WIC’s Infant Formula Rebate Program

In the mid-1980s, infant formula was accounting for an increasing share of total WIC food costs. Starting in 1987, several States implemented rebate programs with manufacturers of infant formula in an effort to control costs. As a result of the cost savings realized from these rebate programs, a Federal law was passed in 1989 requiring that all WIC State agencies—except those States with home delivery/direct distribution or Indian State agencies with 1,000 or fewer participants—enter into cost-containment contracts for the procurement of infant formula. Current Federal regulations specify that those WIC State agencies required to operate a cost-containment system for infant formula must use a sole-source (i.e., single supplier) competitive system unless an alternative system provides equal or greater savings. Under the sole-source competitive system, a WIC State agency uses competitive bidding to award a contract to a manufacturer of infant formula in exchange for a rebate for each can of infant formula issued to WIC participants. As a result, the brand of infant formula provided by WIC will vary by State according to which manufacturer holds the contract for that State.

How the Contracts Work

Solicitation for bids under the sole-source competitive system can take one of two forms—single solicitation or separate solicitations. Under single solicitation, the request for bids is for a single iron-fortified milk-based infant formula that is suitable for routine issuance to most generally healthy, full-term infants (only iron-fortified infant formulas are authorized for use in the WIC program). This formula is referred to as the primary contract brand infant formula, and must be offered in all physical forms—liquid concentrate, powder, and ready-to-feed. (Although the WIC program usually issues formula in powdered or liquid concentrate forms, formula may be issued in ready-to-feed form in special situations, such as when the participant’s household does not have an adequate and safe water supply or refrigeration, or if the person caring for the infant may have difficulty in correctly diluting concentrated liquid or powdered forms.)

Manufacturers who submit bids for the WIC contract are required to specify a rebate amount for the primary contract brand infant formula for each of the three forms of infant formula.

The sole-source contract is awarded to the bidder offering the lowest total monthly net wholesale price, as determined by the submission of sealed bids, for a standardized amount of the primary contract brand infant formula by each of the three forms—powder, liquid concentrate, and ready-to-feed. Net wholesale price is defined as the difference between the rebate level offered by the manufacturer and the infant formula manufacturer’s lowest national wholesale price per unit for a full truckload of infant formula. (All further references to wholesale price in this report will refer to the wholesale price per unit for a full truckload of infant formula.) The standardized number of units must contain the equivalent of the total number of ounces.

19 See Oliveira et al. (2004) for a summary of alternative infant formula cost-containment systems used by some States prior to this report’s 1998-2006 study period.

20 The primary contract brand of formula cannot be an exempt infant formula, which is defined as any formula that is represented and labeled for use by an infant who has an inborn error of metabolism or a low birth weight, or who otherwise has an unusual medical or dietary problem (exempt infant formula is not required to have a rebate). Infant formulas that do not meet the Federal WIC requirement for iron may be issued with medical documentation.

21 WIC State agencies can elect to award the WIC contract to the bidder offering the highest monthly rebate if the weighted average of retail prices for different brands of infant formula in the State vary by 5 percent or less.
by physical form needed to provide the maximum allowance to the average monthly number of infants using each form.

Because net wholesale prices are weighted by the number of units by form, it is possible that a manufacturer can bid a relatively high net wholesale price (i.e., small rebate) on one product form (e.g., liquid concentrate), and yet win the contract by offering a low net wholesale price (i.e., large rebate) on another product form (e.g., powder) if that product form receives a sufficiently large weight.

Table 1 shows how a winning bidder is determined under two different scenarios. Both scenarios assume an equal number of infants (25,000) receive formula, two manufacturers bid on the contract, and the wholesale prices by product form for the two manufacturers are similar. The amount of the rebate per can offered by each manufacturer by product type also remains constant over the two scenarios. However, the scenarios differ in the number of infants issued formula by physical form. Scenario 1 assumes a nearly equal number of infants are issued powder and liquid concentrate (13,250 vs. 11,250), while scenario 2 assumes a majority are issued powder (22,500 vs. 2,000). Both scenarios have the same small issuance of ready-to-feed formula. The two scenarios can be thought of as two States with an equal number of infants but different rates of issuance by form.

