding childcare in the Caribbean Netherlands

Phase III - Second cost analysis and final recommendation for a system of funding

Final report

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Conclusions and summary

A request for data was used to identify childcare costs by type of organisation and island. Cost differences across organisations are explicable.

A new system of funding will be used to objectively determine future compensation amounts. On Bonaire, daycare organisations, organisations that offer daycare as well as out-of-school care (ASC) and host parents will receive an increase over the 2023 subsidy based on the new system. Policy decisions will determine whether out-of-school organisations (ASCs) on Bonaire and all organisations on St. Eustatius and Saba will benefit under the new system.



Understanding costs and recommending a system of funding

The Amsterdam Bureau for Economics, under contract to the Ministry of Social Affairs and Employment (SZW), conducted a study on the funding of childcare in the Caribbean Netherlands in order to arrive at a legally grounded childcare funding system. This report clarifies the costs of childcare in the Caribbean Netherlands as well as the factors that determine differences across types of organisations and between the islands of Bonaire, St. Eustatius and Saba. In addition, this report contains a recommendation for a new system for funding childcare in the Caribbean Netherlands.

Costs of childcare

A request for data was issued in mid-2023 in order to shed light on childcare costs

To identify these costs, the request for data was initiated in the second quarter of 2023 asking organisations to provide cost data for the 2022 financial year. In total, 29 organisations on Bonaire (response rate: 73 percent), 6 organisations on St. Eustatius (response rate: 86 percent) and 2 organisations on Saba (response rate: 100 percent) supplied cost data. This data was used to determine cost levels per type of childcare and per island.

On average, ASCs had the highest costs per day part, while host parents had the lowest costs

In general, costs associated with childcare can be divided into three items: staff, premises and miscellaneous. Staff costs are costs that organisations incur in relation to EYT staff, such as salary, holiday pay and employer contributions. Premises costs include rental or mortgage payments, energy costs and costs of annual maintenance. Miscellaneous costs relate to costs for such items as equipment, meals, transport, the organisation of activities and costs that do not fall under the aforementioned cost items. Other, non-teaching personnel fall under miscellaneous costs.

Childcare costs for daycare averaged \$29 per half day in 2022, ASC averaged \$34 per half day, organisations offering both daycare and ASC averaged \$27 per half day and host parents averaged \$12 per half day.

These costs vary greatly from island to island

Childcare costs are highest on Saba, averaging \$44 per half day, followed by St. Eustatius with an average of \$32 per half day. Average costs on Bonaire amount to \$27 per half day. These averages are based on all types of care.

Staff and miscellaneous costs per half day are both higher on Saba than on Bonaire. Staff costs are lower on St. Eustatius than on Bonaire, while miscellaneous costs are equivalent to those on Saba. Premises costs per half day are approximately the same on all three islands.

In 2022, a large proportion of organisations on Bonaire received lower subsidies than they incurred in costs

Many organisations did not receive sufficient amounts of subsidy (and income from parental contributions) to cover that year's costs. The same appears to be the case for some of the organisations in 2023, despite an increase in subsidies. A number of organisations were questioned about how they handle the gap between subsidy and costs. They indicated that this shortfall is met by drawing on existing buffers, not paying salaries (or paying them late), running up credit with suppliers and taking out (private) loans.

Conclusions and summary

Three factors play a decisive role in cost differences between organisations

The factors accounting for differences in costs in different organisations are*:

- i) Number of children per early-years teacher (EYT);
- ii) Payroll costs per EYT;
- iii) Number of personnel employed to perform other work (such as cooking, cleaning, transport, odd jobs, etc.).

Factor i) Number of children per EYT

There is a negative relationship between the number of children per EYT and staff costs per half day. In general, staff costs per half day tend to be lower at organisations that have more children per EYT. On average, the number of children per EYT is lowest at ASC organisations. This is noteworthy because quality requirements for this type of childcare actually prescribe a less stringent staff/child standard. One explanation is that, although ASCs are only open for part of the day, the demands of staff recruitment and retention mean that staff tend to be full-time employees.

On average, the number of children per EYT is lowest on Saba and highest on St. Eustatius. This is in keeping with the high staff costs per half day on Saba and the low staff costs per half day on St. Eustatius. On Bonaire, both the number of children per EYT and staff costs per half day lie somewhere between the levels of St. Eustatius and Saba.

The varying number of children per EYT can also be attributed to quality requirements. The staff/child standard prescribes a maximum number of children per EYT. Organisations that meet this quality requirement will need more staff and, as a result, generally have higher staff costs than organisations that do not meet the requirement.

Factor ii) Payroll costs per EYT

The second factor determining cost differences between organisations is salary per EYT. Average payroll costs per EYT are highest at organisations that offer both daycare and ASC, and lowest for host parents. Salary levels also vary greatly between islands. On average, the highest salaries are found on Saba and the lowest on St. Eustatius. The average salary on Bonaire lies somewhere between the levels on St. Eustatius and Saba.

BES(t) 4Kids. has compiled a terms-of-employment growth package, which contains salary scales differentiated by position and EYT qualifications. The decision by organisations to adopt or not adopt the salary from this growth package largely accounts for the differences in salary levels between organisations. The EYT qualifications of early-years teachers also have an influence on salary differences across organisations.

Factor iii) Number of personnel employed for other work

The third factor accounting for cost differences among organisations is the number of personnel employed to perform work not directly involving childcare, such as cooking, cleaning, doing odd jobs, etc. This 'other' work is organised differently in different organisations. Some organisations employ personnel for this purpose, others outsource this work and there are also organisations that perform this work themselves without employing anyone specifically for this purpose. The latter group likely incurs other hidden costs, such as overtime and reliance on family and friends.

* The provided data identified these three factors as most decisive. but other factors may also help account for cost differences among organisations.

Conclusions and summary

It is possible to account for cost differences

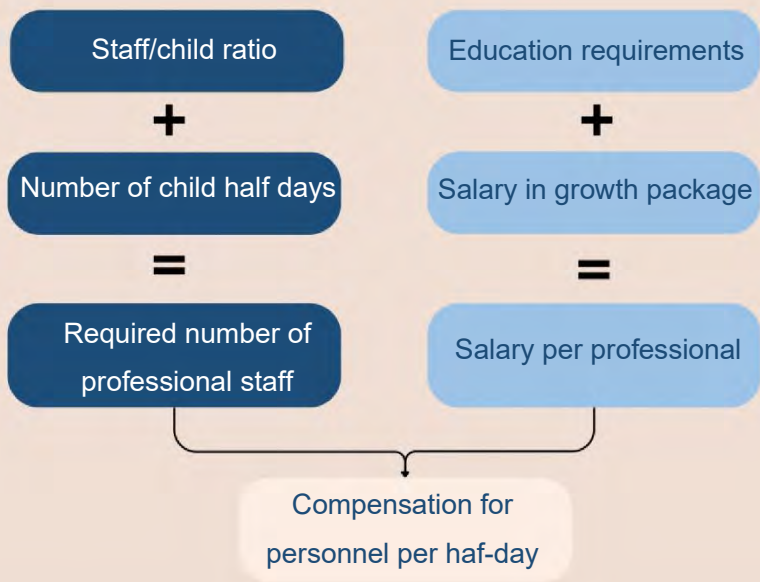
Cost differences across organisations can be attributed to differences in numbers of children per EYT, staff salary levels and the number of personnel employed for other work.

Organisations complying with the staff/child standard accommodate fewer children per EYT than non-compliant organisations. A few organisations have also decided to work with smaller group sizes than prescribed in the staff/child standard. Differences in salary levels are attributable to the adoption or non-adoption of the BES(t) 4Kids. terms-of-employment growth package and differences in the number of other personnel resulting from the various ways in which other work is performed.

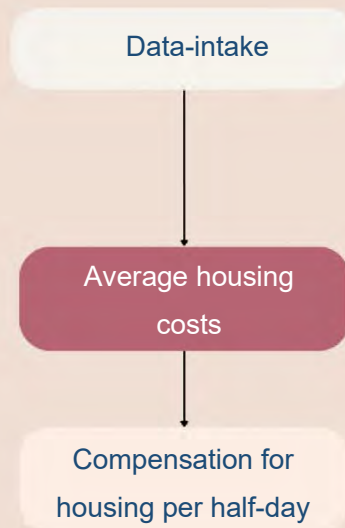
Recommendation for the new system of funding



Professional staff (pedagogical)

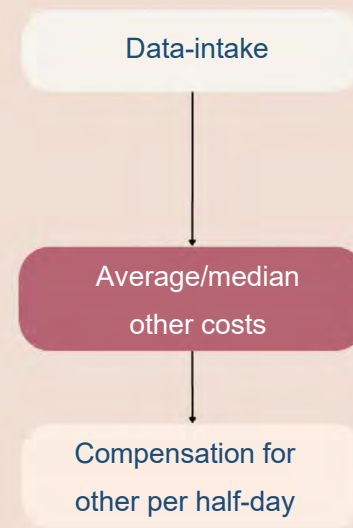


Housing



Other

including other personnel



Compensation personnel



Compensation housing



Compensation other



Additional mark-up



Total compensation per half-day

Recommendation for the new system of funding

The compensation is to be determined in an objective manner

As far as possible, the recommended system will use objective criteria to calculate the compensation. In addition, the recommended new system will also take account of improvements that organisations make, both now and in the future. Finally, in developing the new system, consideration will be given to feasibility for both the administering organisation and childcare organisations.

The compensation calculated according to the new system shall consist of fees that cover staff costs, premises costs and miscellaneous costs.

The quality requirements imposed on organisations under the BES(t) 4Kids programme will serve as objective criteria by which the level of compensation relating to EYT staff can be set.* This compensation will be based on the required number of staff (considering the number of children for whom care is provided) and the staff costs per EYT. The required number of staff will be derived from the staff/child ratio and the total number of child half days. Pending a CLA for the childcare sector in the Caribbean Netherlands, staff costs per EYT will be based on the salaries in the BES(t) 4Kids terms-of-employment growth package as well as the applicable qualification requirements for staff.

The subsidies for premises costs and miscellaneous costs are to be calculated using the cost data supplied by organisations.

* Non-teaching personnel, such as managers, cleaners, chefs, etc., are categorised under miscellaneous costs.

† Offering subsidies on the basis of median premises and miscellaneous costs reduces the impact of outliers in the cost data.

‡ St. Eustatius and Saba require a EYT with Vocational Education (MBO) Level 3 to be on site at least 3 days a week.

The recommended system will subsidise premises and miscellaneous costs using average or median premises and miscellaneous costs, adjusted for price differences between islands.†

There is a proposal to include an additional payment to the subsidies for staff, premises and miscellaneous costs in the funding system. This additional payment is intended to compensate for costs that the funding system does not yet take into account. Such items may include costs associated with (future) quality requirements not yet covered by the funding system.

Table S.1 A lower and upper limit has been established for each policy decision.

Policy decisions	Lower limit	Upper limit
Staff/child standard	Average quality requirement	Average age of children
Efficiency factor	1.05 all types of childcare	1.44 daycare and host parents, 1.63 ASC
Staff with MBO 4 education on site‡	3 days a week	5 days a week
EYT staff salary	Salary scale grade 1	Salary scale grade 10
Holiday pay	No holiday pay	Holiday pay paid
Supplementary pension	No supplementary pension	Supplementary pension paid
Host parent premises	Premises costs not subsidised	Premises costs subsidised
Compensation for miscellaneous costs	Median miscellaneous costs	Avg. miscellaneous costs per island
Additional payment	1% for all types of childcare	6% for daycare and host parents, 16% for ASC

Source: Amsterdam Bureau for Economics (2023).

Conclusions and summary

Several policy decisions must first be made before the recommended system can be implemented. The subsidies awarded under the system have been identified for the various policy decisions. The policy decisions and the accompanying lower and upper limits are shown in Table S.1*.

Indicatory compensation

On Bonaire, daycare organisations, organisations that offer daycare as well as ASC, and host parents will benefit from the recommended system

Table S.2 shows the compensation calculated using the recommended funding system. Compensation ranges are indicated, as the exact subsidy amount will depend on policy decisions. The compensation under the recommended system incorporates the parental contribution, since the subsidy and the parental contribution must jointly serve to cover the incurred costs. Due to disclosure risks, the various types of childcare on St. Eustatius and Saba are shown together in Table S.2.

Under the recommended system, daycare organisations on Bonaire will obtain an increase over the subsidy (+ parental contribution) in 2023. The increase is due to the relatively stringent staff/child standard that applies to daycare, which requires relatively large numbers of EYT staff. Since this staff constitutes a major cost item, the subsidy becomes relatively high. The subsidy level (+ parental contribution) for ASCs lies within the subsidy range under the recommended system. Policy decisions will therefore determine if ASCs will benefit from the new system. The new ASC subsidy is lower than the daycare subsidy because ASCs are subject to a less stringent staff/child standard, thus requiring fewer EYT staff.

* Researchers set lower and upper limits in order to provide estimates of future subsidy amounts. The Ministry of Social Affairs and Employment's ultimate policy decisions, and thus the resulting subsidies, may exceed the range presented in this report.

† Under the new subsidy scheme, there will be no separate subsidy for organisations that offer both daycare and ASC. As is the case under the current scheme, they will continue to receive a combination of the daycare and ASC subsidies. This type of care is presented separately in Table S.2. so that the new subsidy can be compared to the costs that these organisations indicated in response to the request for data.

‡ The 2023 subsidy excludes the one-off extra subsidy that organisations received in 2023.

Finally, organisations that offer daycare as well as ASC will, together with host parents, benefit from the new system†. Host parents will receive a subsidy increase under the new system, compared to the subsidy (+ parental contribution) in 2023. Since host parents are subject to a stringent staff/child standard, they may only care for a maximum of six children. Considering that a relatively limited number of children are looked after by host parents, a relatively high subsidy per half day is needed to cover staff costs. A unique feature of host parents is that they do not require separate premises to care for children. For this reason, the new system may consider excluding host parents from the premises subsidy or opting for a partial subsidy.

Table S.2 The majority of childcare organisations will be better off under the recommended system.‡

Dollars per half day	Costs 2022	Subsidy 2022 + parental contribution	Subsidy 2023 + parental contribution	Indicatory compensation using recommended system
Bonaire: Daycare	\$25	\$12	\$15	\$23 - \$37
Bonaire: ASC	\$30	\$19	\$25	\$19 - \$32
Bonaire: Daycare & ASC	\$27	\$16	\$20	\$21 - \$33
Bonaire: Host parents	\$12	\$8	\$10	\$25 - \$39
Bonaire - Host parents without subsidy for premises	\$12	\$8	\$10	\$22 - \$36
St. Eustatius - all childcare	\$32	\$30	\$31	\$22 - \$45
Saba - all childcare	\$44	\$44	\$46	\$22 - \$46

Source: Amsterdam Bureau for Economics (2023)

Conclusions and summary

Policy decisions will determine if organisations on St. Eustatius and Saba will be better off under the recommended system

On St. Eustatius and Saba, the subsidy in 2023 (+ parental contribution) is within the subsidy range set by the recommended system. As a result, policy decisions will determine if organisations on St. Eustatius and Saba will, on average, be better off under the recommended system. It should be noted, however, that a number of organisations on St. Eustatius and Saba receive additional subsidies. When the subsidy under the recommended system is only compared with the subsidy that these organisations received from UVB in 2023, the organisations on St. Eustatius and Saba will be better off.

Implementation

The level of compensation granted to organisations may be made contingent on their meeting quality requirements

The new funding system assumes that all organisations fully comply with these requirements. In practice, some organisations do not yet (fully) meet them. This shortcoming must be taken into account when implementing the new system. Consideration could be given to reducing the total compensation for organisations that do not yet (fully) meet the quality requirements.

A transitional model could be implemented for organisations where the compensation does not cover all the costs

Under the new funding system, some organisations will not receive sufficient compensation to cover all their costs. These organisations will have to work to reduce costs in the future. However, the process of reducing these costs will not be completed overnight. Therefore, a transitional model could be used to provide organisations the opportunity to complete this task. This scheme would allow organisations to be initially compensated to cover all their costs, and then the compensation would be gradually scaled down to the amount calculated under the new funding system. Organisations would then have time to move towards lower cost levels.

1. Introduction

To arrive at a legally grounded approach to funding childcare in the Caribbean Netherlands, the Ministry of Social Affairs and Employment (SZW) commissioned a study into the funding of childcare. This report identifies the cost of childcare in the Caribbean Netherlands as well as the factors that determine the differences in cost price between types of organisations and between islands. In addition, this report contains recommendations concerning the establishment of a new system for funding childcare in the Caribbean Netherlands.



Background

The public entities of Bonaire, St. Eustatius and Saba, and the Ministries of Education, Culture and Science (OCW), Social Affairs and Employment (SZW), Health, Welfare and Sport (VWS) and the Interior and Kingdom Relations (BZK) have all worked together to structurally improve childcare and ASC facilities in the Caribbean Netherlands. The BES(t)4kids programme was launched for this reason. Its aim is to offer high-quality, safe and accessible childcare to all children in the Caribbean Netherlands. Part of this programme includes making childcare and ASC more financially accessible.

To arrive at a legally grounded approach to funding childcare in the Caribbean Netherlands, the Ministry of Social Affairs and Employment, in close cooperation with the public entities of Bonaire, St. Eustatius and Saba, commissioned a study into the funding of childcare. The study was divided into three phases, resulting in recommendations concerning a system of funding and yielding reliable cost price data that can be used to implement the funding system. The three phases of the study are:

1. Interim recommendations on the establishment a system of funding childcare;
2. An initial, preliminary assessment of childcare costs;
3. A subsequent, final assessment of childcare costs, and final recommendations concerning the funding system.

The first two phases of the study were completed in 2021. This report relates to the third phase of the study, which also includes results from the two previous phases.

Phase III

Two goals were formulated for the third phase of the study:

1. To gain an understanding about the cost structures of childcare organisations in the Caribbean Netherlands as well as the factors that determine the differences in cost price between types of organisations (daycare, out-of-school care and host parents) and between islands (Bonaire, St. Eustatius and Saba). This understand will serve as a basis for determining integral cost prices, specified per island and type of care.
2. To provide recommendations about the establishment of a system of funding childcare in the Caribbean Netherlands, based on the results of the study and in conjunction with past recommendations (phase I and II). These recommendations must consider the acquired insights into the cost structures of childcare organisations, the specific context of the Caribbean Netherlands (per island), the underlying principles regarding the design of the structural funding scheme (such as investments and extra costs due to more stringent quality requirements), implementation issues, as well as salary and price developments.

Structure of the report

The report is structured as follows. Chapter 2 offers insight into the cost structures of childcare organisations and the factors that have an impact on costs. Chapter 3 contains recommendations for establishing the funding system and indicates the applicable policy decisions under the proposed system. Chapter 4 presents tentative outcomes of the funding system. Finally, chapter 5 discusses the implementation of the new system.

