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Surveillance of the Philippine Rice Market

By Christopher John F. Cruz[1/]

The Philippines is one of the world's largest consumers of rice. Latest estimates from the Food and Agriculture Organization, for instance, showed that the average Filipino consumes about 123 kilograms of rice per year, the sixth highest in the world.[2] It should not come as a surprise, therefore, that the share of rice in the Philippine consumer price index (CPI) basket is also sizeable. In a survey of Asian countries [Table 1], the share of rice in the Philippine CPI at 8.9 percent was the fourth highest globally, next to Vietnam, Sri Lanka and Indonesia.

Given the significant contribution of rice to Philippine inflation, the rice industry is one of the key industries being monitored by the Bangko Sentral ng Pilipinas as part of its policymaking process to achieve price stability in the country.

Table 1. Asia's breakdown of CPI baskets

	Rice (%)	Food (%)	Cereals & Bakery Products* (%)	Wheat-bread-flour (%)
Vietnam	25.2	39.9	N/A	3.5
Sri Lanka	17.2	46.7	N/A	N/A
Indonesia	14.0	19.6	4.7	2.0
Philippines	**8.9**	**36.3**	**12.4**	**1.7**
Pakistan	7.2	40.3	7.2	N/A
Taiwan	5.2	26.1	19.7	N/A
Malaysia	4.6	30.0	N/A	0.6
Thailand	2.9	33.0	N/A	0.7
India	2.4	26.9	4.4	2.4
China	2.0	32.5	2.8	0.8
Singapore	1.7	22.1	N/A	N/A
Korea	1.4	13.3	2.8	1.3
Japan	0.9	25.9	2.2	1.2
Hongkong	0.4	32.1	1.8	1.1
Average	**6.7**	**30.3**	**6.4**	**1.5**

*In the Philippines, this consists of rice, corn, other cereals, bread/other bakery products, and pasta.
Source: HSBC (2010), Philippine Statistics Authority

This article provides a brief overview of the BSP's surveillance of the Philippine rice market, including how the BSP takes into account price pressures in the domestic rice market in its monetary policy formulation.

Types of Rice

Data on rice prices are generated by the Bureau of Agricultural Statistics (BAS) by conducting regular surveys in cities and provinces. BAS reports take into account the different classifications of rice based on the Philippine Grains Standardization Program (PGSP). Under the PGSP, there are four categories of rice depending on the varying percentages of broken kernels: regular-milled rice (RMR), well-milled rice (WMR), premium rice and special rice [Table 2]. The prices of RMR and WMR, however, are typically used as benchmark prices in analyzing the trends in the domestic rice market. It may be noted that common rice varieties such as *Dinorado*, *Sinandomeng*, and *Milagrosa* are classified under the special rice category.

Table 2. PGSP Classification of Rice

Categories	Milling degree	Broken	Remarks
RICE SPECIAL	Well-milled (WM); Regular-milled (RM)	-	Includes aromatic rice and those with excellent eating and nutritive quality
RICE PREMIUM	Over-milled (OM); Well-milled (WM)	5% max.	Any rice variety which meet the highest grade requirements for rice as set forth in the prescribed national standards
WELL-MILLED RICE (WMR)	WM	10% max.	Rice kernel from which the hull, the germ, the outer bran layers and the greater part of the inner bran layers have been removed, but parts of the lengthwise streaks of the bran layers shall be less than 20% of the kernels.
REGULAR-MILLED RICE (RMR)	RM	15-45% max.	Rice kernel from which the hull, the germ, the outer bran layers and the greater part of the inner bran layers have been removed but parts of the inner lengthwise streaks of the bran layers shall be within the range of 20-40% of the kernels

Source: Philippine Statistics Authority

Recent developments in the rice market

Rice prices registered marked increase starting in the middle part of 2013. In recent months, the prices of RMR and WMR have, in fact, reached record highs—surpassing those recorded during the 2008 rice crisis (Figure 1).[3]

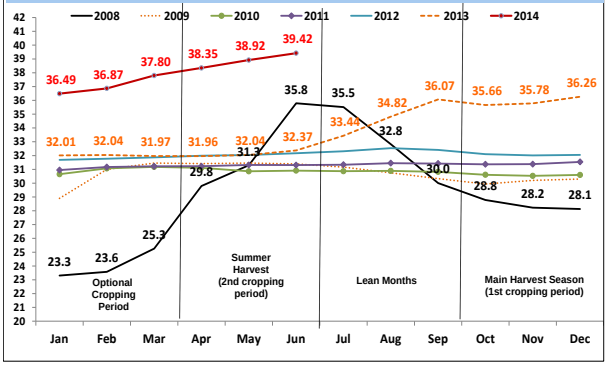
The continued uptrend in rice prices reflects the relatively tight domestic supply conditions which may be attributed to several factors including the impact of weather disturbances (e.g., Typhoon Yolanda) on domestic *palay*