Before bidding, manufacturers are given information by the State on the average number of infants using each physical form, which is derived from at least 6 months of recent participation and issuance data. Manufacturers then bid on the rebate per can by physical form. Bids are evaluated by calculating the net wholesale price per can for each physical form, then multiplying that number by the standardized number of units, which equals the total ounces for bid divided by can size. Total ounces for bid are calculated by multiplying the average infant participation by physical form by the maximum monthly issuance for each form. The winning manufacturer is the one with the lowest total monthly net wholesale price after the monthly net wholesale prices for each physical form are summed.22

Manufacturer 1 bids a high rebate for liquid concentrate—the rebate ($3.70) is 93 percent of the wholesale price ($4.00)—and a lower rebate for powder (rebate equals 87 percent of the wholesale price). In contrast, manufacturer 2 bids a high rebate for powder (rebate is 95 percent of the wholesale price) and a low rebate for liquid concentrate (rebate equals 78 percent of the wholesale price). In scenario 1, manufacturer 1 wins the contract based on the lowest total monthly net wholesale price ($305,914 vs. $419,577) driven by a large rebate for liquid concentrate. In scenario 2, manufacturer 2 wins the contract driven by a large rebate for powder. In the two scenarios, the winner is determined by the size of the rebate and the weight they get from the issuance rates.

Issuance of formula by physical form varies across States. Although liquid concentrate was the primary form of formula issued through WIC for many years, powder is now the primary form of formula issued by most WIC State agencies.23

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22This is equivalent to the lowest “weighted” net wholesale price, where weights are the share of units of each product form.

23A recent study by the U.S. Government Accountability Office (2006) found that in the 29 States that provided information on their use of the different forms of infant formula, only a third of all formula issued in 2004 was liquid concentrate, compared with 55 percent of all formula issued in 2000.
### Table 1

#### How bids are evaluated

**Scenario 1 - 25,000 total infants, approximately evenly split between powder and liquid concentrate**

<table>
<thead>
<tr>
<th>Manufacturer 1 (winning bidder)</th>
<th>Infants</th>
<th>Maximum issuance per child</th>
<th>Total ounces per month</th>
<th>Wholesale price per can</th>
<th>Rebate per can</th>
<th>Net wholesale price per can</th>
<th>Monthly net price to State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Powder (13 oz can)</td>
<td>13,250</td>
<td>128</td>
<td>1,696,000</td>
<td>$11.50</td>
<td>$10.00</td>
<td>$1.50</td>
<td>$195,692.31</td>
</tr>
<tr>
<td>Liquid concentrate (13 oz can)</td>
<td>11,250</td>
<td>403</td>
<td>4,533,750</td>
<td>$4.00</td>
<td>$3.70</td>
<td>$0.30</td>
<td>$104,625.00</td>
</tr>
<tr>
<td>RTF (36 oz can)</td>
<td>500</td>
<td>806</td>
<td>403,000</td>
<td>$6.50</td>
<td>$6.00</td>
<td>$0.50</td>
<td>$5,597.22</td>
</tr>
</tbody>
</table>

Manufacturer 2

<table>
<thead>
<tr>
<th>Infants</th>
<th>Maximum issuance per child</th>
<th>Total ounces per month</th>
<th>Wholesale price per can</th>
<th>Rebate per can</th>
<th>Net wholesale price per can</th>
<th>Monthly net price to State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Powder (13 oz can)</td>
<td>13,250</td>
<td>128</td>
<td>1,696,000</td>
<td>$11.00</td>
<td>$10.50</td>
<td>$0.50</td>
</tr>
<tr>
<td>Liquid concentrate (13 oz can)</td>
<td>11,250</td>
<td>403</td>
<td>4,533,750</td>
<td>$4.50</td>
<td>$3.50</td>
<td>$1.00</td>
</tr>
<tr>
<td>RTF (36 oz can)</td>
<td>500</td>
<td>806</td>
<td>403,000</td>
<td>$6.00</td>
<td>$5.50</td>
<td>$0.50</td>
</tr>
</tbody>
</table>

