Libya's Currency Crisis

Analysis on Devaluation and Liquidity Shortages

June 2021

Topics covered by this brief

- 15 months of price trends analysis from January 2020 - May 2021
- Analysis of key variables affecting the domestic market and essential goods
- A step by step analysis on the circular flow of the cash supply chain in Libya
- Influencing factors of the Libya's liquidity crisis from the perceptions of bank clerks, municipality representatives, merchants and economic experts

Key Findings

Cost of Essential Commodities

- Five months after the devaluation of the Libyan dinar (LYD), the cost of the minimum expenditure basket (MEB) reduced by 0.4% from December 2020 to May 2021, despite a spike in certain imported goods.
- During the above mentioned time period, REACH found that exchange rates, letters of credit (LCs), international prices, conflict and oil production were factors impacting the MEB.

Liquidity Crisis

- Findings from the April 2021 Joint Market Monitoring Initiative (JMMI) indicated that the liquidity crisis has become less severe, with the largest improvements in access to cash found in west Libya, where 43% of interviewed households reported being able to withdraw sufficient cash to meet needs, compared to just 12% in November 2020
- In east Libya, 8.1% of the interviewed households reported to be able to withdraw sufficient cash in November, compared to 0% in April 2021.
- In south Libya, 0.4% of interviewed households reported being able to withdraw cash, however, findings suggest that cheque mark-up fees, the principal method of attaining cash on the parallel market, have reduced considerably.

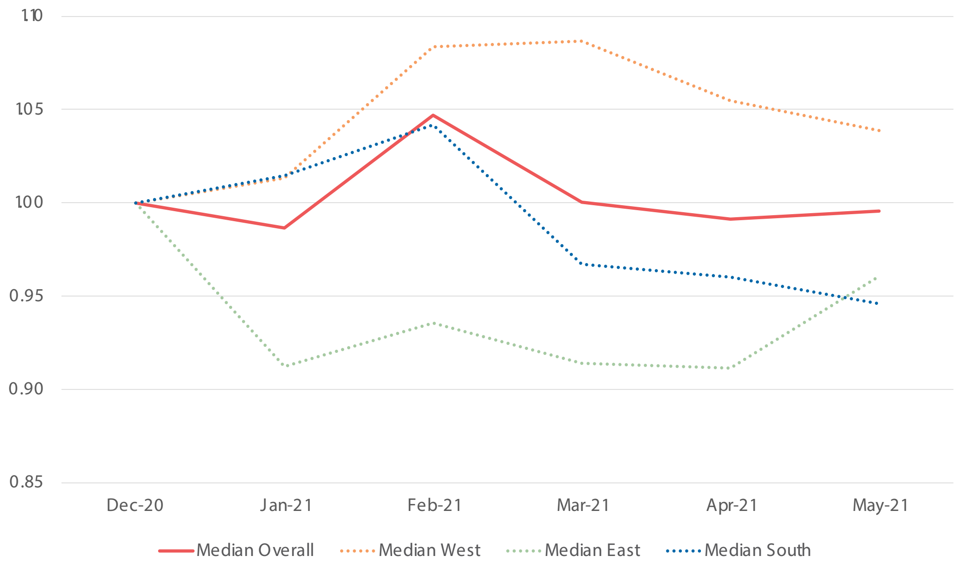
Introduction

At the beginning of 2021, the Central Bank of Libya (CBL) implemented a number of monetary policies, such as the devaluation of the LYD or low interest loans to retail banks. In response to these changes, this brief will look at two knowledge gaps related to household economic vulnerability by analysing MEB fluctuations and households' access to cash. Regarding the changes in prices of essential goods, the consumer price index (CPI) data had not been released since April 2020, many actors have since relied on REACH's JMMI data to give an indication for the trends of basic commodity price fluctuations.[i] The JMMI collects approximately 7,000 prices every month, covering 39 urban areas and 45 essential items from food to pharmaceutical items. This brief intends to provide insights into basic commodity price trends within the first five months following the devaluation of the LYD. In order to explain the post-devaluation trends, REACH has drawn on 15 months of price data to explore other factors that might affect Libya's MEB.

Furthermore, data on access to cash has not been readily available with organisations often relying on anecdotal information. Therefore, REACH has used both qualitative and quantitative data to understand the burden that the liquidity crisis has on the Libya population. Firstly, the JMMI has measured the severity of the liquidity crisis between November 2020 and April 2021 by conducting structured surveys with households regarding their ability to access cash, payment modalities and alternative cash attainment strategies.

[i] The JMMI should not be a substitute for data on inflation. Only the cheapest available price per item is collected, meaning that changes in middle-market and upmarket goods are not captured.

Figure 1: Five months post-devaluation MEB trends



Secondly, to map the cash supply chain in Libya, REACH conducted semi-structured interviews with 39 key informants with expert knowledge of the Libyan market, including bank clerks, municipality representatives, parallel market/ hawala actors, and merchants. This brief will be divided into two sections:

- MEB Pricing Trends: 15 months of longitudinal price analysis **(see methodology)**
- Liquidity Crisis: The severity and root causes of liquidity shortages **(see methodology)**

1. Post-devaluation MEB trends

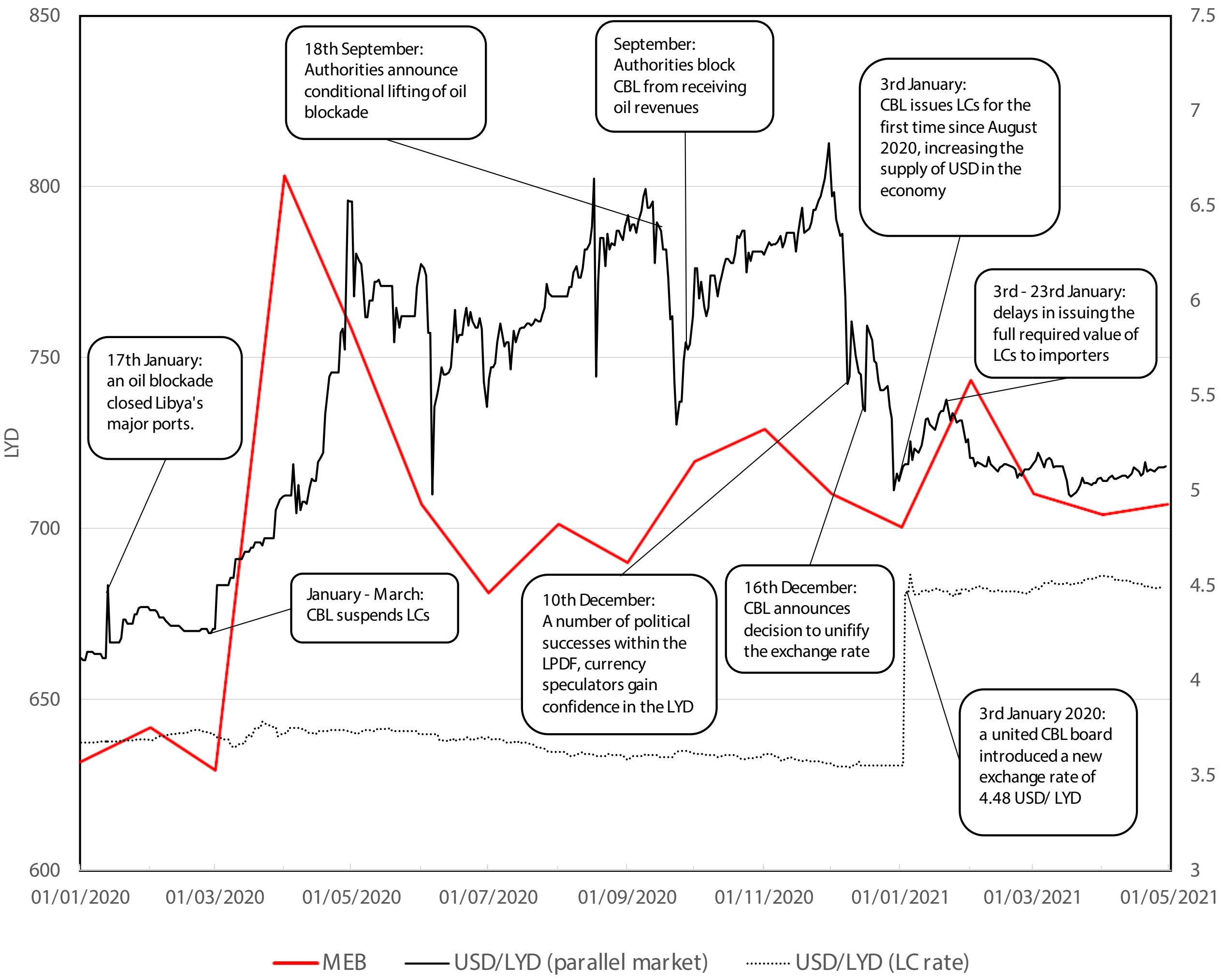
After the CBL decision to devalue the LYD, many actors expressed concern that the MEB will dramatically increase, nonetheless the large price increases for basic commodities had not yet substantiated.[1] From December 2020 - May 2021, the cost of the MEB fell by 0.4% from 710 LYD to 707 LYD. There was a temporary increase from December 2020 to February 2021, where the cost of the MEB rose by 4.7%, due to a number of imported goods increasing in price, such as vegetable oil (+60%), milk (+25%), condensed milk (+20%), flour (+20%), sugar (+20%) and tuna (+14.3%). However, the spike was shortly followed by a correction, returning back to pre-devaluation levels in April 2021. Within 6 months, the west Libyan MEB rose by 3.9%, compared to the south and east that decreased by 5.4% and 3.9% respectively. When comparing the changes to the MEB from the past five months (Figure 1) to January - December 2020 (figure 2), the MEB fluctuations have been less volatile in 2021. However, the historical pricing volatility demonstrates the vulnerability of key commodities in Libya.

