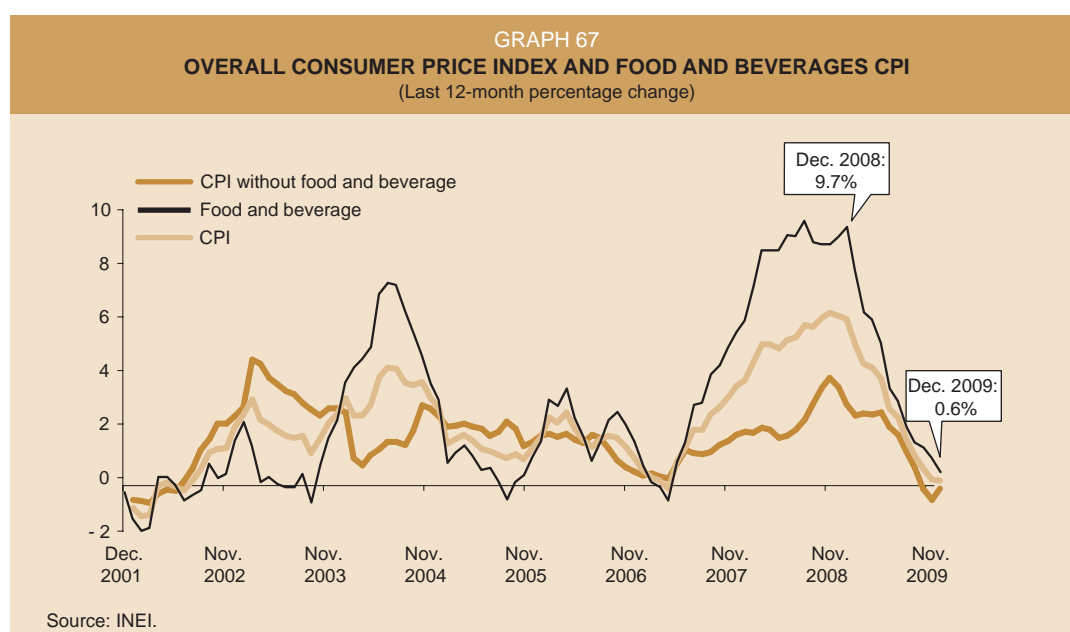


## IV. Inflation

The consumer price index (CPI) of Metropolitan Lima recorded 0.25 percent, a significantly lower rate than the 6.65 percent rate registered in 2008. This lower inflation rate reflected the reversal of the supply shocks observed in both the international market and the domestic market in the previous year, which mainly affected the cost of food products.

Food prices in 2008 had increased 9.7 percent, mainly as a result of the higher international prices of wheat, maize, and soybean associated with industrialized countries' increased demand for basic foodstuffs, as well as with the higher demand for grains –especially maize– to produce ethanol. In addition to this, the prices of agricultural products had also increased, affected by the occurrence of adverse climatic events and the higher prices of fertilizers. In contrast, in 2009, food prices increased 0.6 percent. Moreover, the prices of fuels and derivatives also showed a marked downward trend over the year.



### Core and non-core inflation

Core inflation, which measures the inflationary trend associated with domestic demand, showed a downward evolution between 2008 and 2009, declining from an annual rate of 5.6 percent in December 2008 to 2.3 percent in December 2009. Non-core inflation also showed a downward trend and fell from 8.1 percent in 2008 to 1.9 percent in 2009.

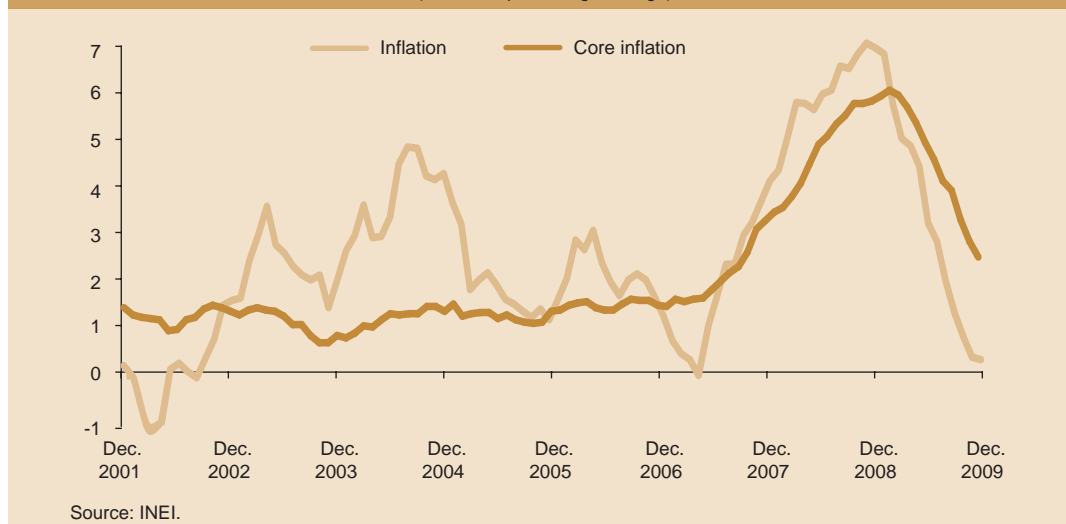
**TABLE 40**  
**INFLATION**  
(Accumulated percentage change)

