

Subsidy Rationalisation for General Purpose Flour: Market and Economics Implications*

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Abstract

Subsidies are an instrumental policy making tool for many governments, but their importance depends on the market situation of the national economy. Efficient subsidy implementation would allow the government to correct market failure thereby aligning social and private costs and benefit. The general objective of this study is to justify the need to rationalise subsidies for food items such as flour. This study assessed the structure and conducts of the general purpose flour market in Malaysia; and analysed the impact of subsidies on market performance to recommend policies to increase market efficiency under the subsidy rationalisation program. To accomplish these objectives, the study adopted a microeconomics market analysis as well as the standard structure and performance analysis method. These two approaches showed the characteristics of an industry's consumer behaviour, competition, as well as the efficiency associated with government regulatory policies on the flour industry. One of the biggest influences on the domestic market is related to the food consumption behaviour of the general population. Food consumption behaviour reflects global trends. As income rises, food trends tend to be consumed in processed form or in such a way that adds value in another manner such as the preparation of food products.

Keywords: Subsidies, Policy, Rationalise, Flour, Malaysia.

JEL Classification Code: H20, H24, H70.

1. Introduction

Subsidies are a decision making tool for many governments, but their significance relies on the market situation of the national economy. Effective implementation of the subsidies would allow the government to correct market failures, which would align the costs as well as social and private benefits. Thus, government intervention in the

market is required because typical price mechanisms have a number of failures that cannot bring social benefits to all parts of the national economy. Based on this argument, the Malaysian government pays a high level of subsidies on energy and some selected essential food items such as sugar, rice, cooking oil, and flour. A subsidy that ultimately decreases the prices of goods for the end user would normally increase the demand and the overall usage of the goods. One form of government intervention is the payment of subsidies in order to increase the welfare level of poor people.

Malaysia, like other countries, pays a high level of subsidies on food, energy, education, and other social sectors of the economy in order to improve poor households' access to various commodities, primarily food and energy. This is also to reduce their poverty level. In 2013, government expenditure on subsidies equated to nearly 16 per cent of its operating expenditure, which is about 5.1 per cent of the total gross domestic product (GDP) (EPU, 2015). Although this can bring social benefits through access to affordable energy and employment in the economy, it may also carry economic and environmental costs. In addition,

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these subsidies are costly for the government because an increase in energy prices also increases the budget in order to cover the negative effects of the shock on the energy prices.

General purpose (GP) flour is a price-controlled item in Malaysia at RM1.35 per kilogram (kg). The government pays all flour millers including Malayan Flour the price difference against the current market price of RM1.80 - RM2.00 per kg (subject to a certain volume quota set in 2007). Volume split between uncontrolled and controlled flour is 80:20. This study seeks to justify the need to rationalise subsidies for food items such as flour while also: (a) assessing the structure and conduct of the flour market in Malaysia; (b) analysing the impact of subsidies on market performance; and (c) recommending policies to increase market efficiency under the subsidy rationalisation program.

1.1. Subsidy: A Drawback

According to World Trade Reports 2006 (World Trade Organization, 2006), introducing a subsidy or any other government measure within a perfect market framework renders that market inefficient and welfare-diminishing. If a market is inefficient, any form of government intervention such as establishing subsidies, may affect economic welfare. Since 2012, subsidy rationalisation was at the forefront of Malaysia's annual budget. Steps were taken in light of widening fiscal deficit which represented about 5 per cent of Malaysia's GDP. Three major benefits of subsidy reforms include:

- 1) To achieve greater overall efficiency gains where subsidy savings, over consumption support, can be directed to productive infrastructure spending on education, science and technology, healthcare and public transportation;
- 2) To improve economic efficiency. As we move closer to market prices, supply and demand becomes more market-responsive and are then driven by price signals. Transport services and basic food industries can be moved to become more competitive. They will become more efficient because they will respond more efficiently to price changes. Non-subsidised prices for goods and services will force resources to be allocated with minimum wastage;
- 3) To produce a more resilient economy, reinforced by lower fiscal deficit and government debt.

1.2. Subsidy Rationalisation under the Economic Transformation Plan (ETP)

For the last 10 years, Malaysia has been running a fiscal deficit which has been growing progressively from RM5

billion in 1998, to a record high of RM47 billion in 2009. This was due to the fact that government expenditure, including subsidies, has been escalating, whereas government revenue has been able to keep pace with economic growth. Consequently, the government has to borrow a lot of money to cover the shortfall. On the other hand, the Malaysian government debt in 1997 was RM90 billion and has grown at a rate of 12 per cent a year to reach a record of RM362 billion in 2009. In addition, as a proportion to the national GDP, Malaysia is one of the world's highest subsidised countries utilising 4.7 per cent of its GDP compared to Indonesia's 2.7 per cent, the Philippine's 0.2 per cent, as well as other Organisation for Economic Co-operation and Development (OECD) countries that average 1.5 per cent.

As of late, various studies conducted with international bodies such as the International Monetary Fund (IMF) and the World Bank has encouraged subsidy reforms in light of Malaysia's widening fiscal deficit. Strengthening the social safety net is an integral part of the authorities' fiscal strategy. Untargeted fuel and food subsidies were regressive: as households in the top two quintiles of per capita consumption received 60 per cent of the subsidies while only 3 per cent went to the bottom quintiles. The elimination of fuel and food subsidies freed up resources that can be redirected to better support the poor. To mitigate the impact of subsidy rationalisation and the implementation of goods and services tax (GST), the 2015 budget calls for increased cash transfers to poorer households (those earning less than RM4,000 per month). The authorities are also reviewing overlapping and fragmented cash transfer programs.