2. Childcare costs in the Caribbean Netherlands

On average, childcare costs are highest for ASCs and lowest for host parents. Cost differences can also be observed between islands, with childcare costs being highest on Saba and lowest on Bonaire.

A number of factors account for cost differences between organisations, notably the number of children per EYT, salary costs per EYT, and the number of personnel employed for other work. The cost differences between organisations can be explained on the basis of these factors.



Underlying principles when calculating costs

Childcare costs were calculated based on the cost data supplied by organisations

This chapter will investigate the costs of childcare in the Caribbean Netherlands. To determine childcare costs in the Caribbean Netherlands, a request for data was issued to all childcare organisations on Bonaire, St. Eustatius and Saba in May 2023. In this request for data, organisations were asked to supply detailed data about the costs that they incur as an organisation. Based on the data supplied by organisations, this chapter will explore the cost structure of childcare in the Caribbean Netherlands as well as the factors that determine cost differences between types of organisations (daycare, after-school care and host parents) and between islands (Bonaire, St. Eustatius and Saba).

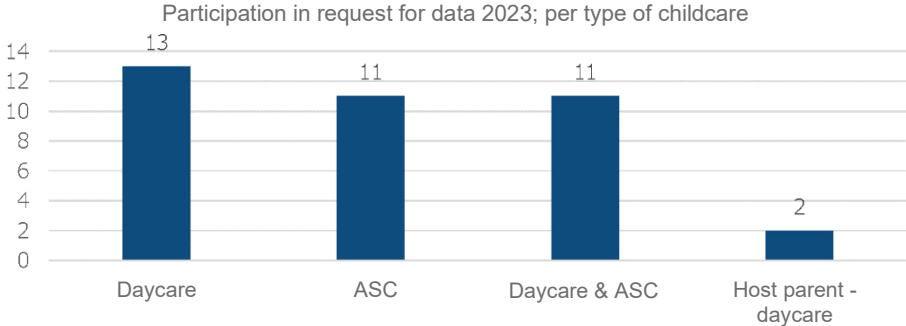
In total, 37 of the 48 organisations supplied cost data. The request for data was answered by a representative group of 13 daycare organisations, 11 out-of-school care organisations (ASCs), 11 organisations that offer daycare as well as ASC and two host parents (see Figure 1). 73 percent of all organisations on Bonaire supplied cost data, 86 percent on St. Eustatius and 100 percent on Saba (see Figure 2).

Principles for calculating costs

The following principles were used when calculating the costs:

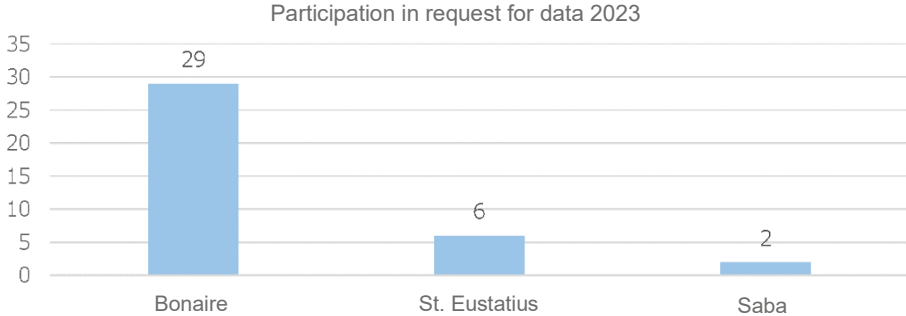
- Organisations were asked to supply cost data that (wherever possible) relates to 2022.
- To enable comparisons between organisations, costs have been expressed in dollars per child per half day. Details about the number of half days per organisation in 2022 were obtained from Implementation of Policy (UVB).

Figure 1 A representative group of organisations completed the final data questionnaire.



Source: Amsterdam Bureau for Economics (2023).

Figure 2 The response rate to the final request for data was 73 percent on Bonaire, 86 percent on St. Eustatius and 100 percent on Saba.



Source: Amsterdam Bureau for Economics (2023).

Organisations with an unknown number of half days in 2022 were excluded from the analysis. For example, UVB did not possess data about the number of half days of organisations that were not (yet) part of the subsidy scheme in 2022. This involved a total of five organisations that responded to the request for data: two daycare organisations on Bonaire, one ASC provider on Bonaire and two daycare organisations on St. Eustatius. As a result, 32 - and not 37 - organisations were included in the cost analysis.

- Two organisations on Bonaire that responded to the request for data only joined the subsidy scheme in July 2022. Therefore, the total number of half days of these organisations only reflects half days in the second half of 2022. Nonetheless, these organisations were included in the analysis.
- During the holidays, ASCs may decide to remain open for both halves of each day instead of just one. These 'extra' half days have not been included in the overview for number of half days supplied by UVB. Although UVB was able to supply data about the number of extra days/weeks that ASCs on Bonaire remained open during the holidays, it does not possess this information as far as St. Eustatius and Saba are concerned. After consulting project leaders of the BES(t)4kids programme on Saba and St. Eustatius, it was determined that ASCs on St. Eustatius and Saba remain open for an extra nine weeks per year during the holidays. In addition to the extra opening hours, the occupancy rate is needed to calculate the number of extra half days during holidays. The number of children using the extra half day of childcare during holiday periods is, however, unknown. In general, the rate of occupancy during the holidays tends to be lower than during other periods. An assumption was made that 50 percent of the children who use ASC on Bonaire, St. Eustatius and Saba also use the extra half day of childcare during the holidays.
- The request for data also queried organisations about the 'hidden' costs that they incur as an organisation. Such costs involve activities that take up time or goods that organisations receive, but for which no costs are registered.

They may, for example, relate to overtime or reliance on family members. Quantifying these costs based on the data provided has proved difficult. As a result, these hidden costs have not been included in the costs presented in this chapter. However, consideration is given to the most common hidden costs for each type of childcare and island, and hidden costs are included in possible explanations of cost differences across organisations. The new system of funding also takes account of the hidden costs that organisations incur.

Principles for calculating income

This chapter compares the costs of organisations to their income in 2022 and 2023. The following principles were used when determining income:

- The amount for the cost-price reducing subsidy was calculated for each organisation by multiplying the number of half days per child (data from UVB) by the subsidy per child per half day obtained from the Temporary Childcare Financing Subsidy Scheme for the Caribbean Netherlands. When performing this calculation, consideration was also given to the fact that subsidy amounts vary per island and type of childcare. The total subsidy amount is therefore a calculation and may differ from the actual subsidy amount disbursed, of which the researchers have no knowledge.
- Since the number of half days per organisation in 2023 cannot yet be determined, calculation of the cost-price reducing subsidy for 2023 is based on the assumption that the number of half days in 2023 is equal to the number of half days in 2022.
- When it comes to the two organisations that only joined the Temporary Subsidy Scheme in July 2022, the assumption made for the calculation of the subsidy for 2023 is that the number of half day in 2023 is twice the number of half days in 2022.

Childcare costs in the Caribbean Netherlands

- Besides a subsidy, organisations also receive a parental contribution. The amount of the monthly parental contribution is specified in the Temporary Childcare Financing Subsidy Scheme for the Caribbean Netherlands. The total annual income from parental contributions was calculated per organisation based on the number of half days per child. For the purposes of this calculation, the maximum parental contribution was assumed to occur.
- Since July 2022, organisations have been receiving an extra compensation to cover the higher costs of children under two years old. This supplement amounts to 50 dollars per month. This supplement was calculated per organisation based on the age of children listed in the file obtained from UVB and added to annual income.
- Finally, a few organisations on St. Eustatius and Saba receive additional income to supplement the subsidy from UVB. The request for data inquired about the amount of this additional income, which was subsequently added to the calculated annual income of these organisations. Calculation of income in 2023 assumes that the additional income for 2023 does not change from 2022. In the case of Bonaire, data were received from the public entity of Bonaire from four organisations that receive an additional subsidy for children with additional care needs. This subsidy was added to the calculated subsidy. Any other additional income has not been identified for Bonaire. The calculated income level for individual organisations may therefore not correspond to actual income levels.

Reliability of cost data

An initial request for data was sent to childcare organisations in 2021, at an earlier stage of the cost study. It asked them to provide cost data for 2020. The financial records of many organisations proved inadequate to provide reliable cost data at that time. The COVID-19 pandemic also meant that 2020 was not a representative year with regard to childcare costs. For this reason, a decision was taken to initiate a new request for data in 2023 (for the year 2022).

In March 2023, researchers separately visited each childcare organisation in order to gain a good understanding of childcare costs and the factors affecting them. Organisations were also prepared for the new request for data during these visits. This new request for data was issued in May 2023.

Organisations responded to this request without any assistance. Three organisations in Bonaire indicated they would like help in completing the request for data and completed it with the help of an administrative support person.

The Amsterdam Bureau for Economics did not perform any checks on the suitability or accuracy of the supplied data. If, however, supplied data gave rise to any questions, organisations were sent additional queries and corrections were made accordingly.

The organisations proved better able to independently complete the request for data than they were in response to the first data request in 2021. The one-on-one meetings with researchers enabled them to be better prepared for the request. They had also made improvements to their financial records over the previous two years.

Nonetheless, the cost data supplied by organisations remains fraught with uncertainty. There are two main reasons for this circumstance. Firstly, the quality of recordkeeping at (some) organisations remains an area of concern. The Ministry of Social Affairs and Employment and the BES(t)4kids programme planned to provide support to childcare organisations to improve their records prior to this study. This support has not yet materialised.

Childcare costs in the Caribbean Netherlands

Secondly, the timing of the request (May 2023) meant that many organisations had not yet closed accounts for the 2022 financial year, causing them to work partly with estimates, budgets and approximations, rather than recognised, actual costs. To obtain more reliable cost data, it would first be necessary to fulfil the accounting support intended for the organisations and subsequently issue a new request for data.

To partially mitigate the impact of unreliable cost data on the funding system, the decision was taken during the design of the funding system to base compensation amounts on objective benchmarks wherever possible (i.e. not using cost data). As a result, the cost data supplied by organisations only has a limited impact on the compensations that are calculated using the funding system.

Childcare costs per type of childcare

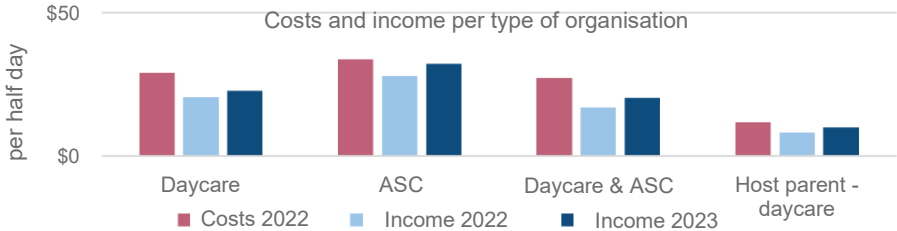
In 2022, the average cost per half day was highest at ASC organisations and lowest at host parents

Figure 3 shows the average cost per type of childcare in the Caribbean Netherlands, and compares them to income in 2022 and expected income in 2023.* The data in Figure 3 represents combined averages for all three islands. Average total costs in 2022 amounted to about \$29 per half day for daycare, about \$34 per half day for ASC, about \$27 per half day for organisations offering both daycare and ASC, and about \$12 per half day for host parents. Average costs for each type of childcare were (significantly) higher than income in 2022, and remain higher than (expected) income in 2023. This means that, on average, organisation suffered losses in 2022. This situation is discussed in more detail later in this chapter.

* Weighted averages, calculated using the number of half days per organisation, were used to calculate average costs and income. As a result, large organisations (with more half days) have a bigger impact on the average than small ones do.

Figure 3 shows the average costs per type of childcare for organisations on Bonaire, St. Eustatius and Saba. Costs per type of childcare are partly influenced by cost differences between islands. If only organisations on Bonaire are considered, the average total cost of daycare is about \$25 per half day, ASC about \$30 per half day and organisations offering both daycare and ASC about \$27 per half day. Host parent childcare only occurs on Bonaire. As a result, the average cost of daycare and ASC in Figure 3 is influenced by the higher costs on St. Eustatius and Saba. The fact that the costs for organisations offering both daycare and ASC are higher in Figure 3 than the costs of organisations only offering daycare can be attributed to cost differences between islands. Since the average costs of daycare and ASC are similarly influenced by the higher costs on St. Eustatius and Saba, including organisations on St. Eustatius and Saba in the average costs has little impact on the cost differences across organisations.

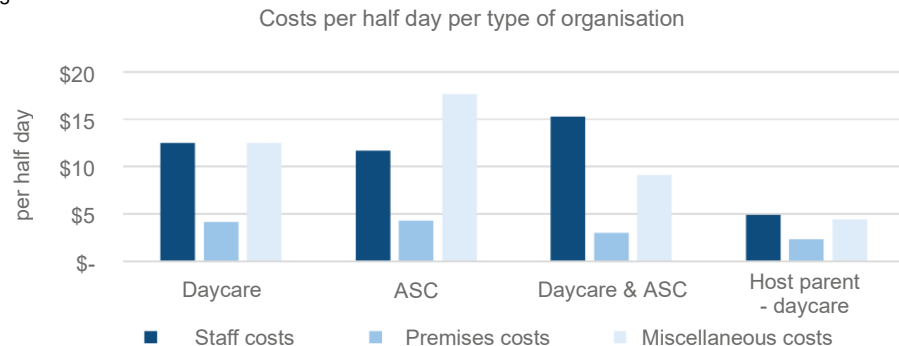
Figure 3 In 2022, the average cost per half day was highest at ASC organisations and lowest at host parents.



Source: Amsterdam Bureau for Economics (2023).

Childcare costs in the Caribbean Netherlands

Figure 4 The ratio between staff costs, premises costs and miscellaneous costs differs per type of organisation.

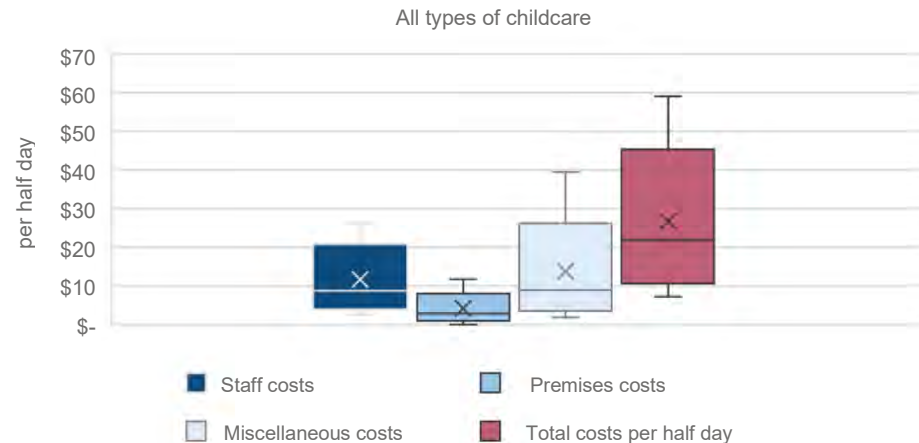


Source: Amsterdam Bureau for Economics (2023).

Costs per half day are widely spread

Figure 5 shows how costs are spread for all organisations. The figure should be interpreted as follows. The lower and upper limits indicate the minimum and maximum costs. The total costs per half day vary from \$7 per half day to \$59 per half day. The 'box' indicates the ways in which costs are spread across the quartiles. The bottom of the box represents the first quartile, whereby 25 percent of the organisations are below this cost level. The top of the box represents the third quartile, whereby 75 percent of the organisations are below this cost level. The horizontal line in the box represents the second quartile (the median) and the cross inside the box indicates the average cost level.

Figure 5 There is a large spread in the costs of organisations.



Source: Amsterdam Bureau for Economics (2023).

The largest spread can be seen in miscellaneous costs, followed by staff costs. Premises costs also vary, but their dispersion only has a limited impact on the total costs, as premises constitute a relatively minor cost item for organisations. The spread in costs by type of organisation is shown in the appendix.* For all types of organisations, the spread can primarily be attributed to differences in staff costs and miscellaneous costs across organisations. An analysis of the factors influencing cost differences across organisations is provided later in this chapter.

* The spread in the costs of host parents has not been included due to the limited number of observations.

Childcare costs in the Caribbean Netherlands

Most organisations state that they have hidden costs

The request for data also queried organisations about hidden costs not included in the accounts, in addition to the costs that are recorded. These costs relate to unrecorded hours worked or goods received. Organisations were asked about the type and frequency of incurred hidden costs. Due to varying answers that are difficult to quantify, hidden costs have not been included in the total cost of childcare presented in this chapter. However, the answers definitely provide an impression of the types of hidden costs that are common among organisations, and how this varies by organisation. Since his information was useful in the design of the proposed funding system, hidden cost were, in this respect, taken into account.

Table 1 shows the most commonly encountered hidden costs per type of organisation. In the vast majority of organisations, the manager/owner performs unpaid overtime on a weekly basis. At just under half of the organisations that only offer daycare or ASC, EYT staff also perform unpaid overtime each week. This percentage is slightly higher at organisations that offer both daycare and ASC. The supplied data indicates that managers/owners generally perform more overtime than EYT staff. The majority of organisations also said that they frequently receive help from family and/or friends, and frequently pay for things 'out of their own pocket'.

Table 1 Most organisations say that they have hidden costs.

Hidden costs	Daycare	ASC	Daycare and ASC	Host parents
Manager/owner performs overtime weekly	100%	90%	73%	50%
Childcare staff perform overtime weekly	44%	40%	64%	n/a
Frequently receive help from family and friends	88%	56%	64%	100%
Frequently pay for things out of own pocket	89%	67%	64%	100%

Source: Amsterdam Bureau for Economics (2023).

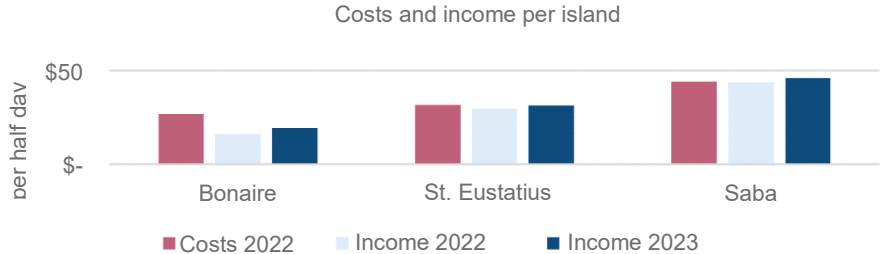
Cost of childcare per island

The average cost of childcare differs greatly per island

This section discusses childcare costs broken down for Bonaire, St. Eustatius and Saba. This analysis involves average costs and income for all types of childcare combined. Figure 6 shows that, at approximately \$44 per half day, the average cost in 2022 was highest on Saba, followed by St. Eustatius at \$32 per half day. Average costs were lowest on Bonaire, amounting to \$27 per half day. In addition to costs, income per half day also varies between islands. Average income per half day is highest on Saba, followed by St. Eustatius. Average income is lowest on Bonaire. The difference in income per half day between islands can be attributed to the additional (local) flow of subsidies that organisations on St. Eustatius and Saba receive, in addition to their regular subsidy.