	Weight Dec. 2001=100	2001	2002	2003	2004	2005	2006	2007	2008	2009	Average 2001-2009
<b>I. Core inflation</b>	<b>60.6</b>	<b>1.30</b>	<b>1.23</b>	<b>0.73</b>	<b>1.23</b>	<b>1.23</b>	<b>1.37</b>	<b>3.11</b>	<b>5.56</b>	<b>2.35</b>	<b>2.00</b>
1. Food	25.0	0.45	0.70	0.19	2.29	0.80	1.42	4.90	8.35	2.58	2.38
2. Non-food	35.5	2.14	1.59	1.07	0.50	1.63	1.28	1.89	3.51	2.16	1.75
a. Goods	21.0	2.16	1.46	0.65	-0.38	0.87	0.64	1.72	3.29	2.32	1.41
b. Services	14.5	2.12	1.81	1.76	1.72	2.47	2.28	2.03	3.91	1.96	2.23
<b>II. Non-core inflation</b>	<b>39.4</b>	<b>-2.36</b>	<b>1.96</b>	<b>5.16</b>	<b>6.75</b>	<b>1.87</b>	<b>0.83</b>	<b>5.07</b>	<b>8.11</b>	<b>-2.54</b>	<b>2.70</b>
1. Food	22.5	-0.99	0.28	3.73	5.82	1.62	2.06	7.25	10.97	-1.41	3.19
2. Non-food	16.9	-4.27	4.22	7.00	7.90	2.17	-0.67	2.37	4.39	-4.10	2.03
a. Fuels	3.9	-13.14	15.60	8.94	17.77	6.89	-1.50	6.45	-0.04	-12.66	2.61
b. Transportation	8.4	-0.02	0.11	10.99	3.49	1.29	1.12	0.82	5.86	0.37	2.61
c. Public services	4.6	-2.73	1.96	-1.98	6.19	-1.72	-3.22	0.24	7.48	-2.31	0.37
<b>III Total</b>	<b>100.0</b>	<b>-0.13</b>	<b>1.52</b>	<b>2.48</b>	<b>3.48</b>	<b>1.49</b>	<b>1.14</b>	<b>3.93</b>	<b>6.65</b>	<b>0.25</b>	<b>2.29</b>
Food and beverages	47.5	-0.21	0.50	1.89	4.00	1.13	1.76	6.02	9.70	0.57	2.77
CPI without food and beverages	52.5	-0.09	2.44	3.04	3.03	1.75	0.61	2.02	3.86	-0.07	1.84
CPI without food and beverages, fuels and electricity	46.3	1.65	1.06	2.86	1.09	1.36	1.28	1.49	4.25	1.71	1.86

Source: INEI and BCRP.

The reduction of core inflation in 2009 was associated with the slowdown of demand, lower inflationary expectations, and the appreciation of the exchange rate. In terms of components, it is worth pointing out the lower growth of meals outside the home, which dropped from 8.3 to 3.3 percent; evaporated milk, which fell from 8.7 to 4.1 percent, and beef, which dropped from 14.5 to 2.2 percent.

**GRAPH 68**  
**INFLATION AND CORE INFLATION**  
(12-month percentage change)



Non-core inflation declined 2.5 percent, mainly as a result of the lower prices of foodstuffs (down 1.4 percent), fuels (down 12.7 percent), and public utilities (down 2.3 percent). This lower result compared with the one observed in 2008 was mainly due to the decline of the growth of the price of potato, which fell from 50.9 percent to 22.5 percent, and the price of rice, which declined 16.6 percent after having increased 12.8 percent.

The items that contributed most heavily to inflation were meals outside the home, sugar, education fees, and fish. On the other hand, the items that most contributed to the reduction of inflation were potato, rice, kerosene, and gasoline.