**Scenario 2 - 25,000 total infants, large majority redeeming powder**

<table>
<thead>
<tr>
<th>Manufacturer 1</th>
<th>Infants</th>
<th>Maximum issuance per child (ounces per month)</th>
<th>Total ounces per month</th>
<th>Wholesale price per can</th>
<th>Rebate per can</th>
<th>Net wholesale price per can</th>
<th>Monthly net price to State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Powder (13 oz can)</td>
<td>22,500</td>
<td>128</td>
<td>2,880,000</td>
<td>$11.50</td>
<td>$10.00</td>
<td>$1.50</td>
<td>$332,307.69</td>
</tr>
<tr>
<td>Liquid concentrate (13 oz can)</td>
<td>2,000</td>
<td>403</td>
<td>806,000</td>
<td>$4.00</td>
<td>$3.70</td>
<td>$0.30</td>
<td>$18,600.00</td>
</tr>
<tr>
<td>RTF (36 oz can)</td>
<td>500</td>
<td>806</td>
<td>403,000</td>
<td>$6.00</td>
<td>$6.00</td>
<td>$0.50</td>
<td>$5,597.22</td>
</tr>
</tbody>
</table>

Manufacturer 2 (winning bidder)

<table>
<thead>
<tr>
<th>Infants</th>
<th>Maximum issuance per child (ounces per month)</th>
<th>Total ounces per month</th>
<th>Wholesale price per can</th>
<th>Rebate per can</th>
<th>Net wholesale price per can</th>
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<td>806</td>
<td>403,000</td>
<td>$6.00</td>
<td>$5.50</td>
<td>$0.50</td>
</tr>
</tbody>
</table>

All the different types of infant formula (except exempt infant formula) produced by the contract-winning manufacturer are referred to as contract brand infant formula. Under single solicitation, the winning bidder is required to supply and provide rebates for all the different types of contract-brand infant formula the WIC State agency chooses to issue, such as lactose-free and soy-based formulas. Contract-winning manufacturers that do not produce soy-based infant formulas must subcontract with another manufacturer to supply it. The amount of the rebate on these contract brand infant formulas is based on the same percentage discount rebate (i.e., the amount of the rebate as a percentage of the wholesale price) for the particular form of the primary contract-brand infant formula. For example, if the rebate offered for the primary contract brand of powdered infant formula was 85 percent of the manufacturer’s wholesale price, then the rebate for all other powdered forms of the contract-brand infant formula (including soy-based powder) would also be 85 percent of their wholesale price.

The percentage discount rebate is based on wholesale prices at the time of the bid opening. The contracts contain inflationary provisions. In the event of an increase (decrease) in the wholesale price after the bid opening, there is a cent-for-cent increase (decrease) in the rebate amounts. Thus, the net wholesale price of formula to a WIC State agency remains fixed over the entire span of the contract despite increases (or decreases) in the wholesale price.24

Under separate solicitations, bids are issued separately for milk-based and soy-based infant formulas. Separate solicitations may increase competition for WIC contracts by allowing new or smaller infant formula manufacturers with a limited product line to bid on contracts (Federal Register, Vol. 65, No. 164).

During most of the 1998-2006 study period, WIC State agencies could choose to issue all or some of the different types of contract brand infant formula. Any noncontract brand of formula (including exempt infant formulas and formulas not manufactured by the WIC contract manufacturer) may be issued only with medical documentation (provided by a licensed health care professional authorized to write medical prescriptions under State law) that an infant has a condition that dictates the formula’s use.25 The WIC agency does not receive rebates from noncontract-brand infant formula.26

States can either hold an individual contract for infant formula or be part of a multistate group contract or alliance. Of the 48 States and the District of Columbia that operated a competitive sole-source rebate system in conjunction with a retail food delivery system as of August 2005, 30 took part in one of 5 multistate alliances under which WIC State agencies join together in a single rebate agreement to obtain infant formula.27 In this way, WIC State agencies with fewer clients can pool their buying power to leverage higher rebate levels (Liu, 1991). The remaining 19 States held contracts that applied solely to their particular State.28

Most WIC participants receive food instruments, such as vouchers, that they transact for the contract brand of infant formula at authorized retailers. The WIC State agency then reimburses the vendor for the full retail price of the infant formula.29

24While the nominal net wholesale price remains constant over time, the real (i.e., inflation-adjusted) net wholesale price will decrease over time due to general price inflation.