[1]Mr. Cruz is Bank Officer III at the Department of Economic Research.
[2]The Philippines follows Myanmar (which consumes 209 kilograms per day), Vietnam (191 kg./day), Bangladesh (168 kg./day), Indonesia (163 kg./day) and Thailand (144 kg./day).

[3]See the box article of the Q2 2014 BSP Inflation report for a more detailed analysis of the drivers of the recent uptick in domestic rice prices.

production, lower rice importation which reflected the government's drive towards rice self-sufficiency, as well as some delays in the arrival of rice imports. The government also cited efforts by unscrupulous traders in creating artificial shortage as a key driver of the recent surge in the price of the staple.

Figure 1. Prices of Regular-Milled Rice (National Average)
In ₱ per kilogram



In an effort to stabilize rice prices, the government imported 500 thousand MT (TMT) of rice in Q4 2013 (through a government-to-government negotiation) and additional 800 TMT (through a public bidding) which is scheduled to arrive in May to August 2014. As of 5 August 2014, about 435.2 TMT (54.4 percent) have arrived out of the 800 TMT. Government imports are expected to be augmented by rice importation by the private sector under the 2014 Minimum Access Volume – Country Specific Quota (MAV-CSQ) program amounting to 163 TMT.

Issues on rice self-sufficiency

The government defines rice self-sufficiency in terms of whether the country satisfies the domestic requirements for food, seeds, and feeds through domestic rice production. The government has previously announced plans to bring domestic rice production in line with the total rice requirement of the country by end-2013. Data from the BAS show that the country's rice production for 2013 was about 7 percent lower than the Department of Agriculture's production target as the estimated *palay* yield for the year remained below the target level [Table 3].

Table 3. *Palay* production, harvest area and yield, 2011-2016

	2011	2012	2013	2014	2015	2016
Production (million MT)						
Target	16.96	18.46	20.04	21.50	22.13	22.73
Actual	16.68	18.03	18.44			
Percent Gap	-2%	-2%	-8%			
Yield (MT/Hectare)						
Target	3.78	4.03	4.23	4.43	4.48	4.53
Actual	3.68	3.84	3.90			
Percent Gap	-3%	-5%	-8%			
Harvest Area (million hectares)						
Target	4.49	4.58	4.74	4.85	4.94	5.02
Actual	4.54	4.69	4.77			
Percent Gap	1%	2%	1%			

Source: Food Staples Sufficiency Program roadmap (http://www.philrice.gov.ph/images/other_products/knowpro/Food-Staples-Sufficiency-Program.pdf), Bureau of Agricultural Statistics

Prior to the damage from Typhoon Yolanda, Briones (2012) noted that the achievement of the Philippine government's rice self-sufficiency (i.e., zero imports) target was not feasible for 2013. The paper compared the Food Staples Sufficiency Program (FSSP) targets with historical trends [Table 4] and concluded that the FSSP targets were ambitious and unlikely to be met. At most, FSSP area targets were deemed as attainable and yield growth will likely surpass historical trends, but the yield targets were viewed by Briones (2012) as unrealistic.

Table 4. Projected and historical growth rates for *palay* yield, area harvested and production

	Projected under FSSP 2011–2016	Historical 1994–2010
All palay		
Yield	3.8	1.5
Area	2.4	1.4
Production	6.3	3.2
Irrigated palay		
Yield	3.6	1.1
Area	4.1	2.1
Production	7.9	3.4
Rainfed palay		
Yield	2.3	2.1
Area	-2.1	0.8
Production	0.2	3.4

Source: DA (2012)

In addition, the study assessed the feasibility of the targets using supply-demand scenario analysis, applying the PIDS Agricultural Multimarket Model for Policy Evaluation (AMPLE). Results show that *palay* production will still fall short of the targets because of the divergence in yield projections by the baseline or reference scenario (which incorporates the assumptions of the FSSP) and the FSSP targets. The study concluded that raising

productivity growth would still fail to eliminate imports. This is because the resulting decline in prices would also tend to raise per capita consumption, which in turn could still require some importation.