This section will address how the increased value of LCs issued by the CBL, the appreciation of the LYD on parallel exchange markets, the continuation of oil production and reduced conflict have contributed to the stability of the basic commodity trends over the past 6 months. It is important to note to that REACH is presenting the relationship between these variables and the cost of living as correlative, not causal. Many of the aforementioned factors may also be correlated to one another, or influenced by immeasurable factors. Nonetheless, REACH has highlighted the most probable factors that have been identified since JMMI data collection began in 2017.

1.1 Libya's Exchange Rates

On the 16th of December 2020, the CBL's board of directors met for the first time since 2014 to agree on devaluating the official exchange rate from 1.4 to 4.48 United States Dollar (USD)/LYD from the 3rd of January 2021 onwards.[2] Officially devaluing the LYD was previously not possible, as the CBL Board was required to be united to execute the decision.[3] In 2018, economic reforms led to the devaluation of the LYD, by imposing a foreign currency transaction fee of 183%.[4] Effectively, the 2018 economic reforms generated a second official exchange rate of 3.900 LYD/USD and caused the parallel market rate to decrease from 8.300 in September 2018 to 4.300 LYD/USD in February 2019.[5] Therefore, when considering the imposed foreign currency transaction fee, the

Figure 2: Exchange Rates/ MEB Trends



official exchange rate had technically only increased from 3.55 USD/LYD in December 2020 to 4.48 on the 3rd January 2021. After the decision to officially devalue the LYD in 2021, the foreign currency transaction fee was removed.

The LYD is officially pegged to the Special Drawing Rights (SDR), which is a supplementary foreign exchange asset based on a basket of major currencies; USD, euro, Chinese yuan, Japanese yen, and pound sterling.[6] Regardless of the state of the Libyan economy and political situation, the LYD will purposely not fluctuate against most of the major foreign currencies. Therefore, political and economic events, such as CBL policies or disagreements between ministries are instead visible in fluctuations within the parallel exchange markets (see figure 2).

Between March to May 2020, the USD/LYD parallel market exchange rate rose by 37.5%. This may be due to LCs being frozen between January – March 2020, thus reducing the supply of foreign currency in Libyan market.[7] The decision to freeze LCs has been attributed to the 93% drop in Libya's oil production, leading to the CBL not receiving sufficient revenue to provide importers with foreign currency at a low exchange rate.[8] The additional demand from importers to buy foreign currency is met by the parallel market, consequently depreciating the LYD value against the USD. The cost of the MEB rose by 28.9% from March to April 2020, whilst the USD/ LYD parallel market exchange rate increased by 15.9%. It is important to note that both the absence of LCs and parallel market forex fluctuations are both known to affect the cost of the MEB.

In 2020, during the period that the CBL issued LCs (April – July 2020), the cost of the MEB reduced drastically, reaching 681 LYD in July, compared to 803 LYD in April (see figure 2). In comparison, the parallel market exchange rate remained high, reaching 5.59 USD/LYD in July, compared to 4.95 in April 2020. Nonetheless, the average daily USD/ LYD exchange rate between April – July 2020 was 5.73, compared to 6.13 August – December 2020. On the 18th September, authorities announced the conditional lifting of the oil blockade, within 5 days of the announcement, a surge in confidence for the LYD, which pushed the USD/LYD rate down by 14.7%.[9] Nonetheless, the confidence was short lived, as authorities from another institution blocked the CBL from receiving oil revenues, which may have contributed to the rise of the exchange rate to 6.83 USD/LYD.[10]

According to economic experts, after a series of positive developments from the Libya Political Dialogue Forum (LPDF) process, such as the establishment of the legal committee to secure the path to the December 24th elections, currency speculators rushed to acquire LYD in an optimistic wave of LYD confidence, thus appreciating the LYD on parallel markets.[11] On 3rd January 2021, the CBL devalued the official exchange rate, driving the accessible rate from 3.55 USD/LYD (after tax) to 4.48 USD/LYD. From December to February 2020, a number of imported goods increased in price, such as vegetable oil (+60%), milk (+25%), condensed milk (+20%), flour (+20%), sugar (+20%) and tuna (+14%). It is unclear whether these changes are related to the devaluation, international price fluctuations, USD/ LYD parallel market exchange rate increasing, or CBL decision to suspend the LCs from August 2020.[12] For example, vegetable oil and milk prices have respectively increased by 78% and 29% from November 2020 – February 2021.

Between the 1st – 21st January, the parallel market USD/LYD exchange rate rose by 10%, thus potentially attributing to 6% rise in the MEB from January to February 2021. According to economic experts, at the beginning of January, there were delays in issuing the full amount of LCs to importers that stimulated a temporary demand for foreign currency on the parallel market.

After a small spike in the parallel market exchange rate in January 2021, the USD/LYD exchange rate had stabilised, getting to a daily average of 5.15 USD/LYD between January – May 2021. This may be due to an increased amount of LCs issued by the CBL in 2021 and increased confidence in the LYD, due to a peaceful ministerial handover from the Government of National Accord (GNA) to Government of National Unity (GNU) officials and authorities handing over oil revenues to the CBL.[13]

1.2 Letters of Credit (LCs)

The standard definition of an LC is a trade deal through an intermediary bank, allowing importers to access capital for international shipping suppliers and providing security for suppliers to be paid.[14] In Libya, LCs offer a mechanism,

Figure 3: Value of issued LC/ MEB Food Trends

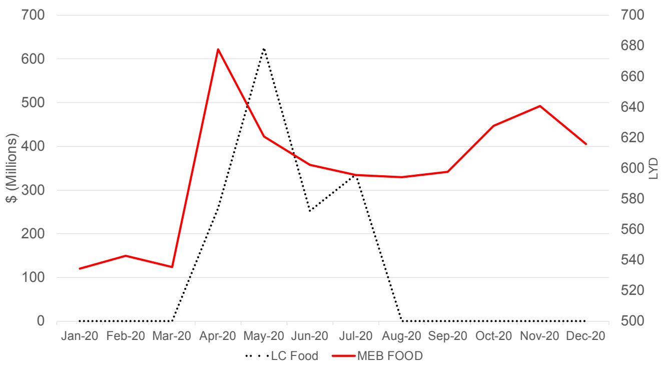
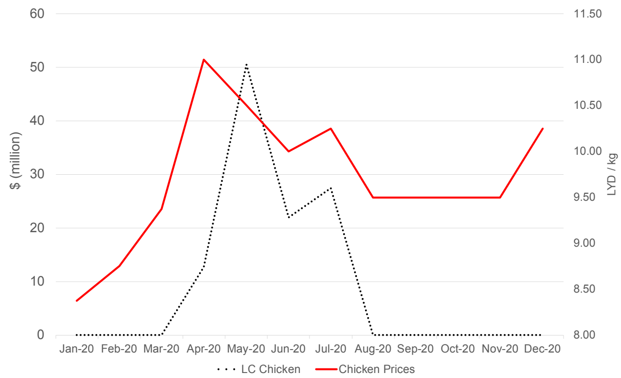