Figure 3 shows that, in 2022, average costs for all types of childcare were higher than their income. Figure 6 reveals that this is especially the case for organisations on Bonaire. The costs and income of organisations on St. Eustatius and Saba were more or less the same in 2022.

Figure 6 The average cost of childcare differs greatly between Bonaire, St. Eustatius and Saba.



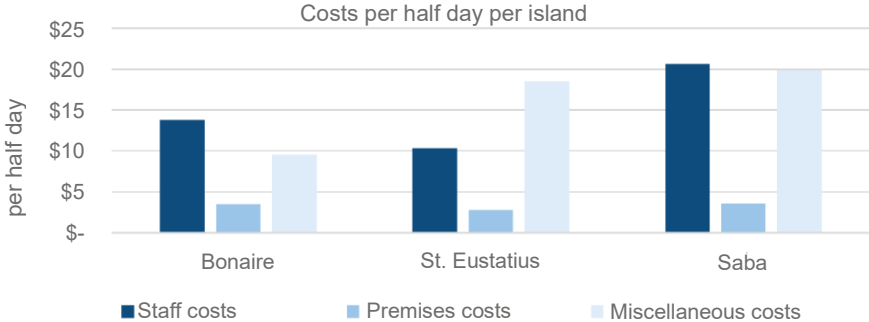
Source: Amsterdam Bureau for Economics (2023).

Childcare costs in the Caribbean Netherlands

Miscellaneous costs per half day are considerably higher on St. Eustatius and Saba than on Bonaire

Figure 7 shows staff costs, premises costs and miscellaneous costs for the three islands. One can see that the higher costs per half day on St. Eustatius are attributable to higher miscellaneous costs per half day, which are an average of \$9 per half day higher than on Bonaire. Staff costs on Saba are \$7 per half day higher than on Bonaire, and miscellaneous costs are \$10 per half day higher. Premises costs per half day are approximately the same on all three islands. An explanation for these cost differences between islands will be provided later in this chapter.

Figure 7 On St. Eustatius, miscellaneous costs are, on average, by far the biggest cost item.

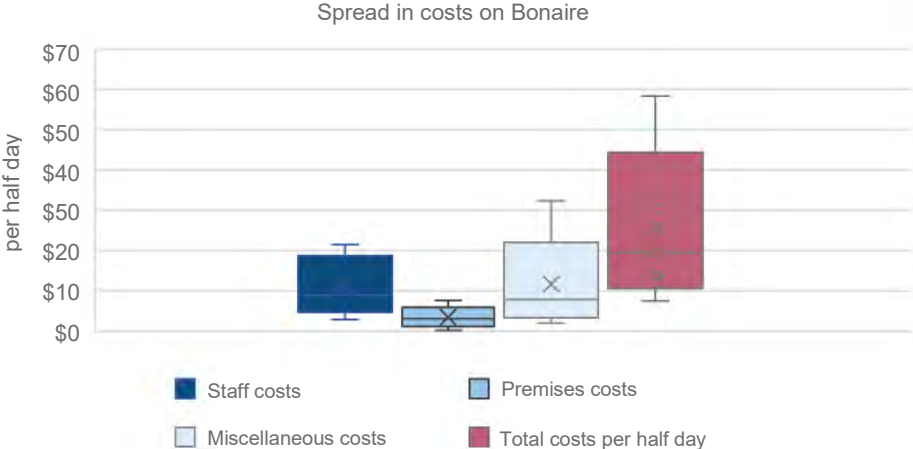


Source: Amsterdam Bureau for Economics (2023).

Costs are widely spread on Bonaire, St. Eustatius and Saba

Figure 8 shows the spread in costs between organisations on Bonaire. Total costs vary between \$7 and \$58 per half day.* The spread in costs can primarily be attributed to varying staff and miscellaneous costs per half day. The spread in premises costs per half day is rather limited.

Figure 8 The spread in costs across organisations on Bonaire can primarily be attributed to varying staff and miscellaneous costs per half day.

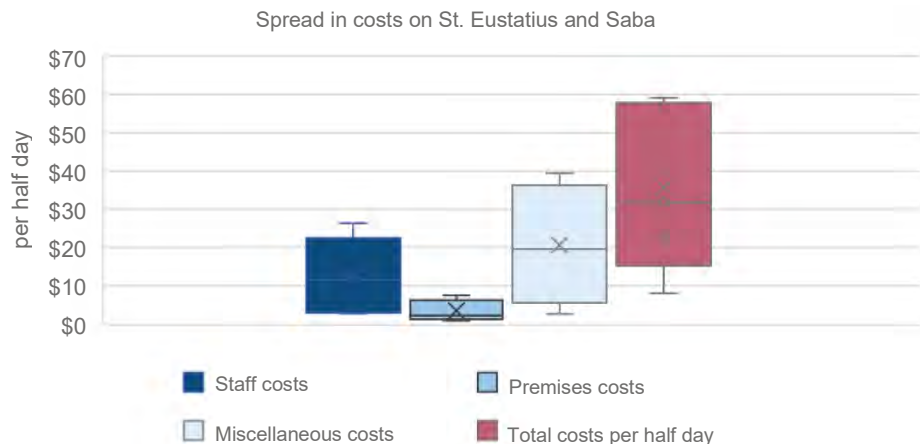


Source: Amsterdam Bureau for Economics (2023).

* The average costs shown in Figures 8 and 9 represent weighted averages. As a result, they deviate slightly from the average costs shown in Figure 6, which are weighted averages based on the number of half days per organisation.

The spread in the costs of organisations on St. Eustatius and Saba paints a similar picture. The spread in the costs of organisations on St. Eustatius and Saba are presented together in Figure 9 due to the low number of observations. Total costs amount to between \$8 and \$59 per half day. Once again, the spread in costs can primarily be attributed to varying staff and miscellaneous costs per half day, and there is limited spread in premises costs per half day. Compared to Bonaire, St. Eustatius and Saba have a slightly larger spread in miscellaneous costs per half day.

Figure 9 The spread in costs across organisations on St. Eustatius and Saba can primarily be attributed to varying miscellaneous costs and, to a (slightly) lesser extent, varying staff costs.



Source: Amsterdam Bureau for Economics (2023).

* This relates to costs for early-years teachers. Other employees can be found under miscellaneous costs.

† Source: Inspectorate of Education. (2023). Final Report on the Survey of the Quality of Childcare in the Caribbean Netherlands.

Factors that have an impact on childcare costs

The results presented above reveal that there is a large spread in costs per half day. For instance, staff and miscellaneous costs per half day vary greatly across organisations. Various factors influence the level of staff and miscellaneous costs per half day. The available data enabled some of these factors to be identified and described below.

There is a negative relationship between the number of children per EYT and the staff costs per half day

Figure 5 shows that staff costs per half day vary across organisations from \$3 to \$26 per half day.* The number of children that are cared for per EYT is one factor that has an impact on staff costs per half day. Organisations that care for relatively few children per EYT operate with a relatively high number of EYT staff, which results in higher staff costs per half day. Conversely, working with more children per EYT should lead to lower staff costs per half day.

The conversations that were held with organisations brought to light that a few organisations choose to operate with smaller group sizes, whereby staff costs per half day are higher. In addition, research by the Inspectorate of Education indicates that 30 percent of the organisations do not yet meet the staff/child standard.† These organisations care for more children per EYT than organisations that actually meet the staff/child standard, resulting in differences in costs per half day.

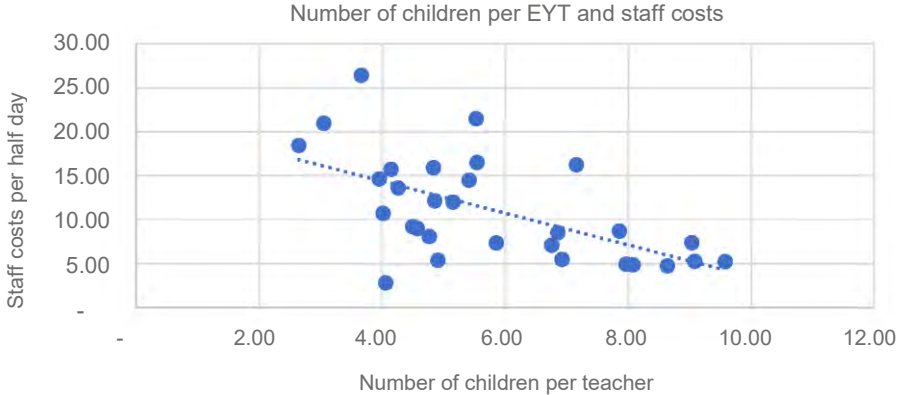
Figure 10 shows the relationship between staff costs per half day and the number of children per EYT.

Childcare costs in the Caribbean Netherlands

There is a negative relationship between the number of children per EYT and staff costs per half day. All other factors being equal, organisations caring for more children per EYT will tend to have lower staff costs. The spread in staff costs across organisations can thus (partly) be explained by differences in the number of children per EYT due, for example, to organisations not yet meeting the staff/child standard or to organisations working with smaller group sizes than required by the staff/child standard.

Figure 10 excludes two outliers where the number of children per EYT is very high.

Figure 10 There is a negative relationship between the number of children per EYT and staff costs per half day.



Source: Amsterdam Bureau for Economics (2023).

The salaries paid to early-years teachers vary greatly across organisations

In addition to the number of children per EYT, the spread in staff costs across organisations can also be partly explained by differences in the level of salaries across organisations. On the one hand, differences in salary levels originate from differences in the EYT qualifications of early-years teachers. Inspectorate of Education research reveals that all staff at 24 percent of the organisations meet the minimum qualification requirement.* This means that some staff is in training at 76 percent of the organisations. In addition, organisations pay varying salaries to their early-years teachers. The request for data included a question asking organisations whether they follow the salary guideline from BES(t) 4Kids. 69 percent of the organisations reported that they follow the salary guideline, or pay salaries even exceeding it. 31 percent of the organisation acknowledged that they do not (yet) pay EYT staff in accordance with the salary guideline.

Figure 11 shows that salary costs per FTE vary greatly across organisations. Most organisations pay their early-years teachers an average salary between \$14,000 and \$28,000 per year (on a full-time basis). Figure 11 shows that there is a positive relationship between average salary costs per FTE and staff costs per half day. This positive relationship could partly explain the spread in staff costs across organisations. The number of children per EYT and the level of salaries thus count as two factors influencing organisations' staff costs. An explanation for the cost differences between types of organisations based on these factors is discussed later in this chapter.

* Vocational education (MBO) Level 3 on Bonaire and Level 2 on St. Eustatius and Saba.

Figure 11 Salary costs per FTE across organisations.



Source: Amsterdam Bureau for Economics (2023).

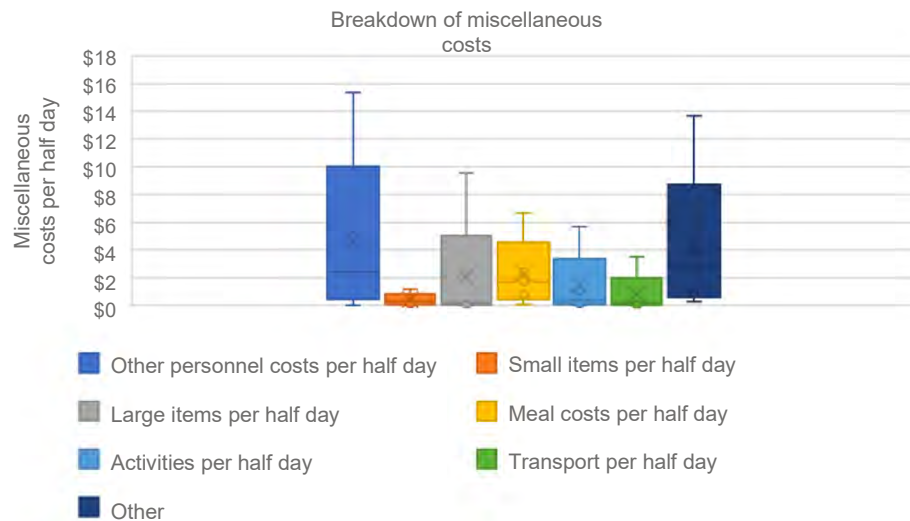
The largest spread in miscellaneous costs can be attributed to other personnel and 'other miscellaneous costs'*

Besides the spread in staff costs, miscellaneous costs per half day also differ greatly across organisations, varying from \$2 to \$39 per half day.

Organisations were asked to distinguish among different types of miscellaneous costs when submitting cost data. Figure 12 shows these various types of miscellaneous costs and the spread of these costs across organisations. * Other personnel constitute the largest cost item in miscellaneous costs and is also the cost item with the largest spread. 'Other miscellaneous costs' is also a large cost item where major differences can be across organisations.

The latter cost item is a collection of expenses that cannot be classified in the other cost items, e.g. cleaning supplies, training for personnel, annual outings with personnel, software licences (including Kindplanner) and the annual contribution to the Chamber of Commerce.

Figure 12 The largest spread in miscellaneous costs can be attributed to 'other personnel' and 'other miscellaneous costs'.



Source: Amsterdam Bureau for Economics (2023).

* Small items refer to supplies that are purchased at least once a year, such as nappies, pens/scripts and small toys. Depreciation costs were requested for expenditures on large items such as outdoor play equipment, computers and furniture.

Childcare costs in the Caribbean Netherlands

The way in which such activities as cooking and cleaning are organised constitutes one factor that influences the level of miscellaneous costs

The level of miscellaneous costs per half day can vary greatly across organisations because they organise activities other than childcare work, such as cooking, cleaning, organising activities and performing odd jobs (hereinafter 'other work') in a variety of ways. For instance, some organisations employ personnel specifically for this other work, such as a cook, kitchen assistant, cleaner, driver, handyman, etc. However, there are also organisations that outsource these activities, as well as organisations where the owner/manager of the childcare organisation, sometimes assisted by early-years teachers and/or family members, personally performs this work.

Organisations that employ more other personnel normally incur higher (miscellaneous) costs

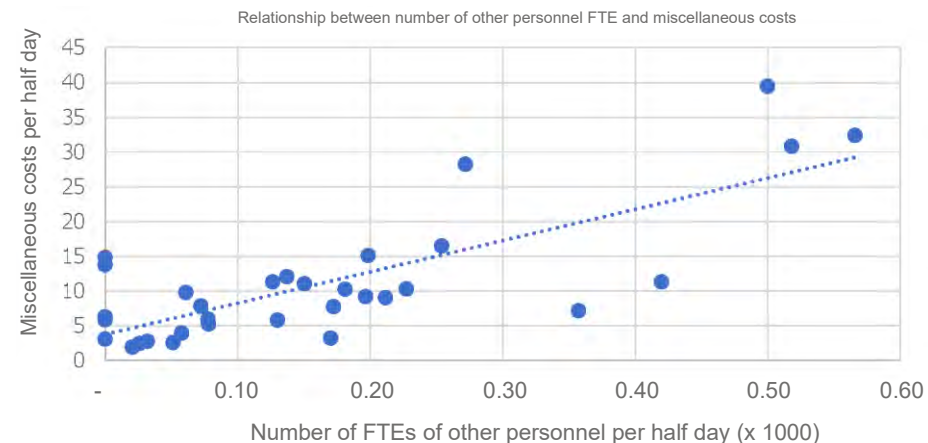
To determine if the way other work is organised impacts the level of miscellaneous costs, we charted the relationship between the number of FTEs of other personnel and miscellaneous costs per half day.

Figure 13 shows that there is a positive relationship between the number of FTEs of other personnel employed by an organisation and miscellaneous costs per half day. This means that, all other factors being equal, miscellaneous costs are generally higher in organisations that employ (more) other personnel than in organisations that do not employ such personnel (or only employ few of them). It can thus be concluded that organisations that employ personnel to perform (some of the) other work incur more costs on average than organisation that outsource the general activities or perform them personally (without other personnel).

The same comparison was made between the number of FTEs of other personnel employed by an organisation and total costs per half day. This relationship is also positive.

As a result and all other factors being equal, organisations that employ (more) general personnel also have higher total costs per half day on average.

Figure 13 There is a positive relationship between the number of FTEs of other personnel and miscellaneous costs per half day.



Source: Amsterdam Bureau for Economics (2023).

The results displayed in Figure 13 are consistent with the impression that was obtained from meetings with childcare organisations, namely that the way in which other work is organised varies greatly from organisation to organisation, and that this largely explains the cost differences across organisations. Organisations with higher miscellaneous costs could potentially achieve cost savings in this area.

It is important to mention that the hidden costs of organisations were not included in the above analysis because they cannot be quantified.

Organisations performing the other work themselves are likely to incur more hidden costs such as overtime and help from family and friends. This can also partly explain why the 'recorded' costs are higher for organisations that employ personnel compared to organisations that perform other work without other personnel. This consideration has been taken into account when designing the new system.

Explanation of differences across organisations

The preceding section identified three factors that have an impact on childcare costs. The number of children and salary costs per EYT have an impact on staff costs per EYT, and the number of FTEs of other personnel has an impact on miscellaneous costs. This section will attempt to explain cost differences across organisations, between types of organisations and between islands based on these identified factors.

Cost differences can be explained by the identified factors

Figure 3 has shown that, on average, costs per half day are highest at ASC organisations, followed by daycare organisations and organisations that offer both daycare and ASC.* The costs are lowest for host parents. Table 2 shows how cost differences between the types of organisations can be explained by the identified factors. Average staff costs per half day are highest at organisation offering both daycare and ASC. These organisations also have the highest salaries for EYT staff. Staff costs per half day as well as salaries are the lowest for host parents. In addition, host parents also care for the most children per half day on average, which helps to reduce staff costs per half day.

* The average costs of daycare & ASC organisations are lower than the costs of organisations that only offer daycare because the daycare category contains a number of organisations (incl. on the Windward Islands) that cause average costs to increase.

† Host parents did not report staff costs in response the request for data because they do not employ staff. Therefore, in accordance with the customary wage regulation 2022, a business owner's salary of \$14,000 was added as annual other personnel costs in addition to the costs indicated by the organisations themselves.

On average, ASCs care for fewer children per EYT than daycare organisations, despite the more flexible staff/child standard. ASCs employ approximately twice as many EYT staff than prescribed by the staff/child standard (10-12 children per EYT). The data supplied by organisations shows that employees at ASC organisations are often employed full time, while children are not present in the facility on a full time basis, as they only operate for half a day. The meetings with organisations revealed that ASC organisations choose to employ people on a full time basis because it is otherwise difficult to retain their staff. This circumstance means that staff costs per half day at ASC organisations are approximately the same as those at daycare organisations despite the fact that, based on the more flexible staff/child standard, ASC organisations would be expected to have lower staff costs per half day.