1.3. Market Structure

The market structure of the flour industry in Malaysia is a typical example of a regulated or government controlled market, given the existing Price Act 1999, Price Control Act 1946, Supply Control Act 1962, and the legal framework of these acts. The price of food stuff or essential items such as flour is regulated, given no provision for competitive price practices. The fundamental reason for applying such price control mechanisms as a pro-poor distributive strategy is to close the income gap between poor and rich households. Basically, the Malaysian flour industry has been dominated by four major players in which Malayan Flour Mills (MFM) and Federal Flour Mills (FFM) are the clear dominator the market with both companies controlling about 57 per cent of the domestic market share. Table 1 shows a brief overview of the Malaysian flour industry which has been dominated by several major players as well as other smaller firms.

<Table 1> Locations of mills in Malaysia Capacity (tonne/day)

Company	Number of mills	Locations of mills in Malaysia Capacity (ton/day)	Est. mkt share	Capacity	Notes
Federal Flour Mill	4	Pasir Gudang, Perai, Kuching, Kota Kinabalu	32%	2,550	80%-owned by PPB Group. Also has flour milling in Vietnam, Indonesia, Thailand and China.
Malayan Flour	2	Lumut, Pasir Gudang	25%	2,520	Doubled capacity since 2012, utilization rate presently at 60%.
Interflour	4	Port Klang, Kuching, Labuan, Lahad Datu	21%	1,690	Privately-owned. To add 550 new MT/day capacity in 1H15 in Pasir Gudang. Also has flour milling in Indonesia, Vietnam and Turkey
Kuantan Flour	1	Kuantan	n.a	n.a	Loss-making for past 6 years
Seberang Flour Mill	1	Perai	n.a	n.a	Privately-owned

* The Kuantan Flour is no longer in operation and this make the market for flour mainly dominated by the three biggest firms.

1.4. General Purpose (GP) and Non-General Purpose

The flour market in Malaysia is divided into General Purpose (GP) and Non-General Purpose (Non-GP). GP flour is subsidised flour with a price ceiling of RM1.35 per kg in Peninsula Malaysia and RM1.45 per kg in Sabah and Sarawak. GP flour is mainly used for *roti canai*, bread, and other broad range of Malaysian sweet and savoury treats. Among the popular brands of GP are *Basikal*, *Bunga Raya*, and Blue Key. Random checks at retail outlets indicated that most of the time, the price of GP flour is above RM1.35.

2. Literature Review

Food subsidy is one of the government's policies to look after consumer's welfare against food price increases. Ramadan and Thomas (2011) studied the reform of food subsidy system in Egypt where the government removed the food subsidy to reduce the public deficit. The removing of food subsidy in Egypt caused reductions in welfare of the general population. Similarly, Sharma and Alagh (2013) concluded that food subsidy plays an important role in the well-being of poor households, especially in rural area in developing countries. According to this study, in India, food subsidy is a vital component of the social safety net for the poor. However, food subsidy is increasing in India unlike Egypt. The reasons behind the increasing food subsidy in India are the rising procurement price and food inflation, namely the price of rice and wheat.

Solaymani, Kari, and Hazly Zakaria (2014) studied the subsidy reform in Malaysia. The authors concluded that

removal of subsidy has a significant negative impact on income and consumption. The effect of removal of subsidy is higher for rural households because their income is relatively lower. However, the welfare decreases for everyone in the country. Likewise, the empirical evidence of energy subsidy reform showed that subsidy reform has increased poverty and decreased household welfare due to the increase in the input cost, especially in developing economy (Nwafor, Ogujiuba, & Asogwa 2006; Gahvari & Taheripour, 2011). In a similar study, Löfgren and El-Said (2001) concluded that there is no doubt that the elimination of subsidy will have a negative impact on households' consumption, but if the government transfers the elimination of subsidised money to the poor households it will lead to a greater increase in the consumption of poor households. However, this will reduce the consumption of non-poor households.

In India, subsidies are a significant part of the budget and it is not very clear to the general public. Srivastava and Rao (2002) argued that even though the total amount of subsidy is very large in India, the government is not paying attention to the health and education sector because the per capital expenditures for health and education is low even though the degree of subsidization is high for these sector. This is mainly because subsidies in these sectors are very inefficient and largely hidden. In many cases most people are unaware of these subsidies (Srivastava & Rao, 2002).

Subsidy programs are important for low income households whereby it helps them gain access to basic needs. Without subsidy programs, many poor households will not have access to the basic needs (Razack, Devadoss & Holland, 2009). The authors found that in India, subsidies in the agriculture sector increase production and reduce

unemployment. Moreover, the wage in the agricultural sector and consumption among urban and rural households also increased. However, according to OECD (2007) and Karami, Esmaeili and Najafi (2012), subsidy programs are expensive, a burden on the government budget and could be inefficient if the benefits are not received by the targeted poor households. Moreover, Dhehibi and Gil (2003) found that in Tunisia removing or reducing food subsidies will not have a significant effect on the food expenditure structure but for low income households it will have some effect on their consumption.