Figure 4: Value of issued LCs/ Chicken Prices



managed by the CBL, to provide importers with access to foreign currency for supplying goods from abroad. The process goes as follows:[15]

- A Libyan importer requests a foreign currency value from a commercial bank
- The commercial bank issues an LC to the CBL
- Once the CBL approves, the importer exchanges the LYD with the commercial bank
- CBL transfers the foreign currency to the supplier's account abroad, after the goods have arrived into the country

The LC system is vital for the Libyan economy for various reasons. Firstly, it provides the Libyan market with supply of foreign currency, leading to a lower demand for foreign exchange transactions on the parallel market. As previously mentioned, the supply of LCs at the beginning of 2021 had helped the LYD to stabilise against the USD on parallel exchange marrkets.

Secondly, during periods when the parallel market foreign exchange rate has been considerably higher than the official

Table 1: Relationship between imports, LC value and prices changes

Food type	Tea	Rice	Fresh and frozen meat	Tuna	Cooking oil	Sugar	Tomato paste	Wheat
Letters of Credit April-July 2020 ($m)	42	65	196	121	98	82	61	122
Total imports 2018 ($m)	33	57	184	143	181	155	123	294
LC/ Import ratio	1.27	1.14	1.07	0.85	0.54	0.53	0.50	0.41
Price changes: March 2020 - January 2021	Green tea: +16.7% Black tea: +18.8%	0.0%	Chicken: +7.0% Lamb: +12.0%	+8.3%	+33.3%	+13.2%	+25.0%	+25.0%

rate, importers are able to supply goods at a far cheaper rate, compared to traders accessing the parallel market rate. For example, in December 2020, the parallel market USD/LYD rate was 6.55, opposed to the official rate with transaction tax of 3.55. If importers bought 100,000 USD worth of frozen chicken through the parallel market, it would have costed Libyan importers 655,000 LYD, instead of 355,000 LYD; 85% more expensive. These costs are often transferred to the average Libyan consumer.

Thirdly, the LC system allows cash to circulate through formal channels, diminishing the presence of the parallel market. The CBL had used the issuing of official LCs, by insisting a proportion of LCs is paid for in cash not by cheque or bank transfer, to incentivise Libyan importers to recover physical LYD to bring back into circulation.[16] Importers that resort to operating within the parallel market often handover large amounts of physical cash to currency vendors. This strengthens the parallel market actors' position within the economy, resulting in other actors engaging in the parallel market to meet their needs, such as households attaining cash or vendor financial transactions. In April 2021, 66% of households interviewed by the JMMI reported exchanging cheques on the parallel market in order to meet their basic needs.[17]

When comparing the 2018 imports the value of the LCs issued from April 2020 to July 2020, it is apparent that importers for certain commodities, such as meat and tea had a greater preference for attaining LCs. Furthermore, a comparison of the prices in March 2020, one month prior to the issuance of LCs and January 2021, the month the LCs began, suggests that commodities with a smaller LC/import ratio were more likely to have risen in price than commodities with a larger LC/import ratio. This indicates that commodities with a smaller LC/import ratio might be more vulnerable to high price increases.

Between April – July 2020, the CBL issued $2.48bn worth of LCs, the largest import category was food ($776m) and livestock/ frozen meat ($367m).[18] When comparing LCs to the value of imports in 2018, importers for certain commodities issued a greater value of LCs in proportion to the importation value. For example, LCs for canned tomatoes covered 50% of the import value in 2018, compared to rice LCs accounting for 114% of the 2018 import value. When comparing the price between the round of LC issued in 2020 (March) and 2021 (January), the price for canned tomatoes and wheat are 25% higher, whereas rice or meat prices either remained the same or decreased in price. These price trend differences may be due to importers for particular commodities having greater access to the official exchange, allowing them to buy commodities at a lower price than importers resorting to the parallel market.

Libya has certain commodities that are locally produced and less affected by the number of LCs that are issued, therefore, when comparing the cost of the food portion of the MEB to the value of LCs for food, trends appear to be less correlated. When comparing LCs for a specific indicator, such as chicken, one can see a clear trend appearing. From January to April 2020, when LCs were frozen, chicken prices increased by 31.3%. After four months of issuing 112 million USD of chicken LCs, the cost of chicken fell by 13.6%. Nonetheless, chicken prices only began to rise 5 months after CBL froze LCs in August/ September 2020 (see figure 4). As with other commodities, the price may have risen, due to importers and wholesalers holding stock for items that were bought during the period that LCs were issued, thus the retail prices would represent the initial costs until those stocks are depleted.

1.3 International Prices

Since Libya imports the vast majority of consumer goods, it is also important to monitor the international prices of key imported commodities. A large proportion of domestic consumption for wheat is met through imports. In 2019, only 0.2 million tonnes of wheat, barley, and maize were produced locally, while 1.3 million tonnes of those products were imported. Similar to cereals, many animal and vegetable oil demand is met with imports, and hence might be more vulnerable to international price fluctuations.[19]

When looking at the relationship between international and Libyan prices of both wheat/ flour and cooking oil. It is important to note that both commodities were not always correlated. For example, between the period of January – May 2020, international cooking oil prices decreased by 28.4%, whereas Libyan prices increased by 22.2%. As international cooking oil prices rose from May 2020 to April 2021 (+108%), Libyan cooking oil prices only began to rise from Decemeber 2020 onwards. The rise in global vegetable oil prices doubling in the past 12 months has been attributed to a global production deficit, low stocks and increased biofuel consumption.[20] Low production may be due to COVID-19 restrictions affecting foreign workforce recruitment. All the while, the rise in biofuel consumption increased following the presidential election in the US, triggering fossil fuel refineries to switch to biofuel, consuming edible oil supplies.[21]

Figure 5: International/ Libyan Wheat Prices

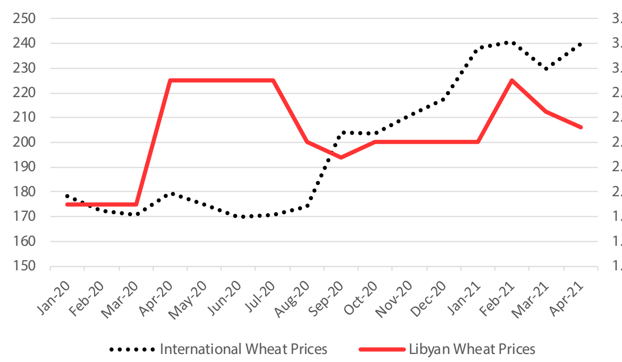
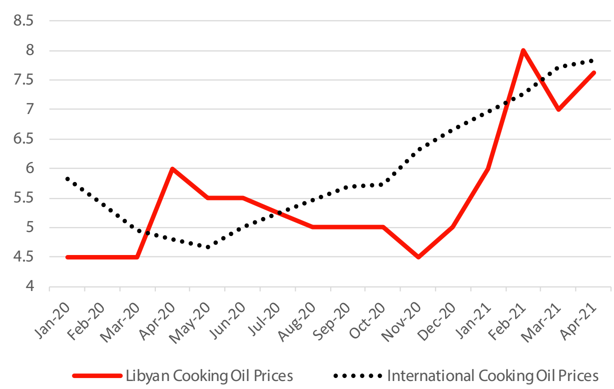


