



Mohammed Bin Rashid School Of Government

POLICY BRIEF

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Summary

The acceleration in worldwide fuel prices due to the Ukrainian-Russian war delivered positive fiscal balances to oil-rich countries, particularly GCC states. Nevertheless, the positive current account balances did not hold these nations immune to inflation. The Russian war and the economic sanctions have triggered a sharp increase in the oil and commodity prices globally. According to the IMF, the Brent crude rose to a seven-year high after the Russian invasion surging to more than \$130 per barrel. To avoid market inefficiency and speed transition into clean energy, the UAE follows a market mechanism in the pricing of petroleum products and international prices are allowed to pass through to domestic ones. According to Dubai Statistics Center, the headline inflation rose to 4.71% in May 2022, scoring its highest level since December 2015.

Certain consumer price index (CPI) components act as main drivers for inflation more than others, and the objective of this policy note is to identify the main driver(s) of Dubai inflation using an element-by-element analysis. This note attempts to identify the absolute contribution of the fuel prices to the headline inflation in Dubai. Additionally, the note studies the impact of fluctuations in fuel prices on the CPI index. To the best of our knowledge, this is the first attempt to answer these questions after the war.



Inflation Dynamics and Fuel Prices in the UAE: Case of Dubai

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Background

Prior to the current Russian-Ukrainian war that started in February 2022; supply-side bottlenecks from the global health crisis aftermath were barely disappearing and international demand was just about displaying a promising come-back when the tension broke. Once again, the world was in for another wave of supply shortage, only this time in strategic commodities such as food, staples, vegetable oils, and fuel. The political tension between the Western and Russian hemispheres pushed commodity prices to unprecedented levels. Soaring inflation figures across the world surpassed intended targets. Economic sanctions on Russia – one of the largest oil exporters in the world – along with restrictions on Ukraine's exports – the world's food basket – exacerbated the price-crisis and led to substantial rises on prices while importers search for alternative sources of food grains to meet inelastic demands.

Economists call for international prices to smoothly transition into domestic markets hauling the argument that demand and supply would adjust accordingly at equilibrium levels. It is much hoped for that consumers would react to the surge in fuel expenses by becoming more energy-efficient and start demanding less of the product. The same theory applies to food expenses. Allowing international prices into domestic markets will reduce market asymmetries; under the stringent condition that governments provide safeguards for the most vulnerable social classes. Through efficient safety nets low-income segments are to be shielded from price hikes.

Summary

Our findings indicate the absolute contribution of the transport component to the year-on-year (yoy) inflation is around 2.2% of the headline inflation during the first quarter of 2022 and 3% during April-May 2022. In line with the literature, the econometric analysis suggests a 10% increase in domestic fuel price adds 0.56 percentage points to the yoy inflation. The study recommends incentivizing the uptake of electronic vehicles, at least until they reach cost-competitiveness with petrol vehicles. This would speed up the transition into clean energy, while reducing the dependence on fuel prices.

Of course, some countries are suffering the blow more aggressively than others; depending on a number of factors such as the availability of social safety nets (SSNs), the presence of food and energy subsidies and the privilege of a fiscal space that allow governments to stretch their spending schemes according to their own priorities. Another crucial variable that determines how harsh inflation could be to a country is the weight that goes into its Consumer Price Index components. According to the IMF Economic Outlook, low income countries devote a substantial 44 per cent of their consumption to food expenses. In the case