On average, ASC organisations have the highest miscellaneous costs per half day, while host parents have the lowest. This difference corresponds to the number of FTEs of other personnel, which is highest at ASCs and lowest at host parents. Cost differences between daycare organisations, ASC organisations and organisations that offer both daycare and ASC can primarily be attributed to varying miscellaneous costs. In general, ASC organisations employ more personnel than daycare organisations for other work.

Table 2 The relatively high total costs at ASC organisations can be attributed to the relatively high miscellaneous costs.

Type of organisation	Daycare	ASC	Daycare & ASC	Host parent
Average staff costs per half day	\$12.45	\$11.68	\$15.20	\$4.90
Average number of children per EYT	6.38	5.36	5.91	8.03
Average payroll costs per FTE per year	\$22,100	\$21,000	\$29,600	\$14000†

Childcare costs in the Caribbean Netherlands

Type of organisation	Daycare	ASC	Daycare & ASC	Host parent
Average premises costs per half day	\$4.11	\$4.29	\$2.95	\$2.29
Average miscellaneous costs per half day	\$12.44	\$17.63	\$9.09	\$4.43
Number of FTEs of other personnel per half day (x 1000)	0.16	0.28	0.19	-
Average total costs per half day	\$29.01	\$33.61	\$27.23	\$11.62

Source: Amsterdam Bureau for Economics (2023).

Cost differences between islands can also be explained by the identified factors

Figure 6 revealed that major cost differences exist between the three islands. These differences can also be (partly) explained by differences in the number of children per EYT, payroll costs per FTE and number of general personnel FTEs. Table 3 indicates that staff costs per half day are by far the highest on Saba. The increased costs are due to the fact that, compared to Bonaire and St. Eustatius, a EYT on Saba cares for relatively few children, while staff salaries are significantly higher. In addition, EYTs on Saba work 36 hours per week (while being paid for 40 hours), so more staff are needed. The average number of children per EYT is the highest on St. Eustatius, while EYT staff salaries are the lowest there. As a result, organisations on St. Eustatius have lower staff costs per half day than their counterparts on Bonaire and Saba.

Miscellaneous costs per half day are highest on St. Eustatius. The number of FTEs of other personnel is also highest there.

The number of FTEs of other personnel on Bonaire and Saba are fairly similar, although the miscellaneous costs per half day vary considerably. This is because salaries paid to other personnel are considerably higher on Saba than on Bonaire.

Table 3 Miscellaneous costs per half day are higher on St. Eustatius and Saba than on Bonaire.

Island	Bonaire	St. Eustatius	Saba
Average staff costs per half day	\$13.77	\$10.31	\$20.61
Average number of children per EYT	5.94	6.96	4.52
Average payroll costs per FTE per year	\$26700	\$20100	\$31300
Average premises costs per half day	\$3.50	\$2.78	\$3.55
Average miscellaneous costs per half day	\$9.25	\$18.49	\$19.81
Number of FTEs of other personnel per half day (x 1000)	0.18	0.28	0.21
Average total costs per half day	\$26.52	\$31.58	\$43.96

Source: Amsterdam Bureau for Economics (2023).

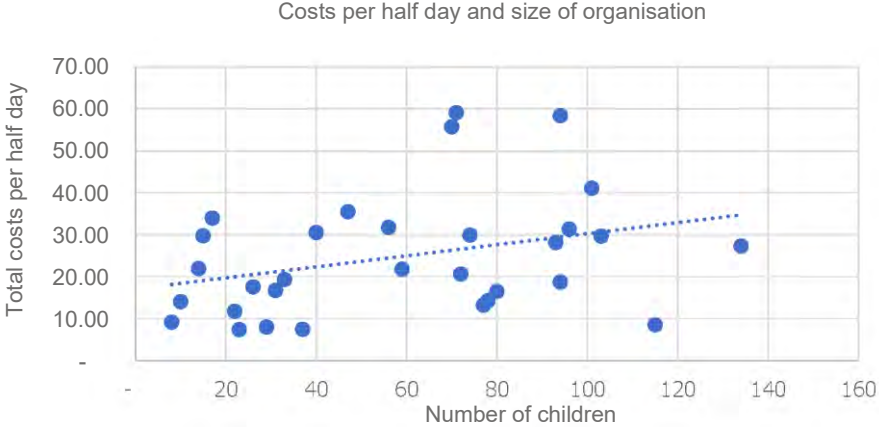
On average, costs per half day are higher at larger organisations

The size of an organisation may also affect cost levels due to economies or disadvantages of scale. Figure 14 shows the relationship between the number of children within an organisation and the total costs per half day.* A slightly positive relationship can be detected between the number of children within an organisation and the costs per half day. This means that, on average, larger organisations have higher costs than smaller organisations.

* In Figure 14, one organisation with more than 500 children was not taken into account because this outlier masked the variation between the other data points in the figure. Disregarding this data point has no impact on the results shown in Figure 14.

Childcare costs in the Caribbean Netherlands

Figure 14 There is a slightly positive relationship between the costs per half day and the size of an organisation.



Source: Amsterdam Bureau for Economics (2023).

Table 4 presents the costs per half day and the underlying factors that have an impact on these costs, broken down by organisation size. The organisations have been divided into quartiles based on the number of half days. The first, second, third and fourth quartiles have been respectively marked as small, small to medium, medium to large and large.

There are several reasons for the slightly positive relationship between the size of an organisation and costs per half day. Firstly, most of the organisations on Saba and St. Eustatius are in the 'medium to large' category. On average, these organisations have higher costs per half day, causing the total costs per half day to be the highest in this category. In addition, organisations in the 'large' category generally care for fewer children per EYT than organisations in the 'small' and 'small to medium' categories, and organisations in the 'large' category also employ more other personnel.

In general, larger organisations pay their employees better than small organisations. Better pay is, in principle, an option not related to the scale of an organisation. Furthermore, smaller organisations generally incur lower costs for other work than larger organisations do. A possible factor in this regard is that small organisations do more unpaid work to carry out other work.

Table 4 On average, larger organisations have higher total costs per half day.

Size of organisations	Small 0-25%	Small to medium 25-50%	Medium to large 50-75%	Large 75-100%
Average staff costs per half day	\$7.88	\$6.97	\$11.94	\$13.2
Average number of children per EYT	7.41	9.31	5.24	5.1
Average payroll costs per FTE per year	\$17100	\$20400	\$21,000	\$22,20
Average premises costs per half day	\$3.29	\$2.45	\$4.89	\$3.1
Average miscellaneous costs per half day	\$7.05	\$7.02	\$18.19	\$11.3
Number of FTEs of other personnel per half day (x 1000)	0.04	0.13	0.24	0.2
Average total costs per half day	\$11.62	\$16.44	\$35.02	\$27.7

Source: Amsterdam Bureau for Economics (2023).

A large proportion of organisations will receive less subsidy in 2022 than they incur in costs

Table 3 showed that, on average, costs in 2022 for all types of childcare were higher than the calculated subsidy. As a result, many organisations did not receive sufficient funding in 2022 to cover costs. The second column in Table 5 shows the percentage of organisations for each type of organisation to which the above applies: 78 percent of organisations. For these organisations, the difference between the calculated subsidy and the indicated costs amounted, on average, to 313,000 dollars. This average is strongly influenced by several outliers. Disregarding these outliers, the average difference between the subsidy and the indicated costs amounted to 119,000 dollars. Table 5 shows the percentage of organisations in each type of childcare that had a shortfall in 2022.

A number of organisations were questioned about how they handle the gap between subsidy and costs. They indicated that this difference is met by drawing on existing buffers, credit with suppliers and (private) loans. An anonymised overview showing the costs in 2022 and income in 2022 and 2023 of all individual organisations has been appended.

Table 5 The subsidies received by the majority of organisations in 2022 were lower than the costs they incurred.

Shortfall in subsidies in 2022	% organisations with shortfall
Daycare	78%
ASC	80%
Daycare & ASC	73%
Host parent - daycare	100%
Total	78%

Source: Amsterdam Bureau for Economics (2023).

Table 6 indicates the average costs of organisations with and without a subsidy shortfall, and the factors that influence these costs. The average total cost of organisations with no shortfall in subsidy can be seen to amount to \$22 per half day. Total cost is \$30 per half day at organisations that have a shortfall. The difference in the level of costs can primarily be attributed to a difference in staff costs. On average, organisations that have a shortfall have higher staff costs per half day because they work with fewer children per EYT, and their average salaries are higher.

Table 6 Organisations whose costs exceeded the subsidy that they received in 2022 had relatively high staff costs.

Organisations with and without shortfall in 2022	Organisations without shortfall	Organisations with shortfall
Average staff costs per half day	\$9.66	\$14.85
Average number of children per EYT	7.67	5.56
Average payroll costs per FTE per year	\$20000	\$27800
Average premises costs per half day	\$1.98	\$3.76
Average miscellaneous costs per half day	\$10.43	\$11.39
Number of FTEs of other personnel per half day (x 1000)	0.18	0.20
Average total costs per half day	\$22.07	\$30.00

Source: Amsterdam Bureau for Economics (2023).

Concluding reflection on cost data

On average, ASC organisations had the highest costs per half day in 2022, while host parents had the lowest

Average childcare costs in 2022 amounted to \$29 per half day for daycare, \$34 per half day for ASC, \$27 per half day for organisations offering both daycare and ASC and \$12 per half day for host parents. Costs were on average highest on Saba (\$44 per half day), followed by \$32 per half day on St. Eustatius and \$23 per half day on Bonaire. There is a large spread in costs between various types of organisations and between islands. There is also a large spread in costs among organisations of the same type.

The number of children and salaries per childcare work, and the number of employees performing other work are important factors that influence cost levels

The provided cost data made it possible to identify three factors that influence the cost of childcare and may (partly) explain the differences across organisations.

These factors are the number of children and salary costs per EYT, and number of personnel (FTEs) that perform other work, such as cooking, cleaning, transport or odd jobs. There is a negative relationship between the number of children per EYT and staff costs per half day. In addition, there is a positive relationship between staff costs per EYT and staff costs per half day, and there is a positive relationship between the number of other personnel and miscellaneous costs per half day. The latter implies that the way that other work (i.e. cooking, cleaning, transport etc.) is organised affects the cost level of organisations, with organisations that employ staff for this purpose generally incurring more costs than those that outsource or carry out this work themselves (owner/manager together with EYT staff and/or family and friends). Organisations performing the work themselves are likely to incur more hidden costs, such as overtime and involvement of family and friends.

The wide dispersion in the number of children per EYT, salaries paid to EYTs and the number of other personnel means that these factors may explain the cost differences across organisations. The higher costs per half day at ASCs are attributable to the fact that these organisations employ a relatively high number of staff, considering the number of children for whom they provide care. The costs of host parents are by far the lowest due to the higher number of children per EYT, the lower salaries and the fewer (no) other personnel compared to daycare and ASC organisations. Hidden costs are also likely to be higher among host parents, a factor that also explains the lower cost level.

One would expect fixed costs, such as premises costs per half day and costs for small and large items per half day, to be higher at ASC organisations because these organisations have to spread the fixed costs over fewer half days than daycare organisations do. However, the cost data indicates that premises costs per half day and material costs per half day are the same as daycare organisations, and that the spread primarily relates to staff costs.

Cost differences between islands can also be explained by the identified factors. The relatively high costs per half day on Saba can be attributed to the relatively low number of children per EYT and the high salaries for early-years teachers and other personnel. On average, staff costs per half day of St. Eustatius are low, while miscellaneous costs per half day are high as a result of the high number of personnel performing other work compared to Bonaire.

Employees are often employed full time at ASC organisations, while facilities are only open one half day per day

Notably, staff costs per half-day at ASCs tend, on average, to be about the same as daycare. Staff costs per half-day at ASCs would have been expected to be lower because larger group sizes can be used, allowing a EYT to take care of more children. However, such has not proven to occur. One explanation for this could be that ASC organisations only care for children for one half day (outside holiday periods), while they often work with full-time contracts in order to be able to recruit and retain staff. This means that a EYT who works 40 hours a week will only care for children for 25 to 27 hours per week. For daycare organisations, which operate for two half days per day, it is easier to allow full-time employees to care for children the majority of the time. The difference between one or two half days of operation per day that distinguish daycare and ASC may also explain the difference in miscellaneous costs per half day. The costs for other personnel (often working full time) at ASCs are spread over fewer half days than at daycare organisations.

Apart from quality requirements, there is no other reason to believe that cost levels between different types of childcare differ significantly from each other

Based on the findings in this chapter, we can reach two conclusions that are important when establishing the new funding system.

Firstly, apart from quality requirements that can differ per type of childcare, there is no reason to objectively believe that cost levels differ between the various types of childcare. Organisations incur the same kind of costs, and discernible differences in costs are mainly due to the ways in which individual organisations allocate their resources, as well as to differences in unrecorded (hidden) costs between organisations. Since quality requirements that apply to premises and miscellaneous costs are (generally) the same for the various types of childcare, it can be objectively concluded that the accompanying costs should be the same per type of childcare.

Apart from differences in cost levels and quality requirements, there is no reason to assume that the cost of childcare differs between the islands The second conclusion is that, apart from quality requirements that can differ between the islands, there is objectively no reason to assume that the cost of childcare differs between islands. Given that there are large differences between islands, especially when it comes to other costs, these differences appear to be largely due to the way individual organisations are organised (e.g. with many or few staff), rather than structural differences in costs between islands. However, some of the cost differences can be explained by differences in prices between islands. This latter difference will be discussed in greater detail in the next chapter. In any case, one can objectively conclude that, apart from differences in quality requirements and price levels, the cost of childcare should be the same on all three islands.

3. Recommendation for the funding system

The new funding system will determine the compensation for childcare organisations in an objective manner. The compensation is intended to cover staff costs, premises costs and miscellaneous costs. The compensation for staff costs will be calculated based on the number of child half days, and the quality requirements that apply to EYT staff. The compensation for housing costs and miscellaneous costs will be calculated using the cost data supplied by the organisations.



Recommendation for the new system of funding

This chapter contains the recommendations for the new funding system. These recommendations are based on the following principles. The new funding system:

- provides a reasonable compensation for the costs of childcare organisations. Discrepancies between compensation and actual current costs should be reconcilable;
- uses objective criteria to determine the compensation;
- takes into account improvements and changes that organisations make now and in the future due to the new system (including improvements in quality) and gives organisations the opportunity to develop;
- takes into account, wherever necessary, cost differences between organisations and - wherever cost differences can be bridged using improvements in business operations - offers organisations enough latitude to realise these improvements over time;
- wherever necessary, takes into account differences between the islands of Bonaire, St.-Eustatius and Saba;
- can be practically executed by the administrative organisation responsible for the subsidy scheme, as well as childcare organisations.

Proposal to subsidise childcare organisations based on the number of children and half days

The proposal is to establish a compensation per child per half day. Direct funding per child can adequately account for differences in size between organisations and differences in costs between types of children. A compensation per child per half day can also be easily adjusted based on type of childcare and island where it is located. Under the temporary subsidy scheme, childcare organisations currently also receive a compensation per child per half day.

Text box: Assessment framework for evaluating the funding system

To assess the recommendations for the system of childcare funding in the Caribbean Netherlands, this study uses an assessment framework derived from Tempelman et al. (2014). A modified assessment framework for evaluating the system of childcare funding in the Caribbean Netherlands has been included in Table T.1.

Table T.1: Assessment framework for evaluating the system of funding

	Criteria	Clarification/operationalisation
1	Cost orientation	Assumes realistic and reasonable costs for organisations and takes differences into account (e.g. island, type, size)
2	Generality	A comprehensive system, one that does not take all detailed costs into account, ensures that responsibility and independence are not compromised
3	Objectivity	Establishes funding based on objective properties
4	Stability and predictability	Offers certainty to organisations and makes funding predictable and stable
5	Transparency and accountability	Funding is logical and understandable. The relationship between criteria and funding must be clear, and must reflect reality
6	Feasibility	Is feasible from various perspectives: accounting, data availability, etc.
7	No countervailing incentives	The system must offer the desired incentives and be in line with the established objectives

Source: Amsterdam Bureau for Economics (2023) based on Tempelman et al. (2014).

Recommendation for the funding system

The proposed system of funding implements objective criteria

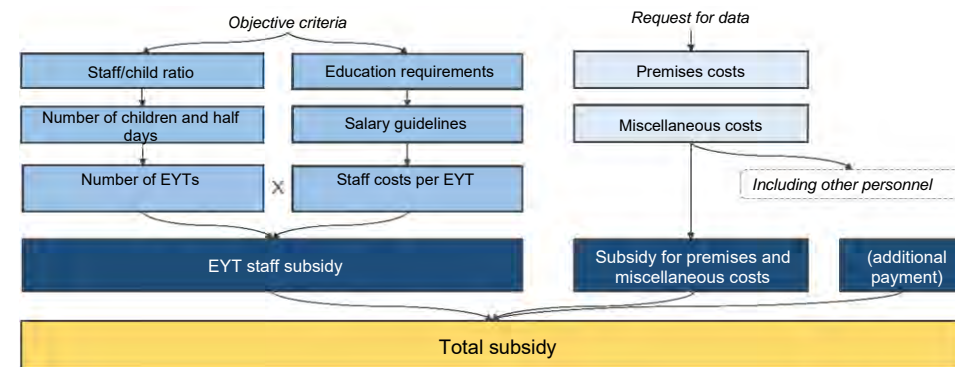
The BES(t) 4Kids programme has established additional requirements for the quality of childcare. For instance, staff/child ratios are used to establish a maximum limit for group size. Staff/child ratios limit organisations to a maximum number of children per EYT, depending on the age composition of the group. In addition, requirements have been established concerning the staff EYT qualifications. BES(t) 4Kids has issued salary guidelines for EYT staff, and there are additional requirements when it comes to housing (including safety), food, use of sustainable materials, and compliant with an EYT policy plan. For instance, requirements that have been established for EYT staff serve as objective criteria that can be used to calculate the compensation for childcare organisations in an objective manner.

The compensation for EYT staff is calculated using the number of child half days and the applicable quality requirements

Objective criteria are used to calculate the costs, and thus the compensation, for EYT staff. The required number of early-years teachers is derived from the number of child half days and the BKR ratio that applies to the concerned organisation. Pending a possible CLA for the childcare sector in the Caribbean Netherlands, the costs per EYT will be determined by the salary guidelines of BES(t) 4Kids and the established qualification requirements. Total costs and the compensation for early-years teachers are determined by multiplying the required number of EYTs by the costs per teacher.* When calculating the compensation for EYT staff, consideration is given to differences in quality requirements between types of childcare and between the islands. The way in which EYT staff are subsidised is linked to a number of policy decisions. These decisions are discussed in the next chapter.

* Non-teaching personnel, such as managers, cleaners, chefs, etc., are categorised under miscellaneous costs.