3. Methodology

In order to achieve the research objectives, this study was conducted based on qualitative methods and secondary sources. Since the study is qualitative in nature, face to face interview was conducted between two groups consisting of consumers as well as restaurant owners and retailers to examine the consumer and retail markets' consumption pattern of wheat flour. The interviews that were carried out with consumers indicated that the GP flour (the subsidised flour) is not popular among end consumers as many of them use non-GP flour for their own consumption. To recommend policies, previous studies and government policies were assessed as a secondary source of information.

4. Results and Discussions

4.1. Consumers Perspectives

From the interviews that were carried out for the study, most consumers consume non-GP flour particularly those without benzoyl peroxide. This is mainly due to their general awareness that bleached flour (GP flour) which is whiter and finer has no vitamins and is hazardous to health. The differences between bleached and unbleached flour is as shown in Table 2. When some of the brand names of GP flour were mentioned, many respondents indicated that they have not seen or heard of the brand. In addition, they could not differentiate between the brands of subsidised and non-subsidised flour. Most of the respondents are unaware and do not consume GP flour because the flour is not available at their favourite stores, i.e., hypermarkets and nearby retailers. From our observation, GP flour is mainly available at 1Malaysia stores and stores that are targeted for Bangladeshi and Indonesian residents.

As such, we could derive that the subsidised flour (GP flour) does not reach the targeted consumers. Most

consumers such as housewives could not differentiate between subsidised or non-subsidised flour but majority of them prefer non-GP flour for their own consumption. Price is not a determinant factor but health concern is the major issue among this group of housewives.

<Table 2> Type of Flour

	Bleached Flour	Unbleached Flour
Colour	White	Less white / yellowish
Bleached using	Bleaching chemicals such as organic peroxides, nitrogen dioxide, chlorine, chlorine dioxide, or azodicarbonamide	Aged naturally
Quality	Finer grain, making a lighter loaf	Tougher grain, making a denser loaf
Nutrition	Less vitamin E. Rest of the nutrition, i.e. calories, fats, fibre, proteins, calcium and iron are about the same.	More vitamin E. Rest of the nutrition, i.e. calories, fats, fibre, proteins, calcium and iron are about the same.

Source: Organics (2016)

4.2. Restaurant Owners

For restaurant owners, especially members of KIMMA (Malaysian Indian Muslim Congress) and PRESMA (Malaysian Muslim Restaurant Owners Association – with 3,200 members), the consumption of flour is estimated at 25kg per day and is mainly used for making *roti canai*. Most of them got their supply of flour from wholesalers. From 25kg of flour, the restaurants are able to produce, on average, 375 pieces of *roti canai*. Sales of *roti canai* contributed only about RM300~RM400(10%~13%) from the overall sales of RM3,000 per day.

The price of *roti canai* is about RM1.35 per piece but the price varies depending on the location of the establishments with the price of *roti canai* expected to be higher in city centre *vis-à-vis* at suburban areas. The price also depended on the add-on services provided by the restaurants, i.e. air-condition section, Wi-Fi, and others. On the issue of liberalization of flour subsidy, the representatives of KIMMA and PRESMA note on the market forces and consumer choices as carried out in many other countries.

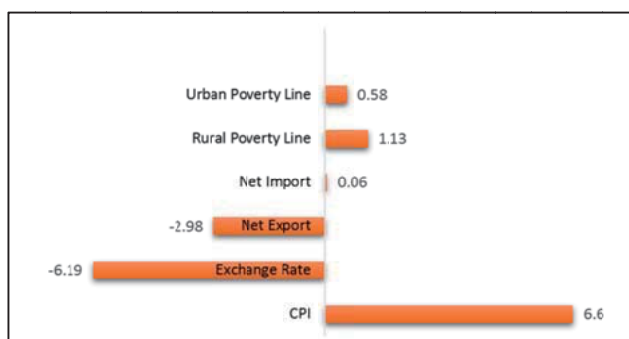
4.3. Retailers

Most big retailers or hypermarkets got their supply of flour directly from millers such as MFM. The amount of flour supplied to these retailers depended on the quota allocated to them. Majority or 80 per cent of retailers' businesses are

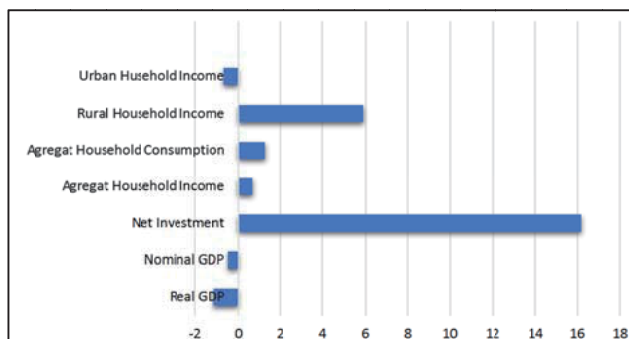
with end consumers and only 20 per cent with small retailers or restaurants. This is in line with the fact that 90 per cent of the flour sales among these retailers are from 1kg pack and only 10 per cent are from the 25kg pack. Depending on the availability of the flour, most retailers sell between 70~80 per cent of non-GP and only 20~30 per cent of GP flour. Demand for flour is stable across the year and only double nearing festive seasons such as Hari Raya.