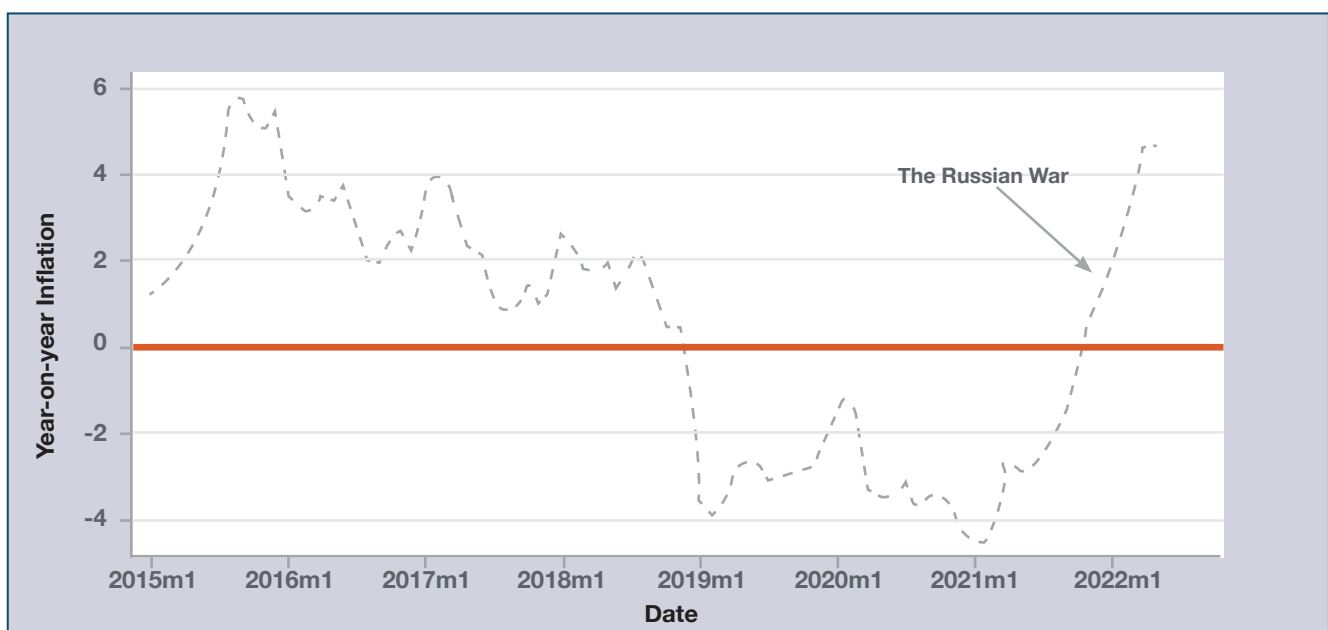
of Emerging Markets (EMs) and more Advanced Economies (AEs); percentages stand at 28 per cent and 16 per cent; respectively for the same component. Ironically, higher petrol prices tend to burden high-income states more than their low-income counterparts.

In household expenditure, goods and services do not possess equal importance nor equal weights. Some items are more important than others and carry greater weights. Hence, price fluctuations for the more important items tend to have greater influence on the average rate of price change. The importance of goods and services in the CPI is determined by the relative amount of personal income spent on them.

The global shocks in food and energy are now translated to elevated CPI numbers around the world and Dubai is not an exception.

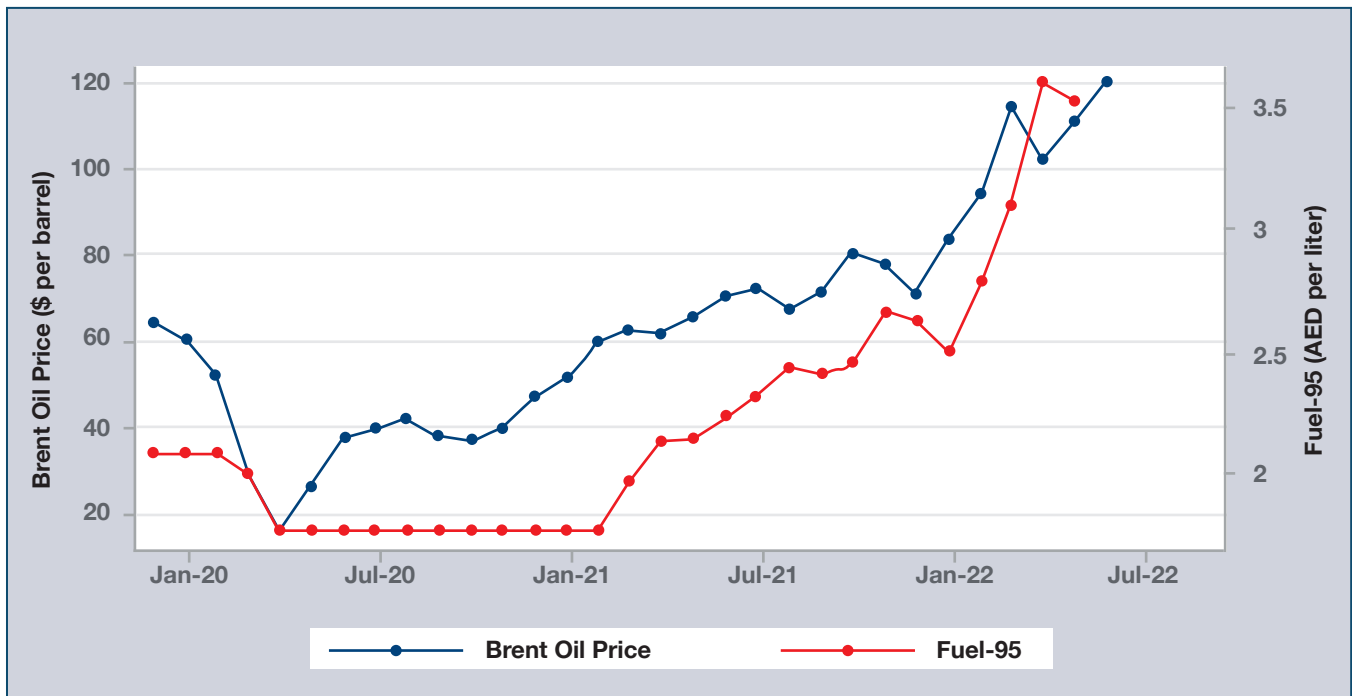
After years of negative inflation, the annual inflation figures have entered the positive territory. In May 2022, the year-on-year inflation rose to its highest level since December 2015 with the index climbing to 4.7% according to Dubai statistics Center (see Figure 1). This begs the question to what extent does the recent surge in fuel price caused by the global shock explains the accelerated prices. Provided the fluctuations in the oil markets (Arezki, R, and Nysveen, P M, 2022), it might be important to determine to what degree the fluctuations in consumer prices are due to the volatility in the fuel market. Thus, this policy note attempts to answer