Figure 6 - International/ Libyan Cooking Oil Prices



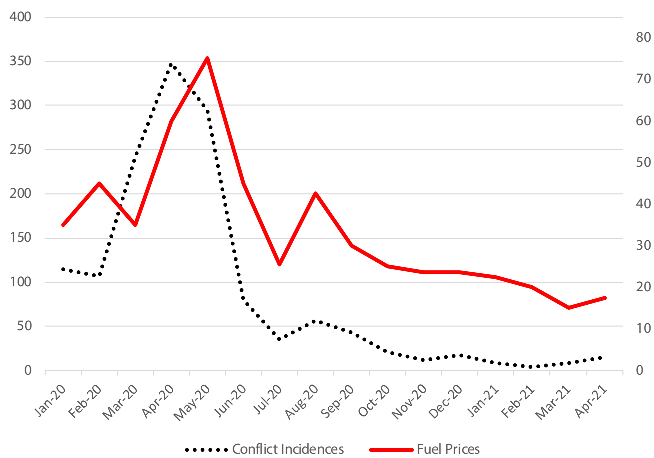
Similarly, Libyan wheat prices rose between March – July 2020 by 50%, during the same time period international wheat prices decreased by 0.2%. As Libyan wheat prices stabilised in September 2020, international prices began to rally. Between August 2020 – February 2021, international wheat prices rose by 38.2%, whereas Libyan wheat prices began to rise only between January – February 2021 (+20%) (see figure 5). According to an expert key informant working for the Food and Agriculture Organization of the United Nations (FAO), there are multiple factors affecting wheat prices in 2021, for example, an increased demand from China, weather conditions in south America and European food nationalism limiting grain exports.[22]

The delayed response between Libyan and international prices may be due to importers buying large stocks of commodities that last several months. In 2020, LCs were only approved between April – July, therefore, a large amount of commodities was brought into the country during that timeframe. As stocks become depleted, the market experiences shortages, leading to higher prices for consumers. As of January 2021, LCs were being issued to import sufficient amount of wheat/ cooking oil. However, by then, many importers were buying goods with the new official exchange rate and higher international prices, which likely contributed to the continued upwards-moving price trends until February 2021.

1.4 Conflict

Similar to domestic economic policies, such as the issuance of LCs, and price dynamics on the international market, conflict can also be considered a driver of price increases in certain goods, particularly domestically produced commodities. Therefore, this section analyses the relationship between conflict and commodity prices in Libya, exploring how the disruption to agricultural production or supply chain logistics can affect prices of essential commodities.

Figure 7 - Conflict Incidences/ Cooking Fuel Prices



After the Tripoli conflict began in April 2019, Libya experienced a number of price spikes for local produced commodities, such as tomatoes, onions, peppers, potatoes.[23] According to local key informants, a large proportion of Libya's farms are located in baladiyas south of Tripoli. The conflict had an effect on agricultural productivity, on the grounds that the region suffered from indiscriminate shelling and disruptions to water supplies. Furthermore, supply chains were disrupted, causing transporters to change their journey to more expensive supply routes, often occurring higher check point fees.[24]

In April 2020, findings suggest that fuel prices were affected by increased military activity **(see figure 7)**, likely due to an increased risk of fuel transportation driving up costs, in turn increasing fuel prices. From January to April 2020, conflict incidences rose by 202%, within the same period unofficial cooking fuel prices in Libya overall rose by 71% and 344% in south Libya.[25, 26] Additionally, the oil blockade imposed by authorities prohibited refineries from receiving crude oil to produce fuel, thus creating shortages and price increases across the country. Within the same period of cooking fuel price spikes, Libya's oil production dropped by 93%.

2. Libya's Liquidity Crisis

Since the 2014, Libya's financial system has been exploited by parallel markets actors that have profited from the populations' distrust in Libya's financial sector, the shortage of foreign currency and limited availability of physical LYD.[27] Similar to spikes in the MEB, lack of physical cash has led to households having increased expenditures and becoming economically more vulnerable. According to the 2020 Libya Multi-Sector Needs Assessment (MSNA), cash and markets related needs were the most prevalent types of humanitarian needs amongst assessed households in Libya; they also most commonly overlapped with needs in other sectors.[28]

The parallel market has become a central part of the economy, allowing households to access physical cash to pay for their basic needs, importers to access foreign currency to supply the country with goods, and merchants to securely transfer cash to their business partners.[29] According to the World Bank, money supply gained two percent in September 2020 from end-2019 with currency in circulation outside banks dropping by around LYD 870 million from 36 billion to 35 billion.[30]

Figure 8: % of households reporting having been able to withdraw cash in the 30 days prior to data collection

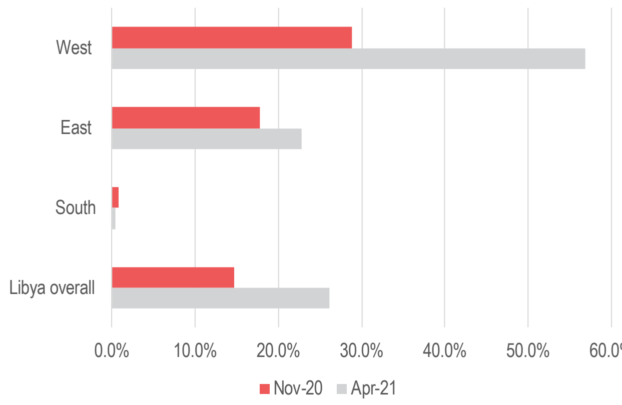


Figure 9: % of households reporting having been able to withdraw sufficient cash in the 30 days prior to data collection

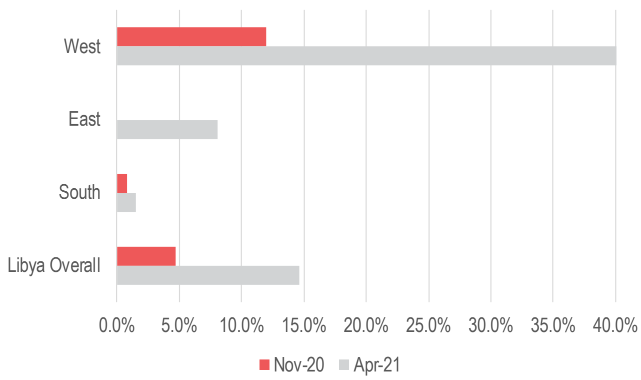


Figure 10: Average cheque mark up fees for cash attainment reported by households

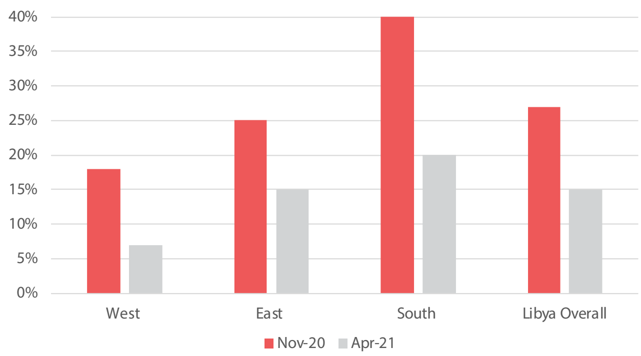
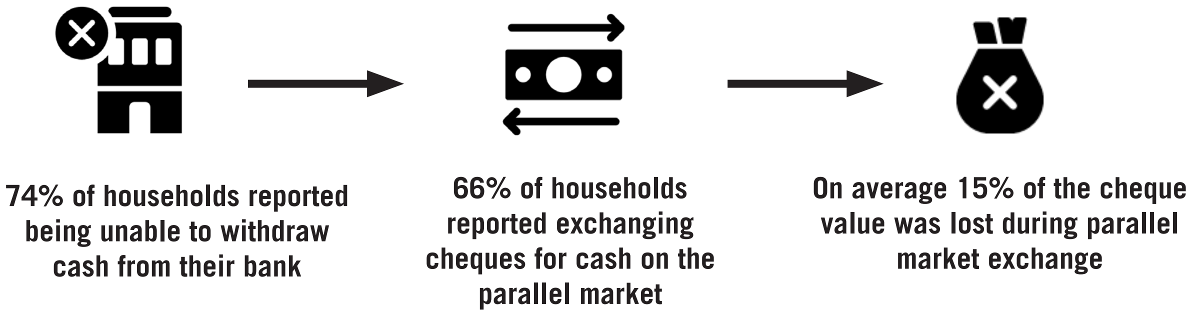


Figure 11: Households' principal strategy of attaining cash



This section draws findings from structured household interviews with 646 households at 35 markets assessed by the JMM in April 2021, following three key indicators: 1) households' ability to withdraw cash from banks to meet basic needs, 2) the prevalence and cost of alternative payment modalities and strategies in attaining cash, 3) parallel market cheque fees, as selling cheques on the parallel market is the principal method for attaining cash in Libya and, 4) disaggregated key indicators by bank type and region **(see annex).** These figures are compared with the JMMI liquidity crisis data collected in November 2020, when 640 households were also interviewed in the JMMI assessed markets.[31] Household survey findings are further contextualized through key informant interviews with bank clerks, municipality representatives, parallel market/ hawala actors, and merchants, to understand the experience and role of market actors and map the movement of liquidity in Libya in closed circuit supply chains.