4.4. Economy and Poverty in Malaysia: Subsidising the Poor Household

Malaysia is a small developing country in which its imports of food, beverages and tobacco accounted for over 5 per cent of its total imports. The country is considered a net importer of food commodities over time because its food imports are greater than its exports. In recent years, the increased in international prices of food has contributed to a significant decline in the value of its exports as shown in 2009 (Figure 1).



<Figure 1> Impact on Increase in Food Prices in 2009



<Figure 2> Impact on Increase in Food Prices in 2009

An increase in food prices during the 2008-2009 period decreased Malaysia's food imports by 4.4 per cent (from RM29 billion to RM28 billion). As in many developing countries, the poorest households in Malaysia spent a high

share of their income on food and beverages. According to the most recent Households' Expenditure and Income Survey, households in rural areas spent around 30 per cent of their total expenditures on food and non-alcoholic beverages while this percentage falls to about 20 per cent for households in urban areas. This pattern of expenditure has been relatively constant over time. Rural areas in Malaysia include a significant percentage of poor households, where Sabah and Sarawak have higher percentages of poor people compared to Peninsular Malaysia. Furthermore, the hard-core poor index, which measures the level of household income below the food poverty line index, is much higher in the Sabah region, in comparison with other regions.

4.5. Subsidy Rationalisation: Past History and Market Adjustment

In the past five years, Malaysia has undergone two significant subsidy rationalisation programs which included fuel subsidy and sugar subsidy rationalisation programs. In both exercises, the market has readily adjusted and consumers and producers were able to realign the consumption and supply accordingly. The initial inflationary effect was expected, especially for energy subsidies such as fuel, which constitutes the main input especially in the transportation sectors. Furthermore, the market adjustment process for the fuel subsidy was undertaken on the back of relatively low prices for global petroleum market and this provided the soft landing for the consumer market. However, the general inflation trend was on the uptrend due to the weakening ringgit that hit the highest low (RM3.76=US\$1) in early 2015. This is also due to the introduction of goods and services taxes (GST) in Malaysia in April 2015.

As for the sugar subsidy, the general impact has been rather soft as the general consumers took on lowering sugar consumption based on health reasons. The inflationary effect was transmitted through the food and beverages industry which was able to transfer the price increase to the consumers. Clearly, the market adjusted quite well to the unsubsidised price while political protest remains minimal except for GST and general political climate of the country.

4.6. Impact of 1kg Pack of GP Flour on the Income of the Poor

The following discussion focuses on the impact of the rationalisation of the 1kg pack on the income of the poor households. To assess this impact, the formula used in this study was based on the formula recommended by the International Monetary Fund (IMF) (2008) as well as the

limited data set available to the team. The robust feature of the formula is that it rests on the assumption on the weightage of the expenditure of household income spent on flour for any low income family.

In extension, the simulation was based on the prices charged for ASEAN countries which may represent a realistic price level/bench mark prices for 1kg pack (assumed quality is the same). The second part of the simulation was done to represent a gastronomic means of price increase for prices and this too is set to represent the 40 per cent lowest income level of the poor household. To assess the impact of the subsidy rationalisation, two general formulas were used to factor in the general public as well as the vulnerable 40 per cent poor household as announced under the 11th Malaysia Plan (11th MP). The income line was based on the poverty line and the number of household under poverty level as announced under the 11th MP.

4.7. Scenario 1: A General Overview

Based on an IMF study (2008), the income impact of subsidy rationalisation on poor households will include the loss of income if price is to be adjusted based on the free market level, i.e. price after doing away with subsidy. Thus, the income loss (RL) depicts the decline in income if price is going to be liberated above the subsidised prices in which the price of neighbouring ASEAN country would be used. This is selected to reflect the upcoming ASEAN Economic Community 2015 where spatial pricing would also be a feature for such an economic community. To estimate the loss of real household income as the arithmetic mean of the relative price change, we use the shares of the consumption items in household expenditures as weights. This amounts to the following:

$$RL = \sum_i w_i \frac{P_i(1)}{P_i(0)} - 1,$$

where RL denotes the impact on real household income in per cent, w_i is the share of item in household expenditures, $P_i(1)$ is the new (in most cases, higher) price of item i , and $P_i(0)$ the price before the reform of price subsidies. This estimate of the loss of real household income can be illustrated with an example: suppose the price of subsidised flour rises by 40~70 per cent, and that the weight of flour in the expenditures of poor household's averages 0.05 per cent. Using the above equation, the average impact on the real income of poor households can then be estimated at 6.0~7.5 per cent.

This estimate provides an upper boundary on the increase in living costs. If households respond to changes in relative prices by shifting away from the item for which the price has increased, the actual loss will be smaller. The loss will be close to the above estimate if the subsidised item is a basic commodity for which no ready substitutes are available. If there is a perfect substitute, households will react to even a small change in the price of the subsidised item by shifting completely out of that item and into the substitute, suffering no loss in real income. The procedure below recognizes the likelihood of a consumer response. Figure 3 shows the income lost due to subsidy rationalisation based on ASEAN Market.