FIGURE 1: DUBAI INFLATION



Source: Dubai Statistics Centre (DSC)

FIGURE 2: OIL PRICE & FUEL-95



these two questions. First, what is the contribution of the transport component toward the headline inflation in Dubai? Second, what is the overall impact of the fuel prices on the consumers' prices? The next section describes the data and the results while Section III discusses the findings and concludes the note.

Materials and Results

Data on consumer prices and inflation in Dubai are available at Dubai Statistics Center website: <https://www.dsc.gov.ae/en-us/Themes/Pages/Prices.aspx?Theme=25>. Prior to January 2022, the Dubai's main CPI components that had a base of 100 for 2014 were housing (44 per cent of the total weight); food and soft drinks (13 per cent) and transportation (11 per cent). Similarly, education accounted for 8.5 per cent; miscellaneous goods and services (5.6 per cent); furniture and household goods (3.7 per cent); communications (5.2 per cent); restaurants and hotels (4 per cent); recreation and culture (5.6 per cent); textiles; clothing and footwear (2 per cent); medical care (0.8 per cent) and beverages and tobacco (0.3 per cent).

In January of 2022, The Emirate of Dubai modified its CPI base year to 2021; mainly to incorporate the dynamics of the health pandemic

that contributed immensely to worldwide price changes and supply shortages.

The transport item on the CPI basket is made up of fuels prices, passenger transport cost (air, road, rail), motor vehicles and its spare parts. However, the fuel prices have the largest weight on the transport item, which is around 40% of the transport division. To determine the direct contribution of the transport division toward inflation by applying the following approach that allows an element-by-element analysis of Dubai CPI to find out what are the drivers of the accelerated inflation:

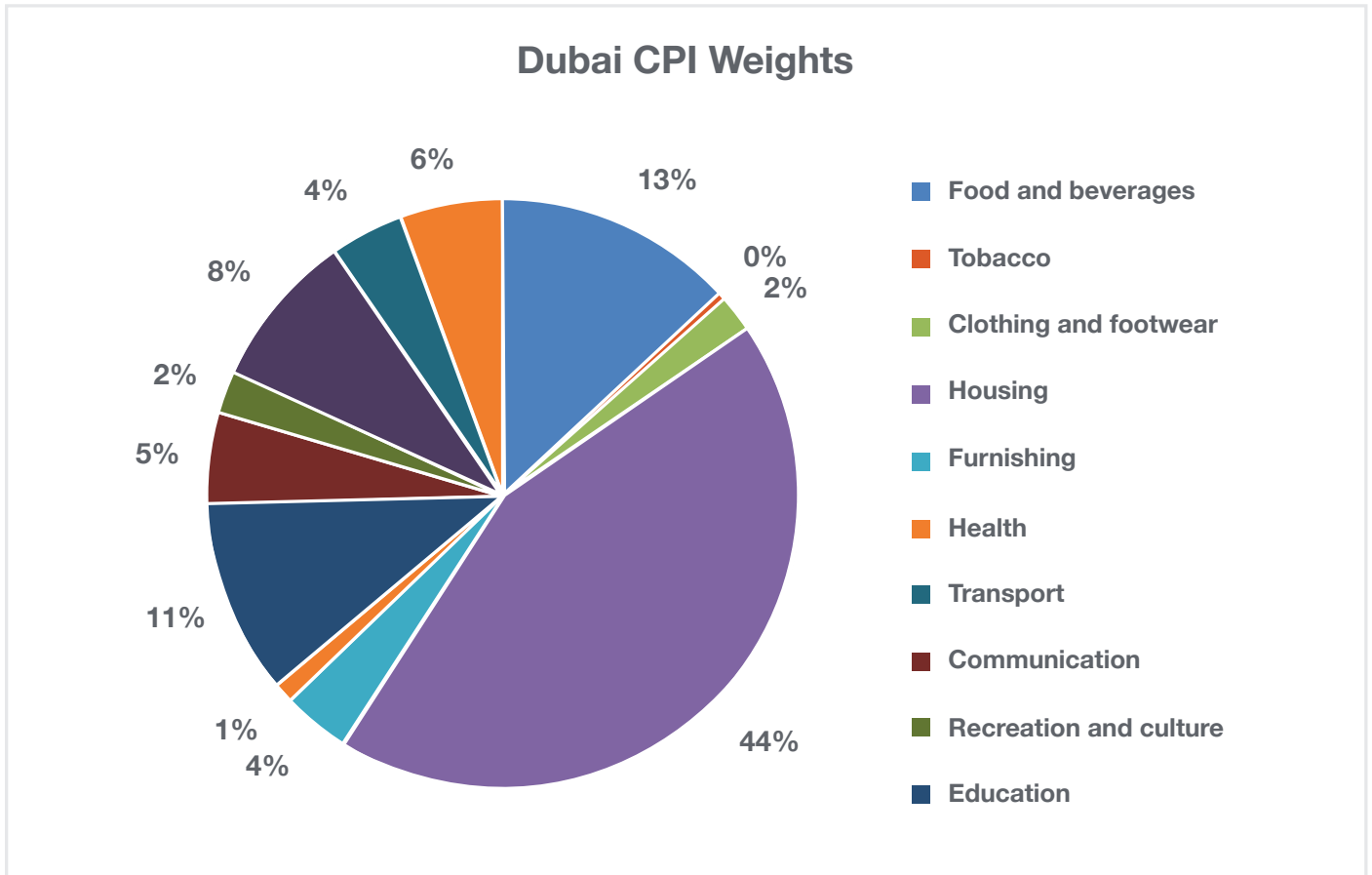
$$= w_i \times \frac{p_{t-1}^i}{CPI_{t-1}} \times \frac{p_t^i - p_{t-1}^i}{p_{t-1}^i}$$

Where w is the weight of item i in the CPI basket adjusted by the factor $\frac{p_{t-1}^i}{CPI_{t-1}}$ and $\frac{p_t^i - p_{t-1}^i}{p_{t-1}^i}$ is the year

on year inflation on item i . The analysis is looking over the period between July 2021 to May 2022, as fuel prices have surged over this period. We used quarterly inflation data and the findings of the contribution approach are presented in Figure 4.