2.1 End of the liquidity crisis?

On the 29th of April 2021, the CBL announced that the liquidity crisis had ended across most parts of the country, as commercial bank directors claimed that all of their branches with sufficient liquidity in their accounts.[32] Survey findings suggest that, by April 2021, a large proportion of customers were still affected by liquidity shortages.[ii] The largest improvements to access to cash can be found in west Libya, as 42.9% of households were able to withdraw sufficient amount of cash to meet needs, compared to 12% in November 2020 **(see figure 9).** In east Libya, 0% of households reported having been able to withdraw sufficient cash in November 2020, compared to 8.1% in April 2021 **(See annex 2).**

In south Libya, households from the JMMI assessed market places reported very little change regarding their access to cash between the two comparison months, however the average reported parallel market cheque mark-up fee has reduced drastically from 40% in November 2020 to 20% in April 2021. REACH focuses on parallel market cheques, as it is the principal method for attaining cash in Libya, therefore to put this in perspective, households in south Libya resorting to selling cheques on the parallel market to access cash would have paid financial transaction fees of 615 LYD in November 2020 compared to 307 in April 2021, which notes a considerable decline but still compounds a significant part of the May 2021 MEB for a household of five in south Libya (1538 LYD). This indicates that the recent improvement in access to liquidity has reduced approximately 300 LYD of the average monthly expenditures of households in south Libya.

The west and east have both also witnessed an improvement in access to cheque mark-up fees, as in west Libya the average reported fee dropped from 18% to 7% and the fees in the east dropped from 25% to 15%. In this light, it is likely that even households that were not able to access cash still benefited from the banks' increased solvency, as parallel market cash actors were able to charge less for buying cheques, as the likelihood of receiving cash from the bank with the traded cheque had increased. In April 2021, the proportion of households that reported selling cheques on the parallel market to attain cash was 87% in the south, 77% in the east and 32.9% in the west.

2.2 Libya's cash supply

Cash is expensive to print, transport, store, and distribute, especially in a large country such as Libya.[33] Cash is in a closed-loop supply chain, compared to most goods that are distributed in one direction, cash has circular movement within the economy. The CBL organises the printing of the LYD through the British company, De La Rue, that prints currency

[ii] The sample is not statistically representative, therefore the findings are indicative.

for over 69 states.[34] The eastern Central Bank situated in Libya has often been supplied with a parallel currency printed by Goznak, a Russian state-owned company. After a seizure of 1.1 billion Russian printed currency in Malta in September 2019, the US State Department declared that Russian-printed Libyan currency in recent years may have complicated Libya's economic challenges.[35] According to Reuters, 4.5 billion of parallel LYD has been shipped to the eastern Central Bank of Libya between February and June 2019.[36]

Once the shipment arrives at the CBL headquarters, the amount and frequency of cash shipments to branches is agreed upon by the individual commercial banks' headquarter management and the CBL. During key informant interviews, bank clerks explained that that the commercial bank branches often calculate the required amount needed for salaries and social security, however, the value is ultimately set by the CBL. Depending on the location of the commercial banks, the cash shipments are sent either directly from CBL headquarters or via its branches in Sebha, Sirt and Benghazi.

2.3 How is cash transported?

For remote cities, especially in south and east Libya, cash shipments are mostly flown to the nearest airport. On land, the cash is usually transported with the oversight from bank management via security personnel, military battalions or the Banking Facilities Guard (also described as the banking police service). A bank clerk from the remote town Algatroun (350km from Sebha) explained that, prior 2011, the Banking Facilities Guard were able to directly transfer liquidity with armoured and military vehicles. In 2014, the bank had to cooperate with armed groups to form a new military force that would pick up the cash shipment from either Ubari or Sebha. The bank clerks described how, after the security situation started deteriorating in 2015, the region experienced an increase in bank robberies, thefts, and murders, and that banks are therefore relying on specific, financial transfer companies for cash transports.

Most bank clerks reported that there are no transportation fees, as the security forces are paid a wage for their service. Nonetheless, three bank clerks mentioned that they know of a fee being paid for transportation of cash to the bank. One southern bank clerk mentioned that the fee can be a percentage of the value that is transferred. In addition, another clerk reported that there were advantages to the security personnel responsible for the transfer, with staff reportedly receiving 1,000-2,000 LYD per person.

Many of the interviewed merchants believed that armed groups were both positive and negative actors influencing the liquidity crisis. During key informant interviews, some merchants commonly explained that armed groups exploited bank officials to obtain a share of cash for their peers, which contributes to the liquidity crisis. Additionally, armed groups were reportedly preventing banks from receiving cash and were commonly associated with stealing large amount of cash, and some merchants and bank clerks reported that shipments are generally less likely to be sent to less secure areas. However, other merchant key informants mentioned that armed groups play a positive role in protecting the shipments and ensuring that the cash is distributed to households.

2.4 How do banks distribute to their clients?

In many large cities, where the liquidity crisis is less severe, ATMs are present (144 active ATMs in Libya overall).[37] However, in remote cities, a distinctive distribution process is in place for commercial banks to distribute cash their clients. Before the COVID-19 crisis, many banks organised distribution days where clients were coming to the banks to receive their cash, with specific time-slots for women and men. However, to avoid overcrowding at banks and adhere to COVID-19 distancing measures, many establishments have adopted a delegate distribution system.

Firstly, clients are sorted into lists according to their area of residence. Each muhalla has a delegate/ mukhtar that communicates with the community and gathers the cheques from the clients. Communication often happens on social media or via announcements at the municipality. Subsequently, the bank calculates the monetary value distributed to clients, by dividing the shipment sum by the number of cheques given to the bank. This figure will be communicated to clients as the withdrawal limit. The total distribution amount per mahalla is given to the delegate to distribute further. Many bank clerks reiterated that the value was always distributed equally according to number of active bank accounts. Most bank clerks explained that there is a small fee for withdrawal that is deducted from the cheque. This fee is usually around 2 LYD, but it can reportedly vary between 2 and 10 LYD. Fees also occur for other transactions, such as depositing money or acquiring certified cheques.