TABLE 41  
INFLATION 2009

	Weight Dec. 2001=100	% Change	Weighted contribution
<b>I. CORE INFLATION</b>	<b>60.6</b>	<b>2.35</b>	<b>1.34</b>
<b>Goods</b>	<b>34.0</b>	<b>2.17</b>	<b>0.68</b>
Food and beverage	13.0	1.94	0.25
Textiles and footwear	7.6	2.20	0.15
Domestic appliances	1.0	- 2.39	- 0.02
Other industrial products	12.5	2.73	0.30
<b>Services</b>	<b>26.6</b>	<b>2.56</b>	<b>0.66</b>
Meals outside the home	12.0	3.26	0.39
Education	5.1	4.58	0.24
Health	1.3	2.77	0.03
Rent	2.3	- 2.26	- 0.04
Other services	5.9	0.70	0.04
<b>II. NON-CORE INFLATION</b>	<b>39.4</b>	<b>- 2.54</b>	<b>- 1.09</b>
Food	22.5	- 1.41	- 0.35
Chicken meat	4.0	3.13	0.12
Rice	2.3	- 16.61	- 0.41
Potato	1.5	- 22.49	- 0.49
Sugar	1.4	30.49	0.34
Oils	0.8	- 12.73	- 0.13
Other foodstuffs	7.9	3.41	0.29
Fresh and frozen fish	1.1	16.55	0.17
Eggs	0.7	- 18.14	- 0.19
Fuels	3.9	- 12.66	- 0.68
Gasoline and lubricant oil	1.5	- 15.82	- 0.30
Gas	1.3	- 4.57	- 0.06
Kerosene	1.2	- 14.98	- 0.31
Transportation	8.4	0.37	0.03
Public services	4.6	- 2.31	- 0.09
Electricity	2.2	- 4.56	- 0.09
Telephone	1.3	- 1.38	- 0.01
<b>III. CPI</b>	<b>100.0</b>	<b>0.25</b>	<b>0.25</b>

Source: INEI and BCRP.



## Foodstuffs with a positive contribution to inflation

**Meals outside the home:** the higher price of this item is associated with the evolution of the price of chicken meat. After showing an increase of 8.3 percent in 2008, it recorded a lower growth of 3.3 percent in 2009.

**Sugar:** The price of sugar increased 30.5 percent following the international price of this product, which increased from US\$ 305 to US\$ 412 between 2008 and 2009 as a result of lower global supply, affected mainly by India's lower supply.

**Fish:** The average price of fish increased 16.6 percent in a context of lower levels of availability of highly consumed fish species, such as mackerel, bonito, palm ruff, and striped mullet, due to fluctuations in hydrobiological conditions. According to IMARPE, the habitat of this species would have been affected by the presence of a mass of warm water until August and the increased presence of winds, such as the South Pacific anticyclone, would have continued affecting ocean conditions thereafter.

**Chicken meat:** The price of chicken meat increased 3.1 percent influenced by a lower supply of substitute products, especially mackerel. The price of chicken meat increased despite the higher supply of poultry resulting from increased placements of baby chicken (up 9.8 percent compared to the previous year).

The price of chicken meat showed a fluctuating evolution over the year and recorded a peak of 8.9 percent in May. The effect of the AH1N1 flu, which reduced the demand for pork, added onto this as from May. In August and September, the price of chicken meat declined after the rise observed during the national holidays, and increased again 10.2 percent in the month of October.

## Foodstuffs with a negative contribution to inflation

**Potato:** The 22.5 percent reduction observed in the price of this product is explained by a 4.6 percent increase in production compared to the previous year, as well as with the higher share of Junin and Huanuco's supply of sugar to Lima. These regions had been affected by a lower availability of seeds and by the higher costs of fertilizers in 2008.

**Rice:** The 16.6 percent decline observed in the price of rice was associated with a 7.0 percent increase in domestic production as a result of larger cultivated areas in the August-July farming period (up 10.1 percent compared with the previous period) due to increased availability of water. Other factors contributing to this included the lower prices of fertilizers and the decline of the international prices of rice, the latter of which dropped 18.4 percent on average (from US\$ 688/ton in 2008 to US\$ 561/ton in 2009).

**Eggs:** The prices of eggs fell 18.1 percent due to higher supply. Placements of laying hens increased 4.5 percent compared to 2008.

**Edible oil:** The price of oil dropped 12.7 percent due to the lower international price of soybean oil, the main input used to produce edible oils. The average price of soybean oil declined from US\$ 1,092/ton in 2008 to US\$ 729/ton in 2009 (-33.3 percent).

## Fuels

The prices of gasoline and kerosene fell 15.8 and 15.0 percent, respectively, reflecting the lower price of crude. The WTI price of oil went from an average of US\$ 99.6/barrel in 2008 to US\$ 61.7/barrel in 2009 (-38.1 percent). The implementation of a price-band system in the Fuel Price Stabilization Fund, established to prevent that the high volatility of the international prices of oil and oil derivatives is transferred to end consumers, contributed to this.

This situation reversed at end 2009 due to the recovery of the price of crude in international markets, as well as to the lower government resources allocated to the Stabilization Fund.