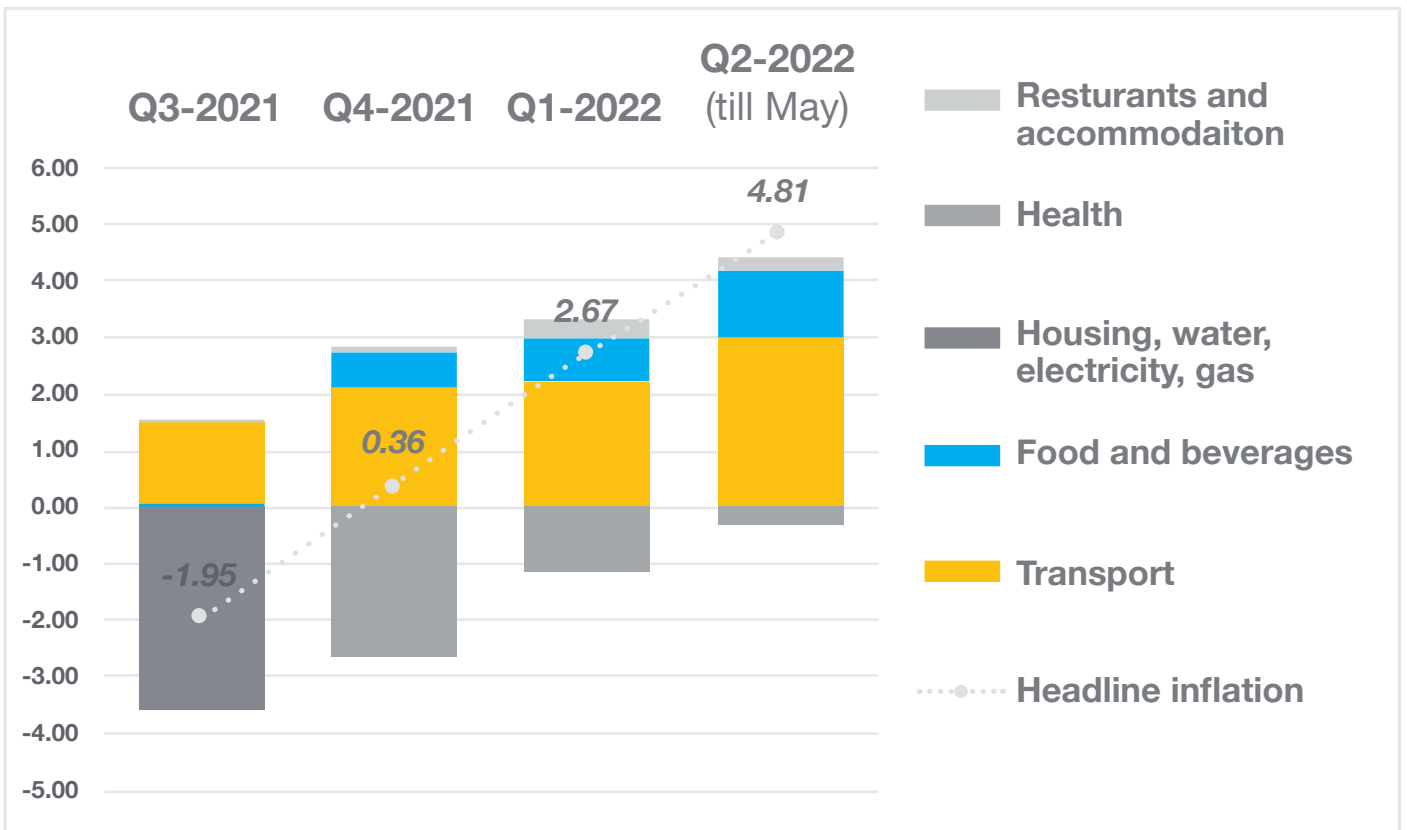
Figure 4 shows the absolute contribution of the main items at the CPI basket. The figure indicate

FIGURE 3: DUBAI CPI WEIGHTS



Source: Authors' calculations and Dubai Statistics Center

FIGURE 4: INFLATION & TRANSPORTATION COST IN DUBAI



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Economic Policy

This research area focuses on the future of the economy in the region and the UAE, with a strong emphasis on policy analysis and economic foresight aimed at sustained long-term prosperity, growth and sustainable development. It explores the main economic challenges and structural shifts underway in the UAE and the region, including the economic consequences of innovation and emerging technology, the knowledge economy, the economic impact of the Fourth Industrial Revolution, the adequacy of existing employment and social policies and inclusive policymaking for greater economic inclusivity.

Furthermore, research in this area aims to create thought-leadership and advance the quality of government practice in the field of public economics in the region, analysing the economic aspects of the expansion and regulation of the public sector and its role in driving economic growth and equity.

Economic policy research at the MBRSG seeks to be intrinsically cross-sectoral, supporting and overlapping with most other research tracks led by the School. It strives to provide a holistic approach to economic policy research and policymaking in the region by addressing a wide variety of topics. Examples of such research topics include economic diversification, sharing and circular economy, the economics of the “new oil normal” and the economics of innovation.

Finally, policies directly and indirectly aimed at economic diversification are explored at length in this research area, with a focus on commodity-dependant economies in the GCC and beyond.



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