<Figure 3> Income Lost due to Subsidy Rationalisation based on ASEAN Market

4.8. Scenario 2: Taking care of the Vulnerable 40%

The same method was repeated by adjusting the formula for the 40 per cent poor which also factors in the total number of household under the 11th MP. Alternatively, estimating the real loss of household income as the geometric mean of the relative price change, using the shares of the consumption items in household expenditures as weights. This can be calculated as follows:

$$RL' = \prod_i \frac{P_i(1)^{w_i}}{P_i(0)} - 1.$$

Based on the 40 per cent of vulnerable poor household, the estimation shows that income loss only represents about 4.38~4.40 per cent out the real income among the poor household. Under both scenarios, the loss in income through the price adjustment based on the ASEAN price level would not significantly affect the real income of the poor household. However, this income lost can be significant after adjusting for 10 per cent inflation rate per annum. This minimum change of the income may be due to

the fact that the total expenditure share for flour consumption is significantly small as compared to the total food or energy expenditure for the poor household.

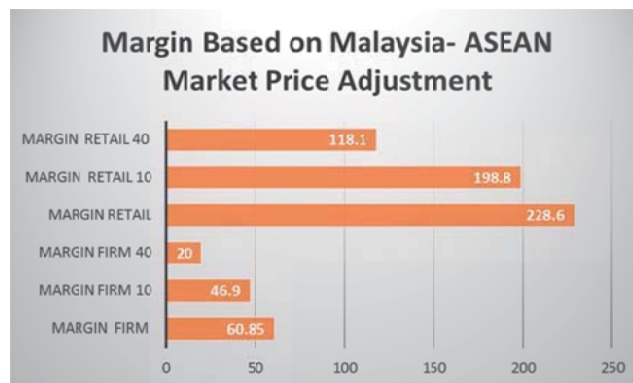
Under most circumstances, subsidised food items would be easily targeted to the poor household if it's considered as "inferior goods". This is fairly reasonable as the market would consider it as "inferior items" based on the purchasing behaviour of the consumers which determine the market demand of the goods. In countries that have attempted to manage subsidised food such as Egypt, the categorisation of the goods as "inferior goods" would automatically lead to a situation where the poor would purchase the goods. This would have made the targeting mechanism to subsidise the item as administratively feasible without much leakages. Finally, this would have made the subsidy scheme in favour of "self-targeting" approach and contribute towards the success of the subsidy programme. By having an administratively self-targeted mechanism, this forms the best combination of any subsidised program that would reduce leakages and inefficiency related to any food subsidy program. Nevertheless, GP flour at the retail level (individual pack) may not be considered as "inferior goods" as brand names and health conscious behaviour among the consumers allow individual consumers to purchase GP flour with certain brand (random interview among housewives).

The unavailability of RM1.35 per kg/pack at nearby grocery stores may have made the subsidised GP flour not easily available thereby rendering it a rare item. As such, the distributive retail aspect of GP flour made it almost impossible to be considered as an "inferior good" in the Malaysian market. Eventually, the main focus of the subsidy now rests on the 25kg/pack which are predominantly purchased as intermediate goods for restaurants, food vendors, and processed foods products.

4.9. The Industry Scenario: 25kg Pack for Domestic Industry and Restaurant

Based on a 2015 Cabinet paper report, the major concern was on the 25kg pack that will be an input for the production of food away from home (FAFH). It cannot be denied that any further rationalisation is going to transfer the cost to the consumer. However, several retailing structure needs to be analysed before some concrete recommendations can be made for policy input. The simulation based on prices in several ASEAN market shows that marginal differences could still be observed and this may have allowed some room to adjust prices based on prices of other ASEAN markets (Figure 4). For example, retailers (noodles) could still make a margin of about RM198.8 per 25kg pack even after adjusting for a 10 per

cent increase in operating cost. However, the operating expenditure could affect the margin of percentage as the marginal differences correlates inversely with the increase in operating cost.



<Figure 4> Margin Based on Malaysia - ASEAN Market Price Adjustment

4.10. Basic Indicator for firm-retail Margin: the case of noodles

The discussion among the restaurant operators indicated that the operators were ready to do away with the subsidy and two-tier pricing. As the main component in the roti/noodle is GP flour, any move to increase the price will be passed back to the consumers. Admittedly, noodle/roti is a staple food for many Malaysians and any move to do away with the subsidy may create a public outcry. The following calculation portrays a simple calculation on the cost of unsubsidised flour on the potential cost of noodles and how it may affect the margin of the operators. Few suggestions from the operators include, the subsidy should be on the final goods and operators will be subsidised based on controlled final goods. In extension, operators proposed that non-subsidised outlets may charge prices above the controlled prices. Nevertheless, the operational part of the proposal may face problems as the monitoring element may be difficult due to the two-tier pricing for final goods.

Based on the simulation on two food items, the major food vendor has some margin to absorb the unsubsidised prices while future price increases may not necessarily be completely attributed to food based inflation only. For example, the plummeting ringgit may also contribute towards the uptrend in the food prices and the general cost of living in Malaysia. Nevertheless, the general tendency will be for the retailers to pass the extra cost to consumers as they wish to maintain their margin.

4.11. The Production Quota among Flour Millers

We have posed several fundamental questions to the Ministry on the rationale of fixing the quota. The retail price of GP flour has been set at RM1.35 per kg based on wheat price HRW-Ord at USD\$245 per metric ton as of May 2007. The average price has increased to USD\$466 in December 2007 which resulted in producers incurring a loss of about RM1,083 per metric ton. Currently, the total subsidised flour is approximately 250,152 metric tons annually and this is to be allocated between the flour producers.