Figure 15 Proposal for the compensation of childcare organisations under the new funding system.



Source: Amsterdam Bureau for Economics (2023).

The compensation for housing and miscellaneous costs is calculated using the average premises and miscellaneous costs of organisations

While objective criteria can be used to calculate the EYT staff compensation, this is not the case when calculating housing costs and miscellaneous costs. The cost data supplied by organisations can be used to determine the subsidies for these costs. The cost data presented in chapter 2 reveals that there is little spread in premises costs between types of organisations and islands. There is a larger spread for miscellaneous costs, but there appears to be no objective reason to make a distinction between organisations when calculating the compensation for miscellaneous costs. It would thus make sense to subsidise organisations based on the average or median premises costs and miscellaneous costs of all organisations that took part in the request for data.

Recommendation for the funding system

The exact manner in which the premises and miscellaneous costs of organisations are subsidised will be subject to a policy decision. This will be discussed in more detail later in the chapter.

Finally, the proposed system makes it possible to implement an additional payment to supplement compensation for staff costs, premises costs and miscellaneous costs. In this case, it is possible to differentiate between type of childcare and island. This additional payment is intended for costs that are not reflected in the cost data of organisations. An additional payment can also be implemented to compensate ASC organisations for the fact that they only care for children one half day per day, making it more difficult for them to deploy full-time personnel (teaching as well as non-teaching) in an efficient manner. The decision whether or not to use this additional payment involves a policy decision that is discussed in the next part of this chapter.

The proposed funding system is cost-oriented, explicable and feasible

The assessment framework of Tempelman et al. (2014) has been used to identify the advantages and disadvantages of the proposed funding system.

- **Cost orientation:** A compensation per child ensures a direct relationship between the number of children and the compensation. There is also a direct relationship between quality requirements and the accompanying costs, differentiated by type of childcare and island.
- **Generality:** The proposed funding system provides general financing where no consideration is given to all the detailed costs of organisations.
- **Objectivity:** The compensation for EYT staff is calculated using objective criteria (quality requirements and number child day parts) and in an objective manner. The compensation for housing costs and miscellaneous costs cannot be determined in an objective manner.

This is done using the cost data supplied by organisations. Due to the limited sample size, this cost data is surrounded by a certain degree of uncertainty. An analysis later in this chapter shows how robust the funding system is against any degree of uncertainty.

- **Stability and predictability:** The funding system results in a compensation per child per half day. The total compensation is easy to calculate based on the number of children and half days. This benefits the predictability. Due to potential fluctuations in the number of children, the stability of the compensation is an area of concern. Since, however, organisations are currently also being subsidised per child per half day, this method of subsidisation does not appear to have resulted in problems.
- **Transparency and explicability:** Using recognisable criteria (staff/child standard, qualification requirements) and a simple system for calculating premises and miscellaneous costs will improve the system's transparency and explicability.
- **Feasibility:** A limited amount of data is needed to calculate the compensation. The simplicity of the system makes the proposed funding system easy to implement.
- **No countervailing incentives:** Due to a direct compensation per child per half day, organisations have - within the applicable quality requirements - an incentive to care for as many children as possible. In addition, a general system, which does not take into account all individual costs, serves as an incentive to effectively deploy all available resources and to implement cost reductions wherever possible.

Recommendation for the funding system

Table 7 Objectivity and stability are two concerns of the proposed funding system.

	Criteria	Proposed funding system
1.	Cost orientation	✓
2.	Generality	✓
3.	Objectivity	+–
4.	Stability and predictability	+–
5.	Transparency and accountability	✓
6.	Feasibility	✓
7.	No countervailing incentives	✓

Source: Amsterdam Bureau for Economics (2023).

Principles for proposed funding system and policy decisions

Many of the principles relate to assumptions based on quality requirements or the cost data of organisations. The manner in which these principles are implemented will, in many cases, involve a policy decision. This circumstance is indicated whenever such instances arise. To enable results of the funding system to be presented in the next chapter, an upper and lower limit has been formulated for each policy decision. Based on these upper and lower limits, the following chapter presents the range for each type of childcare and island within which the compensation calculated under the proposed system are likely to fall.

Duration of work week for early-years teachers and length of half days

When calculating the required number of FTEs for early-years teachers, it was assumed that a full-time work week amounts to 40 hours and that EYT staff has 15 leave days per year. This is in keeping with the salary guideline of BES(t) 4Kids.

Responses to request for data indicate that most daycare and host parent organisations are open 11 hours a day (2 half days) and ASC organisations are open 5.5 hours a day (1 half day). For this reason, the funding system defines a half day as 5.5 hours.

Staff/child standard

The staff/child standard is an important factor when calculating the required number of FTEs for EYT staff. The proposed system calculates the required number of FTEs based on the staff/child standard and the number of child half days. The staff/child standard depends on the age of the children and thus varies per type of childcare. Young children are subject to a more stringent staff/child standard than older children are.

Daycare and host parent childcare are permitted to accommodate four children aged zero to one year (infants) per EYT. This stringent requirement may deter organisations from providing infant care. To prevent such counterincentive tendencies, infants are subsidised separately in the system. Based on the staff/child standard of four infants per EYT, organisations will receive a higher compensation for children 0-1 year old.

Daycare organisations are permitted to care for maximum six children between 1 and 2 years old per EYT, and maximum eight children between two and four years old per EYT. At ASC organisations, it is possible to care for maximum ten children between 4 and 7 years old per EYT, and maximum twelve children between 7 and 12 years per EYT. A host parent childcare requirement restricts host parents to caring for a maximum of six children.

Calculating compensation based on the exact age of each child has a negative effect on the funding system's feasibility, as the age of children is variable. For this reason, it would be more practical to use an average staff/child standard. The exact average used will involve a policy decision. The first option is to use an unweighted average of the staff/child standard per age group.

Recommendation for the funding system

This means a staff/child standard of seven children per half day for daycare and a staff/child standard of 11 children per half day for ASC. Because children from 0-1 year old are subsidised separately, they are not taken into account when calculating the average staff/child standard. It will not be necessary to calculate an average staff/child standard for host parent childcare, as this form is subject to a maximum of six children per EYT.

The second option involves using a weighted average staff/child standard based on the average number of children at daycare and ASC organisations. The weighted average staff/child standard was calculated based on information from UVB. This was done using ages in the middle of the year, namely 1 July 2022. Once again, children aged 0-1 year old were not considered in the analysis. For daycare organisations, the weighted average staff/child standard based on the age of children amounts to 7.48, while this is 11.08 for ASC organisations.

A higher staff/child standard means a lower compensation. Therefore, when calculating subsidies based on the proposed funding system, the weighted average has been used as the lower limit while the unweighted average has been used as the upper limit.

Because the compensation for EYT staff is calculated using the staff/child standard and not using the staff costs that organisations have incurred, the system takes incurred hidden costs into account. Overtime is the hidden cost item that organisations most commonly incur. The staff/child standard is used to objectively calculate the number of early-years teachers needed per organisation. Organisations that currently do not employ sufficient staff may likely prove to be the same organisations where overtime frequently takes place.

* The number of half days per organisation involving full occupancy is also unknown. One possibility involves calculating full occupancy based on the number of EYTs. However, this would overestimate the occupancy rate at organisations that do not yet comply with the staff/child standard. Another possibility involves calculating the maximum occupancy rate based on the number of square metres available on the premises. However, this would also cause the occupancy rate to be under-estimated because organisations do not always fully use the available premises to care for children.

In the new system there will be compensation for this.. Organisations that work efficiently, and thus employ fewer employees, will be rewarded under the new system.

Table 8 figures for calculating the required number of FTEs per type of childcare.

Staff/child standard	Daycare	ASC	Host parent
Age of children	0-4 years	4-12 years	0-4 years
Staff/child standard for infants (0-1 year old)	4.00	n/a	4
Staff/child standard for children (lower limit)	7.48	11.08	6.00
Staff/child standard for children (upper limit)	7.00	11.00	6.00

Source: Amsterdam Bureau for Economics (2023)

Efficiency factor for EYT staff

The proposed funding system makes it possible to implement a supplement factor for the required number of EYT staff (hereinafter 'efficiency factor'). Firstly, this efficiency factor relates to the occupancy rate of childcare organisations. The staff/child standard reflects the maximum number of children that an organisation can accommodate per EYT. An organisation is thus always assumed to be fully occupied, and that an EYT always cares for the maximum number of children possible. Since, in reality, organisations are not always fully occupied, care is often provided for fewer children per EYT than prescribed by the staff/child standard. Use of an efficiency factor takes this under-use into account when calculating the required number of early-years teachers. Ideally, this efficiency factor should be determined using the actual occupancy rate of organisations. However, the occupancy rate of organisations is not known and cannot be determined in an objective manner.*

Recommendation for the funding system

It is therefore necessary to adopt an assumption, since occupancy rate is unknown. This involves using a range. The minimum occupancy rate at organisations is therefore assumed to be 80 percent and the maximum rate 95 percent. This range is equivalent to an efficiency factor ranging from minimum 1.05 and maximum 1.25. This range applies to all types of childcare and all three islands.

The second efficiency factor involves a premium for the activities that EYT staff perform outside the regular half days. The staff/child standard indicates the number of EYTs needed during half days when children are present. In practice, EYTs also partly work outside these half days, for example, when making preparations and when tidying up. An efficiency factor can be used to make a corresponding adjustment that takes this work into account. Assuming that daycare organisations, ASC organisations and host parents spend the same amount of time each day performing tasks outside regular half days, any efficiency factor used must be twice as high for ASC because it only cares for children during one half day per day.

Whether or not an efficiency factor will be applied to tasks outside the half days involves a policy decision. For the purpose of presenting the outcomes of the funding system in the next chapter, a range is used in this regard. The lower limit represents the decision not to use an efficiency factor for tasks outside regular half days because these activities are being or could possibly be carried out during these half days. The upper limit represents the decision to use an efficiency factor of 1.15 for daycare and host parents, and a factor of 1.30 for ASC. This is equivalent to approximately one and a half hours of activities outside regular half days daily.

Table 10 Figures for calculating the required number of FTEs per type of childcare.

Efficiency factor	Daycare	ASC	Host parent
Lower limit: occupancy rate	1.05	1.05	1.05
Upper limit: occupancy rate	1.25	1.25	1.25
Lower limit: activities outside half days	1.00	1.00	1.00
Upper limit: activities outside half days	1.15	1.30	1.15
Lower limit: total efficiency factor	1.05	1.05	1.05
Upper limit: total efficiency factor	1.44	1.63	1.44

Source: Amsterdam Bureau for Economics (2023).

Education requirements

The principles and policy decisions for the staff/child standard and efficiency factor relate to calculating the required number of early-years teachers. The principles and policy decisions that now follow relate to calculating staff costs per EYT, starting with the education requirements. Table 11 shows the education requirements for EYTs on each island. There is currently a minimum education requirement of Vocational education (MBO) Level 3 on Bonaire and Level 2 on St. Eustatius and Saba. In addition, for daycare and ASC organisations, at least one EYT with higher qualifications must be present per location (Vocational education (MBO) Level 4 on Bonaire and Level 3 on St. Eustatius and Saba). This EYT must work for at least three days a week. This additional quality requirement does not apply to host parents. In the calculations, the lower limit is that someone with higher qualifications must be present at the location three days a week. In practice, it may be preferable for someone with higher qualifications to be present at all times. That is why the upper limit is that someone with higher qualifications must be present at the location five days a week.

Recommendation for the funding system

Table 11 There are more stringent education requirements on Bonaire than on St. Eustatius and Saba.

	Bonaire	St. Eustatius	Saba
Minimum education requirement for EYT staff	Vocational education (MBO) Level 3: Professional training	Vocational education (MBO) Level 2: Basic vocational training	Vocational education (MBO) Level 2: Basic vocational training
At least one EYT with higher qualifications*	Vocational education (MBO) Level 4: Middle-management training	Vocational education (MBO) Level 3: Professional training	Vocational education (MBO) Level 3: Professional training
Number of days that EYT with higher qualifications is present at location (lower limit)	3	3	3
Number of days that EYT with higher qualifications is present at location (upper limit)	5	5	5

Source: Amsterdam Bureau for Economics (2023).

Salary guideline

The salary costs per EYT can be calculated based on education requirements, by using the salary guideline in the BES(t) 4Kids, terms-of-employment growth package. Below are the applicable salaries for 2023. The package contains salary scales for each level of EYT education. Each salary scale has 10 grades. The exact grade that will be used in the new funding system involves a policy decision. In the calculation, grade 1 is used as the lower limit and grade 10 as the upper limit on each salary scale. The upper limit for the gross monthly salary per education level and island is indicated in Table 12.

Table 12 Salary scales according to growth package in the BES(t) 4Kids, terms of employment.

Monthly salary EYTs in USD (2023)	Bonaire	St. Eustatius	Saba
MBO 2 lower limit (salary scale 3 grade 1)	\$1475	\$1686	\$1697
MBO 2 upper limit (salary scale 3 grade 10)	\$1842	\$2106	\$2119
MBO 3 lower limit (salary scale 4 grade 1)	\$1673	\$1907	\$1919
MBO 3 upper limit (salary scale 4 grade 10)	\$2088	\$2382	\$2396
MBO 4 lower limit (salary scale 5 grade 1)	\$1897	\$2170	\$2156
MBO 4 upper limit (salary scale 5 grade 10)	\$2369	\$2693	\$2693

Source: Amsterdam Bureau for Economics (2023).

Health insurance, pension and holiday pay

In addition to salary costs, organisations also face employer contributions such as a health insurance premium (health insurance/accident insurance/unemployment). There is also the possibility of including holiday pay and/or pension scheme. Whether or not holiday pay or a pension scheme is included is subject to a policy decision. In the calculation, not including holiday pay and a pension scheme represents the lower limit, while including them represents the upper limit. The figures used when calculating the health insurance premium, pension premium and holiday pay are shown in Table 13.

Table 13 Figures for health insurance, pension and holiday pay.

Health insurance, pension and holiday pay	Figure
Holiday pay (% gross salary)	8%
Health insurance contribution (health insurance/accident insurance/unemployment) (% gross salary incl. holiday pay)	13.4%
Deductible pension PCN 2023	\$20304
Employer pension contribution PCN 2023 (% pensionable pay)	30.4%

Source: Amsterdam Bureau for Economics (2023).

Compensation or housing costs and miscellaneous costs

There are no objective criteria for calculating levels for housing and miscellaneous costs. The cost data supplied by organisations was used to calculate the compensation for these cost items. There is little spread in premises costs per half day between types of or across organisations. Nor has, on average, any substantial price difference been detected between islands. It would thus make sense to subsidise organisations based on the average premises costs of all organisations that took part in the request for data¹. The (weighted) average premises costs of all organisations amount to \$3.40 per half day.

Recommendation for the funding system

Host parents are subject to different housing requirements. They are able to care for children in their own homes and do not need separate premises. Considering this alternative requirement, one could decide not to provide a compensation for host parent premises.

Table 14 Whether or not to implement a compensation for host parent premises is subject to a policy decision.

Policy decision	Lower limit	Upper limit
Host parent premises	Do not subsidise	Subsidise

Source: Amsterdam Bureau for Economics (2023).

Miscellaneous costs exhibit a wider spread in costs across organisations. Furthermore, there are major differences in miscellaneous costs between the types of childcare, but also between islands. Chapter 3 revealed that the spread in miscellaneous costs could primarily be attributed to the number of personnel that an organisation employs for other work, such as cooking and cleaning, and potential hidden costs that other organisations incur when performing this other work. There is no reason to make a distinction between the types of childcare when compensating miscellaneous costs. It therefore makes sense to have the same compensation for other costs for each type of care. As mentioned, major differences in miscellaneous costs were observed between islands. Miscellaneous costs per half day are considerably higher on St. Eustatius and Saba than on Bonaire. This difference can, for the most part, be attributed to these organisations generally having a larger budget, employing more other personnel (in the case of St. Eustatius) and paying a higher salary to this personnel (in the case of Saba) compared to Bonaire. There is no reason to assume that the types of miscellaneous costs incurred by organisations actually differ between islands.

^{*} This quality requirement does not apply to host parents.

[†] Organisations that did not participate in the 2022 subsidy scheme had to be omitted from the analysis, as the number of half days of these organisations is not known. This involved five organisations.

[‡] + Statistics Netherlands (2015). Price benchmark Caribbean Netherlands 2015 - Final report & Statistics Netherlands (2023). Caribbean Netherlands consumer price index (CPI) 2017=100.

However, price differences could be a cause for the differences in miscellaneous costs between them. A calculation using statistics from Statistics Netherlands shows that prices on St. Eustatius and Saba were respectively 2.9 percent and 7.2 percent higher in 2022 than on Bonaire.[‡]

Besides price differences between islands, there is no objective reason to assume that organisations on St. Eustatius and Saba would incur other miscellaneous costs than organisations on Bonaire. The high miscellaneous costs per half day on St. Eustatius and Saba have a strong impact on the average miscellaneous costs per half day of all organisations collectively. For this reason, a decision may be made to subsidise organisations based on the median miscellaneous costs per half day. Such a practice would mean that the high miscellaneous costs per half day on St. Eustatius and Saba would play less of a role. The median miscellaneous costs amount to \$9.05 per half day.

To compensate for price differences between the islands, St. Eustatius is allocated a further increment of 2.9 percent and Saba 7.2 percent in addition to the median miscellaneous costs of \$9.05 per half day. As a result, the miscellaneous costs for Bonaire, St. Eustatius and Saba will be respectively fixed at \$9.05, \$9.31 and \$9.70 per half day. When calculating compensation, the decision to compensate based on median miscellaneous costs has been used as the lower limit.

Compensation based on median miscellaneous costs means that organisations on St. Eustatius and Saba are, on average, paid about \$10 dollars less per half day than their miscellaneous costs. Another option is not to adjust for the differences in miscellaneous costs per half day between islands, as a matter of policy. In this case, one could subsidise based on the average miscellaneous costs per island.

Recommendation for the funding system

The average miscellaneous costs on Bonaire, St. Eustatius and Saba are respectively \$9.25 per half day, \$18.49 per half day and \$19.81 per half day. If subsidies are awarded based on average miscellaneous costs per island, the funding system would perpetuate the budgetary differences between organisations on Bonaire, St. Eustatius and Saba, while there appears to be no objective reason to do so. This policy option would contradict the principle of calculating compensation in an objective manner.

The data about premises and miscellaneous costs stems from 2022. Price developments caused these costs to increase in 2023. For this reason the calculated compensations are therefore indexed on the basis of the Statistics Netherlands consumer price index, differentiated by the three islands. Accordingly, price developments for the second quarter of 2023 (compared to the second quarter of 2022) are used for this purpose. They constitute the most recent figures concerning price developments in the Caribbean Netherlands. Premises costs have been indexed based on indexation in the 'Premises, water and energy' category. Miscellaneous costs have been indexed based on indexation in the 'All expenditures' category.