The analysis, however, does not appear to take into account a possible shift in consumption away from rice to other food staples such as corn, banana, cassava and sweet potato. Survey data by the BAS suggest that there has been a decline in per capita consumption of rice in favor of other staples, particularly corn. Based on the Survey of Demand for Agricultural Commodities [Table 5], the annual per capita consumption of rice declined by about 4.8 kilograms from about 119.1 kilograms in 2008/2009 to 114.3 kilograms in 2012. Meanwhile, other staples, including corn and banana, exhibited some increases over the period covered by the study. These results suggest that efforts by the DA to encourage consumption (and intensify production) of non-rice staples may help curb the increase in rice consumption that, as Briones (2012) noted, is expected to accompany the FSSP-driven increase in rice supply and decline in prices.

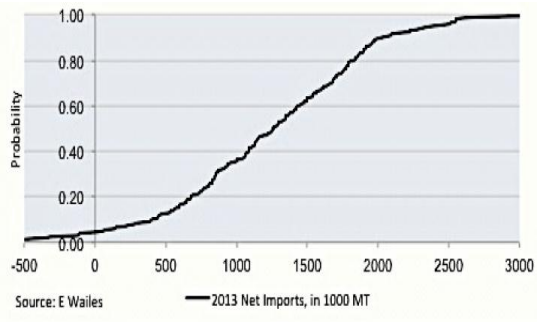
Table 5. Estimated annual per capita consumption (in kg.)

	2008/09	2012	Difference
Rice	119.08	114.27	-4.8
Corn	7.07	10.26	3.2
Camote	4.06	4.31	0.3
Cassava	3.12	2.83	-0.3
Gabi	1.04	1.24	0.2
White Potato	0.73	0.87	0.1
Banana	16.69	20.90	4.2

Source: BAS Survey of Food Demand for Agricultural Commodities for 2008/09 and 2012

Meanwhile, using the Arkansas Global Rice Model (AGRM), simulations by Clarete (2012) of the University of the Philippines School of Economics also indicated low likelihood that the Philippines will achieve its self-sufficiency target by end-2013. The study introduced random shocks to the AGRM 200 times following a historical pattern of rice yields in 50 rice-producing countries and computed the cumulative density function of these results. The result shown in Figure 2 indicates a very low probability for the Philippine rice imports to decline to zero in 2013.

Figure 2. Cumulative Density Function of Philippine Rice Net Imports, Stochastic Projections, 2013



Recently, government officials have shifted away from setting a target date for the plan to be completely self-sufficient in rice.

Outlook on rice prices

The future trend in domestic rice prices will depend largely on how the government will address the relatively tight supply conditions in the country. The impact of the possible occurrence of El Niño in 2014 will also have a role to play in the outlook on rice prices. In any case, the timely arrival of rice imports and contingency measures to mitigate the impact of a possible El Niño will help moderate the upward pressure on rice prices.

Policy response to supply shocks

In responding to supply-side led inflation, the BSP typically looks through the first-round effects since these price pressures lead to relative price shifts rather than affect the underlying inflation trends. However, the BSP, like other central banks, responds only to second-round effects to minimize the generalized impact on inflation expectations, which would be factored into the wage and price-setting processes. Several factors are examined in determining the appropriate policy response. These include (1) the source of the shock, i.e., whether or not the price shock is supply or demand driven; (2) the pass-through of the shock to other food or energy prices; and (3) the persistence of the price spike.

In general, the required policy response also depends on the credibility of the central bank in safeguarding price stability. If policy credibility is weak, then inflation expectations could be dislodged by commodity price pressures. However, if price setters are confident about the inflation-fighting credentials of the central bank, then medium-term inflation expectations tend to stay moored, thus necessitating smaller adjustments in monetary policy settings and reducing the resultant fluctuations in economic activity.

Apart from adjustments in monetary policy levers, central bank communication is also an important part of the policy toolkit in responding to commodity price pressures. Hence, the BSP endeavors to keep inflation expectation firmly anchored through prompt policy actions and careful communication of its views about the drivers of inflation and the reasons behind its monetary policy decisions.

The BSP continues to keep a close watch on emerging price and output developments that could affect the price-setting behavior of firms and give rise to potential second-round effects going forward. Amid the upward pressure on inflation emanating from rice, other food items and fuel, the BSP stands ready to undertake policy actions as necessary to guard against the potential build-up in inflation expectations.

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