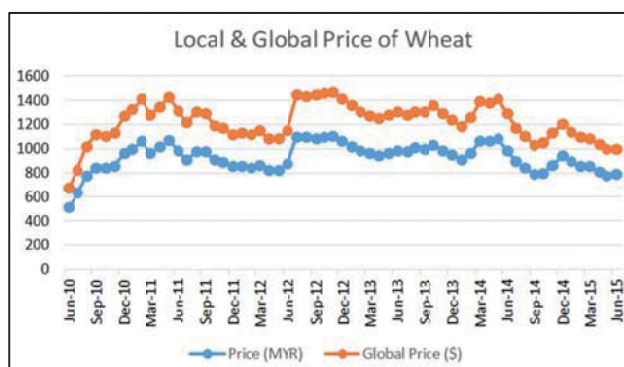
The production quota is mandatory based on volume split between production quota of 80:20 in which the 20 per cent quota is to be complimented by subsidy payments to the producers. The quota for subsidised GP flour has not changed since 2007, even though there has been a significant shift in demand due to its lower price compared to non-GP flour. Flour millers are subsidising through their own pockets while waiting for the government to adjust the quota. Flour millers are given a monthly production quota based on each company's historical sales record. The subsidised volume of GP flour is about 250,152 metric tons per year and this is to be distributed among the flour millers. Despite the greater demand for subsidised GP flour, the monthly quota for each company has remained the same since 2007. The request for quota adjustment was due to the impact on the effect of the company performance.

The general effect of quota is always detrimental to the efficiency of the economy. Any direct intervention through subsidy and quota control would subject the market to waste and inefficiency both at the consumer and producer level. In relation to the waste, a sufficient number of products will be sold on the "informal market/illegal market" as border trade become points for illegal movement of goods. This too has contributed to distorted distribution whereby subsidised flour is not easily found in border town as the "smuggled goods" are easily available. Even though the quantity is quite negligible, the overall loss weighted over the long run may be significant. Our estimate shows that the over efficiency lost due to price control and quota production is about RM2.4 million per quarter indicating an annual income loss of RM9.6 million for the flour industry. Out of this loss, about RM764,253 per quarter was incurred by consumers where not all end up paying RM1.35 per kg while producers experience losses about RM1.7 million per quarter as the price is fixed at RM1.35 per kg due to the production control set at the quarterly basis. On both ends, the producer and consumer losses still represent market distorted effects which can represent the flour market inefficiency. In terms of policy assessment, this loss represents dead weight loss which indicates a sign of inefficiency associated with any

production control and subsidised goods which is regulated at 1 single price below the market price.

4.12. Effect of World Prices on Malaysia's Import of Wheat

There is a significant effect of world price on Malaysia's import of wheat due to currency depreciation. The U.S. dollar became stronger which makes exports more expensive for the Malaysian government (importer). This might lead to reduced imports of wheat. It makes U.S. imports cheap and may increase U.S. imports. A weaker home currency increases the prices of imports purchased by the home country and reduces the prices paid by foreign businesses for the home country's exports. This should cause a decrease in the home country's demand for imports and an increase in the foreign demand for the home country's exports, and therefore increase the current account. However, this relationship can be distorted by other factors. The graph in Figure 5 shows that Malaysian and the global price of wheat have a similar trend. However, Malaysia as a wheat importer has to pay more due to its currency depreciation.



<Figure 5> Local and Global Price of Wheat

5. Policy Recommendations

The flour subsidy issue in Malaysia may differ from other countries as it does not represent the staple food of the country as compared to rice and other basic essentials such as cooking oil. Malaysia's fairly successful sugar rationalisation may represent an exemplary exercise that does not create much resistance from the general consumers. This is partly because of the health issues related to the consumption of sugar in daily dietary intake. However, similar knock on effect can be seen as sugar remains to be an important component for the beverages and food industry and this is expected to contribute to higher

expenditure for food items. On reflection, the post sugar rationalisation phase has contributed towards a general uptrend in the consumer price index (CPI) of 3.1 per cent as reflected in the third quarter of 2014. Even though sugar may not represent the biggest goods expenditure per household, but the food and beverages and restaurant sectors may factor in the price increase for sugar in their input cost.

The finding from the study shows that the subsidised price for flour of 1kg does not have the targeted market penetration. Our random checks showed that the RM1.35 per kg pack is hardly available in any grocery store except in big hypermarkets such as Mydin, Giant, and Tesco. The only small stores that carried a regular stock are those branded under the 1Malaysia store in which there are about 162 stores nationwide. Our discussion with sales managers from these stores indicated that it is a fairly high sales volume item especially in hypermarkets. Alternatively, 1Malaysia stores near cross border towns do not carry any stock, as the RM1.35 per kg subsidised pack are easily transported towards neighbouring countries through the nearest immigration check point. This indicates the degree of leakages of the existing subsidised program which contributed to the untargeted impact of the subsidy program in Malaysia.