Table 15 Prices on Bonaire, St. Eustatius and Saba increased in 2023 compared to 2022.

Price developments 2 nd quarter 2023 (compared to 2 nd quarter 2022)	Bonaire	St. Eustatius	Saba
All expenditures	4.6%	3.3%	5.2%
Premises, water and energy	0.3%	3.8%	6.5%

Source: Amsterdam Bureau for Economics (2023) based on. Statistics Netherlands.

Table 16 presents the indexed compensation for housing and miscellaneous costs used to calculate compensation in the proposed funding system.

Table 16 The compensation for premises and miscellaneous costs is based on cost data supplied by organisations.

Compensation for premises and miscellaneous costs	Bonaire	St. Eustatius	Saba
Compensation for premises costs	\$3.41	\$3.53	\$3.62
Compensation for miscellaneous costs (lower limit)	\$9.47	\$9.62	\$10.20
Compensation for miscellaneous costs (upper limit)	\$9.68	\$19.11	\$20.83

Source: Amsterdam Bureau for Economics (2023)

Additional payment

Finally, the funding system makes it possible to allocate an additional payment to organisations to supplement the compensation for staff costs, premises costs and miscellaneous costs. The aim of this additional payment is to compensate for costs that the funding system does not otherwise take into account. Such costs may include those associated with (future) quality requirements but unrecognised in the funding system. The additional payment can be differentiated per type of childcare and per island.

It is not easy to establish a lower and upper limit for the payment. Such lower and upper limits were determined using the quality requirements relating to healthy nutrition and an ETL policy plan, as well as a possible extra compensation for ASC organisations. However, the use of an additional payment, and what it entails, is subject to a policy decision and can deviate from the example used in this study.

The request for data showed that, on average, food accounts for 5 percent of total costs. Research by the Inspectorate of Education indicates that 79 percent of organisations provide healthy meals.[†]

[‡] Statistics Netherlands (2023). Caribbean Netherlands consumer price index (CPI) 2017=100.

[†] Source: Inspectorate of Education. (2023). Final Report on the Survey of the Quality of Childcare in the Caribbean Netherlands.

Recommendation for the funding system

To incorporate healthy nutrition into the compensation in its entirety, a margin of minimum 0.5 percent and maximum 1 percent was used to supplement the total compensation.

Research by the Inspectorate of Education reveals that 50 percent of organisations follow an EYT policy plan. The costs associated with following such a policy plan are difficult to estimate. The assumption was made that these costs amount to minimum 1 percent and maximum 10 percent of total costs. Because 50 percent of organisations do not yet follow an EYT policy plan, a margin of minimum 0.5 percent (lower limit) and maximum 5 percent (upper limit) was used to supplement the total compensation.

Finally, one could decide to award an additional payment to ASC organisations. The cost data in chapter 2 showed that ASC organisations generally incur higher staff costs per half day. Because ASC organisations only care for children during just 1 half of every school day, it is providing difficult for them to deploy full-time staff efficiently. Due to the different staff/child standards for daycare organisations and ASC organisations, it is difficult to determine how many extra costs that ASC organisations incur as a result of this implicit inefficiency. An increase of 10 percent has been used as the upper limit. The lower limit reflects the choice not to grant the additional payment, and is thus equal to 0.

Table 17 shows the additional payments per type of childcare that are used when calculating compensation using the proposed system.

Table 17 An additional payment would make it possible to compensate for costs that are not reflected in the compensation for staff, housing and miscellaneous costs.

Additional payment	Daycare	ASC	Host parents
Additional payment (lower limit)	1.0%	1.0%	1.0%
Additional payment (upper limit)	6.0%	16.0%	6.0%

Source: Amsterdam Bureau for Economics (2023).

4. Outcomes of proposed funding system

A range for the new, indicatory compensation has been established based on the funding system and the accompanying policy decisions. On Bonaire, daycare organisations, organisations that offer daycare as well as ASC, and host parents will be better off compared to the subsidy in 2023. Policy decisions will determine whether ASCs on Bonaire and organisations on St. Eustatius and Saba will be better off under the new system.



Principles

This chapter presents indicatory outcomes of the proposed funding system. The outcomes are expressed as ranges because the funding system contains several policy decisions that still need to be made. The lower limit matches the policy decisions that were identified as the lower limit in the previous chapter, and the upper limit matches the policy decisions that were identified as upper limit in the previous chapter. In this case, it is important to mention that the lower and upper limits were determined by researchers with the aim of presenting indicatory outcomes of the funding system in this report. The outcomes are therefore indicative and in no way meant to be definitive. There is a chance that the policy decisions eventually made by the Ministry of Social Affairs and Employment, and thus the resulting compensation, will actually exceed the ranges stated in this report. In addition, it is important to mention that the compensation presented in this chapter reflect a situation where organisations meet all quality requirements. The new compensation may be lower for organisations that do not yet (fully) meet these requirements.

The lower and upper limits established for each policy decision are displayed in Table 18.

Principles when calculating the indicatory compensation

To calculate the indicatory compensation, data is needed regarding the number of child half days, broken down into child half days for infants (children 0-1 year old) and child half days for 'regular' children (children >1 year old). The calculation used the total number of child half days per organisation for 2022, sourced from the UVB database. The extra half days at ASCs during holiday periods were added to this number of half days using the same approach described in the principles specified in chapter 2.

Table 18 A lower and upper limit was established for each policy decision.

Policy decisions	Lower limit	Upper limit
Staff/child standard	Weighted average	Unweighted average
Efficiency factor	1.05 all types of childcare	1.44 daycare and host parents, 1.63 ASC
EYT with higher qualifications	3 days a week	5 days a week
EYT staff salary	Salary scale grade 1	Salary scale grade 10
Holiday pay	No holiday pay	Holiday pay paid
Supplementary pension	No supplementary pension	Supplementary pension paid
Host parent premises	Premises costs not subsidised	Premises costs subsidised
Compensation for miscellaneous costs	Median miscellaneous costs	Avg. miscellaneous costs per island
Additional payment	1% for all types of childcare	6% for daycare and host parents, 16% for ASC

Source: Amsterdam Bureau for Economics (2023).

The indicatory compensation are displayed per type of organisation and per island, and compared with the average costs (2022) and income (2022 & 2023). The approach used to calculate costs and income has been described in the principles specified in chapter 2.

Indicatory compensation - overall picture

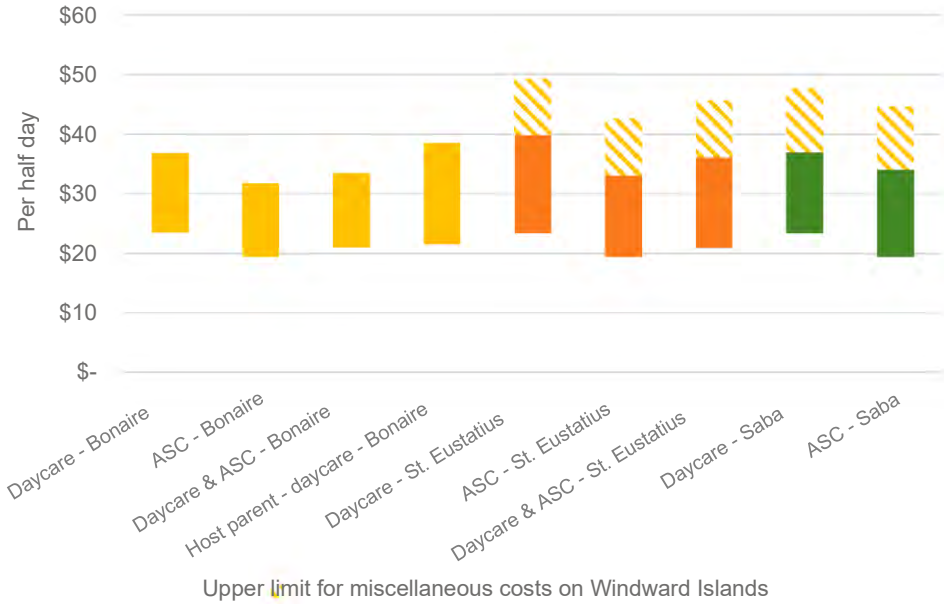
On average, the compensation per half day for daycare organisations is higher than the compensation for ASC organisations

Figure 16 shows the range that the proposed funding system has calculated for new compensation per type of organisation and per island. The upper limit of the compensation for miscellaneous costs, used to compensate the average miscellaneous costs per island, is shown separately (shaded) because this policy decision has a major impact on the compensation for St. Eustatius and Saba. There are few noteworthy elements in Figure 16. Firstly, the indicatory compensation per half day are higher for daycare organisations than for ASC organisations. This difference reflects the more stringent staff/child standard that applies to daycare organisations, requiring more EYT staff per half day in daycares than in ASC organisations.

Outcomes of proposed funding system

In particular, organisations that have a proportionately higher number of infants need a lot of EYT staff. Because EYT staff represent the largest cost item, increased staff numbers result in discernible compensation differences between daycare organisations and ASCs. Secondly, differences can be seen between islands. These differences can primarily be attributed to the way in which miscellaneous costs are subsidised. Subsidising miscellaneous costs based on average miscellaneous costs per island results in higher compensation on St. Eustatius and Saba.

Figure 16 The indicatory subsidies are slightly higher for daycare organisations than for ASCs.



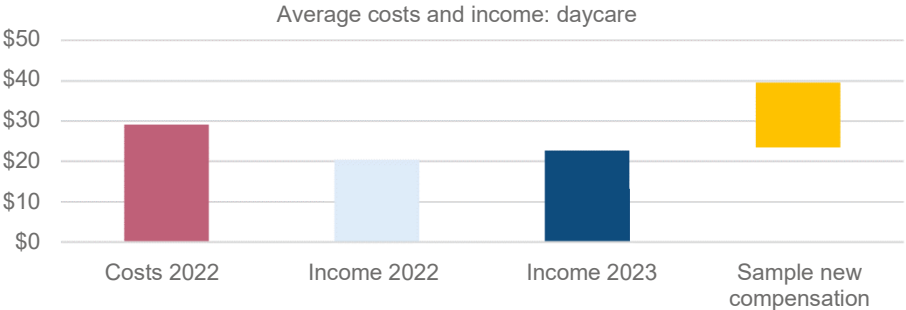
Source: Amsterdam Bureau for Economics (2023).

Indicatory new compensation - daycare

Daycare organisations are expected to be better off under the new system

This section discusses the indicatory compensation calculated using the proposed funding system for each type of childcare and compares them to the average cost and income levels of organisations. All daycare organisations on Bonaire, St. Eustatius and Saba were included in this analysis. The next section of the chapter will examine the indicatory compensation per island. Subsidies displayed by childcare type cannot be broken down for each of the three islands due to the small amount of information recorded on St. Eustatius and Saba and the risk of revealing sensitive cost data.

Figure 17 The future compensation is expected to be higher than the compensation awarded in 2023.



Source: Amsterdam Bureau for Economics (2023)

Figure 17 shows the range of the new compensation per half day for daycare organisations. The calculated lower limit for the new compensation is equivalent to approximately \$24 per half day and the upper limit is approximately \$40 per half day.* The lower limit is approximately the same as the average income for daycare organisations in 2023 but lower than the average costs in 2022. The upper limit is considerably higher than the average costs and income.

* The calculated ranges in Figure 17 and Table 19 are weighted average ranges based on the number of child day parts per organisation. The range will be different for each individual organisation and depends on the number of child half days, the number of infants and the island on which the daycare organisation is based.

Outcomes of proposed funding system

Table 19 shows a comparison between the cost data provided by organisations and the compensation that have been calculated using the proposed funding system. There are two reasons why the average costs of organisations are higher than the lower limit of the new compensation per day part. Firstly, staff costs are higher than the compensation for staff used to determine the lower limit. The discrepancy is due the fact that, on average, organisations care for a slightly lower number of children than assumed when calculating the compensation.

Table 19 The average costs of organisations are somewhere between the lower limit and upper limit.

Daycare (average)	Cost data 2022	Lower limit of compensation	Upper limit of compensation
Number of children per EYT (staff/child standard)	6.38	6.68	4.59
Staff costs per FTE	\$22,100	\$23300	\$33800
Staff costs per day part	\$12.45	\$10.31	\$21.55
Premises costs per day part	\$4.11	\$3.45	\$3.45
Miscellaneous costs per day part	\$12.44	\$9.60	\$12.23
Additional payment per day part	n/a	\$0.23	\$2.27
Total per day part	\$29.01	\$23.60	\$39.51

Source: Amsterdam Bureau for Economics (2023).

Secondly, the average premises costs and, in particular, the average miscellaneous costs are higher than the compensation at the lower limit. This discrepancy is mainly due to the higher miscellaneous costs at daycare organisations on St. Eustatius and Saba, which are not fully subsidised when the lower limit is used.

The upper limit of the new compensation is considerably higher than the average costs of the organisations. This difference can be attributed to the higher compensation for EYT staff. Due to the higher number of children per EYT at organisations relative to the number used for the compensation at the upper limit, organisations will receive a compensation for a larger number of early-years teachers if the upper limit is applied. In addition, the average salaries of EYT staff are higher if the upper limit is used, and holiday pay and supplementary pension are part of the terms of employment, which leads to a higher compensation for staff costs. The additional payment for miscellaneous costs that (some of the) organisation do not yet incur leads to a compensation that is higher than the current costs. The compensation for premises costs and miscellaneous costs are approximately equal to the costs indicated by the organisations.

Indicatory new subsidies: ASC*

Policy decisions will determine whether ASCs are better or worse off under the new system

This section discusses the indicatory compensation for ASC organisations. Figure 18 shows the range for the new compensation per day part. The lower limit for the new compensation amounts to approximately \$20 per half day and the upper limit to \$37 per day part.†

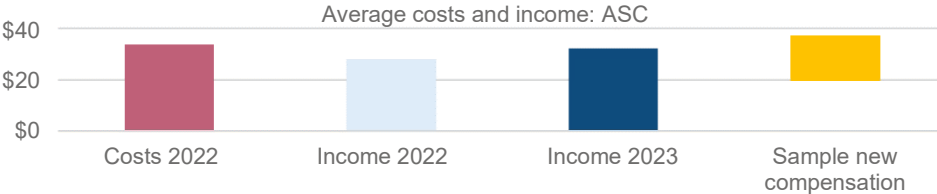
* The 2023 subsidy, which was used to compare the subsidy allocated under the recommended system, excludes a one-off additional payment that was received by organisations in 2023.

† The calculated ranges in Figure 18 and Table 20 are weighted average ranges based on the number of child day parts per organisation. The range will be different for each individual organisation and depends on the number of child half days and the island on which the childcare organisation is based.

Outcomes of proposed funding system

Table 20 compares the cost data provided by ASCs to the compensation calculated using the proposed funding system. The fact that the average costs of ASCs are higher than the lower limit of the new compensation can, firstly, be attributed to the staff costs per half day, which are considerably higher than the compensation for EYT staff. The gap arises because ASC organisations care for an average of 5.36 children per EYT, while the compensation at the lower limit is based on 10.54 children per EYT. In effect, the number of EYTs working for an average ASC organisation is a lot higher than the number of EYTs subsidised at the lower limit. Chapter 2 revealed that the low number of children per EYT can be attributed to the fact that ASCs often employ full-time early-years teachers, while children are only present for one day part per day. Along with staff costs, miscellaneous costs per half day are, on average, also considerably higher than the compensation if the lower limit is adopted. The shortfall occurs because, on average, ASC's employ a lot of other personnel per half day in comparison to daycare organisations and host parents. Once again, this employment practice may be necessary, since ASC's are only able to spread the cost of other personnel over one half day per day, which results in higher miscellaneous costs per half day.

Figure 18 The costs of organisations are somewhere between the lower limit and upper limit of the new compensation.



Source: Amsterdam Bureau for Economics (2023).

Table 20 The high miscellaneous costs of ASCs are not fully covered under the new system.

ASC (average)	Cost data 2022	Lower limit of compensation	Upper limit of compensation
Number of children per EYT (staff/child standard)	5.36	10.54	6.76
Staff costs per FTE	\$21,000	\$23500	\$34000
Staff costs per half day	\$11.68	\$6.26	\$14.15
Premises costs per half day	\$4.29	\$3.48	\$3.48
Miscellaneous costs per half day	\$17.63	\$9.66	\$14.30
Additional payment per half day	n/a	\$0.19	\$5.10
Total per half day	\$33.61	\$19.60	\$37.03

Source: Amsterdam Bureau for Economics (2023).

The upper limit of the new compensation is higher than the costs of the average ASC organisation. At the upper limit, the efficiency factor ensures that the number of children per EYT is a lot closer to the actual number of children per EYT in childcare. In addition, salaries are higher at the upper limit, and holiday pay and supplementary pension are included in the compensation for EYT staff. The result is a higher compensation for staff costs than (current) average staff costs.

Despite an increase in the compensation for miscellaneous costs relative to the lower limit, the compensation is still lower than the actual average miscellaneous costs at ASC's. To compensate for the higher costs incurred by ASCs, the additional payment for ASC's is higher at the upper limit than the additional payment for daycare organisations and host parents.

Daycare & ASC

Organisations that offer daycare as well as ASC are expected to be better off under the new system

This section discusses the sample compensation for organisations that offer both daycare and ASC.

Outcomes of proposed funding system

There is no separate ASC in this type of childcare, and the ratio between the number of half days of daycare and the number of half days of ASC varies per organisation. This type of childcare has been displayed separately in order to make a proper comparison with the cost data supplied by organisations where a distinction is not made for the costs incurred separately for daycare and ASC.

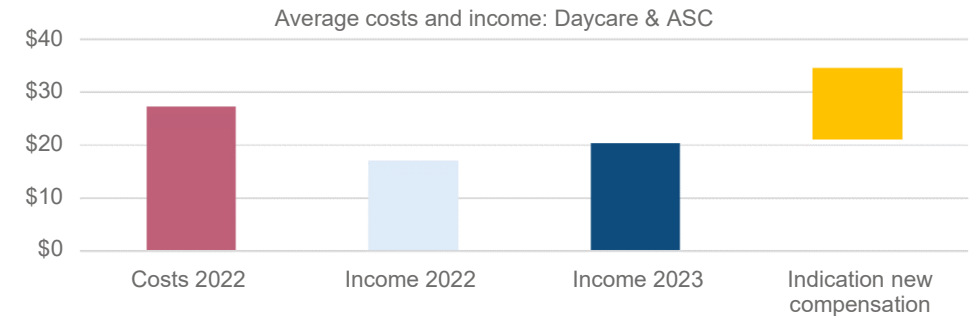
Figure 19 shows the range for the new compensation per day part. The lower limit for the new compensation amounts to \$21 per half day and the upper limit to \$34 per half day.* The average income of organisations in 2023 corresponds approximately to the lower limit of the compensation. The average costs of organisations are somewhere between the lower and upper limit of the new compensation.