25The only exception to this rule is that local WIC agencies may issue noncontract-brand infant formula without medical documentation in order to accommodate religious eating patterns (Federal Register, Vol. 65, No. 164).

26The U.S. Government Accountability Office (2006) estimated that noncontract-brand infant formula accounted for 8 percent of all formula provided to WIC participants in 2004. Also see United States General Accounting Office, 2003, for information on the use of noncontract infant formula in WIC.

27For example, the Western States Contracting Alliance (WSCA) is comprised of Alaska, Arizona, Delaware, Hawaii, Idaho, Kansas, Maryland, Montana, Nevada, Oregon, Utah, Washington, the District of Columbia, West Virginia, and Wyoming (as well as American Samoa, Guam, Virgin Islands, and 3 Indian Tribal Organizations). The New England and Tribal Organization (NEATO) is comprised of Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and 3 Indian Tribal Organizations.

28Although Oklahoma, along with 3 Indian Tribal Organizations located within the State, comprise the Southwest multistate region, they are considered an individual State agency for this report.
infant formula, after which its financial institution bills the formula manufacturer for the contracted rebate on each can of formula purchased. As a result, the cost of infant formula to the WIC State agency per can of infant formula equals net wholesale price plus the retail markup, which can be expressed as:

\[ \text{Cost to WIC} = (\text{retail price} - \text{wholesale price}) + (\text{wholesale price} - \text{rebate}). \]

Wholesale prices are a component of both retail markup and net wholesale price. Wholesale prices for infant formula vary by manufacturer; each manufacturer publishes a wholesale price list for its products. The listed prices are set at the national level, and vary only by volume, with larger volume purchases (up to a truckload of formula) receiving a bulk discount. Since the wholesale price used by WIC is the manufacturer’s lowest national wholesale price per unit for a full truckload of infant formula, the wholesale price for an individual manufacturer, used for the determination of its net wholesale price, does not vary by State (U.S. territories and Indian tribal organizations are excluded from this discussion). On the other hand, the amount of the rebate, determined by the contract awarded by submission of sealed bids, varies by both manufacturer and State. As a result, net wholesale price will also vary by State.

**Recent Legislative Developments**

The Child Nutrition and WIC Reauthorization Act of 2004 (P.L. 108-265), signed into law in June 2004, made several modifications to WIC’s infant formula rebate program. Previously, manufacturers could submit a bid for the rebate contract based on any product in their product line as long as it was suitable for routine issuance to the majority of generally healthy, full-term infants. WIC State agencies were responsible for identifying the specific infant formula products in the winning manufacturer’s product line to be used in their WIC program. Consequently, the contract formulas provided to WIC participants in a particular State would not necessarily include the primary contract-brand product specified in the manufacturer’s bid. For example, nearly all of the bids submitted by the formula manufacturers after February 2003 have been for the new DHA- and ARA-supplemented formulas. However, some States have chosen not to offer these formulas, while others have given the participant (i.e., the infant’s parent) the choice of either supplemented or unsupplemented formula. Where the contract formula provided through WIC was different from the primary contract formula in the bid, the rebate on the formula provided by WIC is based on the same percentage discount rebate as the primary contract formula.\(^\text{29}\) Under the new law, for all contracts based on solicitations issued after September 2004, State agencies must use the primary contract infant formula for which the manufacturer submitted its bid (and for which the contract was awarded) as the first choice of issuance (by physical form), with all other infant formulas issued as an alternative. As a result, if the winning bids are based on the DHA- and ARA-supplemented formulas, then those States awarding rebate contracts will have to offer the supplemented formulas to their participants if they do not do so currently.