In many cities, such as Sebha, the distribution is done in close coordination with the municipality. Once a delegate receives the cheque, they record the cheque holder's name, serial number, telephone number, photocopy of the cheque, and a receipt that is signed and stamped from the bank. At the day of distribution, the client can be summoned to the local council headquarters, handing in their receipt to receive the cash withdrawn from their balance. Depending on the bank, coordination with security services and local municipality reportedly varies greatly, with 9 of the 24 interviewed bank clerks reporting that such coordination was not necessary for distribution. However, many banks work closely with the municipality throughout the distribution period, and some banks are reportedly required to notify the municipal or muhalla council directly. Regarding security, only 4 bank clerk key informants mentioned the need for bank security or armed groups to be present during distribution. In previous years, the presence of armed groups during the distribution process has posed serious household protection concerns and sometimes led to violent incidents during which local militias have fired their weapons on households waiting to withdraw cash.[38]

Bank clerks and cash distribution actors reported that they deal with 5,000 - 65,000 clients at one branch, composed of individuals, businesses and other organisations. Bank clerks iterated that all clients with active accounts were eligible for distribution, those that were excluded were frozen, inactive or accounts without credit. Most bank clerks declared that the standard distribution amount was around 500 LYD per client. Most bank clerks mentioned that there is no difference of withdrawal amounts between households, however it may differ depending on the type of account, for example 750 LYD for a current account and 250 LYD for a savings account. Findings from the bank customer survey indicate that withdrawal limits vary per region, with the average withdrawal limit of customers interviewed in west Libya being 1347 LYD, while the average limits in the east (821 LYD) and south (750 LYD) were considerably lower.[iii]

2.5 Bank functionality

Customers most commonly reported holding an account with Al Jumhuria bank (33%), followed by Atijara Alwatani (27%), Shaml 'Afriqia (16%), Wahda Bank (12%) and Al Saharaa (5%). During the analysis, two measures of bank functionality were used to explore the ability of banks to provide adequate financial services to its clients: 1) households' ability to withdraw cash, and 2) the parallel market cheque mark-up fees. In west Libya, 5 out of 6 banks, (73% of the western household sample) had 100% - 60% of households reporting being able to withdraw cash. The only outlier was Wahda bank, as only 40% of its customers reported being able to withdraw cash, which is 20% lower than the western average. A similar trend is highlighted in east Libya, where for most banks, only between 38% and 20% of customers reported being able to withdraw cash. Customers' ability to withdraw cash appeared particularly low for Wahda bank; 3% of interviewed customers of this bank reported being able to withdraw cash. In South Libya, the majority of banks (4 of the 6) had between 0% and 2% of customers reporting an ability to withdraw cash, with Al Sahraa (14%) and Al Aman (100%) being outliers.

In terms of parallel cheque mark-up fees, when disgregating by bank and region, the average reported fees vary greatly (4% - 25%). In west Libya, the bank with the highest average reported mark-up fee is Wahda bank (10%), whereas bank cheques from Al Aman or Altijara Alwatani have a 4% average mark-up fee. In the east, the mark-up fees have vary between 13%-15%. In south Libya, the two banks with lowest mark-up fee are Al Wahda and Al Jumhuria with 10%, compared to Altijara Alwatani and Ziraii with 25%.

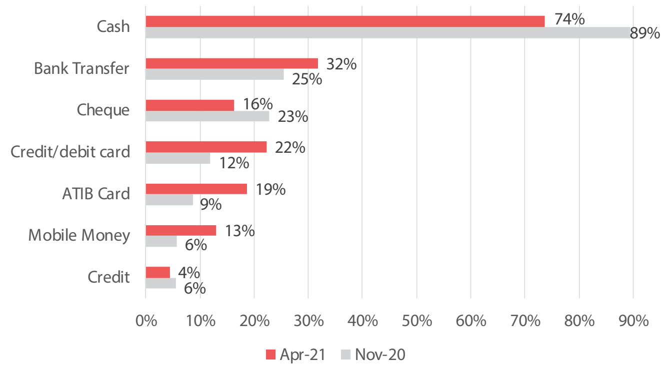
The analysis indicates that the functionality of one particular bank can vary greatly by region. In the east and west, interviewed customers from Wahda bank least commonly reported being able to withdraw cash, while the average reported mark-up fees were relatively high. In April 2019, the CBL in Tripoli started enforcing restrictions on several eastern state-owned commercial banks, inclusing Wahda bank, which together cover 30% Libya's commercial banking needs.[39] Furthermore, the eastern CBL sold bonds to commercial banks to raise funds of salaries and state economic activity, however, due the eastern CBL not receiving a proportion of the oil revenues, it became apparent that the bonds were not able to be paid back, therefore, impacting the solvency of eastern banks that created a backlog of cheques to be cleared and leading to low bank liquidity levels.[40] This could explain why access to cash in the east is considerably more limited than in the west, specifically for banks headquartered in east Libya, such as Wahda bank.

2.6 Alternative payment methods

Banks clerks mentioned that merchants are able to apply for digital financial services at the bank, however, there reportedly were not many benefits for local merchants using such services. For example, two bank employees mentioned that vendors are only able to receive a small percentage of the digital sum in

iii The findings are not exhaustive for all banks prevalent in Libya cash. In November 2020, Danish Refugee Council identified over 8 different mobile money services and 7 pre-paid card available to Libyans.[41] However, bank clerks report the financial infrastructure is still being developed, as their bank could not support alternative payment methods. Additionally, a bank employee in Sebha reported that they are currently improving their services for digital banking, partnering with other financial service providers (FSPs) in order for households and vendors to access digital payment services. Bank clerks in remote cities, such as Ubari and Algatroun, mentioned that the only alternative payment methods are cheques and no digital means are available.

Figure 12: % of interviewed households reporting using the following payment modalities



According to the April 2021 JMMI, the proportion of households using cash had decreased by 14% since November 2020, and the proportion using cheques decreased by 7%. However, JMMI findings indicate a positive trend in the uptake of alternative payment modalities among the population. The proportion of customers who reportedly used credit/debit cards had increased by 10% between November 2020 and April 2021, while the proportion reporting using mobile money had doubled from 6% to 13% (see figure 12).

According to the CBL, the total e-payment transactions in Libya in Q1 of 2021 amounted to 1.2 billion LYD. According to an official at the CBL, although increasing, the relatively slow uptake of e-payment methods in Libya might be partly driven by cultural norms of cash in Libya, with many people historically having been more comfortable with cash due to a generally limited trust in financial institutions.[42]

However, recent steps have been made to improve the uptake of alternative payment methods, according to the World Bank, the CBL plans to expand the point-of-payment system to 50,000 sites within two years, compared to 15,800 reported in Q1 of 2021.[43] To compare Libya to its neighbours, the country has 225 point of sales (POS) machines per 100,000, while Italy has 4,500 and Tunisia has 180. Furthermore, the CBL declared that they will issue additional mobile payment licences for 2021 and intends to contract fintech firms to support the financial infrastructure. The CBL announced that they have warned commercial banks not adhering to the agreed plan to improve customer services, such as e-payments, will be fined.

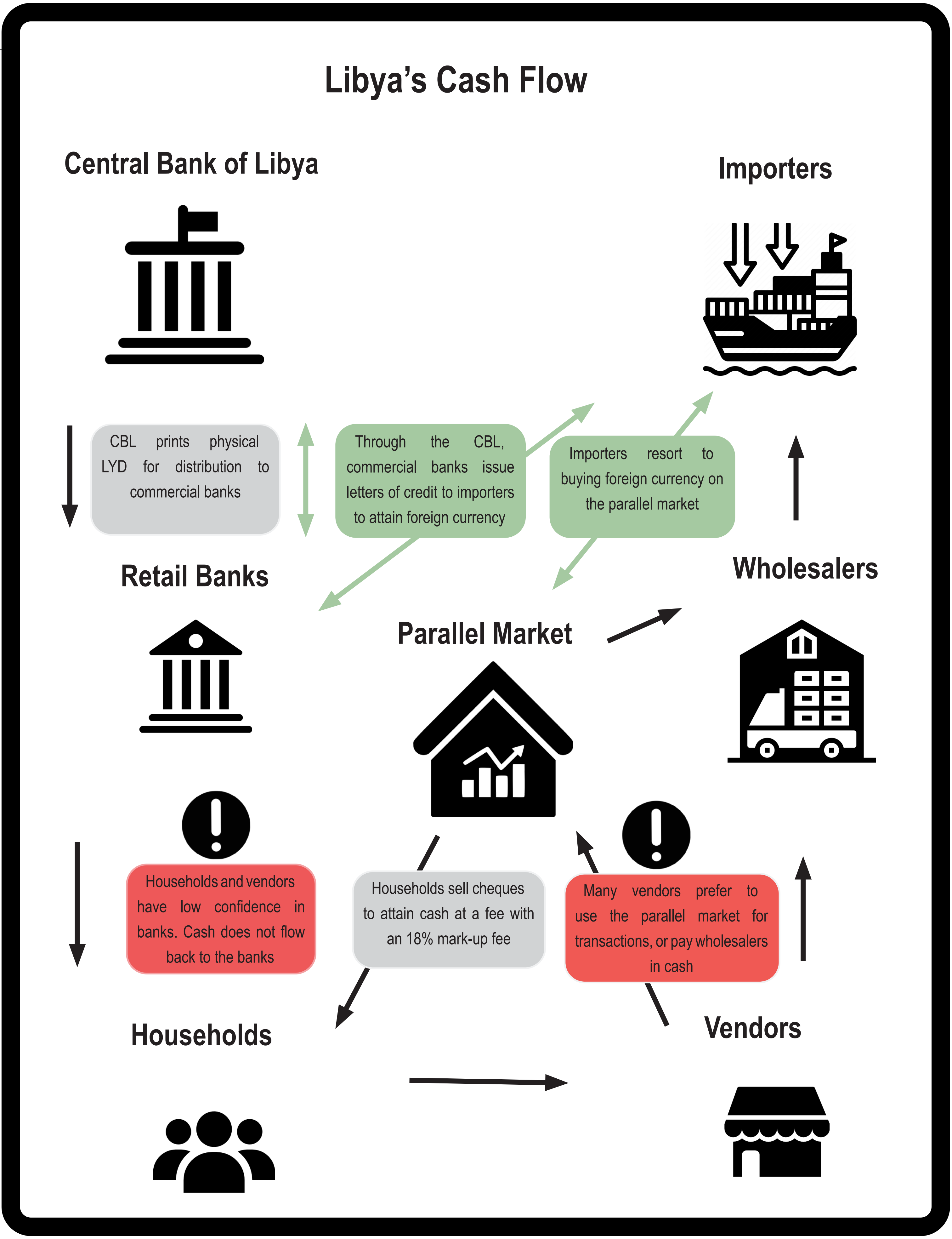
According to the CBL, the latest figures for financial infrastructure are as follows:[44]