Table 21 compares the cost data provided by organisations to the compensation calculated using the proposed funding system. The fact that the average cost of daycare & ASC is higher than the lower limit of the new compensation can be attributed to staff costs per half day, which are considerably higher than the compensation for EYT staff. This discrepancy is, on the one hand, due to fewer children per EYT being accommodated than assumed when calculating the compensation. On the other hand, the staff costs per FTE are also considerably higher than subsidised at the lower limit. Premises and miscellaneous costs more or less correspond to the compensation at the lower limit.

The upper limit of the new compensation is higher than the costs of the average daycare & ASC organisation. The excess is firstly due to the higher compensation for EYT staff. The compensation for staff costs per FTE is higher than the staff costs per FTE incurred by the organisations.

In addition, organisations are caring for a slightly higher number of children per EYT than assumed when calculating the compensation. Secondly, the upper limit for the new compensation is higher than the average costs due to the higher compensation for miscellaneous costs and the additional payment for costs not recognised in current costs.

Figure 19 The costs incurred by daycare & ASC organisations are within the range of the future compensation.



Source: Amsterdam Bureau for Economics (2023).

* The calculated ranges in Figure 20 and Table 22 are weighted average ranges based on the number of child half days per organisation. The range will be different for each individual organisation and depends on the number of child half days, the number of infants and the island on which the daycare organisation is based.

Outcomes of proposed funding system

Table 21 High staff costs per half day at daycare & ASC organisations are not fully covered when the lower limit is used.

Daycare & ASC (average)	Cost data 2022	Lower limit of compensation	Upper limit of compensation
Number of children per EYT (staff/child standard)	5.91	8.69	5.73
Staff costs per FTE	\$29,600	\$23,200	\$33,500
Staff costs per day part	\$15.20	\$7.97	\$17.20
Premises costs per day part	\$2.95	\$3.42	\$3.42
Miscellaneous costs per day part	\$9.09	\$9.48	\$10.48
Additional payment per day part	n/a	\$0.21	\$3.37
Total per day part	\$27.23	\$21.08	\$34.47

Source: Amsterdam Bureau for Economics (2023).

Host parents

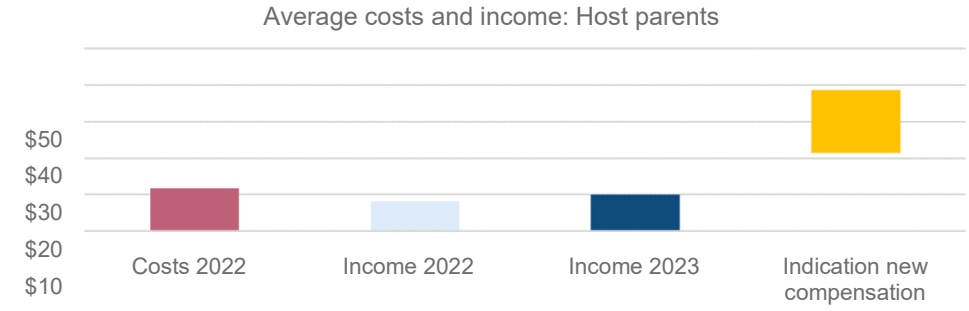
Host parents will be significantly better off with the new compensation

This section discusses the sample compensation for host parents. Figure 20 shows the range for the new compensation per day part. The lower limit for the new compensation amounts to \$21 per day part and the upper limit to \$39 per day part.* Compared to the subsidy (+ parental contribution) in 2023, host parents will be significantly better off under the new compensation.

Table 22 compares the cost data provided by organisations to the subsidies calculated using the proposed funding system. There are two reasons why the average costs of host parents are considerably lower than the lower limit of the new subsidy. Firstly, host parents have low staff costs per half day. because, on average, a relatively high number of children are cared for per EYT and because salaries are relatively low.

Secondly, miscellaneous costs per half day are lower than subsidised at the lower limit. Chapter 2 has revealed that host parents do not employ other personnel, and perform non-teaching activities themselves. This practice results in lower miscellaneous costs. Hidden costs will be also likely to be higher for host parents.

Figure 20 Host parents will be significantly better off under the new compensation.



Source: Amsterdam Bureau for Economics (2023).

Outcomes of proposed funding system

Table 22 The compensation for staff costs, housing costs and miscellaneous costs are higher than the current average costs of host parents.

Host parents (average)	Cost data 2022	Lower limit of compensation	Upper limit of compensation
Number of children per EYT (staff/child standard)	8.03	5.50	4.02
Staff costs per FTE	\$14000	\$22800	\$32700
Staff costs per day part	\$4.90	\$11.81	\$23.24
Premises costs per day part	\$2.29	\$3.41	\$3.41
Miscellaneous costs per day part	\$4.43	\$9.47	\$9.68
Additional payment per day part	n/a	\$0.25	\$2.18
Total per half day	\$11.62	\$24.93	\$38.51

Source: Amsterdam Bureau for Economics (2023).

Bonaire

Organisations on Bonaire are, on average, expected to be better off under the new system

Rather than per type of childcare, the following three sections will discuss the compensation per island. This analysis will shed light on the relationship between the compensation and the current costs of organisations per island, and is intended to provide a better understanding about the funding system. The displayed indicatory compensation represent an average for all organisations per island. This average differs from illustrative compensation for individual organisations.

Figure 21 shows the average range of the new compensation for organisations on Bonaire. The lower limit for the new compensation amounts to \$21 per half day and the upper limit to \$34 per half day.*

* The calculated ranges in Figure 21 and Table 23 are weighted average ranges based on the number of child day parts per organisation. The range will be different for each individual organisation and depends on the number of half days, the number of infants and the type of care.

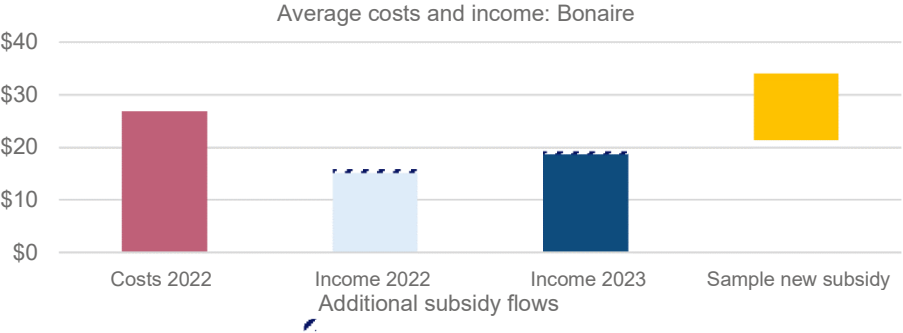
The lower limit of the compensation is slightly higher than the average income of organisations in 2023. Additional income flows (income other than the cost-price reducing subsidy and the parental contribution) have been shaded. The average costs on Bonaire are somewhere between the lower limit and upper limit of the new compensation.

Table 23 compares the costs indicated by organisations to the compensation calculated using the proposed funding system. The fact that average costs on Bonaire are higher than the lower limit of the new compensation can be attributed to staff costs per half day, which are considerably higher than the compensation for staff. This discrepancy is, on the one hand, due to fewer children per EYT being accommodated than assumed when calculating the compensation. On the other hand, the staff costs per FTE are also considerably higher than the staff costs per FTE subsidised at the lower limit. Premises costs and miscellaneous costs more or less correspond to the subsidies at the lower limit.

The upper limit of the new compensation is higher than the average costs on Bonaire. The excess is firstly due to the higher compensation for EYT staff. Using the upper limit would mean that the subsidy per FTE, which includes holiday pay and supplementary pension, is higher than the (current) average staff costs per FTE. The upper limit of the new compensation is also higher than the average costs due to the additional payment for costs that organisations are currently not incurring.

Outcomes of proposed funding system

Figure 21 The average costs of organisations on Bonaire are within the range of the new compensation.



Source: Amsterdam Bureau for Economics (2023).

Table 23 The staff costs of an average organisation on Bonaire are not fully covered if the lower limit is used.

Bonaire (average)	Cost data 2022	Lower limit of compensation	Upper limit of compensation
Number of children per EYT (staff/child standard)	5.94	8.50	5.62
Staff costs per FTE	\$26,700	\$23,200	\$33,600
Staff costs per day part	\$13.77	\$8.25	\$17.72
Premises costs per day part	\$3.50	\$3.41	\$3.41
Miscellaneous costs per day part	\$9.25	\$9.47	\$9.68
Additional payment per day part	n/a	\$0.21	\$3.19
Total per half day	\$26.77	\$21.34	\$34.00

Source: Amsterdam Bureau for Economics (2023).

* The calculated ranges in Figure 22 and Table 24 are weighted average ranges based on the number of child half days per organisation. The range will be different for each individual organisation and depends on the number of day parts, the number of infants and the type of care.

St. Eustatius

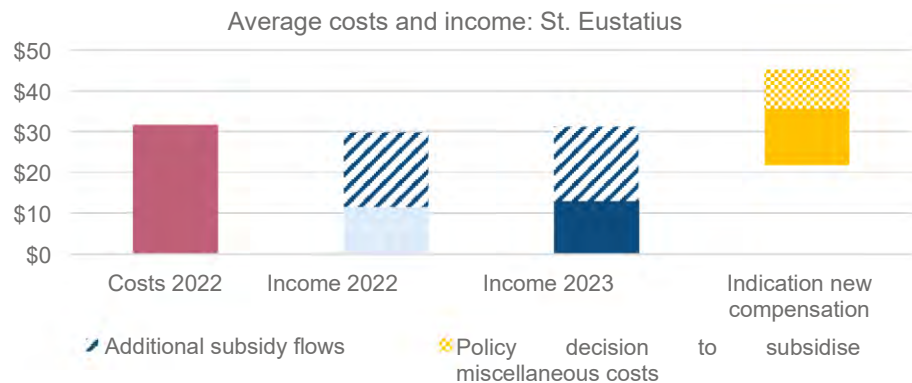
Under the new system, organisations on St. Eustatius are expected to receive a (significantly) higher compensation from the central government

This section discusses the subsidies for St. Eustatius. Figure 22 shows the range for the new compensation per daypart. The lower limit for the new compensation amounts to \$22 per day part and the upper limit to \$45 per half day.* In Figure 22, the policy decision to subsidise miscellaneous costs separately has been shown separately (shaded), because this decision has a major impact on the total compensation for organisations on St. Eustatius. Potential additional compensation flows received by organisations on St. Eustatius have not been taken into account when calculating the future compensation.

The lower limit of the compensation is lower than the average total income of organisations on St. Eustatius, but considerably higher than the subsidy that organisations currently receive from the UVB. The average costs of organisations are somewhere between the lower and upper limit of the new compensation.

Outcomes of proposed funding system

Figure 22 The average costs of organisations on St. Eustatius are within the range of the new compensation.



Source: Amsterdam Bureau for Economics (2023).

Table 24 The extent to which the costs of organisations on St. Eustatius are, on average, fully covered depends, in particular, on whether miscellaneous costs are or are not fully covered.

St. Eustatius (average)	Cost data 2022	Lower limit of compensation	Upper limit of compensation
Number of children per EYT (staff/child standard)	6.96	8.52	5.62
Staff costs per FTE	\$20100	\$23300	\$33800
Staff costs per day part	\$10.31	\$8.43	\$18.09
Premises costs per day part	\$2.78	\$3.53	\$3.53
Miscellaneous costs per day part	\$18.49	\$9.62	\$19.11
Additional payment per day part	n/a	\$0.21	\$4.33
Total per day part	\$31.58	\$21.80	\$45.05

Source: Amsterdam Bureau for Economics (2023).

The fact that costs are higher than the lower limit of the new compensation can, on the one hand, be attributed to staff costs per day part, which are slightly higher than the compensation for staff costs. This discrepancy can be due to fewer children per EYT being accommodated than assumed when calculating the compensation. However, the difference between the average costs and the lower limit of the new compensation can be attributed to miscellaneous costs. Average miscellaneous costs are significantly higher than the compensation for miscellaneous costs. because, on average, organisations on St. Eustatius employ a lot of other personnel, which is not fully subsidised when the lower limit is used.

The upper limit of the new compensation is higher than the average costs on St. Eustatius. The excess is firstly due to the higher compensation for EYT staff. Using the upper limit would mean that the compensation per FTE, which includes holiday pay and supplementary pension, is higher than the average staff costs per FTE. The upper limit of the new compensation is also higher than the average costs due to the additional payment for costs that organisations are currently not incurring.

Saba

Under the new system, organisations on Saba are expected to receive a (significantly) higher compensation from the central government

To conclude, we discuss the subsidies for Saba. Figure 23 shows the range for the new compensation per day part. The lower limit for the new compensation amounts to \$22 per day part and the upper limit to \$46 per day part.*

* * The calculated ranges in Figure 23 and Table 25 are weighted average ranges based on the number of child half days per organisations. The range will be different for each individual organisation and depends on the number of half days, the number of infants and the type of care.

Outcomes of proposed funding system

In Figure 23, the policy decision to compensate miscellaneous costs separately has been shown separately (shaded), because this decision has a major impact on the total compensation for organisations on Saba. Potential additional subsidy flows received by organisations on Saba have not been taken into account when calculating the future compensation.

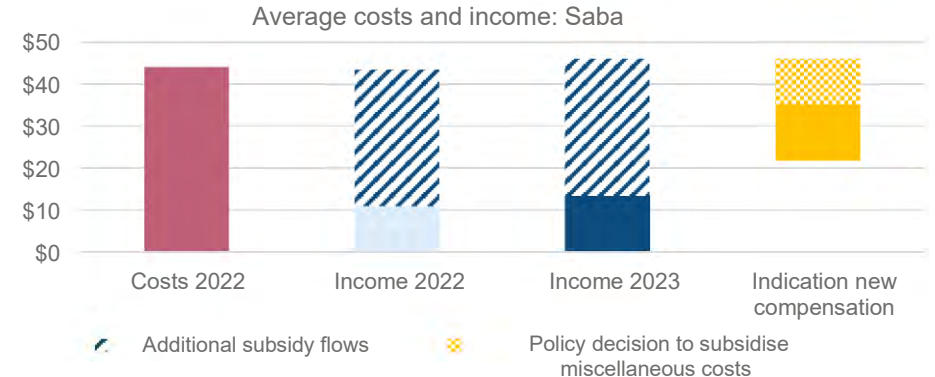
The lower limit of the new compensation is considerably lower than the average income of organisations on Saba. This difference arises because organisations on Saba receive most of their income from additional subsidies. The lower limit of the new compensation is considerably higher than the subsidy that organisations received from the UVB in 2023. The upper limit of the new compensation more or less corresponds to the average costs and the total subsidy level in 2023.

There are several reasons why average costs are higher than the lower limit of the new compensation. Firstly, staff costs per half day are significantly higher than the subsidy for staff. This discrepancy is, on the one hand, due to fewer children per EYT being accommodated than assumed when calculating the compensation. On the other hand, the staff costs per FTE are significantly higher than the compensation that the funding system provides in this regard. The shortfall can be attributed to the fact that the daycare organisation on Saba is regarded as part of the public entity, and daycare employees have the same terms of employment as (other) civil servants at the public entity. As a result, salaries are relatively high at this organisation. Along with staff costs, miscellaneous costs are also higher than the compensation that applies at the lower limit.

On average, organisations on Saba employ a lot of staff, and the salaries of this staff are relatively high. These costs are not fully compensated when the lower limit is used.

The upper limit of the new compensation more or less corresponds to the average costs on Saba. The striking thing is that, even when using the upper limit, the compensation for EYT staff is lower than the average staff costs. This is due to both the low number of children per EYT and the high staff costs per FTE. The lower compensation for staff is compensated by the additional payment for costs that organisations are not currently incurring.

Figure 23 The average costs and income of organisations on Saba correspond to the upper limit of the new compensation.



Source: Amsterdam Bureau for Economics (2023).

Outcomes of proposed funding system

Table 25 Average staff costs and miscellaneous costs are only partly covered when the lower limit is used.

Saba (average)	Cost data 2022	Lower limit in system	Upper limit in system
Number of children per EYT (staff/child standard)	4.52	8.69	5.73
Staff costs per FTE	\$31300	\$23400	\$33900
Staff costs per day part	\$20.61	\$8.01	\$17.32
Premises costs per day part	\$3.55	\$3.62	\$3.62
Miscellaneous costs per day part	\$19.81	\$10.20	\$20.83
Additional payment per day part	n/a	\$0.22	\$4.38
Total per day part	\$43.96	\$22.05	\$46.15

Source: Amsterdam Bureau for Economics (2023)

The extent to which the new compensation fully covers costs varies from organisation to organisation

The costs shown in this chapter for the various types of childcare and different islands are averages. Chapter 2 revealed that there is a large spread in the costs of organisations. The extent of this spread also means that the compensation will fully cover costs for some organisations but not for others. Table 26 presents the percentage of organisations whose costs are fully covered by the new compensation. If the lower limit is used, only a limited number of the ASCs on Bonaire and the organisations on St. Eustatius and Saba will have their costs fully covered. This percentage will increase significantly if the upper limit is used. If the upper limit is used, costs will be fully covered for all daycare organisations, daycare & ASC organisations and host parents on Bonaire.

Table 26 compares the lower and upper limit of the compensation to the costs reported by organisations in 2022. Due to quality requirements, which are not being met by some of the organisations, costs at many organisations are expected to increase in the future. This circumstance also means that, in the future, the number of organisations where the compensation fully covers the costs may be lower than the percentages mentioned above.

Table 26 The extent to which the new compensation fully covers costs varies from organisation to organisation and depends on policy decisions.

% organisations where the new compensation fully covers costs	Lower limit of compensation	Upper limit of compensation
Bonaire: Daycare	57%	100%
Bonaire: ASC	14%	71%
Bonaire: Daycare & ASC	70%	100%
Bonaire: Host parents	100%	100%
St. Eustatius: All types of childcare	25%	75%
Saba: All types of childcare	0%	50%

Source: Amsterdam Bureau for Economics (2023)

Sensitivity analysis for policy decisions

A sensitivity analysis has been used to highlight the isolated effect of individual policy decisions on compensation

The policy decisions associated with the new funding system have a various effect on compensation to organisations. Some policy decisions have a bigger impact on subsidies than others. A sensitivity analysis has been used to highlight the effect of individual policy decisions on the compensation.

A lower and upper limit has been established for each policy decision. The effect on the compensation was determined for each policy decision as the percentage difference between the compensation resulting from using the lower limit and the compensation resulting from using the upper limit. The calculated compensation is the average compensation for all organisations collectively.

Many policy decisions are linked to each other. such as the efficiency factor and the salary of EYT staff. If there is a higher efficiency factor, the system will assume that there are more EYT staff FTEs, which means that the policy decision concerning the amount of salary to be paid will have a bigger impact on the total compensation.