\(^{29}\)In those States that do not offer the formula that was bid on as the formula of first choice, the formula provided must be on the list of WIC-approved infant formulas.
The Child Nutrition and WIC Reauthorization Act of 2004 also requires State agencies or multistate alliances that serve a monthly average of more than 100,000 infants (during the preceding 12-month period) to use separate solicitations in soliciting bids from infant formula manufacturers (except where the Secretary of Agriculture determines that such solicitation procedures are not in the best interest of the program). As of January 1, 2006, there was one case in which two different manufacturers held infant formula contracts in a single State—New York, where Mead Johnson held the milk-based contract and Nestlé held the soy-based contract. However, because the bids for rebates in the larger States will now be solicited for milk-based and soy-based infant formula separately, there may be more cases where two different manufacturers hold contracts—one for milk-based formula and one for soy-based formula—in the same State or multistate alliance.

The new law also prohibits the formation of multistate alliances for the purchase of infant formula if the total number of infants served by the States exceeds 100,000 (unless the alliance had 100,000 infants as of October 2003). Any alliance in existence as of October 2003 may expand to serve more than 100,000 infants, but may not expand to include any additional WIC State agency (an exception is made if the WIC State agency to be added served fewer than 5,000 infants as of October 2003).30

In recent years, some States have seen a growth in the number of WIC-only stores (i.e., vendors that derive more than 50 percent of their annual food sales revenue from WIC food instruments). This growth has been cited as possibly reducing the savings from infant formula rebates in the future (Neuberger and Greenstein, 2004). The thinking is that formula manufacturers are willing to offer high rebates to win the WIC contract in part because the WIC contract brand of formula may get more shelf space and hence lead to increased sales to non-WIC consumers. In contrast, shelf space in WIC-only stores does not promote sales to non-WIC customers. As more WIC participants purchase their formula in WIC-only stores, sales of the contract brand of formula to WIC customers in traditional retail food stores decrease, and these stores may respond by stocking less of the WIC contract brand and devoting less shelf space to it. Infant formula manufacturers may then lower their rebate bids as a result of the reduced opportunity to attract non-WIC customers to their products.31

The Child Nutrition and WIC Reauthorization Act of 2004 includes several provisions that attempt to ensure that the vendors authorized to participate in WIC charge competitive prices. In addition, the Consolidated Appropriations Act, enacted on December 8, 2004, imposed a nationwide moratorium on authorizing new WIC-only stores, except with USDA approval that the stores are necessary to ensure participant access. This moratorium was extended in the FY 2006 Appropriations Act, with an additional exception for WIC State agencies for which vendor cost-containment systems have been certified by USDA. In November 2006, FNS published an interim rule to implement these cost containment provisions (Federal Register, Vol. 70, No. 228).

Federal regulations dictate that participants can redeem a maximum of 128 ounces of powered infant formula each month. However, the amount that participants can actually redeem is determined by can size. If the number of

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30 The same law requires WIC retail vendors to purchase infant formula only from licensed wholesalers, distributors, and retailers set forth on a list provided by the State agencies. This is to prevent the sale of stolen infant formula.

31 There were over 1,200 WIC-only stores in 19 States (including the District of Columbia) in 2004 (preliminary estimate provided by FNS). In December 2005, WIC-only stores accounted for 48 percent of all WIC voucher redemptions in California, the State with the largest number of WIC infants (data from the California WIC program).
dry ounces in a can does not evenly divide into 128, participants may be able to redeem less than the full allotment. For example, if the can size is 16 ounces, then a participant can redeem 8 cans per month and get a full 128 ounces per month. However, if the can size is 14.1 ounces, then a participant can only redeem 9 cans for a total of 126.9 ounces. This disparity raised concerns that some manufacturers may have an advantage when bidding for infant formula contracts because they are essentially bidding on fewer total cans. Regulations require net wholesale price bids to be evaluated assuming all 128 ounces of formula are redeemed—no matter the can size (CFR 246.16a). The Child Nutrition and Reauthorization Act allows States—for contracts awarded on or after October 1, 2004—to round up to the next whole can of infant formula so participants can redeem the full allotment.

In July 2005, FNS released a proposed rule that would prohibit WIC State agencies from requiring infant formula manufacturers, in rebate contracts, to provide free products and services, such as sample infant formula (Federal Register, Vol. 70, No. 143). According to FNS, the quantity of sample infant formula required in rebate contracts has grown in recent years. FNS expressed concern that the increased quantity of sample infant formula and other gratis items, including educational supplies, could result in reduced rebate savings to individual State agencies and to the WIC program nationally.