- Local activated cards: 865,000
- POS machines: 15.800
- Active ATMs: 144
- Purchases through POS: 700 million LYD
- Total purchases through e-payment services in Q1 of 2021 1.180 billion LYD

2.7 E-payment challenges

Interviewed bank clerks commonly reported that the main barrier to expanding their e-payment system was the inability of merchants to attain physical cash from e-payments. Many bank clerks mentioned that vendors were able to access a percentage, whereas others reported that merchants were not able to access the liquidity at all. As many transactions are required to be handled in physical cash, e-payment systems could prevent merchants from having sufficient cash to operate their business. An employee from east Libya mentioned that despite large amounts of demand from clients, the general headquarters management had not yet approved to activate the system throughout the branches. Furthermore, southern bank clerks mentioned that the internal bank infrastructure could not yet support electronic payment systems. Many bank clerks also mentioned that internet connectivity and access to power were not strong enough in the region to support alternative payment systems.

Most interviewed merchants mentioned that many banks have recently begun offering services for payment alternatives. However, the alternative payment mechanism fees vary greatly between banks, with merchants reporting fees of up to 25% of the total amount. The merchants are often forced to charge their households high fees, with customers eventually baring the additional costs. Furthermore, there are often technical problems from these services that are related to power and internet outages. Merchants also commonly reported that there


Libya's Cash Flow
Central Bank of Libya
Importers
CBL prints physical LYD for distribution to commercial banks
Through the CBL, commercial banks issue letters of credit to importers to attain foreign currency
Importers resort to buying foreign currency on the parallel market
Retail Banks
Wholesalers
Parallel Market
Households and vendors have low confidence in banks. Cash does not flow back to the banks
Households sell cheques to attain cash at a fee with an 18% mark-up fee
Many vendors prefer to use the parallel market for transactions, or pay wholesalers in cash
Households
Vendors

are delays in the electronic transfer from the customer to the merchant.

2.8 Perceptions on the Liquidity Crisis

The majority of bank clerks and cash distribution actors reported that unification of state institutions is necessary to improve access to cash in their city. Furthermore, clerks from the south suggested improving infrastructure, such as airports, in order to improve the access to cash in their city. Two bank staff in south Libya mentioned that the lack of security may also hinder cash supply. Four bank clerks mentioned the importance of restoring the merchants' trust in the banking system to ensure they start depositing cash in the banks and ensure the circular movement of cash. A bank clerk described how merchants may sometimes have greater faith the parallel markets for financial transactions, explaining that when a trader would like to transfer money in Libya, the banks are not able to provide the necessary liquidity for the recipient to attain the transfer. The transaction will be required to go through bonds, deposits and digital transfers that require time to process. However, the parallel market is able to provide financial services of transfers without conditions or restrictions, thus attracting traders to operate within the parallel market and disincentivising them from engaging in formal financial institutions.

According to some merchants, the main issue lies with the lack of cash supply from the CBL, the division of economic institutions and the traders' mistrust with banks. Some merchant key informants suggested supporting merchants with business loans, or LCs for merchants to assess foreign currency, thus incentivising merchants to deposit in formal institutions. In addition, many merchants believed that there is widespread corruption within commercial banks, giving preferences to certain traders. Merchants iterated that supporting large traders with credit, and small traders with liquidity, as alternative methods, is far too expensive.

To mitigate some of these challenges to e-payment in Libya, the CBL has recently decided to return 10 billion LYD of antiquated currencies to banks to exchange for demand deposits.[45] On the 18th April 2021, the CBL decided to provide a second instalment of loans reaching the value of 5 billion to commercial banks, to help clear the backlog of uncleared checks in the banking system.[46]

2.9 Closed Circuit Supply Chain

The supply chain infographic above **(see page 12)** shows how cash moves through the closed circuit supply chain within Libya. It aims to visualise some of the failures in cash circulation, when comparing cash supply chains in other countries. In this visualisation, you can see that the parallel market is central to the economy, whereas commercial banks have a limited role. Once households attain cash, goods and services are purchased mostly through physical cash flows via a number of vendors. Many households prefer not to keep their salaries/ savings in the bank, as there may be a risk that one could not access the excess earnings at short notice.

According to May 2021 JMMI data, only 4.7% of 530 vendors across 38 urban areas reported that they deposited their sales revenues at the bank, with 93% of vendors reporting that cash is the main payment modality. About one-third (32%) of vendors stated that there is a lack of demand and 20% reported that it is too expensive to use alternative payment modalities. Therefore, vendors are accumulating a large amount of physical cash, but are not recirculating within formal financial institutions. Some interviewed bank clerks reported that vendors also use the parallel market for financial transactions with business partners across the country, or pay their suppliers directly with cash.

As you move further back up the cash supply chain, the value of cash transfers increases significantly, as importers can demand up to $3 million for LCs. Commercial banks in coastal cities, such as Tripoli, Benghazi and Misrata will receive deposits for LCs improving the formal cash supply, whereas banks in remote cities, such as Algatron or Ghat, will not benefit from these procedures. Furthermore, many importers will be exchanging their LYD for foreign currency with parallel markets, in combination with traders using the parallel market for cross country financial transactions, the parallel market has accumulated vast amounts of physical currency. This leads parallel market actors to hold significant financial dominance, allowing them to provide households with cash for a mark-up fee or become currency speculators, further increasing their profits for possessing large amounts of cash.

Conclusion

REACH has focused on two of the most prevalent economic vulnerabilities that affect households in Libya; price fluctuations and the liquidity crisis. This brief has used 15 months of JMMI pricing data to provide historical insights into basic commodity price trends for the first five months following the devaluation of the LYD. Furthermore, The assessment aimed to measure the severity of the liquidity crisis across Libya by mapping the functionality of the banks, prevalence of different payment modality types and the cost of using alternative methods of attaining cash. REACH has utilised the JMMI network of local market experts to speak to shop households, bank clerks, municipality representatives, parallel market actors and merchants to have a broad range of perspectives concerning Libya's liquidity crisis.

Previous fluctuations in the MEB have a number of interlinked determinants that vary between both parallel and official exchange rates, the value of LCs issued by the CBL, international prices, conflict and oil production. The price fluctuations from the 5 months following the devaluation have been less severe when comparing to the previous 15 months of trends, however past data shows that Libya is still susceptible to economic shocks that affect vulnerable households ability to meet their basic needs. As the value of LCs issued by the CBL has increased, the LYD has appreciated on parallel market exchange markets, oil production continues and conflict incidences have remained low, these factors may have contributed to the stability of the basic commodity trends over the past 6 months.