TABLE 42  
FUEL PRICES  
(Percentage change)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	Average 2001-2009
<b>Fuels</b>	<b>- 13.1</b>	<b>15.6</b>	<b>8.9</b>	<b>17.8</b>	<b>6.9</b>	<b>- 1.5</b>	<b>6.4</b>	<b>0.0</b>	<b>- 12.7</b>	<b>2.6</b>
Gasoline	- 11.4	15.7	9.7	17.7	9.2	- 6.2	10.7	- 6.1	- 15.8	1.9
Gas	- 12.3	11.3	4.2	15.3	-10.9	0.3	1.3	2.7	-4.6	0.4
Kerosene	- 14.4	20.4	13.0	20.3	21.0	2.2	5.8	4.2	- 15.0	5.5
Price of WTI 1/ oil (end of period)										
US Dollar	19.3	29.4	32.1	43.2	59.4	62.0	91.4	41.4	74.3	
Nuevos soles	66.4	103.5	111.6	141.9	203.5	198.8	272.4	129.1	213.8	
1/ West Texas Intermediate. Source: INEI, Bloomberg.										

## Electricity

The 4.6 percent average reduction observed in electricity rates reflected the various adjustments implemented by Osinergmin during the year, which considered the variation of the components of the formulas used to adjust the costs of electricity generation, distribution, and transmission (exchange rate, WPI, the price of copper, aluminium, and coal, among other costs).

TABLE 43  
PUBLIC SERVICES FARES  
(Percentage change)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	Average 2001-2009
<b>Public utilities</b>	<b>- 2.7</b>	<b>2.0</b>	<b>- 2.0</b>	<b>6.2</b>	<b>- 1.7</b>	<b>- 3.2</b>	<b>0.2</b>	<b>7.5</b>	<b>- 2.3</b>	<b>0.4</b>
Electricity	- 6.3	7.9	- 4.6	12.0	- 2.5	- 7.3	1.9	6.3	- 4.6	0.1
Telephone	1.1	- 8.3	0.3	- 2.0	- 7.0	- 6.2	- 7.2	- 4.2	- 1.4	- 3.9
Water	0.0	2.3	0.9	3.0	5.2	8.5	3.2	18.9	0.0	4.5

Source: INEI.

## Education costs

Education costs increased 4.6 percent in 2009 due to the 3.2 percent increase observed in March. In this month, tuition increased approximately 2.1 percent in private schools and 0.2 percent in public schools. Education fees in private schools increased 5.4 percent.

## Imported inflation

Imported inflation recorded a rate of -6.2 percent in 2009 due to the drop of the prices of foodstuffs (-3.1 percent) and fuels (-12.7 percent). This result was associated with the reversal of the rises in the prices of wheat, maize, edible oils, and crude in 2008.

TABLE 44  
DOMESTIC AND IMPORTED INFLATION: 2002 - 2009  
(Accumulated percentage change)

	Weight	2001	2002	2003	2004	2005	2006	2007	2008	2009	Average 2001-2009
<b>I. IMPORTED CPI</b>	<b>12.1</b>	<b>- 4.61</b>	<b>10.30</b>	<b>3.03</b>	<b>11.33</b>	<b>2.18</b>	<b>0.27</b>	<b>10.46</b>	<b>2.20</b>	<b>- 6.25</b>	<b>3.03</b>
Food	5.4	- 1.18	9.98	- 0.10	10.90	- 1.49	2.08	18.83	4.75	- 3.07	4.30
Fuels	3.9	- 13.14	15.60	8.94	17.77	6.89	- 1.50	6.45	- 0.04	- 12.66	2.61
Domestic appliances	1.0	- 0.19	3.42	- 1.91	- 2.83	- 1.23	- 1.29	- 1.50	- 0.06	- 2.39	- 0.90
Other	1.8	4.99	3.39	1.40	3.23	2.27	0.64	0.47	0.46	- 0.34	1.82
<b>II. DOMESTIC CPI</b>	<b>87.9</b>	<b>0.47</b>	<b>0.30</b>	<b>2.40</b>	<b>2.28</b>	<b>1.38</b>	<b>1.28</b>	<b>2.84</b>	<b>7.44</b>	<b>1.35</b>	<b>2.17</b>
<b>III. CPI</b>	<b>100.0</b>	<b>- 0.13</b>	<b>1.52</b>	<b>2.48</b>	<b>3.48</b>	<b>1.49</b>	<b>1.14</b>	<b>3.93</b>	<b>6.65</b>	<b>0.25</b>	<b>2.29</b>
<b>Exchange rate</b>		<b>- 2.40</b>	<b>2.29</b>	<b>- 1.23</b>	<b>- 5.48</b>	<b>4.36</b>	<b>- 6.40</b>	<b>- 7.00</b>	<b>4.47</b>	<b>- 7.59</b>	<b>- 2.21</b>

Source: INEI and BCRP.