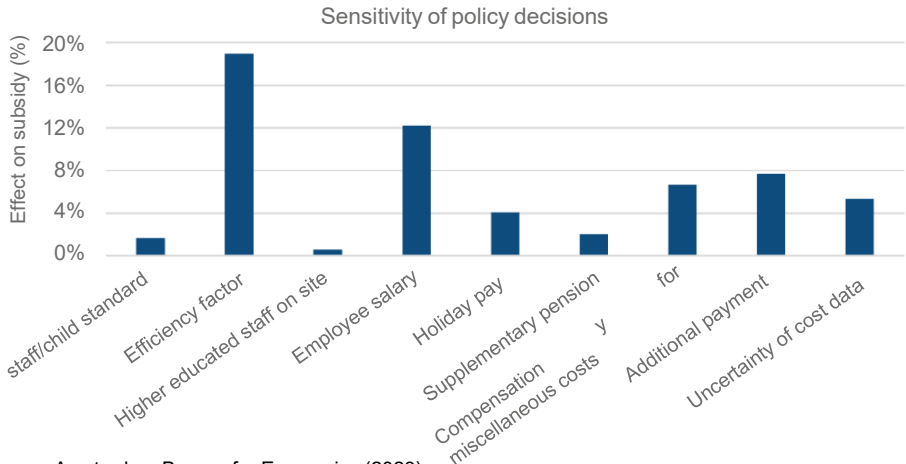
Outcomes of proposed funding system

For this reason, the effect of a policy decision on the compensation has been calculated both when the lower limit is used for all other policy decisions and when the upper limit is used for all other policy decisions. The average of these two calculations is the isolated ultimate effect of the policy decisions on the compensation.

Chapter 2 stated that the cost data supplied by organisations is accompanied by a certain degree of uncertainty. That is why, besides policy decisions, an insight was therefore also provided into the impact on compensation if the costs reported by the organisations were 10 percent higher.

The results of the sensitivity analysis are shown in Figure 24. The policy decision concerning the efficiency factor can be regarded as having the greatest impact on compensation, followed by the EYT salaries to be compensated. The adopted staff/child standard has little impact, as the implemented lower and upper limits for this policy decision are close to each other. The decision concerning the number of week days that a EYT with higher qualifications is present on site and the decision to implement a supplementary pension also have little impact on the total compensation. The limited effect of the supplementary pension can be attributed to the fact that the pensionable pay is relatively low for salaries awarded to EYT staff. In addition, the analysis shows that, if organisations had reported costs that were 10 percent higher, then the compensation would have been approximately 5 percent higher. This effect is more or less the same if the costs were 10 percent lower.

Figure 24 On average, the difference between the lower and upper limit of the efficiency factor has the biggest impact on the outcomes of the new funding system.



Source: Amsterdam Bureau for Economics (2023).

Budgetary consequences of the proposed system

This section presents the budgetary consequences of the proposed funding system.

A total subsidy amount has been calculated for both the lower and upper limit of compensation. The number of half days in the UVB database were used when calculating the total subsidy amount. These day parts derive from 2022. Organisations that did not use the subsidy scheme in 2022 (and for which the number of half days in 2022 is unknown) were not taken into account when calculating the total subsidy. This calculation is an estimate and deviates from the actual costs of the future subsidy.

Outcomes of proposed funding system

The results of the calculation are displayed in Table 27. Based on the established lower and upper limit for the compensation, the total required budget for the future subsidy scheme has been estimated at \$14.3 million and \$23.9 million respectively. By contrast, the budget that was made available in 2023 for the cost-price reducing subsidy amounts to \$11.9 million.* In addition, the total parental contribution for 2023 is estimated at \$2.3 million, based on the number of half days in 2022.† The parental contribution is added to the calculated subsidy. The currently available budget (including parental contribution) is thus approximately equal to the lower limit of the budget required for the future subsidy scheme.

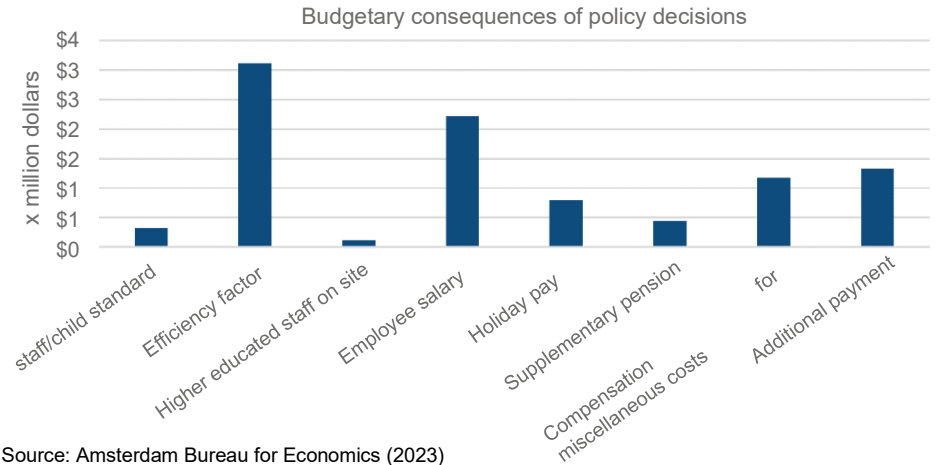
Table 27 The budget required for the new funding system is estimated to be between \$14.3 million and \$23.9 million.

Budgetary consequences	Budget 2023 incl. parental contribution	Required budget lower limit	Required budget upper limit
Total budget subsidy scheme	\$14.2 million	\$14.3 million	\$23.9 million

Source: Amsterdam Bureau for Economics (2023)

The budgetary consequences of individual policy decisions have also been identified. They are shown in Figure 25. These budgetary consequences are (as a percentage) equal to the effects of the policy decisions on the compensation shown in Figure 24.

Figure 25 On average, the difference between the lower and upper limit of the efficiency factor has the biggest impact on the outcomes of the new funding system.



Source: Amsterdam Bureau for Economics (2023)

* Temporary Childcare Financing Subsidy Scheme for the Caribbean Netherlands. (01/01/2023). Referenced on 17 August 2023 via <https://wetten.overheid.nl/BWBR0043533/2023-01-01>

† Organisations that did not use the subsidy scheme in 2022 were not taken into account when calculating this amount.

5. Implementation

The new funding system assumes that all organisations comply with the quality requirements. A reduction of the full compensation could be considered for organisations that do not yet (fully) meet the quality requirements.

Under the new funding system, some organisations will not receive sufficient compensation to cover all their costs. A transitional model could be used to give organisations the opportunity to reduce their costs.



Transitional model: Quality

The level of compensation granted to organisations may be made contingent on their meeting quality requirements

The new funding system assumes that all organisations comply with the quality requirements. Chapter 2 revealed that costs can vary across organisations. This is partly because some of the organisations already (for the most part) meet quality requirements, while others do not. It is important for the new system to also subsidise costs that organisations incur in relation to the quality requirements. In addition, it is important for the efficiency of the funding system that organisations not yet meeting (all) quality requirements and therefore incurring fewer costs for the time being do not receive the same full compensation as organisations already meeting quality requirements. Failure to do so could also create a countervailing incentive. For this reason, the difference in quality between the organisations must be taken into account when implementing the new system. Such a measure will also give organisations an incentive to comply with the quality requirements as soon as possible.

To take differences in quality level into account when paying subsidies, a compensation reduction could be implemented when introducing the new system. A policy decision will determine if and how to implement this reduction. A reduction will allow the compensation that is awarded to organisations to be dependent on the extent to which they meet the quality requirements. Organisations that meet all quality requirements will receive a higher compensation than organisations that do not yet meet (all) the requirements. Variables/policy decisions used to calculate compensation in the new funding system can also be used to determine the level of quality and the reduction in subsidies.

Variables when calculating the new subsidies include:

- Staff/child standard;
- Educational levels of early-years teachers
- Number of days with a higher-qualified EYT on location;
- EYT salary;
- Payment or non-payment of holiday pay and supplementary pension; and
- Additional payment supplementing the total compensation.

These variables can be used to determine the amount of reduction applicable for organisations that do not yet meet all quality requirements. For an organisation that, for example, complies with the staff/child standard but does not follow the BES(t) 4Kids. salary guideline, the compensation could be calculated using the staff/child standard that applies to the organisation, but with a salary per EYT that is lower than the salary in the BES(t) 4Kids. salary guideline. This essentially involves a reduction in the salary compensation, as an organisation pays lower salaries to early-years teachers. The more quality requirements with which an organisation complies, the lower the reduction in compensation.

An important consideration in the design of the transition model concerns the feasibility for the organisation administering the subsidy scheme. The introduction of a transitional model means that the quality level of each organisation must be determined on a regular basis. For reasons of practicality, consideration could be given to having the organisations themselves declare on the basis of a checklist which quality requirements they do and do not meet. This information can then be used as a basis for implementing a (potential) reduction in compensation. The Ministry of Social Affairs and Employment or the administrative organisation can then perform *risk-based* checks. Such checks could have a disciplinary effect on the way in which organisations complete the checklist.

Transitional model: Costs

A transitional model could be implemented for organisations where the compensation does not cover all the costs

Chapter 2 demonstrated that there are major cost differences between organisations. Introducing the new system will create situations where the compensation does not cover the full costs of some organisations. This potential shortfall will particularly apply to ASCs and organisations on St. Eustatius and Saba. The number of organisations in which the compensation does not cover the full costs will depend on the final fixed amount of compensation and the policy decisions behind it.

Organisations whose costs are not fully covered by the compensation will need to gradually reduce their costs. Chapter 2 showed that, besides the difference in quality, higher costs at organisations are mainly caused by relatively small group sizes (staff/child ratio) and a relatively high number of other personnel. These organisations should be able to become more efficient by increasing group size and reducing the number of other personnel.

However, the process of reducing these costs will not be completed overnight. A transitional model could be considered to give organisations the opportunity to do so. This scheme would allow organisations to be initially compensated to cover all their costs, and then the compensation would be gradually scaled down to the amount calculated under the new funding system. Organisations would then have time to move towards lower cost levels. A policy decision is needed to determine whether or not to adopt this transition model, as well as the time allowed organisations to reduce costs. The exact design of the transition model is beyond the scope of this study, but feasibility for the administering organisation is again a key concern.



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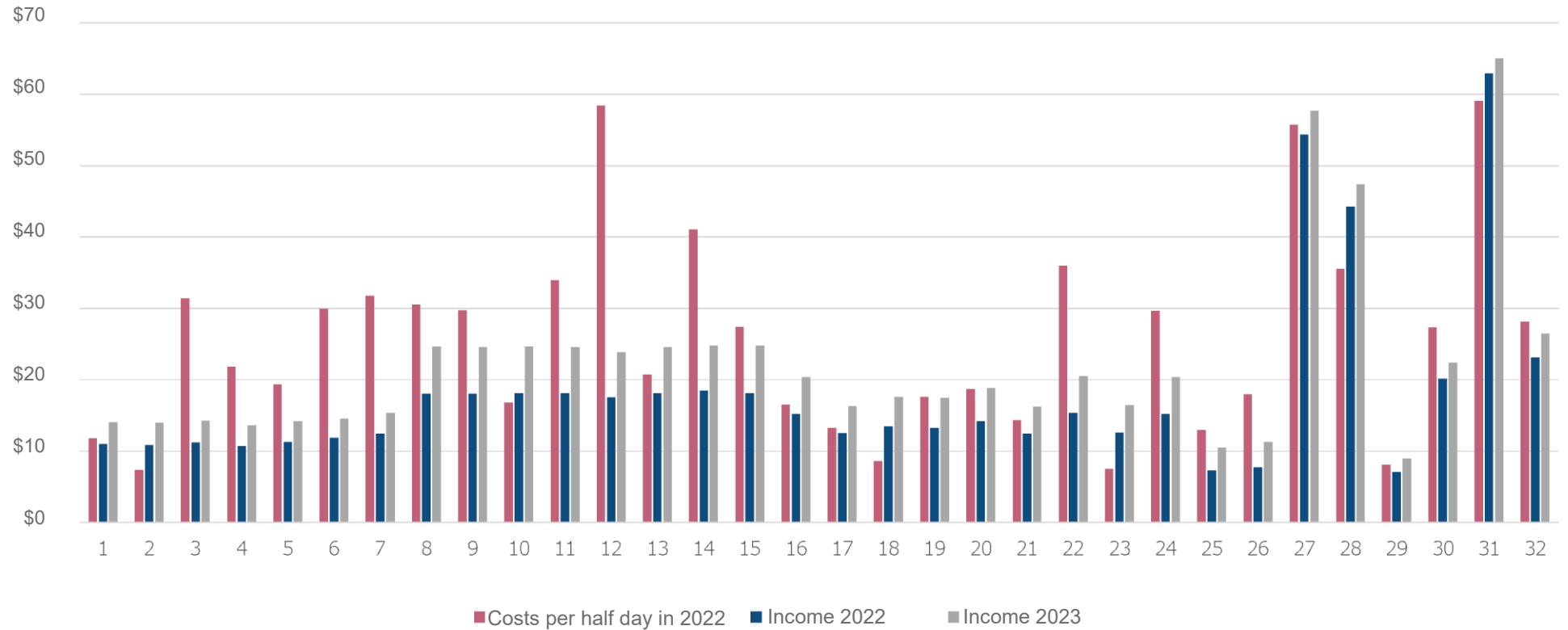
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Appendix



Costs and income per childcare organisation

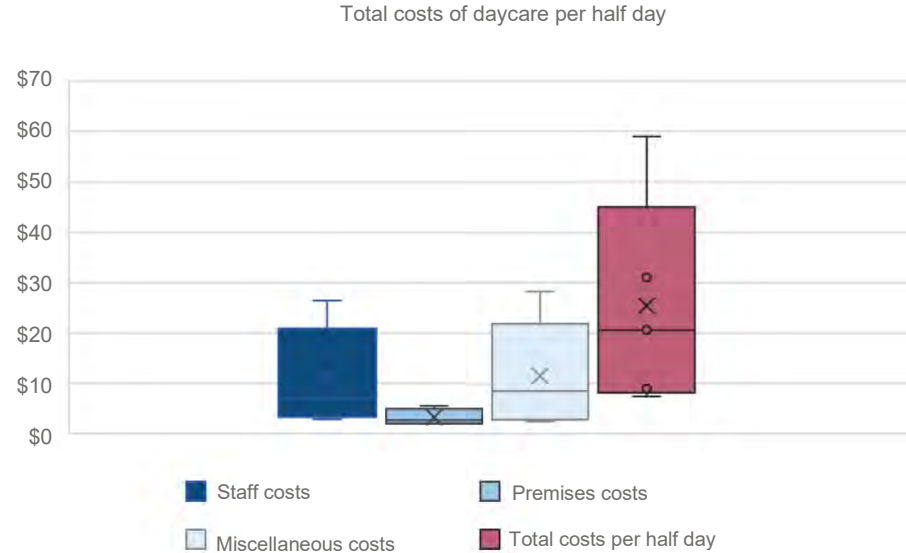
Figure A.1. Overview of costs and income per half day per childcare organisation.



Source: Amsterdam Bureau for Economics (2023)

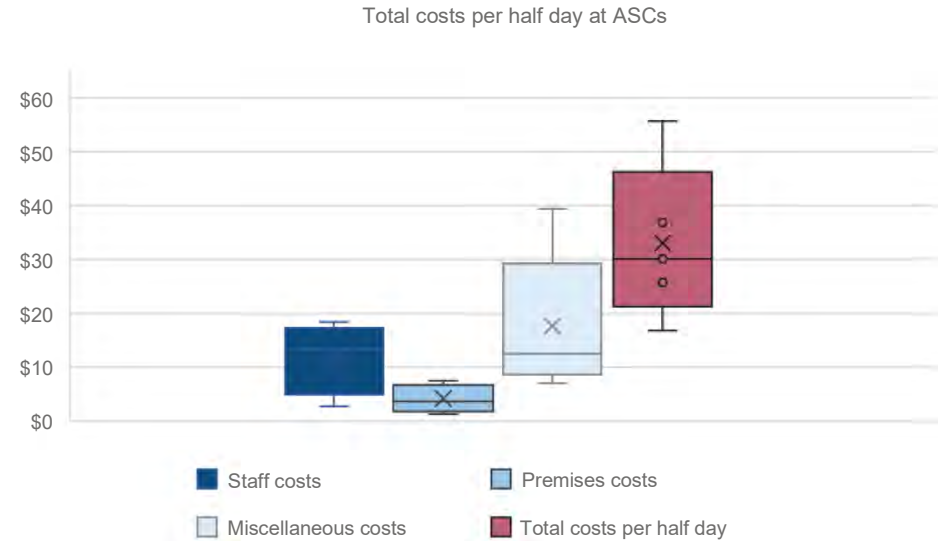
Spread in costs per type of childcare*

Figure A.2. Spread in costs at daycare organisations.



Source: Amsterdam Bureau for Economics (2023).

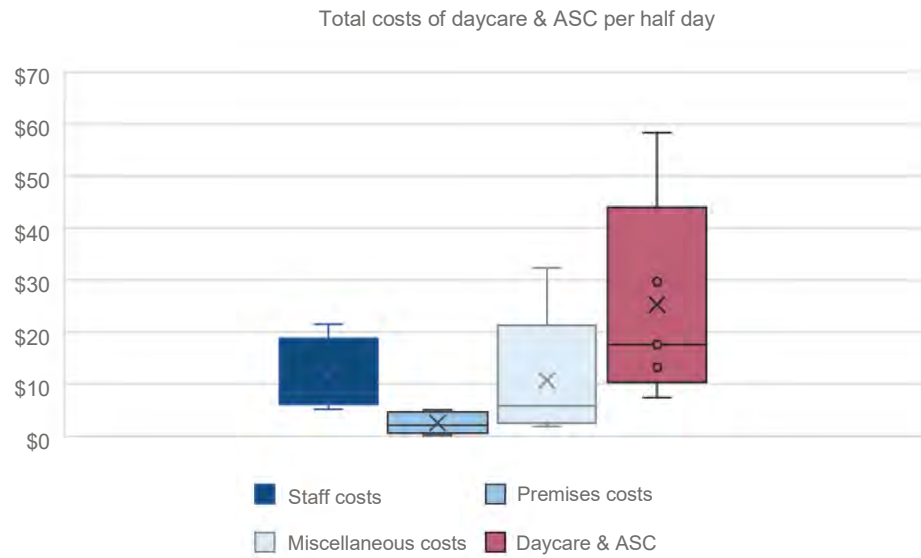
Figure A.3. Spread in costs at ASCs.



Source: Amsterdam Bureau for Economics (2023).

* The average costs shown in Figures A.2, A.3 and A.4 are weighted averages. As a result, they deviate slightly from the average costs per type of organisation shown in Figure 3, which are weighted averages based on the number of half days per organisation.

Figure A.4. Spread in costs at daycare & ASC.



Source: Amsterdam Bureau for Economics (2023).