Our findings also show that the impact on subsidy rationalisation on the 1kg per pack is not going to affect the welfare of the poor households by any significant amount. Based on our calculation, the poor household's income will be affected by about 6.0~7.5 per cent and 4.35~4.40 per cent if the 40 per cent of the vulnerable poor is to be taken into account. This decline may be addressed through existing safety net programs which are already available in the system such as the extreme/elderly income support (*Bantuan Warga Emas*) under the Welfare Department. This decline would be easily adjusted through direct transfer payment as all the administrative procedures are in place. However, there is a need to better coordinate some of the existing safety net programs, as the poor household continues to receive support from the government. There is no need to design any new scheme in order to address the negative impact of the subsidy rationalisation scheme on the GP flour. In extension, the compensation programs could also be addressed through the energy subsidy rationalisation scheme, as it represents a bigger budget expenditure for any poor households.

The 25kg per pack GP flour may have a significant impact on general consumers and this may provide a high degree of resentment among the general public. As has been the case in most countries that plan to rationalise the flour subsidy, government efforts have been unsuccessful as bread has been the staple food for the poor. The experience

of Egypt has been unique and the government continued to subsidise the *Coarse Baladi bread* and *Baladi Wheat Flour* as it represents the bread that is mainly consumed by the poor. At the same time, Egypt continues to charge market prices for premium bread as the non-poor households could afford to pay higher/unsubsidised prices for regular bread. The prime lesson to be learned is to allow the market to discriminate the two types of goods that is consumed by the different groups of consumers.

In actual fact, prices of *roti canai* or food away from home (FAFH) experience the market discrimination process as prices for *roti canai* and FAFH could be much more expensive in urban areas than those in rural areas. Similarly, some restaurants in upscale markets may charge higher prices for *roti canai* and FAFH, whereby this is accepted within the current market structure. It is expected that the ordinary restaurants (lower-end) serving FAFH are price inelastic (-0.11) but with low tendency to switch to other substitutes (Levedahl, 2011). However, an inelastic demand may not affect the level of consumption as much, given no substitute for the same goods.

Given a relatively inelastic income for low-end FAFH (0.01), any changes in income may not influence demand. Based on this empirical finding, any prices changes due to subsidy rationalisation may not have a significant impact on the demand for process food such as *roti canai* which is among the most popular FAFH among Malaysians. Subsidy reforms entail price liberalisation or adjusting controlled prices of subsidised goods and services, often during macroeconomic adjustment. The economic goals are to correct fiscal imbalances and to improve allocative efficiency. Since the removal of subsidies may have adverse consequences for the poor, these effects must be analysed and, to the extent feasible, mitigated or offset. In this context, the principal—and interrelated—issues that arise are the speed of price-subsidy reforms.

There is a trade-off between rapidly cutting budget-financed subsidies and avoiding an adverse impact on the poor. A one-time adjustment of prices to eliminate subsidies can yield immediate budget savings and quickly correct distortions in resource allocations. However, it can also result in a sudden and significant drop in the standards of living, especially for low-income households. The need to compensate households implies that fiscal savings from price-subsidy reform are usually less than the amount spent on generalised subsidies before the reform.

Gradual reform is not without drawbacks. Apart from the fact that it takes longer to reap budgetary and economic gains, progress under gradual reform may falter, or even be reversed. A number of small price increases may engender more public opposition to continuing reforms than a single large increase. In addition, the continued presence during

the phase-out period of institutions needed to administer the price subsidies contributes to the risk of a reversal of the reforms. Finally, a gradual approach may fail if it is adopted to postpone politically difficult reforms. Such failure can be avoided by publicly adopting a detailed timetable of measures and the options for protecting the real income among the poor households.

Fiscal considerations: A high share of explicit subsidies in spending implies a greater potential for rapid budgetary savings. The budgetary savings will be offset in part—at least in the short run—by compensation for the poor. Elimination of implicit subsidies, on the other hand, will not generally yield budgetary savings, although the revenues of public-sector agencies could increase. Consequently, the speed of reform for the implicit subsidies should reflect the availability of resources, including from external sources. Since the monetary value of subsidy are tied up to the physical amount of subsidised flour, rationalisation of GP flour subsidy includes the proposal to transfer this subsidy through the existing income support program managed by the Welfare Department under the Ministry of Women, Family and Community Development. Since the delivery of income support program has been aligned based on mean testing method, this is expected to better target the poor families facing an increase in the cost of living. This is not expected to affect the operating expenditure of the income support program as it is an existing program managed by the Welfare Department.

Availability of social protection instruments and administrative capacity: Compensating the poor for the elimination of subsidies requires not only resources, but also a system to deliver compensation to those who need it. Price-subsidy reform can be rapid when countries already have the social protection instruments that can be adapted to the needs of the poor during any reform. If new social safety net instruments need to be established, the administrative capacity to design and implement adequate and well-targeted social protection will affect the speed of reform. Availability of information on the socioeconomic and demographic characteristics of the poor will also influence the speed.

Willingness of governments to act on a technically sound reform package: Political considerations have an impact on whether reforms are implemented in a timely manner. In part, they are determined by the popularity of the government and by the level of organization of the middle class. Even under favourable conditions, governments may opt for a slower pace of reform in order to assess and react to unintended consequences, including any adverse political repercussions, and adjust the timing and speed of reforms

accordingly. As noted above, however, this runs the risk of reform reversal.