According to interviewed respondents, the bifurcation of economic institutions, insecurity, household and merchant mistrust of banks, foreign currency shortages, a strong culture of cash and underdeveloped financial infrastructure have led to Libya suffering from an endemic liquidity crisis. The shortages of physical cash have created a large financial burden to households incurring financial transaction costs in order to attain cash. In April 2021, 66% of interviewed households reported having resorted to selling cheques on the parallel market to attain cash, allowing the parallel market to generate large amounts of money in revenue from households who rely on the system to access cash to pay for their basic needs. In addition, parallel market actors engage in foreign currency exchange for financial transactions between merchants, further increasing the amount of money lost to the rentier economy. As the CBL provides banks with loans and incentivises banks to strengthen their digital payments, access to cash may improve over the coming months. However, the cash culture in Libya is likely to continue to dominate the Libyan economy in the near future. As the liquidity crisis has led to humanitarian actors struggling to distribute the sufficient amount of cash to vulnerable households, it is important for those engaging in the Libyan economy to understand the root causes of their programming challenges and the population's needs.

Methodology

JMMI Pricing Data Collection

The monthly data and analysis that fed into this brief were provided through the Joint Market Monitoring Initiative (JMMI), which was created by the Libya Cash Working Group (CWG) in June 2017 to further the understanding of market dynamics in Libya. Field staff familiar with the local market conditions identified shops representative of the general price level in their respective locations, with at least 4 prices per assessed for each of the 45 items in 39 urban areas. In line with the purpose of the JMMI, only the price of the cheapest available brand was recorded for each item. The methodology for the JMMI is based on purposive sampling. Partner field teams, in coordination with the CWG, identify shops to assess based on the following criteria: 1) shops need to be large enough to sell all or most assessed items, 2) prices in these shops need to be good indicators of the general price levels in the assessed area, 3) shops should not be located in different areas within the assessed city or baladiya.

Enumerators were trained on methodology and tools by REACH. Data collection was conducted through the KoBoCollect mobile application. Following data collection, REACH compiled and cleaned all partner data, normalising prices, cross-checking outliers and calculating the median cost of the MEB in each assessed market.

In locations where it is not possible to identify four large markets that fulfil criterion (1), smaller shops, such as grocery shops, vegetable vendors, butchers and bakeries, are added to the shop list, as long as they fit criteria (2) and (3), in order to guarantee at least four prices per item of interest. Each month, price data is collected from the same shops whenever possible to ensure comparability across months. The CMWG primarily targets urban areas throughout Libya, aiming to ensure coverage of markets that serve as commercial hubs for surrounding regions. Data is collected via the KoBo mobile data collection application. The CMWG maintains a joint KoBo account for the JMMI. The data collection tool is published alongside the dataset every month and disseminated to the humanitarian community.

To contextualise the pricing data, qualitative information is also gathered from local sources and economic experts through key informant interviews. The JMMI should not be a substitute for data on inflation. Only the cheapest available price per item is collected, meaning that changes in middle-market and upmarket goods are not captured.

Liquidity Crisis

Since October 2020, JMMI has been collecting a series of additional data on the ability to access cash and payment modalities. In April 2021, REACH interviewed 640 households in 35 urban areas using a structured survey. Respondents were selected purposively, with an average number of 8 households and 4 vendors per region. The respondents were vendors and households from market places already monitored by the JMMI. Furthermore, REACH deployed an online bank customer questionnaire with 149 Libyan bank customer respondents to understand bank functionality in April 2021. Due to non-probability sampling, findings are indicative only. Furthermore, the sample from south Libya is disproportionately large, therefore national level data may be slightly skewed towards southern Libyan respondent findings.

Semi-structure qualitative interviews were conducted with 26 bank clerks, municipality representatives and parallel market vendors from 12 different locations across Libya. Furthermore, 13 key informant interviews were conducted with merchants and financial lawyers in 9 locations across Libya. The semi-structured interviews were analysed using a qualitative data analysis computer software package called Nvivo. The tool was used to find trends amongst the interviews and respondent groups.

Limitations

As previously mentioned, the lack of statistical representativeness amongst the deployed tools is one of the limitations of the methodology. Furthermore, engaging with the parallel market to attain cash can be a sensitive subject matter. This could increase the risk of households underreporting their cash attainment strategies.

Endnotes

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42 E-payments transactions top LD 1.1 bn in Q1 of 2021 – but cash is still king in Libya, Libya Herald, May 2021

43 Libya Economic Monitor, World Bank, April 2021

44 E-payments transactions top LD 1.1 bn in Q1 of 2021 – but cash is still king in Libya, Libya Herald, May 2021

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Annex 1

This brief has added three tables from the JMMI April 2021 liquidity crisis data:[i]

1) Households' ability to withdraw cash and the reported average parallel market cheque mark-up fee disaggregated by bank branch and region

2) The prevalence of interviewed households reporting the ability to withdraw cash and alternative cash attainment strategies disaggregated by region

3)The prevalence of interviewed households reporting using different payment modalities disaggregated by region

i The findings and analysis disaggregated between banks and region are indicative, due to purposive sampling

Bank	Number of interviewed households reported principal bank	Interviewed households able to withdraw cash in 30 days prior to data collection	Average reported cheque mark-up fee
Name of Bank			
East			
Al Jumhuria	40	35.0%	13%
Al Saharaa	10	20.0%	14%
Altijara	13	23.1%	14%
Altijara Alwatani	37	24.3%	14%
Wahda Bank	30	3.3%	15%
Shaml 'Afriqia	13	38.5%	14.50%
South			
Al Jumhuria	85	0.0%	23.50%
Al Saharaa	7	14.3%	10%
Altijara Alwatani	100	0.0%	22.50%
Wahda Bank	5	0.0%	25%
Shaml 'Afriqia	59	1.7%	10%
West			
Al Aman	8	75.0%	4%
Al Jumhuria	67	64.2%	7%
Al Saharaa	10	60.0%	5%
Altijara Alwatani	29	69.0%	4%
Wahda Bank	38	39.5%	10%
Shaml 'Afriqia	24	70.8%	6.50%

Annex 2

Location	West Libya	East Libya	South Libya	Libya Overall
% of interviewed households reporting ability to withdraw cash in 30 days prior to data collection				
Unable to withdraw cash from bank	43.1%	77.1%	99.6%	73.9%
Able to withdraw cash from bank, but not sufficient amount to meet basic needs	14%	14.8%	0%	11.5%
Able to withdraw cash from bank, in sufficient amounts to meet needs	42.9%	8.1%	0.4%	14.6%
% of interviewed households reporting using alternative methods of obtaining cash				
Selling cheques on parallel market	32.9%	77.2%	87.0%	65.7%
Exchanging cheques with businesses	5.9%	1.3%	0.8%	2.7%
Borrowing cash from vendors	2.3%	3.4%	3.4%	3.0%
Being paid in cash	13.1%	8.1%	1.2%	7.0%
Other	4.1%	8.1%	5.3%	5.5%
Preferred not to answer	17.6%	4.7%	5.0%	9.3%
Average reported mark-up fee				
Selling cheques on parallel market	7.0%	15.0%	20.0%	15.0%
Exchanging cheques with businesses	10.0%	3.5%	1.0%	5.5%

Location	West Libya	East Libya	South Libya	Libya Overall	Average Mark-up Fee
% of interviewed households reporting using the following payment modalities					
Cash	93.9%	66.1%	96.3%	89.4%	-
Credit/debit card	20.4%	11.9%	9.6%	11.9%	7.5%
ATIB Card	45.3%	0.9%	0.8%	8.7%	1.0%
Cheque	8.8%	33.9%	28.3%	22.8%	20.1%
Mobile Money	12.2%	9.3%	4.6%	5.7%	12.5%
Credit	0.0%	0.9%	8.3%	5.5%	0.0%
Bank Transfer	0.6%	20.3%	47.5%	25.4%	20.4%
Other	0.0%	0.0%	0.4%	0.17%	-