Assess the gains from price-subsidy reform: These would include improved resource allocation (e.g., improved availability of price-controlled items), resource savings that could finance critical public services, or reduce the deficit or taxes, and the beneficial impact on real incomes of some households (see below).

Examine the short-term impact of increasing prices of consumer items on real household incomes, particularly the incomes of the poor: Both the direct and indirect effects of changes in the price of subsidised items must be considered by following these steps.

Assess the direct impact of a reduction in subsidies on real household incomes: This study has identified that liberalising the domestic GP flour market may not affect the real income of the poor households. Nevertheless, we cannot ignore the fact that food price increases had an immediate and significant impact on the level of real consumption of low-income households. This was attributable to the high share of food (over 30%) in total expenditures of low-income households and the high increase in food (above 75%) as reflected in the post GST implementation. However, in the case of GP flour and the 1kg pack, it only represents about 0.05% of the expenditures of the poor households. Thus, any move to liberalise the domestic markets may not affect the welfare of the low-income households. Not all poor households lose from price-subsidy reform. For example, households that produce more food than they consume may gain from the liberalization of food prices. Those employed in the traded-goods sector may also benefit from the elimination of implicit exchange rate subsidies.

The impact of price-subsidy reform on real household income (particularly of the poor) should be monitored: There must be continuous monitoring of social outcomes during the implementation of subsidy reforms. In many countries, weak governance and administrative capacity hamper the targeting and delivery of benefits. Weak governance can divert and waste resources allocated for price subsidies. Weak administrative capacity reflects the lack of cost-effective mechanisms to channel income transfers or targeted price subsidies to the designated population groups, and can be rooted in such factors as insufficient information on the poor and lack of equipment. Even where administrative capacity exists, targeting and delivery can be difficult. Determining eligibility on the basis of income may lead to miss targeted benefits if the administrative capacity is weak.

6. Conclusions

This study has attempted to address three fundamental issues which include: a) To assess the structure and conduct of the flour market in Malaysia; b) To analyse the impact of subsidies on market performance; and c) To recommend policies to increase market efficiency under the subsidy rationalisation program.

The interviews that were carried out with consumers indicated that the subsidised GP flour is not popular among end consumers as many of them use non-GP flour for their own consumption. The unpopularity is partly due to the unavailability of the flour at their favourite shops. The subsidised flour could be easily found at shops targeting Indonesian and Bangladeshi immigrants. In a way, the subsidised flour does not reach the target consumers. These findings strengthen our view on the liberalisation of the 1kg per pack that it will not affect the welfare of poor households.

For restaurant owners and retailers, the liberalisation of the 25kg per pack will have little effect on them. As stated earlier, retailers regard GP flour as a service item and they are not gaining much margin from the product. For restaurant owners, the price of *roti canai* depends on the location of the stores and other add-on services requested by consumers at their store and are thus not totally dependent on the subsidised flour.

The findings show that the liberation on the 1kg per pack GP flour may not affect the welfare of poor households as much as real income may be reduced by approximately 4.38 ~7.58 per cent. This can be compensated through the existing safety net programs implemented by various agencies. Similarly, liberation for the 25kg per pack demands more consideration as it affects the demand for FAFH and this may have an impact on the general consumers. However, our findings show that the producer-retail margin may be sufficient to absorb the minor adjustment of the unsubsidised price based on data from the ASEAN countries. Furthermore, the price inelastic nature given the limited substitute for FAFH may result in insignificant reduction in demand given the new unsubsidised prices. In extension, the low-income elasticity

for low-end FAFH may not affect the market demand for end products such as *roti canai* or local cake/delicacies which use GP flour as the main ingredient. This study also shows that the efficiency cost associated with price and production control (quota) is fairly significant and this must be addressed within the current market structure.

It is projected that the Malaysian economy is expected to expand approximately 4.5 to 5.5 per cent in 2015, driven primarily by growth in domestic demand. In line with the growth in consumer demand, interest in good quality pastries and bread is rising, and the number of specialties cafes and pastry shops serving bakery products is similarly increasing. All these factors are boosting wheat imports. As domestic consumption stabilises and there is a need to reduce the available stock, wheat imports are forecast to drop by 8 per cent in 2012/13 and subsequently increased by 6.5 per cent in 2013/14. The price of wheat import is lower due to slow export demand in 2015/16. The projection of 2015 to 2017 indicates that the import price will remain almost unchanged. World wheat production is projected to reach record levels due to upward revisions for the European Union and Canada (IGC and USDA FAS). Global stocks ending in 2015 are projected to reach their highest level in twelve years, but consumption is also expected to rise (AMIS and IGC). However, there is a significant effect of ringgit depreciation over import cost. The impact of price depreciation shows that the Malaysian government now has to pay 25 per cent higher than before. This indicates that the U.S. dollar has become stronger which makes U.S. exports more expensive for the Malaysian government (importer) which may reduce imports.

In conclusion, there is a strong justification for the government to rationalise the GP flour subsidy as it has some distorted effect on the market efficiency and competitiveness. Malaysia may need to adjust to a more competitive price and market structure for the GP flour industry such as in neighbouring ASEAN countries which have moved towards less regulated markets that has contributed towards a much more efficient and competitive market. Alternative compensation strategies for the poor household must include greater targeting for income transfer to eliminate leakages and market distortion effects.

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